

ABBREVIATIONS

ABV	above	FIN	finish (ed)
AFF	above finish floor	FFE	finished floor elevation
ASC	above suspended ceiling	FFL	finished floor line
ACC	access	FA	fire alarm
ACFL	access floor	FBKR	fire brick
AP	access panel	FE	fire extinguisher
AC	acoustical	FEC	fire extinguisher cabinet
ACPL	acoustical plaster	FHS	fire hose station
ACT	acoustical tile	FPL	fireplace
ACR	acrylic plastic	FP	fireproof
ADD	addendum	FRC	fire-resistant coating
ADH	adhesive	FRT	fire-retardant
ADJ	adjacent	FLG	flashing
ADJT	adjustable	FHMS	flathead machine screw
AGG	aggregate	FHWS	flathead wood screw
A/C	air conditioning	FLX	flexible
ALT	alternate	FLR	floor (ing)
AL	aluminum	FLCO	floor cleanout
ANC	anchor, anchorage	FD	floor drain
AB	anchor bolt	FPL	floor plate
ANOD	anodized	FLUR	fluorescent
APX	approximate	FJT	flush joint
ARCH	architect (ural)	FTG	footing
AD	area drain	FRG	forged
ASB	asbestos	FND	foundation
ASPH	asphalt	FR	frame (d), (ing)
AT	asphalt tile	FRF	fresh air
AUTO	automatic	FS	full size
BP	back plaster (ed)	FBO	furnished by others
BSMT	basement	FUR	furred (ing)
BRG	bearing	FUT	future
BPL	bearing plate	GA	gage, gauge
BUT	bed joint	GV	galvanized
BM	bench mark	GI	galvanized iron
BL	below	GP	galvanized pipe
BET	between	GSS	galvanized steel sheet
BVL	beveled	GKT	gasket (ed)
BLT	bituminous	GC	general contract (or)
BLK	block	GL	glass, glazing
BLKG	blocking	GLB	glass block
BD	board	GLF	glass fiber
BW	both ways	GCMU	glazed concrete masonry units
BOT	bottom	GST	glazed structural tile
BLDG	building	GB	grab bar
BUR	built up roofing	GD	grade, grading
BBD	bulletin board	GRN	granite
CAB	cabinet	GVL	gravel
CAD	cadmium	GF	ground face
CPT	carpet (ed)	GT	grout
CSMT	casing	GPDW	gypsum dry wall
CI	cast iron	GPL	gypsum lath
CIPC	cast-in-place concrete	GPPL	gypsum plaster
CST	cast stone	GPT	gypsum tile
CB	catch basin	HH	handhold
CK	caulk (ing) caulk (ing)	HBD	hardboard
CLG	ceiling	HBW	hardware
CHT	ceiling height	HWD	hardwood
CEM	cement	HJT	head joint
CPL	cement plaster (portland)	HDR	header
CM	centimeter (s)	HTG	heating
CER	ceramic	HVAC	heating/ventilation/air conditioning
CT	ceramic tile	HD	heavy duty
CMT	ceramic mosaic (tile)	HT	height
CKBD	chalkboard	HX	hexagonal
CHAM	chamfer	HES	high early-strength
CR	chromium (plated)	HC	hollow core
CIR	circle	HM	hollow metal
CIRC	circumference	HK	hook (s)
CLR	clear (ance)	HCR	horizontal
CLS	closure	HB	hose bibb
COL	column	HW	hot water heater
COMB	combination	INCM	inclinator
COMPT	compartment	INCL	include (d), (ing)
COMPO	composition (composite)	ID	inside diameter
COMP	compress (ed), (ion), (ible)	INS	insulate (d), (ion)
CONC	concrete	INSC	insulating concrete
CMU	concrete masonry unit	INSF	insulating fill
CX	connection	INT	interior
CONST	construction	IKL	interlock
CONT	continuous or continue	INTM	intermediate
CONTR	contract (or)	INV	invert
CLL	contract limit line	IPS	iron pipe size
CJT	control joint	JC	janitor's closet
CPR	copper	JT	joint
CG	corner guard	JF	joint filler
CORR	corrugated	J	joint
CTR	counter	KCPL	keene's cement plaster
CFL	counterflashing	KPL	kickplate
CS	countersink	KIT	kitchen
CTSK	countersunk screw	KO	knockout
CRS	course (s)	LBL	label
CRG	cross grain	LAB	laboratory
CFT	cubic foot	LAD	ladder
CYD	cubic yard	LB	lag bolt
DPR	dampener	LAM	laminare
DP	dampproofing	LAV	lavatory
DL	dead load	LH	left hand
DEM	demolish, demolition	L	length
DMT	demountable	LT	light
DEP	depressed	LC	light control
DLT	detail	LP	lightproof
DIAG	diagonal	LW	lightweight
DIA	diameter	LWC	lightweight concrete
DIM	dimension	LTL	limestone
DPR	dispenser	LL	lintel
DIV	division	LVR	live load
DR	door	LPT	louver
DA	doublebleading	M	low point
DH	double hung	MB	machine bolt
DTA	dovetail anchor	MI	malleable iron
DRB	dovetail anchor slot	MH	manhole
DS	downspout	MFR	manhole (er)
D	drain	MAS	manufature (er)
DRB	drainboard	MO	masonry opening
DT	drain tile	MTL	material (s)
DWR	drawer	MAX	maximum
DWG	drawing	MECH	mechanic (al)
DF	drinking fountain	MC	medicine cabinet
DW	dumbwater	MED	medium
EF	each face	MER	member
E	east	MMB	membrane
ELEC	electric (al)	MET	metal
EP	electrical panelboard	MFD	metal floor decking
EW	electric water cooler	MTR	metal furring
EL	elevation	MRD	metal roof decking
ELEV	elevator	MTHR	metal threshold
EMER	emergency	M	meter
ENC	enclose (ure)	MM	millimeter (s)
EQ	equal	MMW	millwork
ECP	equipment	MIN	minimum
ESC	escalator	MIR	mirror
EST	estimate	MISC	miscellaneous
EXCA	excavate	MOD	modular
EXH	exhaust	MLD	molding, moulding
EXG	existing	MR	mop receptor
EXP	expanded metal plate	MT	mount (ed), (ing)
EB	exposed	MOV	movable
EXT	exterior	MULL	mullion
EXS	extra strong	NL	nailable
FB	face brick	NAT	natural
FOC	face of concrete	NI	nickel
OF	face of finish	NR	noise reduction
FOM	face of masonry	NRC	noise reduction coefficient
FOS	face of studs	NOM	nominal
FF	factory finish	NOM	nonmetallic
FAS	fasten fastener	N	North
FBD	fiberboard	NIC	not in contract
FN	fence	NTS	not to scale
FGL	fiberglass		

MATERIALS LEGEND

	CONTINUOUS WOOD BLOCKING
	NON-CONTINUOUS WOOD BLOCKING (SHIM)
	STEEL
	GYPSUM BOARD
	PLYWOOD
	RIGID INSULATION
	BATT INSULATION
	CONCRETE MASONRY UNITS

SYMBOLS

	ELEVATION SYMBOL
	SECTION/DETAIL SYMBOL
	WALL TYPE SYMBOL
	WINDOW SYMBOL
	ROOM NAME & NUMBER SYMBOL
	FINISH NUMBER
	DOOR SYMBOL

PARKING REQUIREMENTS

GENERAL NOTES

- ALL CONSTRUCTION INCLUDING MATERIAL AND WORKMANSHIP, SHALL CONFORM TO THE 2012 INTERNATIONAL BUILDING CODE.
- ALL ASTM STANDARDS LISTED HERE WITHIN, SHALL BE AS REFERENCED IN THE LATEST ISSUE OF THE ANNUAL BOOK OF STANDARDS OF THE AMERICAN SOCIETY FOR TESTING AND MATERIALS.
- THE CONTRACTOR, SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS AND SITE CONDITIONS BEFORE BEGINNING WORK. THE ARCHITECT AND ENGINEER, SHALL IMMEDIATELY BE NOTIFIED IN WRITING OF ANY DISCREPANCIES. THE CONTRACTOR SHALL CAREFULLY STUDY AND COORDINATE THE MECHANICAL, PLUMBING, AND ELECTRICAL SYSTEMS WITH THE ARCHITECTURAL WORK PRIOR TO INSTALLATION AND SHALL NOTIFY THE ARCHITECT IN WRITING OF ALL APPARENT INCONSISTENCIES FOR CLARIFICATION.
- ALL OMISSIONS AND OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND SPECIFICATIONS, SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR ENGINEER. WORK SHOULD NOT PROCEED UNTIL A SOLUTION IS GIVEN BY THE ARCHITECT OR ENGINEER.
- IN CASE OF CONFLICTS BETWEEN GENERAL NOTES AND DETAILS, THE DETAILS, SHALL TAKE PRECEDENCE OVER THE GENERAL NOTES. TYPICAL DETAILS, SHALL BE USED WHENEVER APPLICABLE. REFER TO SPECIFICATIONS FOR INFORMATION NOT COVERED BY THESE NOTES OR DRAWINGS.
- IF A SPECIFIC DETAIL IS NOT SHOWN FOR ANY PART OF WORK, THE CONSTRUCTION, SHALL BE THE SAME AS FOR SIMILAR WORK.
- COORDINATE FOUNDATION PLANS AND MECHANICAL DRAWINGS, FOR ALL OPENINGS, INSERTS AND OTHER RELATED ITEMS.
- DIMENSIONS ARE TO FINISH FACE OF WALLS UNLESS NOTED OTHERWISE.
- ADDITIONAL MISCELLANEOUS STEEL ITEMS NOT SHOWN ON STRUCTURAL DRAWINGS MAY BE REQUIRED. GENERAL CONTRACTOR AND FABRICATOR SHALL COORDINATE ALL REQUIREMENTS AND SHALL NOTIFY THE ARCHITECT IN WRITING OF ALL APPARENT INCONSISTENCIES FOR CLARIFICATION. (SUCH AS SIMPSON STRONG TIES)
- DO NOT DIMENSION THIS DRAWING. ANY DIMENSIONS, QUESTIONS, SHOULD BE DIRECTED TO THE ARCHITECT OR ENGINEER.

PROJECT CONTACTS

ARCHITECT:	RUDY MOLINA, A.I.A.	MILNET ARCHITECTURAL SERVICES 608 S. 12th STREET Mc ALLEN, TEXAS 78501 (956) 688-5656
OWNER:	TROPICAL TEXAS BEHAVIORAL HEALTH	1901 S. 24TH AVENUE EDINBURG, TEXAS 78539 956-289-7000
MEP:	LEO MUNOZ	TRINITY MEP 3533 MORELAND DR. WESLACO, TEXAS 78596 956-973-0600

CIVIL:	
STRUCTURAL:	SOLORIO, INC. 108 CLEO DAWSON MISSION, TEXAS 78572 PHONE NUMBER
GENERAL CONTRACTOR:	T.B.D.

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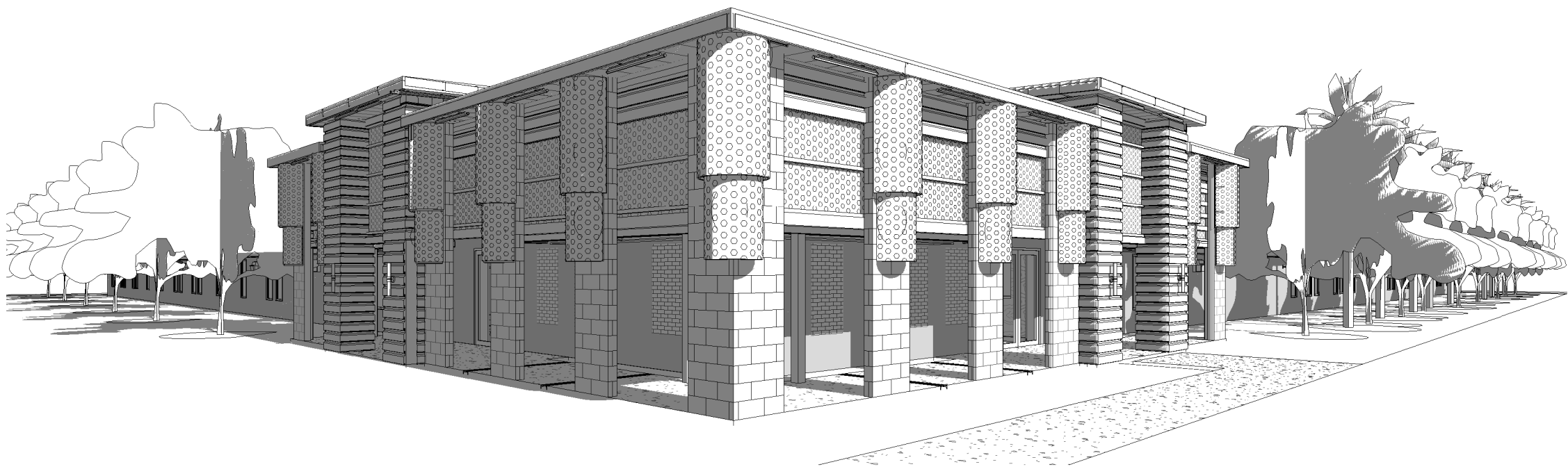
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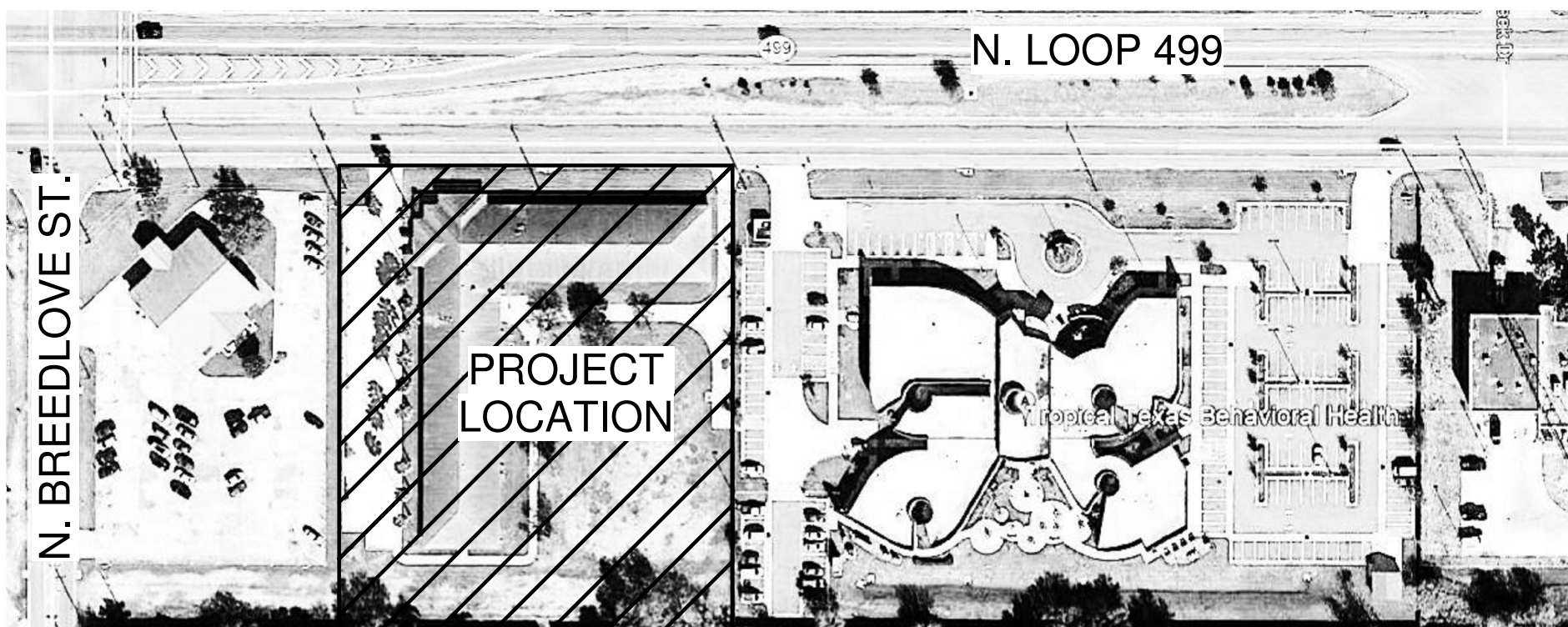
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HOP VILLA RENOVATIONS



SITE PLAN/LOCATION MAP



MILNET
ARCHITECTURAL
SERVICES



HOP VILLA RENOVATIONS
TROPICAL TEXAS BEHAVIORAL HEALTH
HARLINGEN, TX

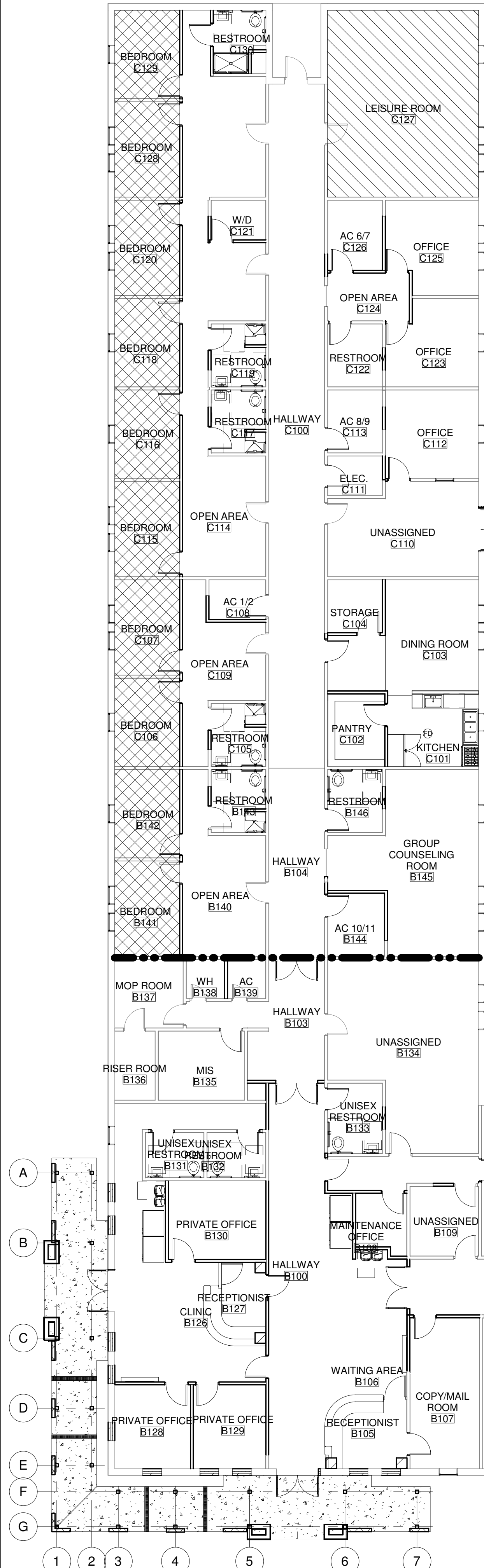
PROJECT NUMBER
217027

DATE
AUGUST 20, 2018

ISSUE FOR SEALED
PROPOSALS

SHEET NUMBER

A0.0



OCCUPANCY SCHEDULE - R-4					
NUMBER	NAME	OCCUPANCY	AREA	OCC. LOAD	EXIT WIDTH TOTAL
B141	BEDROOM	R-4	127 SF	1	0' - 0 3/16"
B142	BEDROOM	R-4	117 SF	1	0' - 0 3/16"
C106	BEDROOM	R-4	117 SF	1	0' - 0 3/16"
C107	BEDROOM	R-4	127 SF	1	0' - 0 3/16"
C115	BEDROOM	R-4	127 SF	1	0' - 0 3/16"
C116	BEDROOM	R-4	117 SF	1	0' - 0 3/16"
C118	BEDROOM	R-4	117 SF	1	0' - 0 3/16"
C120	BEDROOM	R-4	127 SF	1	0' - 0 3/16"
C128	BEDROOM	R-4	127 SF	1	0' - 0 3/16"
C129	BEDROOM	R-4	117 SF	1	0' - 0 3/16"
			1219 SF	6	0' - 1 27/32"

OCCUPANCY SCHEDULE - UTILITY					
NUMBER	NAME	OCCUPANCY	AREA	OCC. LOAD	EXIT WIDTH TOTAL
A107	STORAGE	UTILITY	46 SF		
A108	AC 4/5	UTILITY	61 SF		
A112	AC 6/7	UTILITY	49 SF		
A115	STORAGE	UTILITY	50 SF		
A117	AC 8/9	UTILITY	49 SF		
A118	AC 3/ELEC.	UTILITY	58 SF		
A121	AC 1/2	UTILITY	64 SF		
A124	STORAGE	UTILITY	50 SF		
A127	STORAGE	UTILITY	50 SF		
A133	AC 10/11	UTILITY	66 SF		
B112	CLOSET	UTILITY	36 SF		
B113	MAINTENANCE EQ	UTILITY	323 SF		
B114	JANITORIAL SUPPLIES	UTILITY	98 SF		
B115	MOP SINK	UTILITY	32 SF		
B117	MECH. ROOM	UTILITY	63 SF		
B118	STORAGE	UTILITY	54 SF		
B119	AC	UTILITY	32 SF		
B120	WH	UTILITY	32 SF		
B121	ELEC ROOM/ MDF	UTILITY	98 SF		
B136	RISER ROOM	UTILITY	57 SF		
B137	MOP ROOM	UTILITY	96 SF		
B138	WH	UTILITY	31 SF		
B139	AC	UTILITY	31 SF		
B144	AC 10/11	UTILITY	74 SF		
C108	AC 1/2	UTILITY	46 SF		
C111	ELEC.	UTILITY	44 SF		
C113	AC 8/9	UTILITY	71 SF		
C121	W/D	UTILITY	45 SF		
C126	AC 6/7	UTILITY	79 SF		
			1884 SF	0	0' - 0"

OCCUPANCY SCHEDULE - ASSEMBLY					
NUMBER	NAME	OCCUPANCY	AREA	OCC. LOAD	EXIT WIDTH TOTAL
B122	CONFERENCE ROOM A	ASSEMBLY	295 SF	42	1' - 0 21/32"
B123	CONFERENCE ROOM B	ASSEMBLY	270 SF	39	0' - 11 9/16"
B124	BREAK ROOM	ASSEMBLY	275 SF	39	0' - 11 13/16"
C127	LEISURE ROOM	ASSEMBLY	577 SF	82	2' - 0 23/32"
			1418 SF	203	5' - 0 3/4"

OCCUPANCY SCHEDULE - BUSINESS					
NUMBER	NAME	OCCUPANCY	AREA	OCCUPANT LOAD	EXIT WIDTH TOTAL
A100	HALLWAY	BUSINESS	1515 SF	15	0' - 4 17/32"
A101	IDD CUBICLES	BUSINESS	521 SF	5	0' - 1 9/16"
A102	UNISEX RESTROOM	BUSINESS	49 SF	0	0' - 0 5/32"
A103	OPEN AREA	BUSINESS	103 SF	1	0' - 0 5/16"
A104	RESTROOM	BUSINESS	49 SF	0	0' - 0 5/32"
A105	OFFICE	BUSINESS	172 SF	2	0' - 0 1/2"
A106	OFFICE SUPERVISOR	BUSINESS	184 SF	2	0' - 0 9/16"
A109	OFFICE SUPERVISOR	BUSINESS	184 SF	2	0' - 0 9/16"
A110	OFFICE SUPERVISOR	BUSINESS	172 SF	2	0' - 0 17/32"
A111	RESTROOM	BUSINESS	50 SF	0	0' - 0 5/32"
A113	IDD CUBICLES	BUSINESS	392 SF	4	0' - 1 3/16"
A114	UNISEX RESTROOM	BUSINESS	50 SF	0	0' - 0 5/32"
A116	IDD CUBICLES	BUSINESS	392 SF	4	0' - 1 3/16"
A119	OFFICE SUPERVISOR	BUSINESS	172 SF	2	0' - 0 17/32"
A120	OFFICE MANAGER	BUSINESS	293 SF	3	0' - 0 7/8"
A122	OFFICE INTAKE	BUSINESS	184 SF	2	0' - 0 9/16"
A123	OFFICE INTAKE	BUSINESS	172 SF	2	0' - 0 17/32"
A125	TCCOOMMI	BUSINESS	293 SF	3	0' - 0 7/8"
A126	TCCOOMMI SUPERVISOR	BUSINESS	172 SF	2	0' - 0 17/32"
A128	UNISEX RESTROOM	BUSINESS	50 SF	0	0' - 0 5/32"
A129	OFFICE CIS/IDD QA (2)	BUSINESS	172 SF	2	0' - 0 17/32"
A130	UNISEX RESTROOM	BUSINESS	50 SF	0	0' - 0 5/32"
A131	MAIL/COPY ROOM	BUSINESS	171 SF	2	0' - 0 1/2"
A132	OFFICE HR	BUSINESS	185 SF	2	0' - 0 9/16"
A134	TCCOOMMI	BUSINESS	293 SF	3	0' - 0 7/8"
B100	HALLWAY	BUSINESS	407 SF	4	0' - 1 7/32"
B101	HALLWAY	BUSINESS	405 SF	4	0' - 1 7/32"
B102	HALLWAY	BUSINESS	215 SF	2	0' - 0 21/32"
B103	HALLWAY	BUSINESS	205 SF	2	0' - 0 5/8"
B104	HALLWAY	BUSINESS	216 SF	2	0' - 0 21/32"
B105	RECEPTIONIST	BUSINESS	101 SF	1	0' - 0 5/16"
B106	WAITING AREA	BUSINESS	314 SF	3	0' - 0 15/16"
B107	COPY/MAIL ROOM	BUSINESS	216 SF	2	0' - 0 21/32"
B108	MAINTENANCE OFFICE	BUSINESS	59 SF	1	0' - 0 3/16"
B109	UNASSIGNED	BUSINESS	99 SF	1	0' - 0 9/32"
B110	FINANCIAL STAFF	BUSINESS	254 SF	3	0' - 0 3/4"
B111	IDD RESPITE ROOM	BUSINESS	218 SF	2	0' - 0 21/32"
B116	RESTROOM	BUSINESS	31 SF	0	0' - 0 3/32"
B125	OFFICE SHARED(4)	BUSINESS	293 SF	3	0' - 0 7/8"
B126	CLINIC	BUSINESS	465 SF	5	0' - 1 13/32"
B127	RECEPTIONIST	BUSINESS	78 SF	1	0' - 0 1/4"
B128	PRIVATE OFFICE	BUSINESS	130 SF	1	0' - 0 3/8"
B129	PRIVATE OFFICE	BUSINESS	124 SF	1	0' - 0 3/8"
B130	PRIVATE OFFICE	BUSINESS	157 SF	2	0' - 0 15/32"
B131	UNISEX RESTROOM	BUSINESS	54 SF	1	0' - 0 5/32"
B132	UNISEX RESTROOM	BUSINESS	55 SF	1	0' - 0 5/32"
B133	UNISEX RESTROOM	BUSINESS	79 SF	1	0' - 0 1/4"
B134	UNASSIGNED	BUSINESS	513 SF	5	0' - 1 17/32"
B135	MIS	BUSINESS	122 SF	1	0' - 0 3/8"
B140	OPEN AREA	BUSINESS	241 SF	2	0' - 0 23/32"
B143	RESTROOM	BUSINESS	70 SF	1	0' - 0 7/32"
B145	GROUP COUNSELING ROOM	BUSINESS	419 SF	4	0' - 1 1/4"
B146	RESTROOM	BUSINESS	71 SF	1	0' - 0 7/32"
B147	HALLWAY	BUSINESS	21 SF	0	0' - 0 1/16"
C100	HALLWAY	BUSINESS	783 SF	8	0' - 2 11/32"
C101	KITCHEN	BUSINESS	133 SF	1	0' - 0 13/32"
C102	PANTRY	BUSINESS	85 SF	1	0' - 0 1/4"

OCCUPANCY SCHEDULE - BUSINESS					
NUMBER	NAME	OCCUPANCY	AREA	OCCUPANT LOAD	EXIT WIDTH TOTAL
C103	DINING ROOM	BUSINESS	215 SF	2	0' - 0 21/32"
C104	STORAGE	BUSINESS	60 SF	1	0' - 0 3/16"
C105	RESTROOM	BUSINESS	70 SF	1	0' - 0 7/32"
C109	OPEN AREA	BUSINESS	189 SF	2	0' - 0 9/16"
C110	UNASSIGNED	BUSINESS	275 SF	3	0' - 0 13/16"
C112	OFFICE	BUSINESS	169 SF	2	0' - 0 1/2"
C114	OPEN AREA	BUSINESS	678 SF	7	0' - 2 1/32"
C117	RESTROOM	BUSINESS	70 SF	1	0' - 0 7/32"
C119	RESTROOM	BUSINESS	70 SF	1	0' - 0 7/32"
C122	RESTROOM	BUSINESS	71 SF	1	0' - 0 7/32"
C123	OFFICE	BUSINESS	155 SF	2	0' - 0 15/32"
C124	OPEN AREA	BUSINESS	81 SF	1	0' - 0 1/4"
C125	OFFICE	BUSINESS	168 SF	2	0' - 0 1/2"
C130	RESTROOM	BUSINESS	59 SF	1	0' - 0 3/16"
			15005 SF	150	3' - 9"

GENERAL INFORMATION
LOCATION: HARLINGEN, TX
ARCHITECT: MILNET ARCHITECTURAL SERVICES, PLLC

PROJECT DESCRIPTION
INTERIOR RENOVATION OF EXISTING ONE STORY BUILDING AND FACADE IMPROVEMENTS.

APPLICABLE CODES
2012 - IBC
2012 - IFC
2012 - NFPA 101 LSC
2014 - NEC
2012 - TAS

BUILDING HEIGHT AND AREAS
OCCUPANCY CLASSIFICATION
CONST. TYPE V B - UNPROTECTED, SPRINKLED
OCCUPANCY GROUP "A"

ALLOWABLE
TOTAL AREA: 11,000SF
OCCUPANT LOAD: 203
HAVE: 1,418SF

OCCUPANCY CLASSIFICATION
CONST. TYPE V B - UNPROTECTED, SPRINKLED
OCCUPANCY GROUP "B"

ALLOWABLE
TOTAL AREA: 18,000SF
OCCUPANT LOAD: 152
HAVE: 15,179SF

OCCUPANCY CLASSIFICATION
CONST. TYPE V B - UNPROTECTED, SPRINKLED
OCCUPANCY GROUP "R-4"

ALLOWABLE
TOTAL AREA: 14,000SF
OCCUPANT LOAD: 6
HAVE: 1,219SF

BASIC ALLOWABLE HEIGHT:
ALLOWABLE STORIES: 1 (TABLE 503)
ACTUAL STORIES: 1
ALLOWABLE HEIGHT: 40 FT
ACTUAL HEIGHT: EXISTING NON-MODIFIED

TOTAL ACTUAL RENOVATION SQUARE FOOTAGE:
22,000 SF

GENERAL NOTES:
SEPARATE REVIEW, APPROVAL, AND PERMITS ARE REQUIRED FOR GRADING, ACCESSORY BUILDINGS AND STRUCTURES, SIGNS, TRASH ENCLOSURES, BLOCK WALLS, RETAINING WALLS NOT SUPPORTING BUILDINGS, AND DEMOLITION WORK. CONTACT CITY FOR PROCEDURAL INFORMATION.

OVERALL PLAN SHEET IS INTENDED FOR CODE COMPLIANCE SUCH AS OVERALL OCCUPANCY, EGRESS INFORMATION, FIRE SEPARATION AND GENERAL INFORMATION ONLY.

A FIRE SYSTEM APPROVED BY THE FIRE MARSHALL OR AHJ SHALL BE PROVIDED.

AUDIBLE ALARM DEVICES SHALL BE USED IN ALL AREAS. AUDIBLE ALARM DEVICES SHALL BE PROVIDED AND INSTALLED BY CONTRACTOR WITHIN BASE BID. RE: MEP

AN OCCUPANT LOAD SIGN SHALL BE POSTED IN ANY ROOM WITH AN OCCUPANT LOAD OVER 50. THE SIGN IS REQUIRED TO BE POSTED AT OR NEAR THE MAIN EXIT.

PROVIDE PANIC HARDWARE FOR GROUP "A" OCCUPANCIES WITH AN OCCUPANT LOAD OF 50 OR MORE.

MARKING OF FIRE RATED AND SMOKE STOP PARTITIONS: ALL SMOKE STOP PARTITIONS, HORIZONTAL EXIT ENCLOSURES, AND FIRE WALLS MUST BE PERMANENTLY MARKED ABOVE CEILING AS FOLLOWS: "FIRE AND SMOKE BARRIER - PROTECT ALL OPENINGS." LETTERS SHALL BE PAINTED RED. PROTECT ALL OPENINGS. LETTERS SHALL BE PROVIDED ONE LABEL PER STRUCTURAL BAY.

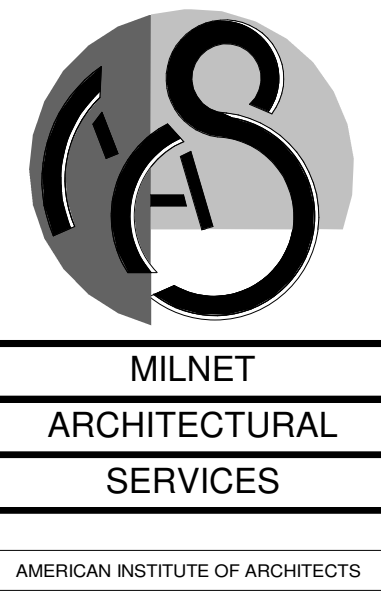
CODE PLAN LEGEND

"A" OCCUPANCY

"B" OCCUPANCY

"R-4" OCCUPANCY

2HR RATED WALL



HOP VILLA RENOVATIONS

TROPICAL TEXAS BEHAVIORAL HEALTH

HARLINGEN, TX

PROJECT NUMBER
217027

DATE
AUGUST 20, 2018

ISSUE FOR SEALED
PROPOSALS

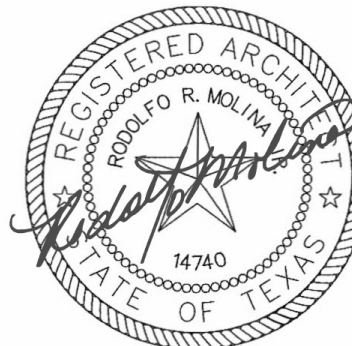
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MILNET
ARCHITECTURAL
SERVICES

AMERICAN INSTITUTE OF ARCHITECTS



HOP VILLA RENOVATIONS
TROPICAL TEXAS BEHAVIORAL HEALTH
HARLINGEN, TX

PROJECT NUMBER
217027

DATE
AUGUST 20, 2018

ISSUE FOR SEALED
PROPOSALS

SHEET NUMBER

AS1.0

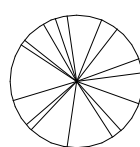
GENERAL NOTES:

1. OWNER WILL PROVIDE SOIL TESTS PRIOR TO FOUNDATION WORKS.
2. PROVIDE SIDEWALK AS PART OF BASE BID.
3. RE: CIVIL FOR UTILITY CONNECTIONS (U.R. WATER & SEWER.)
4. WARNING:
CONTACT 1-800-DIG-TEST FOR UNDERGROUND ELECTRICAL CABLES IN SITE.
5. ALL CONSTRUCTION AND MATERIALS FOR DRAINAGE, GRADING AND PAVING TO BE IN ACCORD WITH "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION".
6. ALL SOIL PLACED ONTO SITE IS TO BE COMPACTED TO 90% DENSITY, EXCEPT UNDER ANY PAVING COMPACTION IS TO BE 95%, BY OWNER. RE: CIVIL FOR ADDT. INFO.
7. CONTRACTOR IS RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL CONTROL FOR CONSTRUCTION.
8. CONTRACTOR IS RESPONSIBLE FOR PAYING ANY FEES FOR PERMITS AS MAY BE REQUIRED FOR THIS CONSTRUCTION.
9. ALL PIPE SLEEVES SHALL BE SCH. 40 PVC AND FURNISHED IN PLACE BY THE CONTRACTOR BEFORE PAVING.

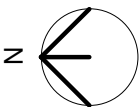
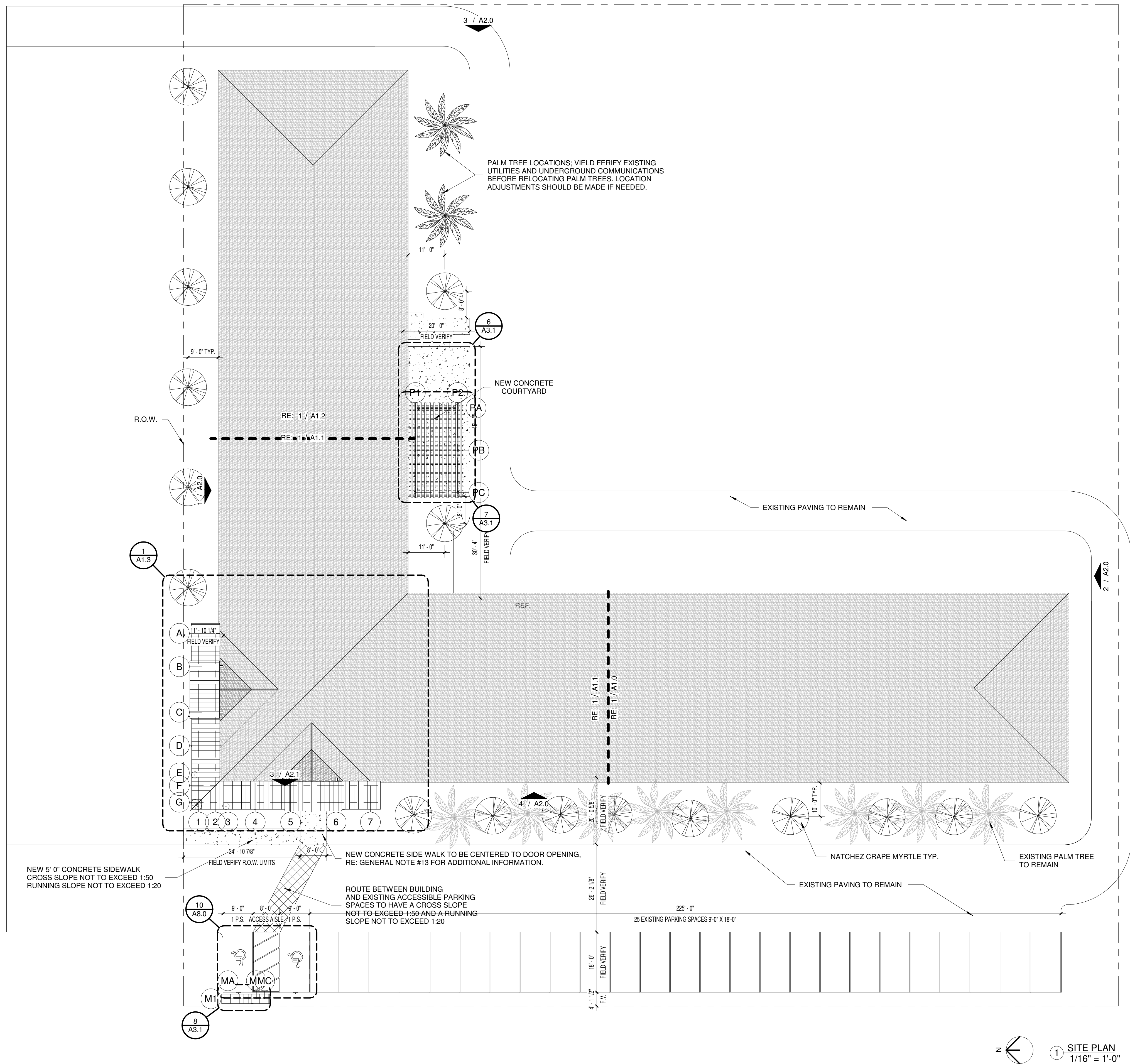
TUELECTRIC SLEEVES:
6" SLEEVES ARE TO BE DOVE GREY AND PLACED 48" BELOW TOP OF CURB ELEVATIONS, WITH END CONDUIT MARKERS FURNISHED BY TUELECTRIC PLACED ON EACH END OF CONDUIT.
IRRIGATION SLEEVES:
2" & 4" SLEEVES ARE TO BE PLACED 24" BELOW TOP OF CURB.

10. CONTRACTOR TO SET CONTROL GRADES AT 25' INTERVALS ALONG ALL PAVING FLOW LINES.
11. CONTRACTOR TO PROVIDE JOB SIGN. RE: 4/A9.0
12. PROVIDE AND INSTALL PRE-ENGINEERED METAL CANOPY OVER NEW CONC SIDEWALKS. RE: 1/A3.1, RE: STRUCTURAL FOR ADDITIONAL INFORMATION
13. ALL SIDEWALKS AND COVERED WALKWAYS SHALL HAVE 1:50 MAXIMUM CROSS SLOPE. SIDEWALKS OR COVERED WALKWAYS THAT MUST HAVE SLOPES GREATER THAN 1:20 SHALL HAVE HANDRAILS ON BOTH SIDES WITH 4" HIGH CONC. CURBS ON BOTH SIDES. HANDRAILS SHALL BE 34" TO TOP A.F.F. THERE SHALL BE NO ABRUPT CHANGE IN ELEVATION ALONG ACCESSIBLE ROUTES AT SIDEWALKS AND COVERED WALKWAYS.
14. CURB RAMP SLOPE SHALL BE 1:12 MAXIMUM WITH 1:10 FLARED SIDES AND SHALL BE TEXTURED. PAINT WITH A LIGHT REFLECTIVE PAINT. PARALLEL CURB RAMP SLOPE SHALL BE 1:12 MAXIMUM & TEXTURED. PAINT WITH A LIGHT REFLECTIVE PAINT. ALL CURB RAMP SHALL HAVE A LANDING AT TOP & BOTTOM. LANDINGS SHALL HAVE A 1:50 MAXIMUM SLOPE IN ANY DIRECTION.
15. STRIPED ACCESS AISLES AND ACCESSIBLE PARKING SHALL HAVE A MAXIMUM CROSS SLOPE IN ALL DIRECTIONS OF 1:50.
16. ALL GRADING SHALL BE DONE TO DRAIN WATER AWAY FROM BUILDINGS.
17. ALL EXTERIOR ALCOVES SHALL HAVE A 1:50 MAXIMUM SLOPE AND SHALL HAVE NO DROPS AT DOORS NOR AT CONNECTING SIDEWALKS.
18. REFER TO CIVIL DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR CONTACTING ARCHITECT IN CASE OF DISCREPANCIES AND COORDINATING WITH CIVIL ENGINEER PRIOR TO PROCEEDING.
19. PROVIDE 2' X 4' CONCRETE SPLASH BLOCK AT DOWNSPOUT LOCATIONS.
20. ALL EXTERIOR DOORS SHALL HAVE A LEVEL AREA WITH A 1:50 MAXIMUM SLOPE IN ALL DIRECTIONS. THE AREA SHALL BE A MINIMUM OF 5 FT. IN THE DIRECTION OF TRAVEL BY THE WIDTH OF THE SIDEWALK.
21. ANY EXISTING CONSTRUCTION THAT IS TO BE REMOVED, SHALL BE REMOVED CAREFULLY SO AS NOT TO DAMAGE ANY EXISTING CONSTRUCTION THAT IS TO REMAIN. PAVING, LANDSCAPING, ETC THAT IS DAMAGED BY CONTRACTOR IS TO BE REPAIRED TO MATCH EXISTING CONDITIONS BEFORE DAMAGE AT NO ADDITIONAL COST TO OWNER

LANDSCAPING GENERAL NOTES



NATCHEZ CRAPE MYRTLE



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

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GENERAL NOTES

1. THIS CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE, UNLESS OTHERWISE INDICATED. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE, WORKMEN, AND OTHER PERSONS DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR EARTH BANKS, FORMS, DISFOLDING, PLACING SAFETY NETS, SUPPORT AND BRACING FOR CRANES, POLES, ETC. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT OR THE ENGINEER DO NOT INCLUDE INSPECTION OF THE ABOVE AND BELOW ITEMS.
2. ALL CONSTRUCTION AND QUALITY OF MATERIALS SHALL COMPLY WITH THE GOVERNING BUILDING CODES AND REGULATIONS.
3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, TOLERANCES AND CONDITIONS AT THE JOB SITE BEFORE COMMENCEMENT OF WORK AND SHALL IMMEDIATELY REPORT ANY DISCREPANCIES OR OMISSIONS TO THE ARCHITECT AND ENGINEER IN WRITING. ANY OMISSION OR CONFLICT BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH ANY WORK SO INVOLVED.
4. IN CASE OF CONFLICT: NOTES AND DETAILS ON THE BALANCE OF THE DRAWINGS TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. DRAWINGS TAKE PRECEDENCE OVER SPECIFICATIONS.
5. WHERE CONSTRUCTION DETAILS ARE NOT SPECIFICALLY SHOWN OR NOTED FOR ANY PART OF THE WORK, SUCH DETAILS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAILS SHOWN FOR SIMILAR CONDITIONS AND MATERIALS. WHERE SUFFICIENTLY SIMILAR WORK IS NOT SHOWN, THE ENGINEER SHALL BE CONSULTED FOR CLARIFICATION.
6. EACH SUBCONTRACTOR IS CONSIDERED AN EXPERT IN HIS RESPECTIVE FIELD AND SHALL PRIOR TO THE SUBMISSION OF A BID OR PERFORMANCE OF WORK, NOTIFY THE GENERAL CONTRACTOR, ARCHITECT, ENGINEER OR OWNER, IN WRITING OF ANY WORK CALLED OUT ON THE DRAWINGS IN HIS TRADE THAT CANNOT BE GUARANTEED OR PERFORMED AS INDICATED.
7. THE CONTRACTOR SHALL COORDINATE ALL MECHANICAL AND ELECTRICAL EQUIPMENT, AS TO WEIGHTS AND EXACT LOCATIONS, WITH STRUCTURAL SUPPORTS. IN THE EVENT THAT THE PURCHASED EQUIPMENT DEVIATES IN WEIGHT AND LOCATION FROM THOSE INDICATED ON THE PLANS, THE ARCHITECT AND ENGINEER MUST BE NOTIFIED AND APPROVAL OBTAINED PRIOR TO INSTALLATION.
8. THIS STRUCTURE IS DESIGNED AS A STABLE UNIT AFTER ALL COMPONENTS ARE IN PLACE. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY BRACING AS REQUIRED TO INSURE THE VERTICAL AND LATERAL STABILITY OF THE ENTIRE STRUCTURE, OR ANY PORTION THEREOF, DURING CONSTRUCTION.
9. NEITHER THE OWNER NOR THE ARCHITECT NOR THE ENGINEER WILL ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING AND BRACING, AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS.
10. TRADE NAMES AND MANUFACTURERS REFERRED TO ARE FOR QUALITY STANDARDS ONLY. SUBSTITUTIONS WILL BE PERMITTED AS APPROVED BY THE ENGINEER.
11. ANY OPTIONS OR APPROVED SUBSTITUTIONS ARE FOR CONTRACTORS CONVENIENCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CHANGES, ADDITIONAL COSTS (INCLUDING REDESIGN BY THE ENGINEER), AND COORDINATION WITH ALL ITEMS THAT THE SUBSTITUTIONS MAY IMPACT.
12. THE ARCHITECT AND ENGINEER ARE TO BE NOTIFIED IN WRITING WHEN CONSTRUCTION AT THE SITE BEGINS.
13. ANY QUESTIONS RELATED TO INTERPRETATION OR INTENT OF THESE DRAWINGS SHALL BE REFERRED TO THE ENGINEER.
14. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO LOCATE AND PROJECT ANY EXISTING UNDERGROUND OR CONCEALED CONDUIT, PLUMBING, OR OTHER UTILITIES PRIOR TO BEGINNING ANY WORK.
15. PIPES, DUCTS, SLEEVES, CHASES, ETC. SHALL NOT BE PLACED IN BEAMS OR WALLS UNLESS SPECIFICALLY SHOWN OR NOTED. SHALL NOT SHALL ANY STRUCTURAL MEMBER BE CUT FOR PIPES, DUCTS, ETC. UNLESS NOTED. CONTRACTOR SHALL OBTAIN PRIOR APPROVAL FOR INSTALLATION OF ANY ADDITIONAL PIPES, DUCTS, ETC.

DESIGN CRITERIA

- DESIGN LOADS, STRUCTURAL ANALYSIS AND PREPARATIONS OF STRUCTURAL MEMBERS ARE BASED UPON THE FOLLOWING CRITERIA:
1. CODE: IBC 2015
2. LATERAL LOADS
- A. WIND SPEED (V³ S): 140 MPH
- B. EXPOSURE CATEGORY: 1
- C. IMPORTANCE FACTOR: 1.0
- D. BUILDING CATEGORY: III
- E. SEISMIC DESIGN CATEGORY: A
- F. SITE CLASS: D
- G. SEISMIC COEFFICIENTS: 0.086 g
- Ss 0.014 g
- S1 2.5
- Fv 3.5
- Sms 0.140 g
- Sd1 0.050 g
- Sd2 0.063 g
- Sd3 0.033 g
3. VERTICAL LOADS
- A. COOL: 15 PSF
- B. ACTUAL LATERAL LOAD: 20 PSF
- C. DEAD LOAD: 20 PSF
- D. LIVE LOAD (REDUCIBLE): 250 PSF
- E. WIND UPLIFT LOAD (NET): 0 PSF
- F. GROUND SNOW LOAD: 0 PSF
- G. CRANE LOADS: NONE
- H. MECHANICAL UNITS: SEE PLANS
- FLOOR:
- A. DEAD LOAD: 50 PSF
- B. LIVE LOAD, OFFICE: 50 PSF
- C. LIVE LOAD, LIGHT STORAGE: 125 PSF
- D. LIVE LOAD, HEAVY STORAGE: 250 PSF
- E. LIVE LOAD, CLASSROOM: 100 PSF
- F. LIVE LOAD, CORRIDOR: 100 PSF
- G. MECHANICAL UNITS: SEE PLANS
4. SUBSURFACE INFORMATION
- A. PREPARED BY: n/a
- B. PROJECT NO.: n/a
- C. DATE: n/a
- D. MINIMUM FOUNDATION DEPTH: 24 INCHES
- E. MINIMUM FOOTING WIDTH: 12 INCHES
- F. ALLOWABLE BEARING PRESSURE (CONTINUOUS FOOTINGS): 1500 PSF
- G. ALLOWABLE BEARING PRESSURE (ISOLATED FOOTINGS): 1500 PSF
- H. WIRE REINFORCEMENT INSTITUTE (WRI) CRITERIA
- I. CLIMATIC RATING (Cw) 15
- J. EFFECTIVE PLASTICITY INDEX (UNDISTURBED, NATIVE SOIL) 22
- K. EFFECTIVE PLASTICITY INDEX (SITE IMPROVED SOIL) 21
- L. PVR (UNDISTURBED SOIL) 1.1/4 INCH
- M. PVR (WITH SITE IMPROVEMENT) 1.0 INCH

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- S1 2.5
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- D. LIVE LOAD (REDUCIBLE): 250 PSF
- E. WIND UPLIFT LOAD (NET): 0 PSF
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- FLOOR:
- A. DEAD LOAD: 50 PSF
- B. LIVE LOAD, OFFICE: 50 PSF
- C. LIVE LOAD, LIGHT STORAGE: 125 PSF
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- L. PVR (UNDISTURBED SOIL) 1.1/4 INCH
- M. PVR (WITH SITE IMPROVEMENT) 1.0 INCH

ALLOWANCE

1. IN ADDITION TO THE MATERIAL SHOWN, THE CONTRACTOR TO PROVIDE ADDITIONAL MATERIAL, FOR USE ON THE PROJECT AS DIRECTED BY THE STRUCTURAL ENGINEER FIELD REPRESENTATIVE. THE ALLOWANCE COST SHALL INCLUDE MATERIAL COST, LABOR COSTS AND PLACEMENT AT THE SITE.
2. REMAINING BALANCE AT THE END OF THE PROJECT SHALL BE RETURNED/CREDITED BACK TO THE OWNER.
3. THE ALLOWANCE SHALL APPEAR ON THE SCHEDULE OF VALUE AS A LINE ITEM.
- | MATERIAL | ALLOWANCE |
|-----------------------------------|--------------|
| CONCRETE | 10 CU. YD. |
| REINFORCING STEEL | 3000 LBS |
| STRUCTURAL STEEL | 5000 LBS |
| CMU | 1000 SQ. FT. |
| CONCRETE SPALL REPAIR (x 6" DEEP) | 0 SQ. FT. |

SHOP DRAWINGS AND SUBMITTALS

1. SHOP DRAWINGS SHALL BE PREPARED AND SUBMITTED FOR REVIEW TO THE ENGINEER FOR EACH STRUCTURAL BUILDING MATERIAL AS INDICATED IN THE STRUCTURAL GENERAL NOTES AND THE CONTRACT SPECIFICATIONS. SEE THE CONTRACT SPECIFICATIONS FOR SUBMITTAL PROCEDURES AND ADDITIONAL INFORMATION.
2. SHOP DRAWINGS SHALL USE DRAFTING LINE WORK AND LETTERING THAT IS CLEARLY LEGIBLE. SHOP DRAWINGS SHALL NOT CONTAIN NO REPRODUCTIONS OF THE CONTRACT DRAWING PLANS OR DETAILS.
3. SUBMIT STRUCTURAL SHOP DRAWINGS IN PDF FORMAT.
4. SHOP DRAWINGS SHALL NOT SHOW MATERIALS FOR MORE THAN ONE LEVEL OF THE SAME PLAN.
5. SHOP DRAWINGS SHALL SHOW CLEAR AND COMPLETE INFORMATION FOR THE FABRICATION (DETAIL, SHEETS AND/OR MATERIAL LISTS) AND INSTALLATION.
6. ALLOW A MINIMUM OF (2) WEEKS FOR REVIEW OF EACH SET OF SHOP DRAWINGS.
7. CONTRACTOR SHALL REVIEW THE SHOP DRAWINGS SUBMITTED BY THE SUB-CONTRACTOR AND COORDINATE WITH THE ARCHITECT AND ENGINEER BEFORE SUBMITTING TO THE ARCHITECT AND ENGINEER FOR REVIEW. ANY QUESTIONS THAT THE CONTRACTOR CANNOT ANSWER WITH THE INFORMATION ON THE DRAWINGS SHALL BE MARKED FOR ENGINEER REVIEW.
8. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS. SEE NOTE NUMBER 3 UNDER GENERAL NOTES.
9. REVIEW OF SHOP DRAWINGS BY THE ENGINEER IS FOR GENERAL CONFORMANCE TO THE STRUCTURAL DRAWINGS. REVIEW OF THE SHOP DRAWINGS BY THE ENGINEER DOES NOT RELIEF THE CONTRACTOR FOR ANY ERRORS IN DIMENSIONS OR MATERIALS INDICATED ON THE SHOP DRAWINGS.
10. IF THERE IS ANY DISCREPANCY BETWEEN THE STRUCTURAL DRAWINGS AND SHOP DRAWINGS, THE INFORMATION SHOWN ON THE STRUCTURAL DRAWINGS GOVERN. INFORMATION THAT IS NOT INDICATED ON THE SHOP DRAWINGS SHALL BE OBTAINED FROM THE STRUCTURAL DRAWINGS.
11. PROVIDE SUBMITTALS FOR THE FOLLOWING ITEMS:
- | ITEM | REQUIRED |
|---|----------|
| A. CONCRETE MIX DESIGN | X |
| B. CURING COMPOUND FOR CONCRETE | X |
| C. REINFORCING STEEL | X |
| D. STRUCTURAL STEEL | X |
| E. STEEL JOIST | X |
| F. METAL DECKING (INDICATE LAYOUT AND TYPES OF DECK PANELS, ANCHORAGE DETAILS, REINFORCING CHANNELS, PANS, DECK OPENINGS, SPECIAL JOINTING, ACCESSORIES, AND ATTACHMENTS TO OTHER CONSTRUCTION) | X |
| G. PRE-MANUFACTURED METAL BUILDING (INCLUDE CALC'S & REACTIONS) | X |
| H. PRE-MANUFACTURED WOOD TRUSSES | X |

REINFORCING STEEL

1. BAR REINFORCEMENT SHALL CONFORM TO THE FOLLOWING GRADES OF ASTM A615, INCLUDING SUPPLEMENT S1, GRADE 40 - #3 AND SMALLER GRADE 60 - #4 AND LARGER.
2. DETAILS OF REINFORCEMENT SHALL BE IN ACCORDANCE WITH CHAPTER 7 OF THE AMERICAN CONCRETE INSTITUTE (ACI) 318, UNLESS OTHERWISE NOTED.
3. VERTICAL REINFORCING SHALL BE TIED OR OTHERWISE FIXED IN POSITION AT THE TOP AND BOTTOM AND AT INTERMEDIATE LOCATIONS, SPACED NOT GREATER THAN 192 BAR DIAMETERS NOR FOUR (4) FEET ON CENTER.
4. WELDED STEEL WIRE FABRIC REINFORCEMENT SHALL CONFORM TO ASTM A185.
5. LAPS OF WELDED STEEL WIRE FABRIC AT SPLICES SHALL BE NOT LESS THAN 12 INCHES.
6. WALLS, PLASTER, COLUMNS SHALL BE DOWELED TO THE SUPPORTING FOOTINGS WITH REINFORCEMENT OF THE SAME SIZE, GRADE AND AT THE SAME SPACING AS THE VERTICAL REINFORCEMENT IN THE WALLS, PLASTER, OR COLUMNS.
7. BAR SUPPORTS SHALL BE PROVIDED IN ACCORDANCE WITH THE PROVISIONS OF "BAR SUPPORT SPECIFICATION" AS CONTAINED IN THE LATEST EDITION OF THE "MANUAL OF STANDARD PRACTICE" BY THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI).
8. REINFORCING STEEL DETAILING, BENDING AND PLACING SHALL BE IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE", LATEST EDITION.
9. ALL REINFORCEMENT SHALL BE SECURELY TIED IN PLACE BEFORE PLACING CONCRETE OR GROUT. PROVIDE CONCRETE OR MASONRY CHAIRS AT 4'-0" O.C. MAX. (PLASTIC CHAIRS NOT ALLOWED).
10. PROVIDE CORNER BARS TOP AND BOTTOM AT ALL BEAM CORNERS AND DEAD END BEAM INTERSECTIONS. BARS TO EQUAL SIZE AND QUANTITY OF THE NOTED BEAM STEEL. BARS SHALL BE BEAM REINFORCEMENT 40 BAR DIAMETERS.
11. BARS DETAILED AS CONTINUOUS SHALL BE LAPPED 40 BAR DIAMETERS AT SPLICES.
12. EXTEND SLAB REINFORCING STEEL PERPENDICULAR TO BEAM, TO THE TOP OUTSIDE REINFORCING BAR OF PERIMETER BEAMS. START THE SLAB REINFORCING STEEL PARALLEL TO BEAM, NOT MORE THAN 8" FROM THE TOP INSIDE REINFORCING BAR OF PERIMETER BEAMS.
13. PROVIDE #4 "Z" BARS AT 12" ON CENTER WHERE THE SLAB STEPS DOWN MORE THAN 3". THE "Z" BARS SHALL LAP THE MAIN SLAB REINFORCING STEEL 40 BAR DIAMETERS.
14. ALL CONDUIT OR PLUMBING LINES IN SLAB SHALL BE PLACED BELOW SLAB REINFORCING. ALL CONDUIT TO BE NO GREATER THAN 1" DIAMETER AND TO BE PLACED IN CENTER OF SLAB. NO PLUMBING LINES GREATER THAN 1 INCH ALLOWED IN THE SLAB.
15. WELDING OF CROSSING BARS AND TACK WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED.
16. WELDING OF REINFORCING STEEL, IF PERMITTED BY THE STRUCTURAL ENGINEER, SHALL BE PERFORMED IN ACCORDANCE WITH THE "STRUCTURAL WELDING CODE REINFORCING STEEL" ON THE AMERICAN WELDING SOCIETY, AWS D1-4.96 AS INCORPORATED IN CBC CHAPTER NO. 19, AND BY CERTIFIED WELDERS QUALIFIED USING PROCEDURES CONTAINED THEREIN. E70XX ELECTRODES SHALL BE USED IN WELDING. GRADE 60 REINFORCEMENT REINFORCEMENT SHALL NOT BE WELDED UNTIL A CHEMICAL ANALYSIS SUFFICIENT TO DETERMINE THE CARBON EQUIVALENT (C.E.) IS PERFORMED. THE C.E. OF REINFORCING STEEL SHALL BE CALCULATED FROM THE CHEMICAL COMPOSITION AS SHOWN IN THE MILL TEST REPORT. IF MILL TEST REPORTS ARE NOT AVAILABLE, A CHEMICAL ANALYSIS SHALL BE MADE ON REINFORCEMENT REPRESENTATIVE OF THOSE TO BE WELDED. THE C.E. SHALL NOT EXCEED 0.55 AS CALCULATED PER CBC CHAPTER 19. A COPY OF THE MILL TEST OF REINFORCING STEEL IN CONCRETE MEMBERS. (SPECIAL INSPECTION IS REQUIRED FOR ALL FIELD WELDING).
17. CONTRACTOR SHALL SUBMIT REINFORCING STEEL SHOP DRAWINGS FOR REVIEW BEFORE FABRICATION AND INSTALLATION.
18. CONCRETE COVER FOR REINFORCING AS FOLLOWS:
- | | MINIMUM COVER | TOLERANCE |
|---|---------------|-----------|
| DRILLED PIERS, FOOTINGS AND OTHER PRINCIPAL STRUCTURAL MEMBERS IN WHICH CONCRETE IS DEPOSITED INTO FORMWORK, WHERE CONCRETE SURFACES, AFTER REMOVAL OF FORMS, ARE EXPOSED TO WEATHER OR GROUND: | 3" | 3/8" |
| FOR BARS 5/8" IN DIAMETER | 2" | 1/4" |
| FOR BARS 5/8" OR LESS IN DIAMETER | 1 1/2" | 1/4" |
| WHERE SURFACES ARE NOT DIRECTLY EXPOSED TO WEATHER OR GROUND: | | |
| FOR SLAB ON GRADE (FROM TOP OF SLAB) | 1 1/2" | 1/4" |
| FOR BEAMS, COLUMNS | 1 1/2" | 1/4" |
| FOR JOISTS AND SLABS | 1" | 1/8" |

20. LAPS AT BAR SPLICES, UNLESS NOTED OTHERWISE, SHALL BE AS FOLLOWS:
- MASONRY - GRADE 60: LAP 50 DIA. (30" MIN.)
- GRADE 40: LAP 48 DIA. (24" MIN.)
- CONCRETE - LAP PER SCHEDULE BELOW
- | BAR SIZE | f _c = 2000 PSI | f _c = 3000 PSI | f _c = 4000 PSI | f _c = 5000 PSI |
|----------|---------------------------|---------------------------|---------------------------|---------------------------|
| #3 | 22 | 22 | 22 | 22 |
| #4 | 29 | 29 | 29 | 29 |
| #5 | 40 | 36 | 36 | 36 |
| #6 | 57 | 46 | 43 | 43 |
| #7 | 77 | 63 | 54 | 54 |
| #8 | 100 | 82 | 71 | 71 |
| #9 | 128 | 104 | 90 | 90 |
| #10 | 162 | 132 | 115 | 115 |
| #11 | 200 | 163 | 141 | 141 |
- FOR WELDED WIRE FABRIC: SPACING OF WIRE PLUS 12".

SPECIAL NOTES TO OWNER

1. UNDER NORMAL CONDITIONS, AND FOR CONVENTIONAL BUILDINGS SUCH AS THE SUBJECT MATTER, REINFORCED CONCRETE AND MASONRY DEVELOP CRACKS. THE CRACKS ARE DUE TO INHERENT SHRINKAGE OF CONCRETE, CREEP AND RESTRAINING EFFECTS OF VERTICAL AND OTHER STRUCTURAL ELEMENTS TO WHICH THE BEAMS/SLABS ARE TIED.
2. THE CRACKS FORMED ARE NORMALLY COSMETIC, THE SLAB MAINTAINS ITS SERVICEABILITY AND STRENGTH REQUIREMENTS. IT IS EMPHASIZED THAT ALTHOUGH SPECIAL EFFORT IS MADE TO REDUCE THE POTENTIAL CAUSES AND NUMBER OF SUCH CRACKS, IT IS NOT PRACTICAL TO PROVIDE TOTAL ISOLATION BETWEEN THE FLOOR SYSTEM AND ITS SUPPORTS AND THEREBY ACHIEVE COMPLETE INHIBITION OF ALL CRACKS.
3. MOST SUCH CRACKS DEVELOP OVER THE FIRST THREE YEARS OF THE LIFE OF THE FLOOR SYSTEM. CRACKS WHICH ARE WIDER THAN 0.01 INCH MAY NEED TO BE PRESSURE EPOXIED. REFER TO THE NOTES UNDER "ALLOWANCES".
4. THE OBJECT OF THE JOINTS PROVIDED IS TO ALLOW MOVEMENT. MOVEMENTS DUE TO CREEP AND SHRINKAGE MAY BE NOTICEABLE AT JOINTS UP TO TWO YEARS AFTER CONSTRUCTION. BEYOND WHICH MOVEMENTS DUE TO VARIATIONS IN TEMPERATURE WILL PERSIST.

STRUCTURAL STEEL

1. MATERIAL AND WORKMANSHIP SHALL CONFORM TO THE LATEST EDITION OF THE AISC SPECIFICATIONS FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.
2. STRUCTURAL STEEL SHALL COMPLY WITH THE FOLLOWING ASTM DESIGNATIONS:
- | MATERIAL | DESIGNATION | STRENGTH |
|----------------------------------|--------------|-----------|
| ANCHOR BOLTS | A30 | Fy=36 ksi |
| PLATES | A36 | Fy=36 ksi |
| ANGLES | A36 | Fy=36 ksi |
| CHANNELS | A36 | Fy=36 ksi |
| WIDE FLANGE SHAPES | A572 | Fy=50 ksi |
| STEEL PIPE | A53 GRADE B | Fy=35 ksi |
| SQUARE & RECT. STEEL TUBES (HSS) | A500 GRADE B | Fy=46 ksi |
| ROUND TUBES (HSS) | 500 GRADE B | Fy=42 ksi |
3. ALL STRUCTURAL STEEL SHALL BE FABRICATED, ERECTED, AND PAINTED IN ACCORDANCE WITH THE SPECIFICATIONS FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS AS AMENDED TO DATE AND THE CODE OF STANDARD PRACTICE, LATEST EDITION AS ADOPTED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION, AMENDED AS FOLLOWS:
- SECTION 4.2.1, DELETE FIRST TWO SENTENCES.
- SECTION 7, ALL REFERENCE TO OWNER SHALL BE CHANGED TO GENERAL CONTRACTOR.
- SECTION 7.9.3, THE CONTRACTOR SHALL PROVIDE THE SEQUENCE AND SCHEDULE OF PLACEMENT OF NON-SELF SUPPORTING STEEL FRAMES.
- SECTION 7.9.4, THE CONTRACTOR TO DESIGN SHORES, JACKS OR LOADS.
4. WELDING SHALL BE DONE IN ACCORDANCE WITH THE STANDARD CODE FOR ARC AND GAS WELDING IN BUILDING CONSTRUCTION AS PUBLISHED BY THE AMERICAN WELDING SOCIETY, EXCEPT THAT ALL WELDING SHALL BE DONE BY THE ELECTRIC ARC PROCESS. ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS AND SHALL CONFORM TO ANSISAWS D1.4.
5. DETAILED AND OR SCHEDULED CONNECTIONS HAVE BEEN DESIGNED BY STRUCTURAL ENGINEER. ANY CONNECTION NOT DETAILED OR SCHEDULED OR ALTERED FOR FABRICATOR PURPOSES SHALL BE SIZED AND DETAILED BY FABRICATOR AND SHALL BE MARKED FOR ENGINEERS VERIFICATION. FABRICATOR SIZED AND DETAILED CONNECTIONS SHALL SUPPORT ONE HALF THE TOTAL UNIFORM LOAD CAPACITY SHOWN IN THE TABLES OF UNIFORM CONSTANTS, PART 2 OF THE AISC MANUAL OF STEEL CONSTRUCTION FOR THE GIVEN BEAM, SPAN AND GRADE OF STEEL SPECIFIED. THE EFFECT OF ANY CONCENTRATION LOADS MUST BE TAKEN INTO ACCOUNT.
6. SEE ARCHITECTURAL PLANS FOR MISCELLANEOUS STEEL ITEMS NOT INDICATED ON STRUCTURAL DRAWINGS. STEEL ITEMS SHOWN ON ARCHITECTURAL DRAWINGS AND NOT SPECIFIED ON THE STRUCTURAL DRAWINGS SHALL BE DESIGN BY THE STEEL FABRICATOR. SEE DESIGN CRITERIA FOR LOADING.
7. ALL WELDED CONNECTIONS SHALL BE MADE USING 1/4" FILLET WELD, U.N.O.
8. ALL BOLTED CONNECTIONS SHALL BE MADE USING 3/4" DIAMETER HIGH STRENGTH BOLTS, ASTM A325, BEARING TYPE CONNECTION W/ WASHERS ASTM F436, U.N.O. ON DESIGN DRAWINGS. SPECIAL INSPECTION REQUIRED FOR ALL HIGH STRENGTH BOLTING.
9. ALL CONNECTION PLATES AND STIFFENERS SHALL BE MADE WITH 1/4" THICK PLATES, UNLESS OTHERWISE NOTED ON PLANS.
10. ALL STEEL (INCLUDING BOLTS) EXPOSED TO THE WEATHER SHALL BE HOT DIPPED GALVANIZED, INCLUDES STEEL THAT IS ONLY COVERED WITH PLASTER OR STUCCO). SEE ARCHITECTURAL PLANS IF STRICTER REQUIREMENTS ARE REQUIRED.
11. ALL EXPOSED STEEL SHALL FOLLOW SECTION 10 OF THE CODE OF STANDARD PRACTICE OF AISC, SECTION 10 OF THE CODE ADDRESSES ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS).
12. CONNECTIONS SHALL BE PER HOLLOW STRUCTURAL SECTIONS, CONNECTION MANUAL BY AISC.
13. WELDED STEEL MEMBER PASS THROUGH CMU WALLS. PROVIDE HALF INCH GAP BETWEEN THE CMU AND THE STEEL MEMBER. PROVIDE ELASTOMERIC MATERIAL BETWEEN THE STEEL MEMBER AND CMU WALL.
14. ALL BEAMS NOT SHOWN SHALL BE W14x26. ALL COLUMNS NOT SHOWN SHALL BE HSS14x14.
15. STEEL SHOP SHALL BE ALSO CERTIFIED.
16. HOLES FOR BOLTS IN STRUCTURAL STEEL SHALL BE DRILLED OR PUNCHED. BURNING OF HOLES SHALL NOT BE PERMITTED. UNLESS NOTED OTHERWISE, HOLES SHALL BE STANDARD SIZE 1/16 INCH LARGER THAN THE BOLT.
17. ALL STRUCTURAL STEEL SHAPES SHALL BE PRIMER WITH A RUST RESISTANT PRIMER BEFORE SHIPMENT TO THE PROJECT SITE. PRIMER SHALL NOT BE APPLIED TO THE IMMEDIATE AREA OF STEEL INTENDED TO RECEIVE SLIP CRITICAL BOLTED CONNECTIONS.
18. HIGH STRENGTH BOLTS INSTALLATION SHALL BE CONTINUOUSLY INSPECTED BY A SPECIAL INSPECTOR. FOLLOWING ARE REQUIREMENTS OF THE SPECIAL INSPECTOR:
- A. HE SHALL VERIFY THE MILL CERTIFICATES FOR MATERIAL.
- B. HE SHALL VERIFY THAT THE MATERIAL USED ARE PROPERLY STORED AND PREPARED FOR USE.
- C. HE SHALL VERIFY THAT CONSTRUCTION DETAILS, PROCEDURES, TOOL CALIBRATIONS AND WORKMANSHIP ARE IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND BUILDING CODE.
- D. FOR SNUG-TIGHT CONNECTIONS, HE SHALL VERIFY THAT THE PLIES OF THE CONNECTED ELEMENTS HAVE BEEN BROUGHT INTO SNUG CONTACT WITH EACH OTHER.
- E. FOR SLIP-TIGHT CONNECTIONS, HE SHALL VERIFY THE PRETENSION METHOD SELECTED BY THE CONTRACTOR HAS INDUCED THE REQUIRED MINIMUM TENSION IN THE BOLT.
- F. HE SHALL CERTIFICATE OF INSPECTION SHALL BE FURNISHED BY THE SPECIAL INSPECTOR TO THE BUILDING OFFICIAL PRIOR TO HIS INSPECTION AND TO THE ARCHITECT AND ENGINEER.
19. WELDING IN THE FIELD SHALL BE CONTINUOUSLY INSPECTED, BY A SPECIAL INSPECTOR FOLLOWING ARE REQUIREMENTS OF THE SPECIAL INSPECTOR:
- A. HE SHALL VERIFY THAT THE MATERIAL USED ARE PROPERLY STORED AND PREPARED FOR USE.
- B. HE SHALL VERIFY THE WELDER'S QUALIFICATIONS.
- C. HE SHALL VERIFY THAT CONSTRUCTION DETAILS, PROCEDURES AND WORKMANSHIP ARE IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND BUILDING CODE.
- D. A CERTIFICATE OF INSPECTION SHALL BE FURNISHED BY THE SPECIAL INSPECTOR TO THE BUILDING OFFICIAL PRIOR TO HIS INSPECTION AND TO THE ARCHITECT AND ENGINEER.
20. ALL NON SHRINK GROUT FOR LEVELING OF BASE PLATES SHALL HAVE A MINIMUM 5000 PSI COMPRESSIVE STRENGTH AT 28 DAYS. GROUT SHALL COMPLY WITH CORPS OF ENGINEERS SPECIFICATION CRD-C 621.

Drawing List	
Sheet Number	Sheet Name
S101	General Notes
S102	General Notes
S201	Foundation Plan
S301	Low Framing Plan
S302	Framing Plan
S401	Typical Concrete Details
S402	Foundation Details
S501	Sections
S502	Sections

CAST-IN-PLACE CONCRETE

1. VERIFY ALL DIMENSIONS. COORDINATE WITH ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION AND NOTIFY ARCHITECT AND/OR ENGINEER OF ANY DISCREPANCIES.
2. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE SPECIFICATIONS, ACI #301 LATEST EDITION, DRILLED PIERS SHALL COMPLY WITH ACI 308.1 AND ACI 308.3R, LATEST EDITIONS.
3. ALL DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS, ACCESSORIES UNLESS OTHERWISE NOTED, SHALL BE IN ACCORDANCE WITH THE ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE". ACI #315 LATEST EDITION THE MINIMUM 28 DAYS CYLINDER STRENGTH SHALL BE AS FOLLOWS:
- | LOCATION | STRENGTH AT 28 DAYS | MAXIMUM SLUMP | SIZE OF LARGE AGGREGATE | WATER/CEMENT RATIO |
|---------------|---------------------|---------------|-------------------------|--------------------|
| FOUNDATIONS | 3000 PSI | 5" | 1 1/2" | 0.53 |
| SLAB ON GRADE | 3000 PSI | 5" | 1 1/2" | 0.53 |
| GRADE BEAMS | 3000 PSI | 5" | 1 1/2" | 0.53 |
| WALL | 3000 PSI | 6" | 3/4" | 0.53 |
4. NO HORIZONTAL CONSTRUCTION JOINTS WILL BE PERMITTED IN SLABS OR BEAMS. VERTICAL CONSTRUCTION JOINTS IN SLABS ARE TO BE AS SHOWN ON PLANS OR AS APPROVED BY ENGINEER.
5. ALL OPENINGS IN SLAB (FOR PIPING, DRAINS, ETC.) SHALL BE SEALED WITH 1/2 SEALANT "2A" (SELF-LEVELING 2-PART POLYURETHANE).
6. UTILITIES THAT PROJECT THROUGH SLAB FLOORS SHOULD BE DESIGNED WITH EITHER SHOWN OR FLEXIBLE OR WITH FLEEVES IN ORDER TO PREVENT DAMAGE TO THESE LINE SHOULD VERTICAL MOVEMENT OCCUR.
7. BACKFILL AROUND PERIMETER TO PROVIDE POSITIVE DRAINAGE AWAY FROM SLAB.
8. FLOOR TOLERANCES
9. F-NUMBER SYSTEM
- | | COMPOSITE | MINIMUM LOCAL VALUE |
|-----------------------------|-----------|---------------------|
| FLATNESS (F ₁) | 30 | 23 |
| LEVELNESS (F ₂) | 25 | 19 |
10. IN ALL INSTANCES MINIMUM SLAB THICKNESS SHALL BE OBTAINED. COORDINATE SLAB FINISHES WITH ARCHITECTURAL PLANS.
11. ANCHOR BOLTS, DOWELS, INSERTS, ETC. SHALL BE SECURELY TIED IN PLACE PRIOR TO PLACING CONCRETE.
12. REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ALL MOLD, GROOVES, REINFORCEMENT, ORNAMENTAL CLIPS, PIPES, CONDUITS, INSERTS ETC. TO BE CAST IN CONCRETE. PROVIDE OVERSIZED SLEEVES FOR PLUMBING AND ELECTRICAL CONDUITS AND PIPES. NO PIPES OR DUCTS SHALL BE PLACED IN CONCRETE, FOOTINGS, OR SLAB UNLESS SPECIFICALLY DETAILED IN THESE PLANS, OR AS DIRECTED BY THE ENGINEER.
13. MECHANICALLY VIBRATE ALL CONCRETE WHEN PLACED.
14. CONCRETE TESTING SHALL BE ONE SET OF CYLINDERS FOR EVERY 50 CUBIC YARDS OR PORTION THEREOF FOR EACH TYPE OF CONCRETE POURED ON ANY GIVEN DAY. ONE SET CONSISTS OF 2 CYLINDERS TESTED FOR COMPRESSION AT 7 DAYS AND TWO CYLINDERS AT 28 DAYS.
15. VAPOR RETARDANT
- A. VAPOR RETARDANT (UNDER SLAB) SHALL CONFORM TO ASTM E1745, CLASS C OR BETTER AND SHALL HAVE A MINIMUM VAPOR PERMEANCE OF 0.044 PERMS IN CONCRETE TESTED AT 28 DAYS IN ACCORDANCE WITH ASTM E96. VAPOR RETARDANT SHALL BE NO LESS THAN 15 MILS THICK.
- APPROVED PRODUCTS:
- A. STEGO WRAP (15 MIL), BY STEGO INDUSTRIES LLC. (887) 464-7834.
- B. HUSKY YELLOW GUARD (15 MIL)
- C. IF PUMPING OF THE CONCRETE IS CONTINUED FOR MORE THAN 100 CUBIC YARDS, INSTALLATION
- A. LAY STEPS SMOOTHLY, STRETCH AND WEIGHT EDGES, LAP JOINTS TWELVE (12) INCHES AND SEAL WITH TAPE AS SPECIFIED VAPOR RETARDANT MANUFACTURER. TURN BARRIER UP SIX (6) INCHES AT WALLS AND AT ALL PIPES, ABUTMENTS, ETC. TAPE AND SEAL AT PENETRATIONS AND AT EDGES.
- B. AT GRADE BEAMS, EXTEND VAPOR RETARDANT DOWN SIDES OF BEAM TRENCHES AND ALONG BOTTOM OF FOOTING EXCAVATIONS, SECURE TO SIDES OF TRENCH.
- PATCHING:
- A. PATCH ALL PUNCTURES WITH A MINIMUM OVERLAP OF 6" IN ALL DIRECTIONS AND TAPE AROUND ENTIRE PERIMETER OF REPAIR.
- PREINSTALLATION CONFERENCE:
1. AT LEAST 30 DAYS PRIOR TO THE START OF THE CONCRETE SLAB CONSTRUCTION SCHEDULE, THE CONTRACTOR SHALL CONDUCT A MEETING TO REVIEW THE PROPOSED MIX DESIGNS AND TO DISCUSS THE REQUIRED METHODS AND PROCEDURES TO ACHIEVE THE REQUIRED CONCRETE CONSTRUCTION. THE CONTRACTOR SHALL SEND A PRE-CONSTRUCTION CONFERENCE AGENDA TO ALL ATTENDEES 20 DAYS PRIOR TO THE SCHEDULED DATE OF THE CONFERENCE.
2. WORKMANSHIP SHALL BE RESPONSIBLE REPRESENTATIVES OF EVERY PARTY CONCERNED WITH THE CONCRETE WORK TO ATTEND THE CONFERENCE, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
- A) CONTRACTOR'S SUPERINTENDENT
- B) LABORATORY RESPONSIBLE FOR CONCRETE MIXES AND/OR FIELD QUALITY CONTROL
- C) READY-MIX CONCRETE PRODUCER
- D) CONCRETE SUBCONTRACTOR
- E) ADMIXTURE MANUFACTURER(S)
- F) LIQUID DENSIFIER AND SEALER MANUFACTURER
- G) LIQUID DENSIFIER AND SEALER APPLICATION
- H) JOINT FILLING APPLICATOR
3. MINUTES OF THE MEETING SHALL BE RECORDED, TYPED AND PRINTED BY THE CONTRACTOR AND DISTRIBUTED BY HIM TO ALL CONCERNED PARTIES, INCLUDING THE OWNERS REPRESENTATIVE, THE ARCHITECT, AND THE STRUCTURAL ENGINEER WITHIN FIVE DAYS OF THE MEETING.
- CONCRETE SUBCONTRACTOR QUALIFICATION:
1. THE CONCRETE SUBCONTRACTOR SHALL INCLUDE IN THEIR BID PACKAGE TO THE CONTRACTOR, SUFFICIENT DATA THAT CLEARLY INDICATES THE CONCRETE CONTRACTOR'S ABILITY TO SUCCESSFULLY PERFORM THE WORK AND TO ACHIEVE THE FLOOR SLAB TOLERANCES SPECIFIED IN THIS SECTION. THE CONCRETE SUBCONTRACTORS TEAM SHALL HAVE PARTICIPATED IN THE MAJORITY OF THESE PROJECTS, AND THAT TEAM SHALL REMAIN THE SAME THROUGH THE COMPLETION OF THIS PROJECT. THE CONTRACT PLANT SHALL BE LOCATED WITHIN 50 MILES OF THE PROJECT SITE AND BE A CONTINUOUS OPERATING PLANT.
- CONCRETE MATERIAL:
1. CEMENT: TEXAS LEHIGH ASTM C 150, TYPE I, ONE BRAND OF CEMENT THROUGHOUT THE PROJECT, OR APPROVED EQUAL BEFORE BIDDING PER SECTION 01600.
2. COARSE AND FINE AGGREGATES: ASTM C33, COMBINED AGGREGATE GRADATION FOR SLABS ON GRADE AND OTHER DESIGNATED CONCRETE SHALL BE 8% - 18% FOR LARGE TOP AGGREGATES (1 1/2") OR 8% - 22% FOR SMALLER TOP SIZE AGGREGATES (1" OR 3/4") AND RETAINED ON EACH SIEVE BELOW THE TOP SIZE AND ABOVE THE NO. 100 SIEVE. SLABS ON GRADE SHALL HAVE A MAXIMUM AGGREGATE SIZE OF 1-1/2" FOOTINGS AND PIERS 1" AND BEAMS 3/4".
3. WATER: COMPLYING WITH ASTM C 94.
4. AIR: CONCRETE SHALL CONTAIN "POZZOLITA" ADMIX AS PER MANUFACTURER'S SPECIFICATIONS, IN ACCORDANCE WITH ASTM C494.
- ADMIXTURES:
1. ENTRAINING ADMIXTURES: SHALL CONFORM TO ASTM C-260. ADMIXTURE MANUFACTURER SHALL PROVIDE WRITING CERTIFICATION THAT THE AIR-ENTRAINING ADMIXTURE IS COMPATIBLE WITH OTHER REQUIRED ADMIXTURES. ALL EXTERIOR SLABS SHALL BE AIR-ENTRAINED (4% - 6%), ACCEPTABLE PRODUCTS: EUCLID CHEMICAL AEA-92 AND AIRMIX 200, MASTER BUILDERS MICROAIR, W. R. GRACE DARAVAIR 1000 AND DAREX-11.
- NOTE: AIR-ENTRAINING ADMIXTURE SHALL NOT BE USED ON INTERIOR CONCRETE.
2. WATER-REDUCING ADMIXTURE: SHALL CONFORM TO ASTM C494, TYPE A AND CONTAIN NOT MORE THAN 0.05% CHLORIDE IONS. ACCEPTABLE PRODUCTS: EUCLID CHEMICAL WR-69 AND WR-91, MASTER BUILDERS 200M AND 322N, W. R. GRACE WRDA 36 AND WRDA 64.
3. WATER REDUCING, RETARDING ADMIXTURE: SHALL CONFORM TO ASTM C494, TYPE D, AND CONTAIN NOT MORE THAN 0.05% CHLORIDE IONS. ACCEPTABLE PRODUCTS: EUCLID CHEMICAL RETARDER 75, MASTER BUILDERS POZZOLIT R.
4. W. R. GRACE DARAVAIR 17.
5. HIGH RANGE WATER-REDUCING ADMIXTURE (SUPERPLASTICIZER): SHALL CONFORM TO ASTM C494, TYPE F OR TYPE G AND CONTAIN NOT MORE THAN 0.05% CHLORIDE IONS. ACCEPTABLE PRODUCTS: EUCLID CHEMICAL EUCON 37, MASTER BUILDERS POLYREDUL 1000 W. R. GRACE DARAVAIR 1000.
6. WATER-REDUCING, NON-CORROSIVE ACCELERATING ADMIXTURE: SHALL CONFORM TO ASTM C494, TYPE C OR E, AND CONTAIN NOT MORE CHLORIDE IONS THAN ARE PRESENT IN MUNICIPAL DRINKING WATER. THE ADMIXTURE MANUFACTURER MUST HAVE LONG-TERM, NON-CORROSIVE TEST DATA FROM AN INDEPENDENT TESTING LABORATORY OF AT LEAST A YEAR'S DURATION USING AN ACCEPTABLE ACCELERATED CORROSION TEST METHOD SUCH AS THAT USING ELECTRICAL POTENTIAL MEASURES. ACCEPTABLE PRODUCTS: EUCLID CHEMICAL ACELGUARD 80/90 AND ACELGUARD NCA, MASTER BUILDERS NC534 AND POZZUTEC 20, W. R. GRACE POLARSET.
7. PROHIBITED ADMIXTURES:
- a) CALCIUM CHLORIDE OR ADMIXTURES CONTAINING MORE THAN 0.05% CHLORIDE IONS ARE NOT PERMITTED.
- b) FLYASH: A MAXIMUM OF 20% AS CEMENT REPLACEMENT ALLOWED

- EVAPORATION RETARDER:
1. WATERBORNE, MONOMOLECULAR FILM FORMING, MANUFACTURED FOR APPLICATION TO FRESH CONCRETE.
- a) ACCEPTABLE PRODUCTS: "EUCLID" BY THE EUCLID CHEMICAL COMPANY - CONTACT: PHIL BRANDT (877) 438-3828
- CURING MATERIALS:
1. EXTERIOR CURING: ALL EXTERIOR CONCRETE SLABS SHALL BE CURED USING A LIQUID MEMBRANE-FORMING CURING COMPOUND. THE LIQUID MEMBRANE-FORMING CURING COMPOUND SHALL MEET THE REQUIREMENTS OF ASTM C 1515 WITH A MAXIMUM V.O.C. CONTENT OF 700 G/L.
- a) ACCEPTABLE PRODUCTS: "SUPER REZ SEAL" BY EUCLID CHEMICAL COMPANY - CONTACT PHIL BRANDT (877) 438-3828
2. INTERIOR CURING: ALL INTERIOR CONCRETE SLABS SHALL BE CURED USING A REDUCED ODOR, DISSIPATING LIQUID MEMBRANE FORMING CURING COMPOUND THAT IS FORMULATED FROM HYDROCARBON RESINS. THE DISSIPATING LIQUID MEMBRANE FORMING CURING COMPOUND SHALL MEET THE REQUIREMENTS OF ASTM C-309 AND

RESPONSIBILITIES OF THE OWNER

A. EMPLOY AND PAY THE SPECIAL INSPECTION AGENCY TO PERFORM INSPECTIONS SPECIFIED IN THIS SECTION AND THOSE REQUIRED BY AUTHORITIES HAVING JURISDICTION.

B. EMPLOY AND PAY THE MATERIALS TESTING LABORATORY TO PERFORM TESTS SPECIFIED IN THIS SECTION AND THOSE REQUIRED BY AUTHORITIES HAVING JURISDICTION.

1) RETESTING - THE CONTRACTOR SHALL REIMBURSE THE OWNER FOR RETESTING WHERE RESULTS OF INSPECTIONS AND TESTS PROVE UNSATISFACTORY AND INDICATE NONCOMPLIANCE WITH REQUIREMENTS.

C. EMPLOY THE DESIGN PROFESSIONAL RESPONSIBLE FOR THE STRUCTURAL DESIGN OR ANOTHER ENGINEER OR ARCHITECT DESIGNATED BY THE (DPR) TO PERFORM STRUCTURAL OBSERVATION. (REF 1702)

DEFINITIONS

A. DERIVED FABRICATOR: A FABRICATOR REGISTERED AND APPROVED BY THE BUILDING OFFICIAL AND ENGINEER OF RECORD, TO PERFORM WORK, OFF SITE, REQUIRING SPECIAL INSPECTION WITHOUT SPECIAL INSPECTION. THE DESCRIPTION IN SECTION 1701.1 OF THE 1998 CALIFORNIA BUILDING CODE IS APPLICABLE.

B. SPECIAL INSPECTION AGENCY: THE ACCREDITED INSPECTION BODIES DESIGNATED HEREIN AND APPROVED BY THE ENGINEER OF RECORD TO PERFORM SPECIAL INSPECTION AS REQUIRED BY THE BUILDING CODE AND THE PROJECT SPECIFICATIONS AND AS DESCRIBED IN SECTION 1701.1 1998 CALIFORNIA BUILDING CODE.

C. SPECIAL INSPECTOR: A QUALIFIED PERSON, EMPLOYED BY THE SPECIFIED SPECIAL INSPECTION AGENCY WHO HAS BEEN TRAINED AND COMPETENT TO THE SATISFACTION OF THE BUILDING OFFICIAL FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION. DUTIES INCLUDE VISUAL OBSERVATIONS AND FIELD MEASUREMENTS OF MATERIALS, OBTAINING SPECIMENS FOR TESTS AND SELECTING ACTION AND RECORDING OF RESULTS.

D. TESTING LABORATORY: AN ACCREDITED MATERIALS TESTING LABORATORY, APPROVED BY THE ENGINEER OF RECORD, TO MEASURE, EXAMINE, TEST, CALIBRATE OR OTHERWISE DETERMINE THE CHARACTERISTICS OR PERFORMANCE OF CONSTRUCTION MATERIALS.

E. CONTINUOUS INSPECTION: ON SITE INSPECTION BY THE SPECIAL INSPECTOR ON A CONTINUOUS BASIS OBSERVING ALL WORK REQUIRING SPECIAL INSPECTION.

F. PERIODIC INSPECTION: INTERMITTENT INSPECTION AS PERMITTED BY THE PLAN SPECIFICATIONS AT PREDETERMINED INTERVALS OR MORE FREQUENTLY AS WORK PROGRESSES, NO SIGNIFICANT ELEMENTS OR AREAS SHALL BE COVERED BY ADDITIONAL WORK UNTIL APPROVED BY THE MUNICIPAL BUILDING INSPECTOR AND/OR THE SPECIAL INSPECTOR.

G. STRUCTURAL OBSERVATION: THE VISUAL OBSERVATION, BY THE ENGINEER OF RECORD OR HIS DESIGNEE, INCLUDING BUT NOT LIMITED TO THE ELEMENTS AND CONNECTIONS, OF THE STRUCTURAL SYSTEM, FOR GENERAL CONFORMANCE TO THE APPROVED PLANS AND SPECIFICATION, AT SIGNIFICANT CONSTRUCTION STAGES AND AT COMPLETION OF THE STRUCTURAL SYSTEM. STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR THE SPECIAL AND MUNICIPAL INSPECTIONS REQUIRED BY CODES AND SPECIFICATIONS.

H. ENGINEER OF RECORD

I. DPR: ENGINEER OF RECORD/DESIGN PROFESSIONAL OF RECORD

J. SPECIAL INSPECTION AND MATERIALS TESTING

THIS SECTION APPLIES TO THE STRUCTURAL PORTIONS OF THE PROJECT REQUIRING SPECIAL INSPECTION. THE SPECIAL INSPECTORS DUTIES ARE DESCRIBED IN CBC 1701.3 AND CBC 1701.5

DOCUMENTED METHODS AND PROCEDURES SHALL BE USED FOR INSPECTION AND TESTING REGARDING OF CONTRACTUAL DOCUMENTS, AND FOR ESTABLISHING AVOIDANCE OF CONFLICTS. ALL INSPECTIONS, STANDARDS, PROCEDURES, CHECKLISTS RELEVANT TO THE WORK WILL BE KEPT UP TO DATE AND READILY AVAILABLE FOR USE. NO INSPECTION OR TEST WILL BE PERFORMED IF THE SAFETY OF THE TESTING PERSONNEL IS IN QUESTION DUE TO JOB SITE CONDITIONS. PRIOR TO PROJECT COMMENCEMENT, THE TESTING AGENCY WILL CONFER WITH AND OBTAIN THE APPROVAL FROM THE CONTRACTING DESIGN PROFESSIONAL OF RECORD REGARDING THE INSPECTION AND TESTING PROCEDURES OR SPECIFICATIONS INCLUDING ANY APPROPRIATE ASTM METHODS CODE REQUIREMENTS OR PROJECT SPECIFICATION REQUIREMENTS. AT THE START OF AND DURING EACH INSPECTION OF THE PROJECT TO ASCERTAIN PROPOSED CONFORMITY OR NONCONFORMITY, PERSONNEL QUALIFICATIONS AS REQUIRED, AND PROCEDURES WITH APPLICABLE CODES, PLANS, AND SPECIFICATIONS.

1. ALL INSPECTIONS SHALL BE PERFORMED BY AN ACCREDITED, APPROVED SPECIAL INSPECTION AGENCY EMPLOYED BY THE OWNER OR OWNER'S AGENT, NOT THE CONTRACTOR OR SUBCONTRACTOR.

2. ACCREDITATION TO ASTM E 309 STANDARD

SPECIFICATIONS FOR AGENCIES ENGAGED IN THE TESTING AND/OR INSPECTION OF MATERIALS USED IN CONSTRUCTION, IS PREFERRED.

COPIES OF THE TEST RESULTS AND FINAL REPORTS SHALL BE FURNISHED TO THE ENGINEER OF RECORD (EOR) AND/OR THE DESIGNER OF THE FINAL DISTRIBUTIONS, WITHIN TWO DAYS OF THE TEST, IN THE CASE OF DISCREPANCIES OR DEFICIENCIES, THE SPECIAL INSPECTION AGENCY SHALL IMMEDIATELY NOTIFY THE EOR, TESTING FREQUENCY SHALL BE PER APPLICABLE STRUCTURAL MASONRY, REINFORCED CONCRETE, AND STRUCTURAL STEEL WELDING CODES AND STANDARDS AND ARE PART OF THIS SPECIFICATION.

A. CERTIFICATE OF SATISFACTORY COMPLETION OF WORK REQUIRING SPECIAL INSPECTION MUST BE COMPLETED AND SUBMITTED TO THE INSPECTION SERVICES DIVISION BY THE CONTRACTOR.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE TEST AND/OR INSPECTION FIRM WITH A CONSTRUCTION SCHEDULE TO FACILITATE THE PROPER COORDINATION.

THE SPECIAL INSPECTOR SHALL FURNISH DAILY INSPECTION REPORTS TO THE BUILDING OFFICIAL, THE ARCHITECT, AND THE ENGINEER AT A MINIMUM PER WEEK.

IF REQUESTED, THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL REPORT, SIGNED BY BOTH HE AND HIS SUPERVISOR, STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND THE WORKMANSHIP PROVISIONS OF THE CBC.

ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. THE UNCORRECTED, TO THE PROPER DESIGN AUTHORITY AND THE BUILDING OFFICIAL.

SPECIAL INSPECTION REPORTS

THESE REPORTS SHALL INCLUDE, AS A MINIMUM, THE FOLLOWING INFORMATION:

A. PERMIT NUMBER

B. NAME OF THE MUNICIPAL INSPECTOR, IF AVAILABLE, AND OF THE GOVERNING MUNICIPALITY

C. SPECIAL INSPECTION AGENCY NAME, ADDRESS, AND PHONE NUMBER

D. UNIQUE IDENTIFICATION OF THE REPORT AND OF EACH PAGE.

E. CLIENT NAME AND ADDRESS

F. NAME AND ADDRESS OF THE DESIGN PROFESSIONAL OF RECORD, AND OTHER DESIGNERS OR ENGINEERS APPLICABLE TO THE PROJECT

G. DESCRIPTION OF THE TYPE OF INSPECTION PERFORMED

H. ANY UNRESOLVED DISCREPANCIES, EXCLUSIONS, ADDITIONS TO OR FROM THE APPROVED DRAWINGS AND SPECIFICATIONS RELEVANT TO THE SPECIFIC INSPECTION OR TEST.

I. COMPLIANCE FINDINGS AND REFERENCE

J. DESCRIPTION OF LOCATION WHERE THE INSPECTION WAS PERFORMED WITHIN THE PROJECT

K. TIME AND DATE OF THE INSPECTION

L. MEASUREMENTS, EXAMINATIONS, AND DERIVED RESULTS SUPPORTED BY TABLES, GRAPHS, SKETCHES, OR PHOTOGRAPHS AS APPROPRIATE

M. NAME, SURNAME, TITLE, AND IDENTIFICATION NUMBER, AS APPROPRIATE, OF THE FIELD INSPECTOR PERFORMING THE INSPECTION

N. IDENTIFICATION OF SUBCONTRACTORS EMPLOYED TO CARRY OUT TESTS OR PARTS OF TESTS

TESTS REPORTS

LABORATORY TESTS AND MILL CERTIFICATIONS ARE REQUIRED TO BE SUBMITTED TO THE ENGINEER OF RECORD. THESE REPORTS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:

1. CONCRETE CYLINDERS

2. REINFORCING STEEL

3. STRUCTURAL STEEL

4. CONCRETE MIXES

5. CONCRETE ANCHORS

6. SPECIAL INSPECTION: A SPECIAL OR DEPUTY INSPECTOR FROM AN ACCREDITED EOR APPROVED INSPECTION AGENCY AND WITH THE APPROPRIATE CURRENT MUNICIPAL LICENSES AND CERTIFICATIONS SHALL BE REQUIRED FOR THE TYPE OF WORK LISTED BELOW.

- 9A WELDING OBSERVATION - (APPLICABLE TO SHOP AND FIELD)

 - 1 THE SPECIAL INSPECTOR SHALL CHECK EACH WELDER'S CERTIFICATION AND VERIFY THAT THE WELDER DOES WORK ONLY AS QUALIFIED BY HIS CERTIFICATION
 - 2 THE SPECIAL INSPECTOR SHALL KEEP A WRITTEN RECORD OF EACH WELDER BY NAME, IDENTIFICATION NUMBER AND HIS IDENTIFYING STEEL MARK, IF APPLICABLE, AND THE PERCENTAGE OF REJECTABLE WELDS
 - 3 THE SPECIAL INSPECTOR SHALL MONITOR EACH TYPE OF REJECTABLE WELD (EITHER VISUALLY OR BY NONDESTRUCTIVE TEST), THE INSPECTOR OF RECORD WILL NOTIFY THE WELDER AND HIS FOREMAN FOR VERIFICATION OF DEFECT. THE INSPECTOR OF RECORD WILL OBTAIN REMOVAL, REWORK, OR REPAIRS
 - 4 THE SPECIAL INSPECTOR SHALL CHECK STRUCTURAL MEMBERS FOR THICKNESS ADJACENT TO WELDS, OPENING, ETC. REWORK, OR REPAIRS
 - 5 THE SPECIAL INSPECTOR SHALL INSPECT JOINTS FOR PROPER PREPARATION, INCLUDING BEVEL, ROOT FACES, ROOT OPENING, ETC. REWORK, OR REPAIRS.
 - 6 THE SPECIAL INSPECTOR SHALL DETERMINE THE LOCATION OF ELECTRODES TO BE USED FOR THE VARIOUS JOINTS, AND POSITIONS. CHECK THE STORAGE FACILITIES TO SEE IF THEY ARE ADEQUATE TO KEEP THE ELECTRODES DRY.
 - 7 THE SPECIAL INSPECTOR SHALL OBSERVE THE TECHNIQUE OF EACH THE SPECIAL INSPECTOR SHALL OBSERVE THE WELDER WHEN HE IS NOT AT THE WELDING AREA
 - 8 THE SPECIAL INSPECTOR SHALL VERIFY THE USE OF PROPER PNEUMATIC AND INTER PASS TEMPERATURES. INSPECTOR SHALL WELDER WITH USE OF A WELDING INSPECTION SHEET
 - 9 THE SPECIAL INSPECTOR SHALL CONTINUOUSLY OBSERVE MULTI-PASS WELDS. CONTIN IN SPECTION IS DEFINED AS FOLLOWS: THE INSPECTOR IS PRESENT IN THE WELDING AREA AT ANY TIMES AND ANY POSITION OF THE WELDING AT ANY GIVEN TIME. THE INSPECTOR MAY WATCH MULTIPLE WELDERS PROVIDED THEY ALL BE IN THE AREA, CLOSE ENOUGH FOR EFFECTIVE VISUAL INSPECTION OF THE WORK PERFORMED.
 - 10 THE SPECIAL INSPECTOR SHALL DETERMINE THAT THE OPERATOR IS CAPABLE OF PRODUCING THE REQUIRED RESULTS
 - 11 THE SPECIAL INSPECTOR SHALL OBSERVE SINGLE PASS FILLET WELDS PERIODICALLY, OR MORE OFTEN IF CODES AND SPECIFICATIONS REQUIRE.
 - 12 THE SPECIAL INSPECTOR SHALL, IF STRAIGHTENING OR RESTRAINING OF WELDMENTS IS NECESSARY, VERIFY THAT APPROVED METHODS WILL BE USED.
 - 13 THE SPECIAL INSPECTOR SHALL TAKE STAMP ACCEPTANCE OF WELDED JOINTS WITH THE INSPECTOR'S IDENTIFICATION STAMP. APPROVED METHOD MUST BE USED.

SIZE OF OPENING	24" O.C. STUD SPACING		16" O.C. STUD SPACING	
	NO. OF JACK STUDS ¹	NO. OF KING STUDS ²	NO. OF JACK STUDS ¹	NO. OF KING STUDS ²
UP TO 3'-6"	1	1	1	1
> 3'-6" TO 5'-0"	1	2	1	2
> 5'-0" TO 5'-6"	1	2	2	2
> 5'-6" TO 8'-0"	1	2	2	2
> 8'-0" TO 10'-6"	2	2	2	3
> 10'-6" TO 12'-0"	2	2	3	3
> 12'-0" TO 13'-0"	2	3	3	3
> 13'-0" TO 14'-0"	2	3	3	4
> 14'-0" TO 16'-0"	2	3	3	4
> 16'-0" TO 17'-0"	3	3	4	4
> 17'-0" TO 18'-0"	3	3	4	4

HEADER TO KING

HEADER SPAN	3 5/8" STUD WALL	6" STUD WALL
< 4'	(2) 6" CSJ 18ga.	(3) 6" CSJ 18ga.
> 4' TO 8'	(2) 8" CSJ 18 ga.	(3) 8" CSJ 18 ga.
> 8' TO 12'	(2) 10" CSJ 18 ga.	(3) 10" CSJ 16 ga.
> 12' TO 16'	(2) 12" CSJ 18 ga.	(3) 12" CSJ 14 ga.

HEADER SPAN	
< 4'	(4) #10 SCREWS
> 4' TO 8'	(4) #10 SCREWS
> 8' TO 12'	(6) #12 SCREWS
> 12' TO 16'	(8) #12 SCREWS

MATERIALS	FASTENER	FREQUENCY OR QUANTITY
CEILING JOIST TO WOOD TOP PLATE	1" - 1 1/8" #10	1 AT EACH JOIST
CEILING JOIST TO TOP PLATE TRACK	5/8" - 3/4" #10 SELF DRILLING PAN HEAD	1 AT EACH JOIST
CONNECTION CLIP TO TOP PLATE TRACK	1" - 1 1/8" #10	4 AT EACH CLIP TO TOP PLATE
CONNECTION CLIP TO TOP PLATE TRACK	5/8" - 3/4" #10 SELF DRILLING PAN HEAD	4 AT EACH CLIP TO TOP PLATE
CONNECTION CLIP TO CEILING JOIST	5/8" - 3/4" #10 SELF DRILLING PAN HEAD	MIN. 3 AT EACH CLIP TO CEILING JOIST AND AS PER LOADING
CONNECTION CLIP TO RAFTER	5/8" - 3/4" #10 SELF DRILLING PAN HEAD	MIN. 3 AT EACH CLIP TO RAFTER AND AS PER LOADING
CEILING JOIST TO PARALLEL RAFTER	5/8" - 3/4" #10 SELF DRILLING PAN HEAD	NO. VARIES AS PER LOADING
CEILING JOIST TO TRUSS WEB	5/8" - 3/4" #10 SELF DRILLING PAN HEAD	MIN. 2 AT FLANGE AND AS PER LOADING JOIST
CEILING JOIST, OVERLAPPED AT SUPPORT	5/8" - 3/4" #10 SELF DRILLING PAN HEAD	MIN. 2 AT WEB
CONNECTION CLIP TO RIDGE BOARD	5/8" - 3/4" #10 SELF DRILLING PAN HEAD	4 - 6 AT EACH CLIP TO RIDGE
RAFTERS OVERLAPPED AT RIDGE	5/8" - 3/4" #10 SELF DRILLING PAN HEAD	MIN. 6 AT OVERLAPPED WEB SECTION AND AS PER LOADING
BUILT UP BEAM (RIDGE BOARD)	5/8" - 3/4" #10 SELF DRILLING PAN HEAD	1 AT EACH FLANGE AT 12" O.C.
STIFFBACK BRACING TO JOIST	5/8" - 3/4" #10 SELF DRILLING PAN HEAD	MIN. 2 AT EACH JOIST
SUB-FASCIA TRACK TO RAFTER	5/8" - 3/4" #10 SELF DRILLING LOW PROFILE PAN HEAD	1 AT EACH CONNECTION CLIP AND MAX TOP PLATE
WOOD FASCIA TO SUB-FASCIA TRACK	1 5/8" #6 TRIM HEAD	2 AT 24" O.C. AND AT MAXIMUM OF 12" FROM EACH END OF BOARD OR CORNER
STUD TO PLATE TRACK (BOTTOM)	5/8" - 3/4" #8 OR #10 SELF DRILLING LOW PROFILE HEAD	1 AT EACH FLANGE
STUD TO PLATE TRACK (TOP)	5/8" - 3/4" #8 OR #10 SELF DRILLING LOW PROFILE HEAD	1 AT EACH FLANGE
DIAGONAL BRACING TO STUD	1/2" - 5/8" #8 OR #10 SELF DRILLING LOW PROFILE HEAD	1 AT EACH STUD
LATERAL BRACING TO STUD	1/2" - 5/8" #8 OR #10 SELF DRILLING LOW PROFILE HEAD	1 AT EACH STUD PER STRAP OR 3 AT CONNECTION CLIP WITH COLD ROLLED CHANNEL
STUD TO STUD (NESTED)	1/2" - 5/8" #8 OR #10 SELF DRILLING LOW PROFILE HEAD	1 AT 24" O.C. THROUGH FLANGE
STUD TO STUD (BACK TO BACK)	1/2" - 5/8" #8 OR #10 SELF DRILLING LOW PROFILE HEAD	1 AT 24" O.C. THROUGH WEB
STUD TO STUD (AT WALL INTERSECTION)	1/2" - 5/8" #8 OR #10 SELF DRILLING LOW PROFILE HEAD	1 AT 24" O.C. OR 1 AT EACH BLOCKING
LINTEL TO STUD	1/2" - 5/8" #8 OR #10 SELF DRILLING LOW PROFILE HEAD	REQUIREMENT VARIES WITH DIFFERENT LOADING
WALL BOTTOM TRACK (RUNNER) TO FOUNDATION	1/2" DIAMETER ANCHOR BOLT	4"-0" O.C., (1) 9" FROM END OF WALL OR EACH SIDE OF SPLICE

INSPECTION	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED
AS MASONRY CONSTRUCTION BEGINS, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:		
A. PROPORTIONS OF SITE PREPARED MORTAR.		X
B. CONSTRUCTION OF MORTAR JOINTS.		X
C. LOCATION OF REINFORCEMENT AND CONNECTORS.		X
THE INSPECTION PROGRAM SHALL VERIFY:		
A. SIZE AND LOCATION OF STRUCTURAL ELEMENTS.		X
B. TYPE, SIZE AND LOCATION OF DOWELS, ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES AND OTHER CONSTRUCTION		X
C. CHECK GROUT MIX FOR COMPLIANCE WITH CODE AND SPECIFICATIONS		X
D. WELDING OF REINFORCING BARS.		X
E. PROTECTION OF MASONRY DURING GOLD WEATHER (TEMP. BELOW 40 °F) OR HOT WEATHER (TEMP. ABOVE 90 °F).		X
F. CUTTING OF CLEAN OUT HOLES, KNOCKING DOWN OF FIRMS AND REMOVAL OF DEBRIS		X
PRIOR TO GROUTING, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:		
A. GROUT SPACE IS CLEAN.		X
B. PLACEMENT OF REINFORCEMENT AND CONNECTOR.		X
C. CHECK GROUT MIX FOR COMPLIANCE WITH CODE AND SPECIFICATIONS.		X
D. CONSTRUCTION OF MORTAR JOINTS.		X
E. CHECK INSTALLATION OF CLEAN OUT CLOSURE.		X
GROUT PLACEMENT SHALL BE VERIFIED TO ENSURE COMPLIANCE WITH CODE AND CONSTRUCTION DOCUMENT PROVISIONS. (SUCH AS MECHANICAL VIBRATION DURING PLACEMENT AND LATER DURING RECONSOLIDATION.)		X
PREPARATION OF ANY REQUIRED GROUT SPECIMENS, MORTAR SPECIMENS AND/OR PRISMS SHALL BE OBSERVED.	X	
COMPLIANCE WITH REQUIRED INSPECTION PROVISIONS OF THE PROVISIONS OF THE CODE AND CONSTRUCTION STANDARDS AND THE APPROVED SUBMITTALS SHALL BE VERIFIED.		X
CHECK THAT CURING REQUIREMENTS ARE BEING FOLLOWED		X
VERIFY PLACEMENT OF ANCHORS INTO CONCRETE MASONRY UNITS.		X
FREQUENCY OF TESTS:		
A. CONCRETE MASONRY UNIT TEST - FOR EACH TYPE, CLASS, AND GRADE OF CONCRETE MASONRY UNIT INDICATED, TEST UNITS BY METHOD OF SAMPLING AND TESTING OF ASTM C140. ONE SET FO CMU STANDARD PRISM TEST SHALL BE CONDUCTED FOR EVERY 5,000 SQ. FT. OF WALL DURING CONSTRUCTION IN ACCORDANCE TO ASTM C1314, BUT NOT LESS THAN ONE SET OF 3 MASONRY PRISMS FOR THE PROJECT.	X	
B. MORTAR TEST: FOR EACH TYPE INDICATED, TEST MORTAR BY METHODS OF SAMPLING AND TESTING OF ASTM C780. CONDUCT TESTS NO LESS FREQUENTLY THAN THAT REQUIRED TO EVALUATE MORTAR USED TO INSTALL EACH INCREMENT OF MASONRY UNITS INDICATED ABOVE FROM WHICH SAMPLES ARE TAKEN FOR TESTING. TEST MORTAR FOR EVERY 1,500 SQ. FT. OF WALL CONSTRUCTION.		X
C. GROUT TEST: AT START OF GROUTING OPERATION, TAKE ONE TEST PER DAY FOR FIRST 3 DAYS. EACH GROUT TEST CONSISTS OF THREE SPECIMENS TAKEN IN ACCORDANCE WITH ASTM C1019. AFTER FIRST THREE TESTS, SPECIMENS FOR CONTINUING QUALITY CONTROL SHOULD BE TAKEN EVERY A WEEK FOR EVERY 25 CUBIC YARDS OF GROUT OR FOR EVERY 2,500 SQ. FT. OF WALL, WHICHEVER COMES FIRST.		X

1. PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TEXAS AND HAVING THREE (3) OR MORE YEARS EXPERIENCE IN THE DESIGN OF THE TYPE OF THE BUILDING INDICATED ON THE CONTRACT DOCUMENT.
2. THE METAL BUILDING AND COMPONENTS SHALL BE DESIGNED TO CARRY ITS OWN WEIGHT PLUS ALL SUPERIMPOSED DEAD AND LIVE LOADS INCLUDING WIND LOADS FROM ALL DIRECTIONS AND INCLUDING ALL MECHANICAL, ELECTRICAL AND ARCHITECTURAL LOADS. VERIFY ALL LOADS WITH MECHANICAL, ELECTRICAL AND ARCHITECTURAL PLANS.
3. THE BUILDING DIMENSIONS AND SITE CONDITIONS PRIOR TO DESIGN, FABRICATION OR ERECTION OF PRE-MANUFACTURED BUILDINGS.
4. PRE-MANUFACTURED BUILDING FRAMES AND THE CONNECTION OF FRAME TO THE FOUNDATION IS TO BE DESIGNED BY OTHERS AND IS NOT THE RESPONSIBILITY OF SER CONTRACTOR SHALL COORDINATE THE CONNECTION OF THE BUILDING FRAME WITH THE FOUNDATION.
5. THIS FOUNDATION HAS BEEN DESIGNED USING ASSUMED REACTIONS FROM THE PRE-MANUFACTURED BUILDING COMPONENTS AND IS FOR BID PURPOSES ONLY. THE CONTRACTOR SHALL SUBMIT BASE CONNECTION DETAILS (SIZE AND THICKNESS BASE PLATE AND DIAMETER AND LENGTH ANCHOR BOLTS) AND REACTIONS OF THE BUILDING ENGINEER PRIOR TO CONSTRUCTION SO THE DESIGN ASSUMPTIONS CAN BE VERIFIED. DEPTH OF ANCHOR BOLTS SHALL BE SUFFICIENT TO PREVENT CONICAL SHEAR OF THE CONCRETE FOUNDATION.
6. METAL BUILDING SUPPLIER SHALL PROVIDE AND SUBMIT FOR REVIEW ALL DESIGN CALCULATIONS AND DRAWINGS FOR ALL WORKS FOR REVIEW OF SHOP DRAWINGS.
7. ANY ADDITIONAL COST OF FOUNDATION WORK REQUIRED BY REVISIONS OF THE FOUNDATION DESIGN AFTER PRE-MANUFACTURED BUILDING REACTIONS ARE SUBMITTED SHALL BE BY OTHERS.
8. METAL ROOF DOES NOT PROVIDE LATERAL BRACING FOR THE PURLINS, BRIDGING SHALL BE DESIGNED AND SUPPLIED BY THE PURLIN MANUFACTURER.
9. REFER TO MECHANICAL DRAWINGS FOR ROOF SUPPORTED HVAC UNITS AND PROVIDE SUPPORT FOR ADDITIONAL LOADS AS REQUIRED.
10. MAXIMUM PURLIN SPACING SHALL BE 5'-0" O.C. WITH A MAXIMUM ALLOWABLE TOTAL DEFLECTION OF L/240.
11. PRE-ERECTED BUILDING CONTRACTOR SHALL PROVIDE ADDITIONAL FRAMING REQUIRED TO SUPPORT THE WEIGHT MECH. UNITS AND PROVIDE PROPER SERVICEABILITY OF SUSPENDED MECHANICAL UNITS, MECHANICAL DUCTWORK, LIGHT FIXTURES, AND ALL OTHER SUSPENDED ITEMS AND ITEMS SUPPORTED ON TOP OF ROOF.
12. DETAILS SHALL BE INCLUDED WHICH CLEARLY DETAIL RIGID FRAME BASE, HAUNCH, RUPED CONNECTIONS AND ALL OTHER MEMBER CONNECTIONS.
13. WIND LOAD DESIGN SHALL INDICATE METHOD OF TRANSFERRING FORCES TO A. END WALL WIND LOAD TO SIDE WALL FOUNDATIONS. B. AT END BAY SIDE WALL WIND LOAD TO END WALL FOUNDATIONS. CALCULATIONS SHALL SHOW HOW WIND LOAD IS TRANSFERRED TO EACH STORY.
14. PORTAL MOMENT FRAMES SHALL BE USED TO RESIST HORIZONTAL WIND FORCES. DESIGN OF ALL CONNECTIONS SHALL BE CLEARLY INDICATED.
15. DESIGN OF HORIZONTAL CROSS-BRACING IN PLANE OF ROOF FRAMING SHALL BE COMPLETE AND SHALL INDICATE METHOD OF TRANSFERRING TRIBUTARY WIND LOAD TO RIGID FRAMES OR THE SIDE WALL PORTAL FRAMES.
16. ALL COLUMN BASE PLATE SHALL BE SET AND GROUTED UNDER FOR FULL CONTACT BEARING.
17. ALL BASES FOR THE COLUMNS SHALL BE "PINNED" AND NOT ASSUMED AS FIXED. NO MOMENT FORCES SHALL BE TRANSFERRED INTO THE BUILDING FOUNDATION.
18. PROVIDE CROSS BRACING IN SPACES WHICH CLEARLY SHOW THE PRIMARY STRUCTURAL RIGID MOMENT FRAME, PORTAL MOMENT FRAME, END WALL POST AND BEAMS, INTERIOR COLUMNS, AND OTHER STRUCTURAL MEMBERS THAT ARE TO BE USED ON THE SUBMITTED BUILDING. SIZE OF ALL STANDARD AISI MEMBERS AND OF ALL WEB AND FLANGE SECTIONS USED IN BUILT UP MEMBER SHALL BE NOTED AS WELL AS ALL BOLTS.
19. DESIGN AND MEMBERS FOR FRAMED OPENINGS SHALL BE PROVIDED AS PART OF THE METAL BUILDING DESIGN.
20. LATERAL SUPPORT BEAMS SHALL BE DESIGNED BY METAL BUILDING SYSTEM SUPPLIER.
21. DEFLECTION CRITERIA
 - a. GIRTS SUPPORTING METAL STUD WALLS L/360
 - b. GIRTS SUPPORTING CMU WALLS L/480
 - c. HORIZONTAL DEFLECTION OF FRAME L/360
 - d. VERTICAL DEFLECTION OF FRAME L/240
 - e. LATERAL SUPPORT BEAMS FOR METAL STUD WALLS L/360
 - f. LATERAL SUPPORT BEAMS FOR CMU WALLS L/480
22. ALL STRUCTURAL STEEL SHALL BE FABRICATED, ERECTED, AND PAINTED IN ACCORDANCE WITH THE SPECIFICATIONS FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL MEMBERS, REFERENCED TO DATE AND THE CODE OF STANDARD PRACTICE, LATEST EDITION AS ADOPTED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION, AMENDED AS FOLLOWS:
 - a. SECTION 3.1 IN CASE OF DISCREPANCY, STRUCTURAL ENGINEERS DRAWINGS GOVERN.
 - b. SECTION 4.2.1, DELETE FIRST TWO SENTENCES.
 - c. SECTION 4.2.2 ANY CHANGES, ADDITIONS OR DELETIONS REQUIRE APPROVAL FROM OWNER, CONTRACTOR AND ENGINEER.
 - d. SECTION 7.1 REFERENCE TO OWNER SHALL BE CHANGED TO GENERAL CONTRACTOR.
23. SECTION 7.9.3, THE CONTRACTOR SHALL PROVIDE THE SEQUENCE AND SCHEDULE OF CONSTRUCTION
 - f. SECTION 7.9.4, THE CONTRACTOR TO DESIGN SHORES, JACKS OR LOADS.
23. STEEL SHOP SHALL BE ALSO CERTIFIED AND LOCATED WITHIN 200 MILES FROM JOBSITE.

CONCRETE MASONRY UNITS (CMU) SHALL CONFORM TO ASTM C90, AND AS FOLLOWS:

UNIT COMPRESSIVE STRENGTH: 1900 PSI MINIMUM COMPRESSIVE NET AREA

* WEIGHT CLASSIFICATION: COMPRESSIVE WEIGHT BLOCK

* GROUT: 3000 PSI

* MORTAR SHALL BE TYPE S

* CONCRETE MASONRY ASSEMBLAGE (fm) SHALL BE 1500 PSI

ALSO REINFORCING BARS SHALL BE NEW BIL E AND SHALL CONFORM TO ASTM A-615, GRADE 60, REINFORCING BARS #3 AND SMALLER MAY BE GRADE 40.

CONCRETE SHALL CONFORM TO ASTM C150 TYPE I, LOW ALKALI, MASONRY CEMENTS

ALL ALLOWED.

TYPICAL VERTICAL REINFORCEMENT, C.N.O. (DRAWING NOTES GOVERN OVER THESE NOTES)

ALL VERTICAL REINFORCEMENT TO BE IN CONCRETE OR GROUT FILLED CELLS, PROVIDE DOWELS FROM FOUNDATION, SAME SIZE AND SPACING.

VERTICAL HORIZONTAL REINFORCEMENT SHALL BE TWO (2) #5 CONTINUOUS IN 8" X 16" DEEP CONTINUOUS CONCRETE OR GROUT FILL. BOND BEAM BELOW EACH FLOOR AND ROOF LEVEL, UNLESS NOTED OTHERWISE, PROVIDE STANDARD DUR-O-WALL TRUSS-TYPE REINFORCING OR REVIEWED EQUIVALENT EVERY OTHER COURSE (16" ON CENTER) AND AS PER MANUFACTURER'S RECOMMENDATIONS. (9 GAGE MINIMUM GALVANIZED)

VERTICAL CELLS TO BE FILLED SHALL HAVE VERTICAL ALIGNMENT SUFFICIENT TO MAINTAIN A CLEAR UNOBSTRUCTED VERTICAL RUN. REINFORCING SHALL BE FILLED SOLIDLY WITH PEA GRAVEL, CEMENT (3/8" MAX AGGREGATE SIZE) OR GROUT. EACH WITH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. GROUT OR CONCRETE SHALL BE A WORKABLE MIX SUITABLE FOR PUMPING WITHOUT SEGREGATION AND SHALL BE THOROUGHLY MIXED. GROUT OR CONCRETE SHALL BE PLACED BY PUMPING OR AN APPROVED ALTERNATE METHOD AND SHALL BE PLACED BEFORE INITIAL SET OR HARDENING. REINFORCING SHALL BE PLACED PER PERMANENT FORMS.

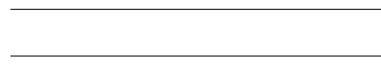
ALLOW C.M.U. WALLS TO SET AT LEAST 24 HOURS AFTER COMPLETION BEFORE GROUTING. GROUT OR CONCRETE SHALL BE CONSOLIDATED BY RESOLIDATION AFTER EXCESS MOISTURE HAS BEEN ABSORBED BUT BEFORE WORKABILITY IS LOST. THE FILLING OF ANY SECTION OF A WALL SHALL BE COMPLETED IN ONE DAY WITHOUT INTERRUPTIONS GREATER THAN 15 MINUTES. REINFORCING TO BE PLACED IN WALLS OF 4 FEET OR MORE MINIMUM. WHERE THE CONCRETE OR GROUT POUR DECEEDS 4 FEET IN HEIGHT, CLEANOUTS SHALL BE PROVIDED BY SUITABLE OPENINGS IN THE FACE SHELLS IN THE BOTTOM COURSE OF EACH CELL TO BE FILLED, OR OTHER APPROVED LOCATIONS. THE CLEANOUTS SHALL BE SEALED AFTER INSPECTION AND BEFORE BEING FILLED.

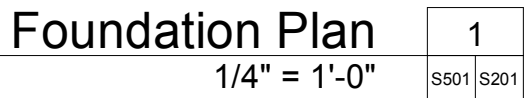
WHEN CELL FILLING IS STOPPED FOR ONE HOUR OR LONGER, HORIZONTAL CONSTRUCTION JOINT SHALL BE FORMED BY STOPPING THE POUR OF CONCRETE OR GROUT APPROXIMATELY 1/2 INCH ABOVE OR BELOW BED JOINT.

END WALLS AND CROSS WEBS FORMING CELLS TO BE FILLED SHALL BE FULL BEDDED IN MORTAR TO PREVENT LEAKAGE OF CONCRETE OR GROUT UNLESS WALL IS TO BE POURED SOLID.

PROVIDE VERTICAL CONTROL JOINTS AT A MAXIMUM SPACING OF 24' (10' FROM CORNERS). JOINT SHALL BE TYPICAL TRUSS TYPE JOINT REINFORCED THROUGH THE JOINT. BOND BEAM REINFORCEMENT SHALL BE CONTINUOUS THROUGH THE JOINT.

DURING ERECTION, COVER TOP OF WALLS, PROJECTIONS AND SILLS WITH WATERPROOF SHEATHING AT THE END OF EACH DAYS WORK.



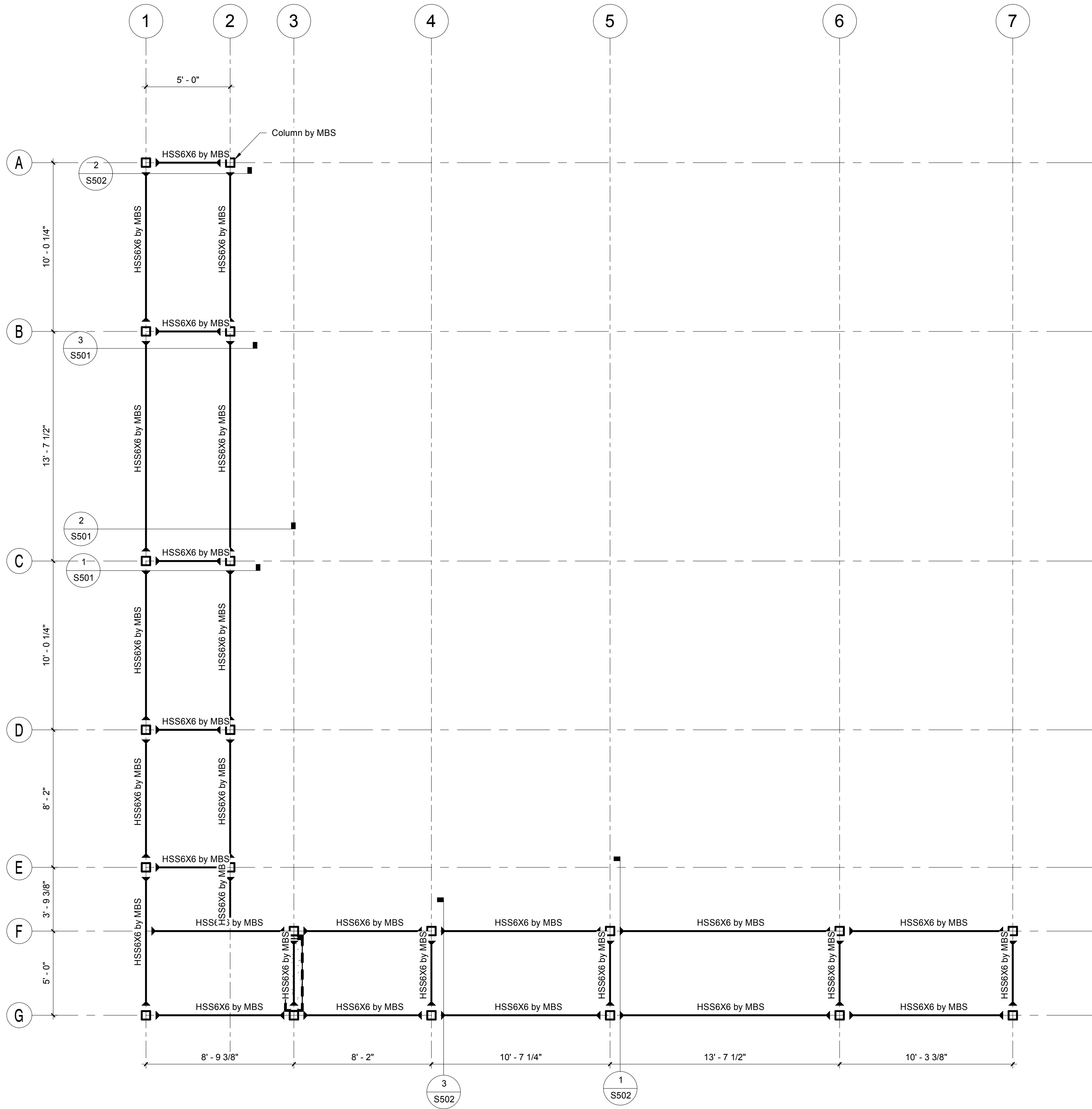


1. FOR GENERAL NOTES SEE SHEET S101 AND S102.
2. FOR TYPICAL DETAILS SEE SHEETS NUMBER 5400.
3. CONTRACTOR/SUBCONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS WITH THE EXISTING STRUCTURE PLANS BEFORE BEGINNING ANY WORK.
4. THE CONTRACTOR AND OR SUBCONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ARCHITECT AND ENGINEER BEFORE THE WORK HAS BEGUN.
5. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL DIMENSIONS.
6. REFER TO ARCHITECTURAL PLANS FOR FLOOR DRAIN LOCATIONS.
7. SLOPE SLAB TO DRAINS. SEE ARCHITECTURAL PLANS FOR SLOPE.
8. REFER TO ARCHITECTURAL PLANS FOR FLOOR FINISHES. ENGINEER IS NOT RESPONSIBLE FOR TYPE OF FLOOR FINISHES.
9. PROVIDE SLAB CONTRACTION JOINTS PER TYPICAL DETAIL.
10. THE TESTING LABORATORY SHALL BE THE OWNERS REPRESENTATIVE TO CONTROL THE PLACEMENT OF COMPACTED FILL. THE TESTING LABORATORY SHALL APPROVE THE SUBGRADE PREPARATION, THE FILL MATERIALS, THE METHOD OF PLACEMENT AND COMPACTION, AND COMPACTION, AND SHALL GIVE WRITTEN APPROVAL OF THE COMPLETED FILL. THE TESTING LABORATORY SHALL INDICATE ON THERE REPORT THE ELEVATION OF THE COMPLETED SUBGRADE.
11. ALL EARTHWORK AND GRADING SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE REQUIREMENTS OF THE GEOTECHNICAL ENGINEERING STUDY. THE MORE STRINGENT REQUIREMENTS BETWEEN THE SUBGRADE NOTES AND GEOTECHNICAL ENGINEERING STUDY SHALL GOVERN AND EXECUTED BY THE CONTRACTOR.
12. IN THE EVENT FOUNDATION EXCAVATIONS ARE CARRIED TO A DEPTH GREATER THAN REQUIRED, THE ADDITIONAL DEPTH SHALL BE FILLED WITH THE SAME COMPACTION AS REQUIRED FOR THE EXCAVATION NO ADDITIONAL EXPENSE TO THE OWNER. NO UNCONTROLLED FILL WILL BE PERMITTED.
13. THE FOOTING EXCAVATIONS SHALL BE KEPT FREE FROM LOOSE MATERIAL AND STANDING WATER.
14. THE FOUNDATION EXCAVATIONS SHOULD BE OBSERVED BY THE TESTING LABORATORY PRIOR TO STEEL OR CONCRETE PLACEMENT TO ASSESS THAT THE FOUNDATION MATERIALS ARE CAPABLE OF SUPPORTING THE DESIGN LOADS AND ARE CONSISTENT WITH THE MATERIALS DISCUSSED IN THE STUDY. THIS IS ESPECIALLY IMPORTANT TO IDENTIFY THE ACCEPTABILITY OF THE SUBGRADE OR FILL MATERIAL UNDER THE FOOTING. SOFT OR LOOSE SOIL ZONES ENCOUNTERED AT THE BOTTOM OF THE FOOTING DURING CONSTRUCTIONS SHOULD BE EXCAVATIONS SHOULD BE REMOVED TO THE LEVEL OF COMPETENT SOIL AS DIRECTED BY THE TESTING LABORATORY. CAVITIES FORMED AS A RESULT OF EXCAVATION OF SOFT OR LOOSE SOIL ZONES SHOULD BE BACKFILLED WITH LEAN CONCRETE OR SELECT FILL AS DETERMINED BY THE TESTING LABORATORY.
15. CARE SHOULD BE TAKEN NOT TO SHAKE OR DISRUPT AREAS SUCH THAT WATER WILL NOT DRAIN AND BE USED FOR STRUCTURE DURING CONSTRUCTION AND CAUSE THE NEAR SURFACE CLAYS TO SWELL. THE PROPOSED STRUCTURE SHALL BE ISOLATED FROM ANY MOISTURE SOURCE WHICH MIGHT ALSO CAUSE SWELLING OF THE CLAYS AFTER COMPLETION OF THE CONSTRUCTION.
16. WHEN THE STRUCTURE IS COMPLETE, THE GROUND SURFACE SHOULD SLOPE AWAY FROM THE STRUCTURE AND DOWN SPOUTS SHOULD CARRY RUNOFF WATER SEVERAL FEET FROM THE BUILDING, PREFERABLY INTO PAVED AREAS OR SEWERS, BEFORE DISCHARGING.
17. DO NOT PLANT, OR LEAVE IN PLACE, DEEP ROOTED TREES WITHIN CLOSE PROXIMITY TO THE PERIMETER OF THE STRUCTURE. DEEP ROOTED TREES HAVE THE POTENTIAL TO CAUSE MOISTURE TO BE DRAWN FROM THE BUILDING IF PLANTED CLOSE ENOUGH TO ALLOW THE ROOT BALLS EXTEND NEAR OR BENEATH THE BUILDING.
18. AIR CONDITIONING CONDENSER DRAIN LINES TO DISCHARGE WATER A MINIMUM OF 5 FEET FROM THE PERIMETER OF THE STRUCTURE. THE DISCHARGE AREA SHALL HAVE SUFFICIENT SLOPE AWAY FROM THE STRUCTURE TO PREVENT STANDING WATER.
19. THE FINAL ONE (1) FOOT OF FILL OUTSIDE THE BUILDING AREA SHOULD CONSIST OF A COHESIVE CLAYEY (CL) SOIL. FILL CAN NOT BE ALLOWED TO DRY OUT DURING OR AFTER COMPACTION. (P1 BETWEEN 15 AND 25)
20. NOTE THAT SOME LEVELS OF RISK ARE ASSOCIATED WITH ALL FOUNDATION SYSTEMS. THE RISK OF SUCH A "LOW TO MODERATE RISK" FOUNDATION, IT ALSO SHOULD BE NOTED THAT THE FOUNDATION PROVIDED IS NOT DESIGNED TO RESIST SOIL MOVEMENT AS A RESULT OF SEWER/PLUMBING LEAKS, EXCESSIVE IRRIGATION, NON UNIFORM IRRIGATION, POOR DRAINAGE, AND WATER PONDING NEAR THE FOUNDATION SYSTEM.
21. THE FOUNDATION PROVIDED IS NOT DESIGNED TO RESIST WEATHER PERIODS WILL LIKELY ENCOUNTER DIFFICULTIES DUE TO THE WET OR SOFT SURFACE SOILS BECOMING A GENERAL HINDRANCE TO EQUIPMENT DUE TO RUTTING AND PUMPING OF THE SOIL SURFACE. IF THE SUBGRADE CANNOT BE ADEQUATELY COMPACTED TO MINIMUM DENSITIES AS DESCRIBED ABOVE, ONE OF THE FOLLOWING MEASURES WILL BE REQUIRED:
 - a) ANALYTICAL AND PLACEMENT WITH SELECT FILL,
 - b) CHEMICAL TREATMENT OF THE SOIL TO DRY SOIL, AND INCREASE THE STABILITY OF THE SUBGRADE.
 - c) DRYING BY NATURAL MEANS.

SLAB ON GRADE	
THICKNESS	5.0 INCHES
REINFORCING (EACH WAY)	#4 AT 14" O.C.
REINFORCING LOCATION	MID DEPTH
VISQUEEN	15 MIL
CONCRETE CHAIRS (NO PLASTIC CHAIRS ALLOWED)	3" O.C. EACH WAY

1. SITE PREPARATION		
A.	PREPARATION OF EXISTING GROUND	
	ALL AREAS TO SUPPORT SELECT FILL SHALL BE STRIPPED OF ALL VEGETATION AND/OR ORGANIC TOPSOIL:	6 INCHES
	ADDITIONAL DEPTH OF REMOVAL:	*24 INCHES
	EXTEND BEYOND BUILDING FOOT PRINT:	3 FEET
	EXPOSED SUBGRADE SHALL BE SCARIFIED TO A DEPTH OF:	9 INCHES
	MOISTURE: (OPTIMUM MOISTURE CONTENT)	-2 TO +2%
	COMPACTION (ASTM D-698) (MAXIMUM DENSITY):	95%
B.	SELECT FILL MATERIAL	
	AMOUNT OF COMPACTED SELECT FILL:	54' INCHES
	NO ORGANIC OR OTHER PERISHABLE MATERIAL	
	NO STONES LARGER THAN	2 INCHES
	*FINISHED FLOOR SHALL BE AS INDICATED ON CIVIL DRAWINGS, INCREASE INDICATED AMOUNT OF FILL AS REQUIRED TO ACHIEVE MOST STRINGENT REQUIREMENT.	
	INCREASE EXCAVATION AS REQUIRED TO MEET MINIMUM AMOUNT OF SELECT FILL	
	FILL MATERIAL SHALL BE AS INDICATED ON THE GEOTECHNICAL REPORT.	
C.	PLACING SELECT FILL	
	FILL LIFTS (LOOSE MEASURE, NOT EXCEEDING):	8 INCHES
D.	COMPACTION OF SELECT FILL	
	MOISTURE: (OPTIMUM MOISTURE CONTENT)	-2 TO +2
	COMPACTION (ASTM D-698) (MAXIMUM DENSITY):	95%
E.	COMPACTION TESTING	
	ATTERBERG LIMITS (ONE AT A RATE OF):	5,000 CU. YDS.
	COMPACTION (ONE TEST PER):	2,500 SQ. FT./LIFT (MIN. OF 3 PER LIFT

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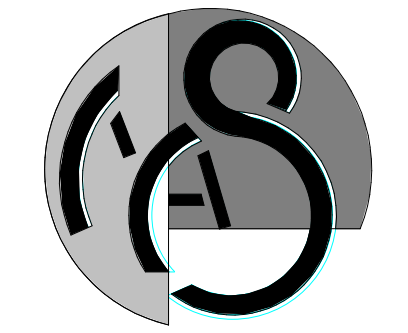


Low Framing Plan
1/4" = 1'-0"

1
S501 S301

Framing Notes

1. FOR GENERAL NOTES SEE SHEET S101, S102 AND S103.
2. FOR TYPICAL DETAILS SEE SHEETS S400's.
3. DIMENSIONS SHOWN ARE FOR GENERAL INFORMATION. COORDINATE WITH ARCHITECTURAL PLANS.
4. SEE ARCHITECTURAL ROOF PLAN FOR ROOF HATCHES.
5. SEE MECHANICAL PLANS FOR MECHANICAL OPENINGS.
6. STEEL BEAM TO STEEL BEAM CONNECTION PER DETAIL.
7. ALL STEEL COLUMN SHALL BE HSS6x6x3/8 UNO ON PLANS.
8. PROVIDE CMU LINTEL WHERE MECHANICAL DUCT PENETRATES CMU WALL PER TYPICAL CMU LINTEL DETAIL.
9. DESIGN OF MBS PURLINS UNDER UNITS WITH LOADS INDICATED ON THE DRAWINGS PER DESIGN CRITERIA. MBS PURLINS SHALL BE DESIGNED BY MBS SUPPLIER DESIGN PURLINS FOR 1/500. (MECHANICAL WEIGHT+ DEAD LOAD ONLY) COORDINATE OPENINGS WITH MECHANICAL PLANS.
10. PURLIN MANUFACTURER TO VERIFY THE MINIMUM ROW OF BRIDGING AND SIZE.
11. PROVIDE CMU LINTEL OVER ALL OPENINGS. SEE TYPICAL CMU LINTEL DETAIL.



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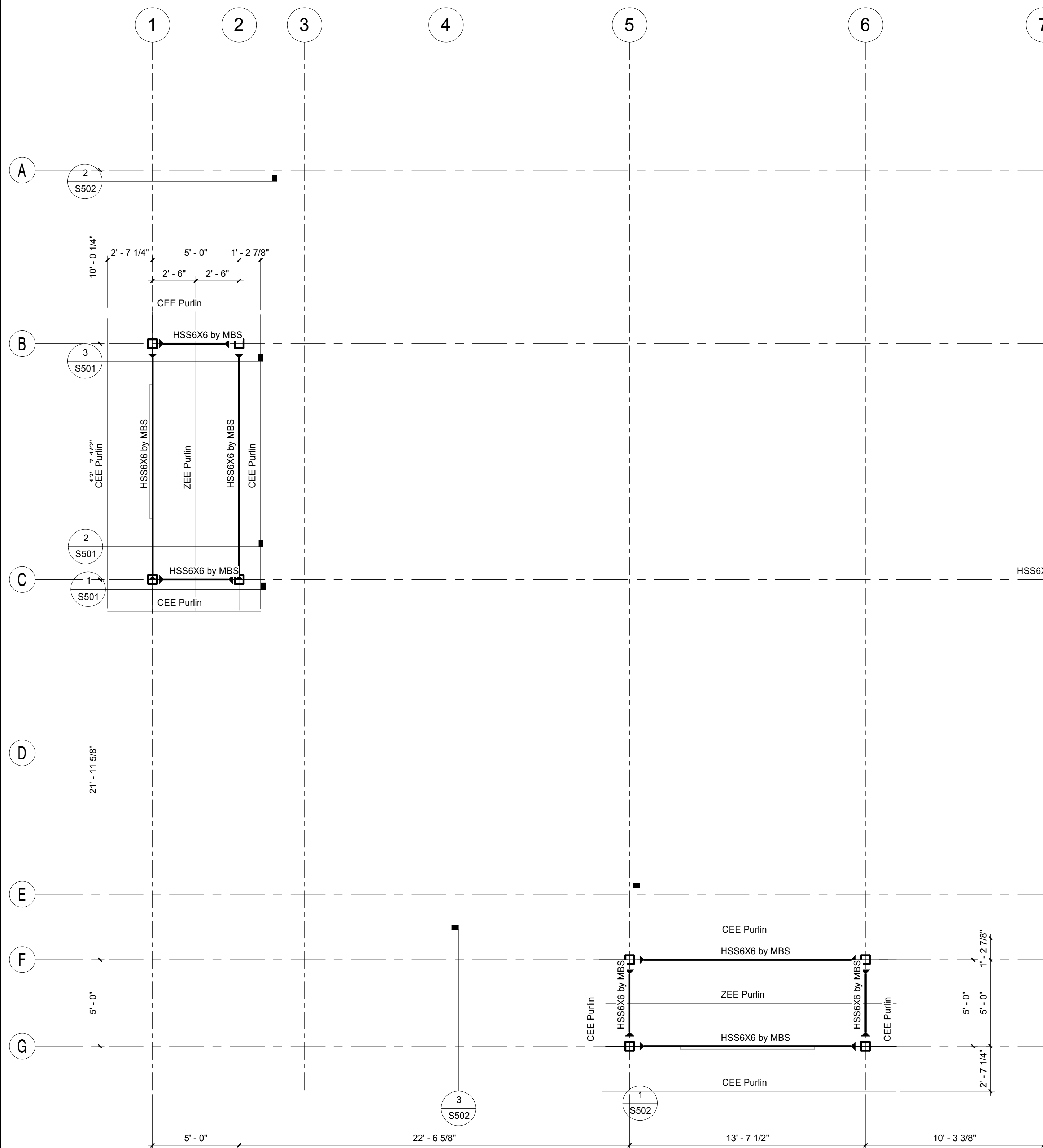
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HARLINGEN, TX

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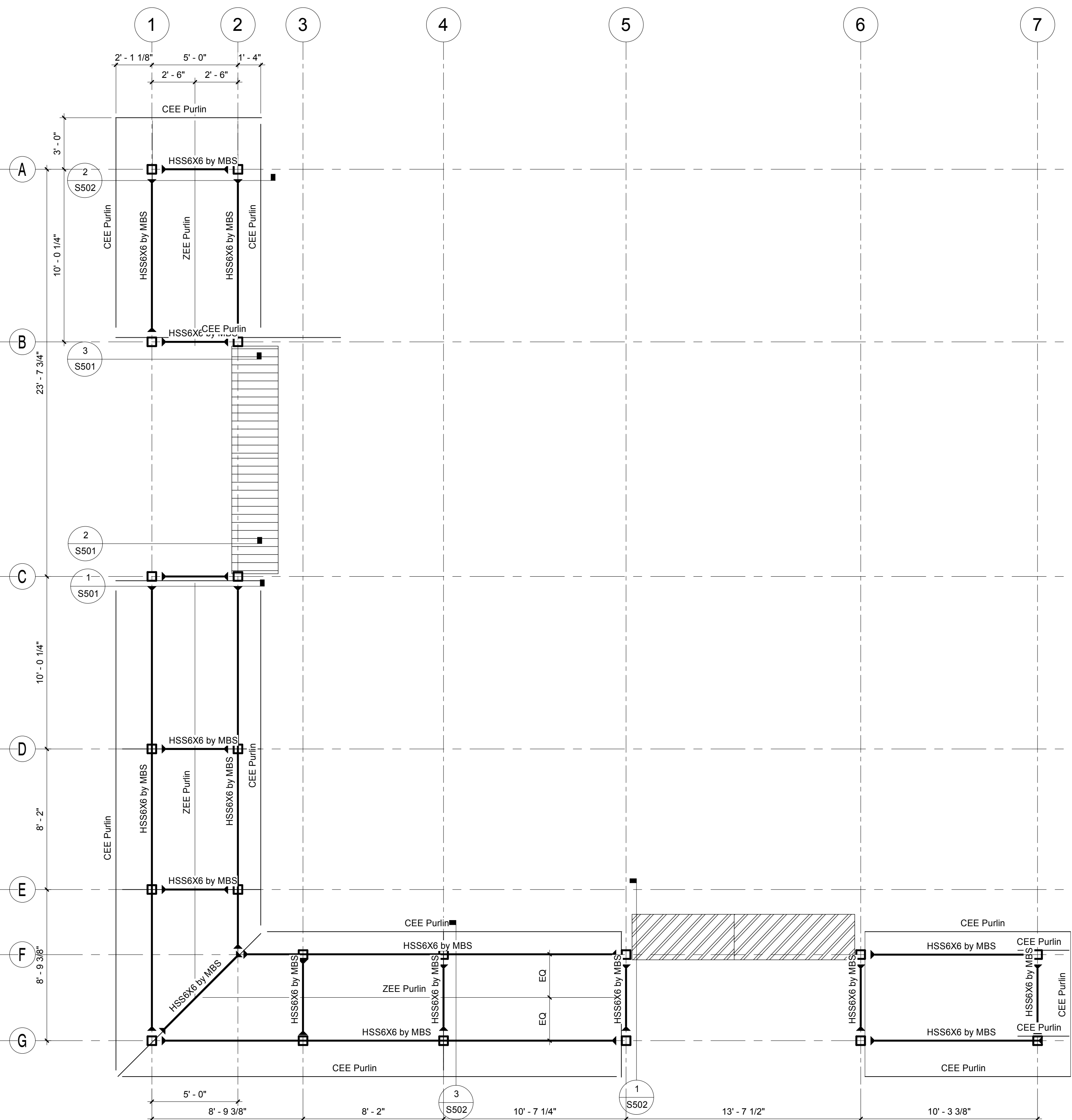
DATE
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S H E E T

S301



Roof Framing Plan

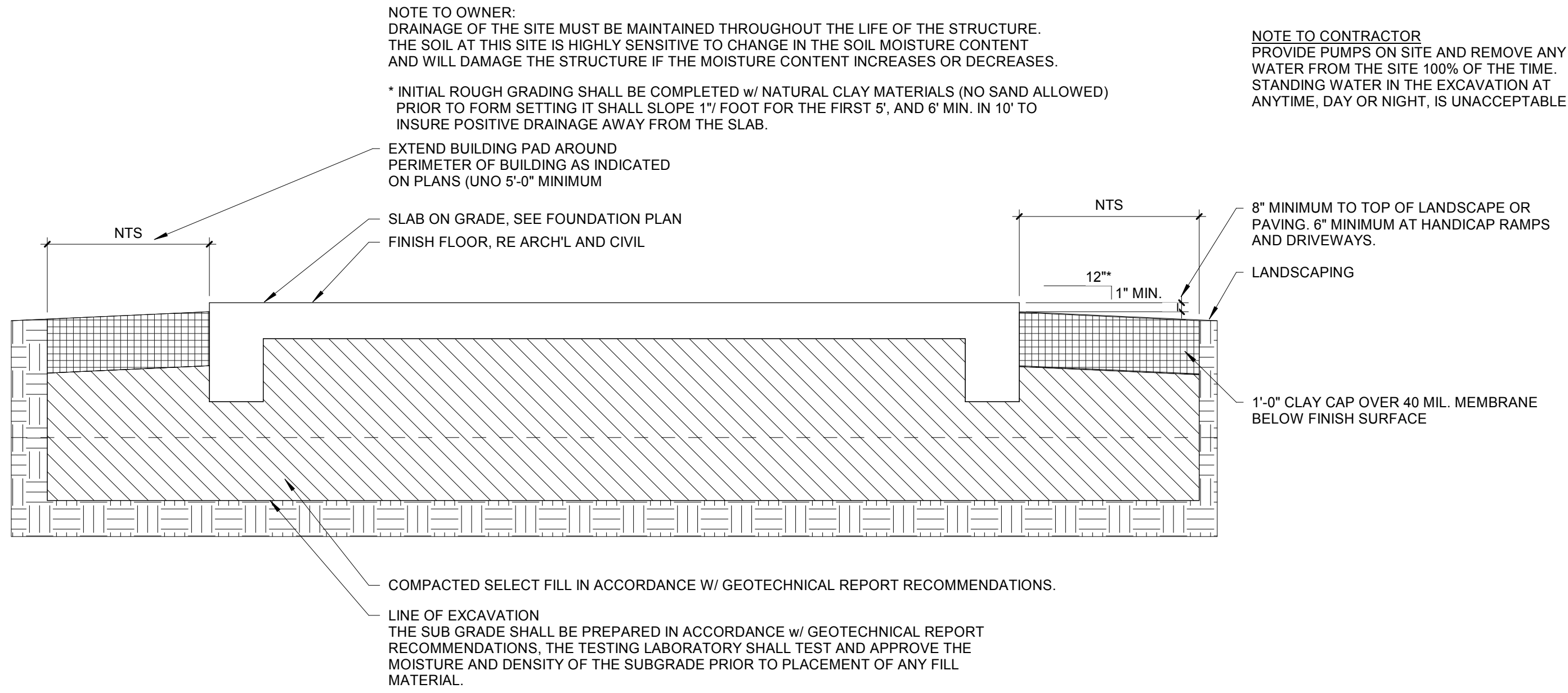


Low Roof Framing Plan	2	
1/4" = 1'-0"	S501	S302

Framing Notes

1. FOR GENERAL NOTES SEE SHEET S101, S102 AND S103.
2. FOR TYPICAL DETAILS SEE SHEETS S400's.
3. DIMENSIONS SHOWN ARE FOR GENERAL INFORMATION. COORDINATE WITH ARCHITECTURAL PLANS.
4. SEE ARCHITECTURAL ROOF PLAN FOR ROOF HATCHES.
5. SEE MECHANICAL PLANS FOR MECHANICAL OPENINGS.
6. STEEL BEAM TO STEEL BEAM CONNECTIONS SHALL BE WELDED.
7. ALL STEEL COLUMN SHALL BE HSS8x6x3/8 UNO ON PLANS.
8. PROVIDE CMU LINTEL WHERE MECHANICAL DUCT PENETRATES CMU WALL PER TYPICAL CMU LINTEL DETAIL.
9. DESIGN OF MBS PURLINS UNDER UNIFORM LOADS WITH LOADS INDICATED ON THE DRAWINGS PER DESIGN CRITERIA. MBS PURLINS SHALL BE DESIGNED BY MBS DESIGNER. DESIGN CRITERIA FOR 1600. (MECHANICAL WEIGHT+ DEAD LOAD ONLY) COORDINATE OPENINGS WITH MECHANICAL PLANS.
10. PURLIN MANUFACTURER TO VERIFY THE MINIMUM ROW OF BRIDGING AND SIZE.
11. PROVIDE CMU LINTEL OVER ALL OPENINGS. SEE TYPICAL CMU LINTEL DETAIL.

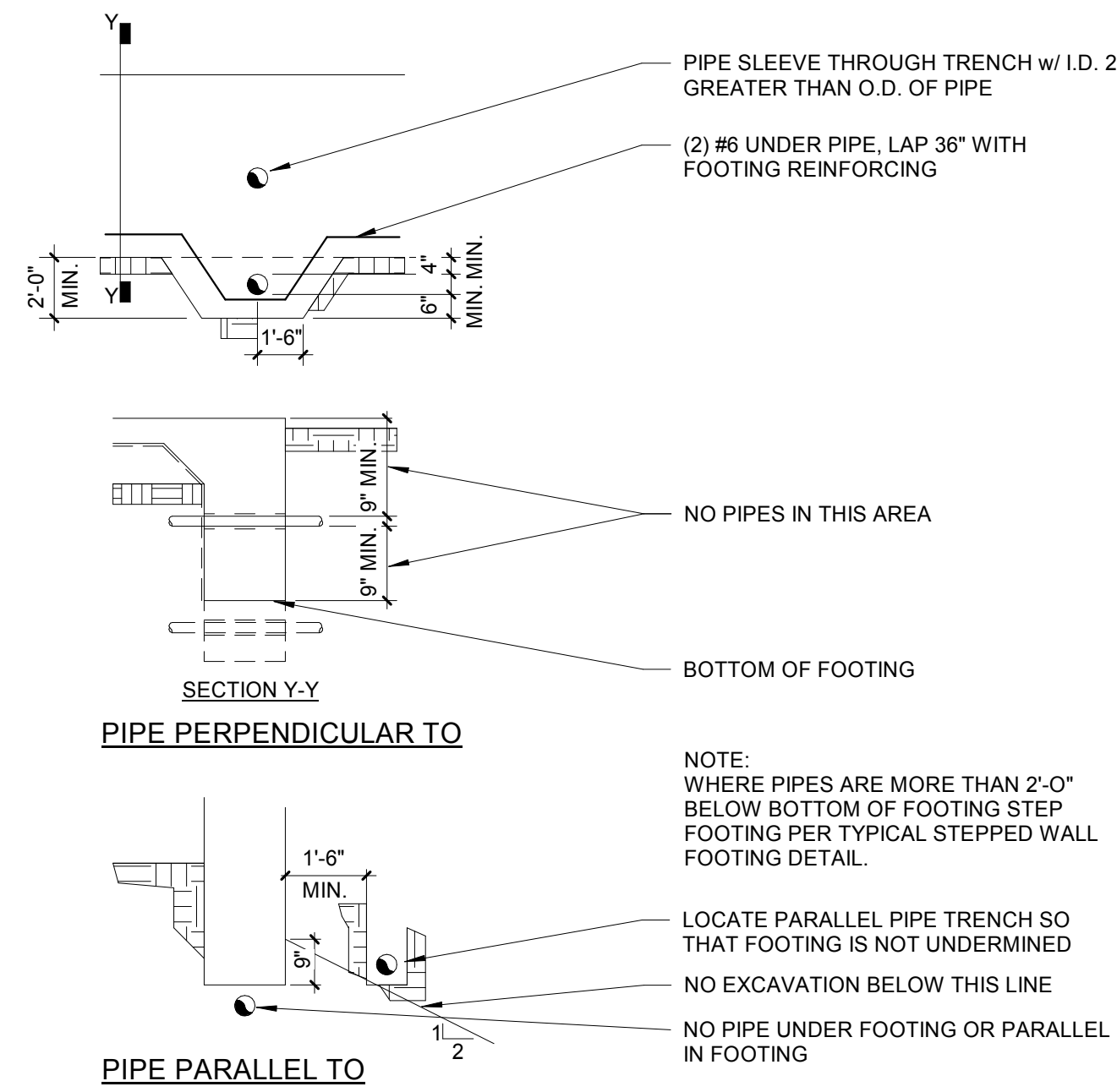
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Typical Building Subgrade Preparation

1" = 1'-0"

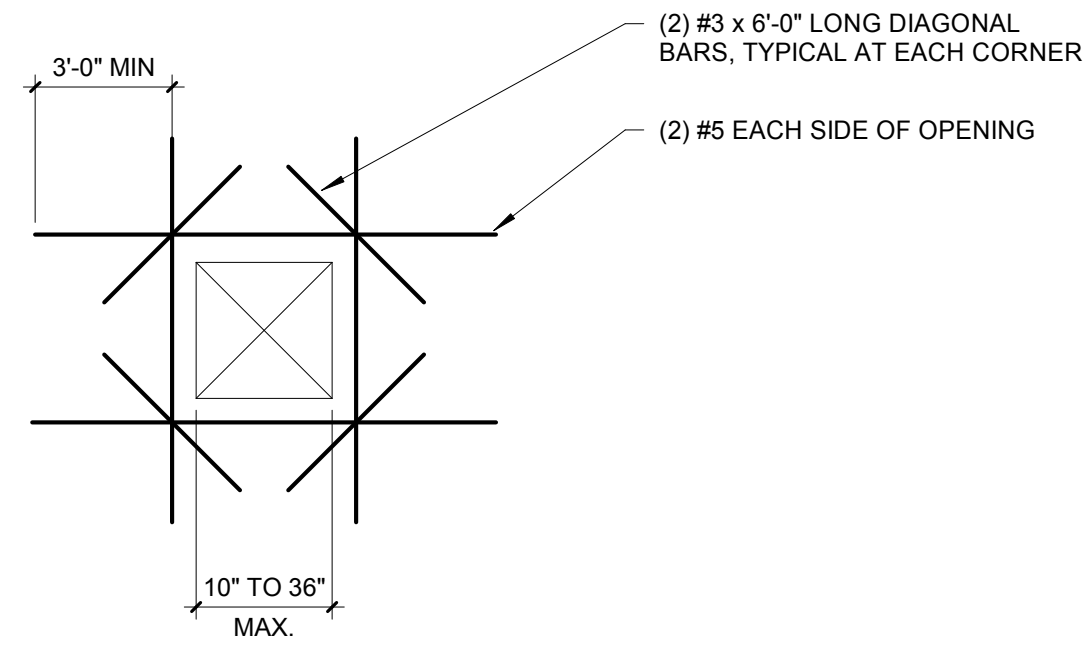
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S401



Typical Piping Through Footing

3/8" = 1'-0"

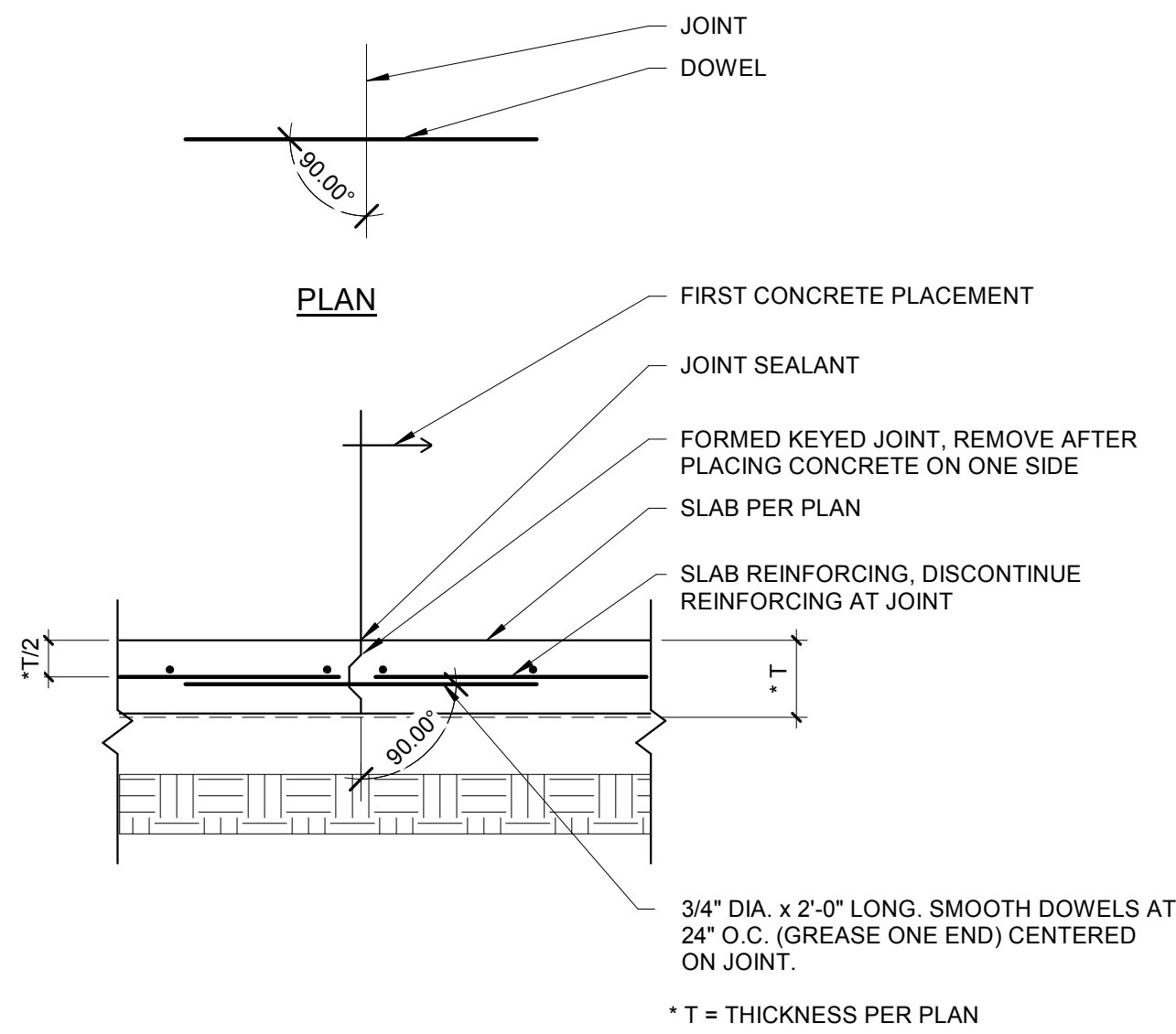
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S401



Typical Slab Opening Reinforcing

1/4" = 1'-0"

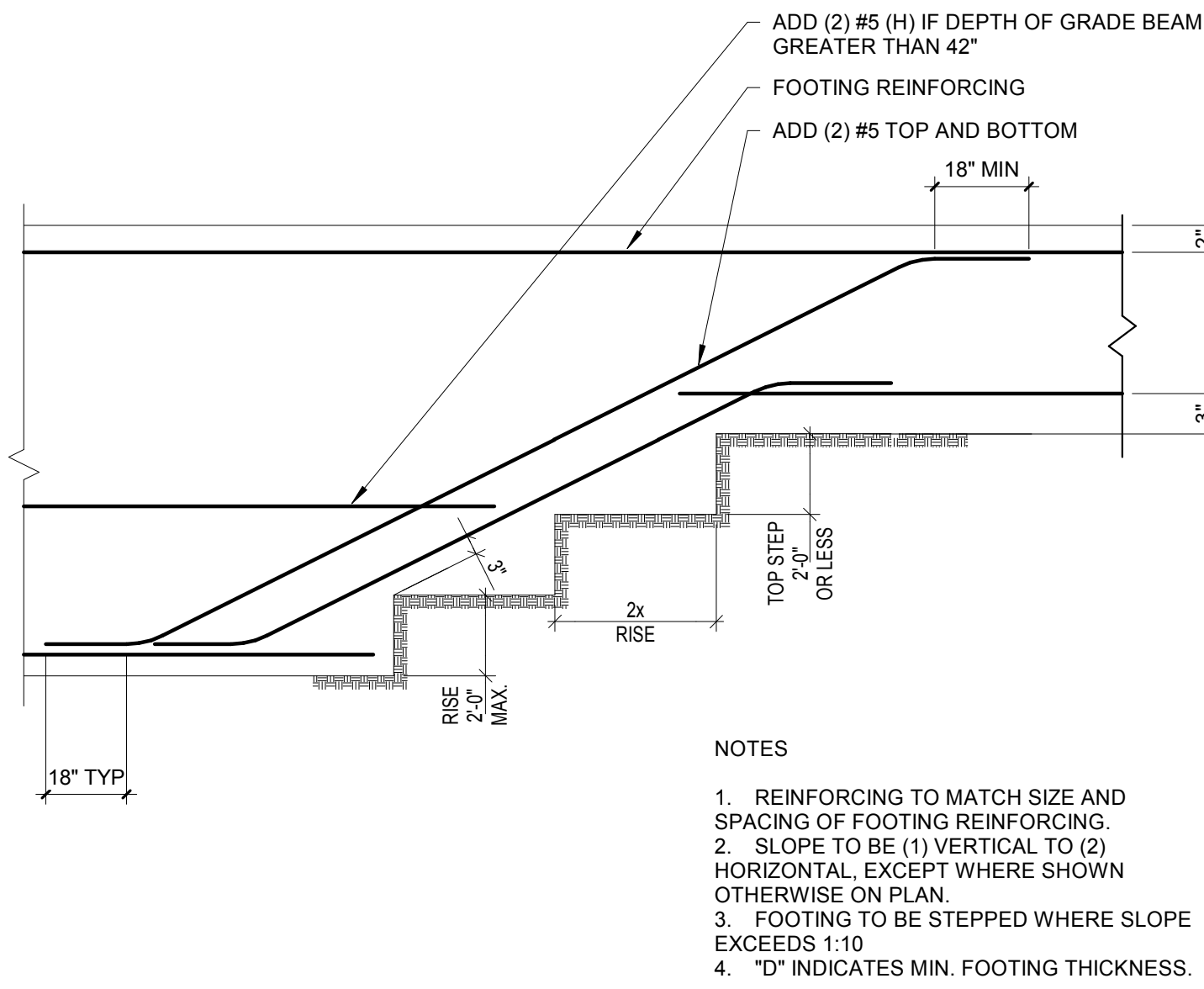
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S401



Typical Slab Construction Joint

1" = 1'-0"

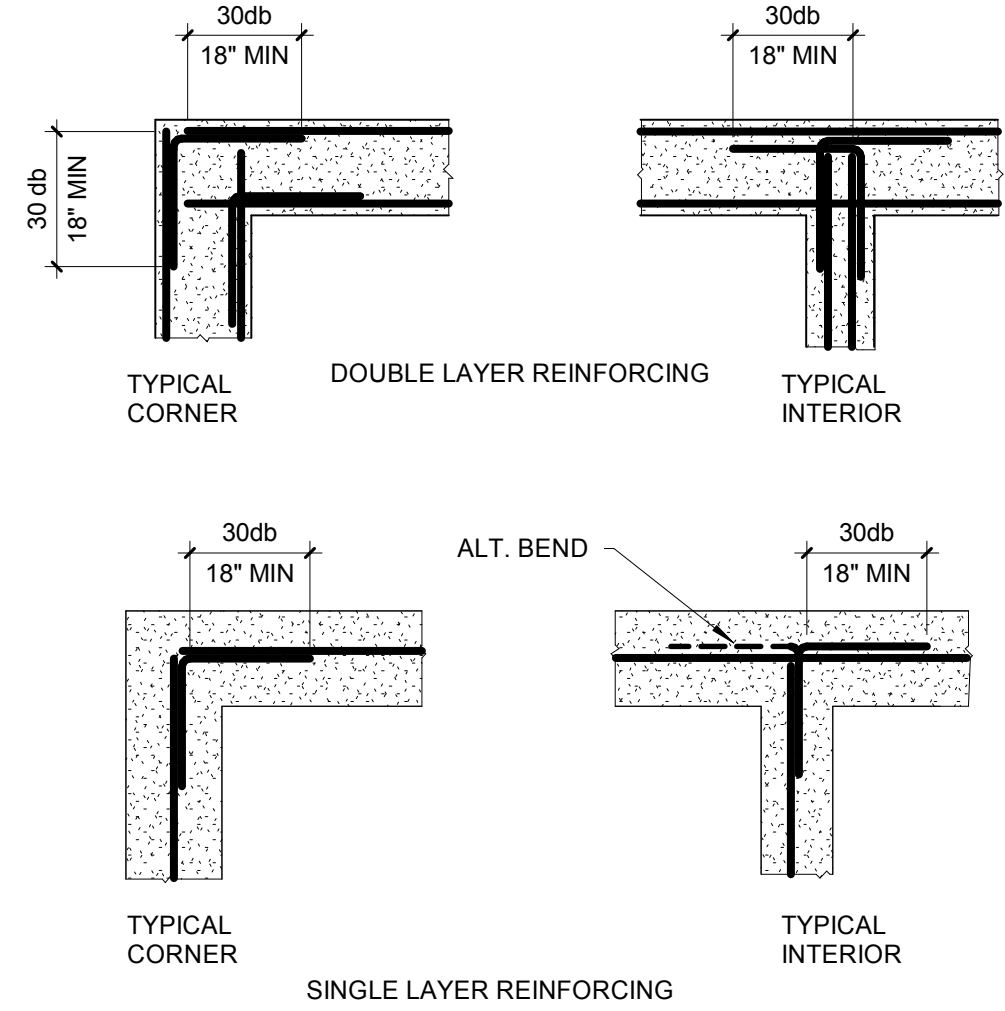
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S401



Typical Stepped Footing

1" = 1'-0"

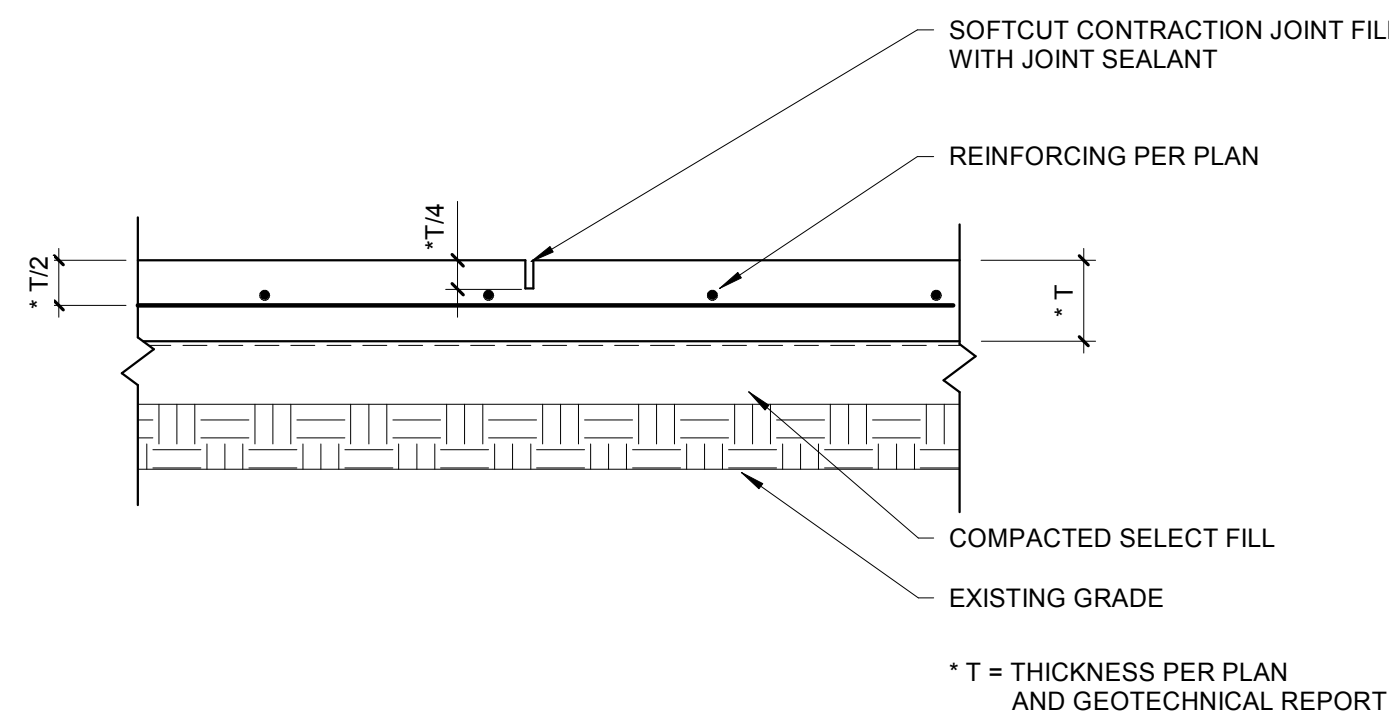
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Typical Reinforcing at Concrete Intersections

1/4" = 1'-0"

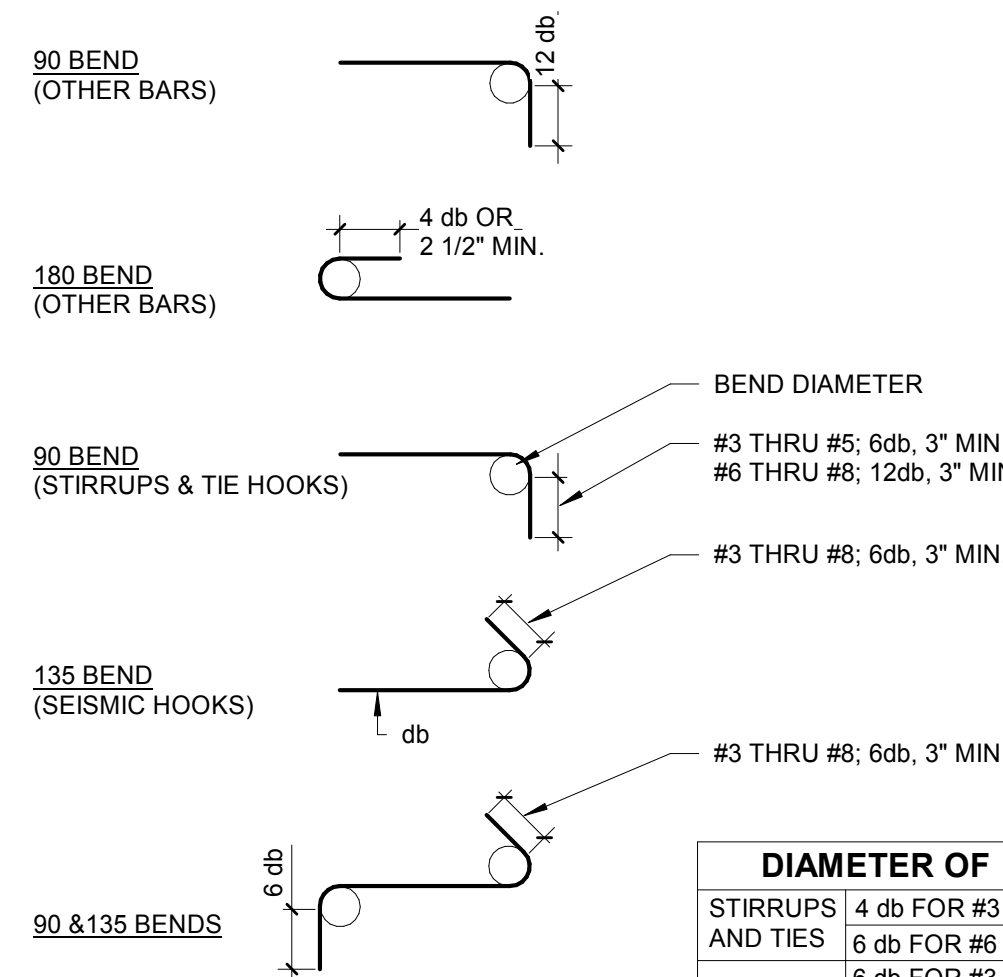
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S401



Typical Slab Contraction Joint

1" = 1'-0"

6
S401

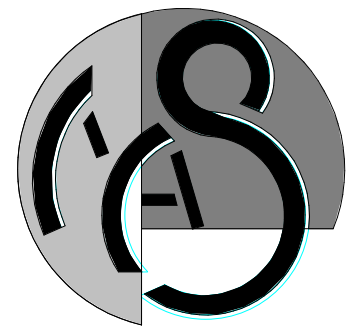


DIAMETER OF	
STIRRUPS AND TIES	4 db FOR #3 THRU #5 BARS
	6 db FOR #6 THRU #8 BARS
	6 db FOR #3 THRU #8 BARS
ALL OTHERS	8 db FOR #9 THRU #11 BARS
	10 db FOR #14 THRU #18 BARS

Typical Reinforcing Bends

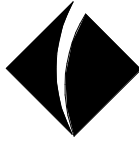
1/4" = 1'-0"

3
S401



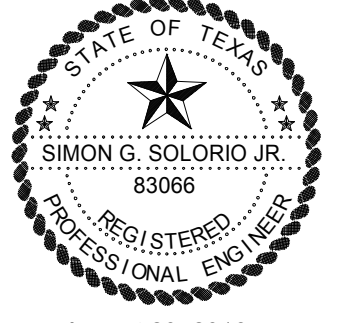
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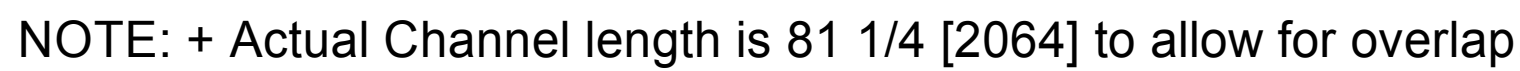
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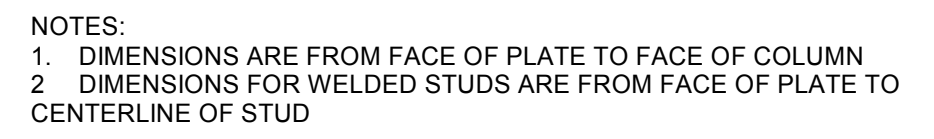
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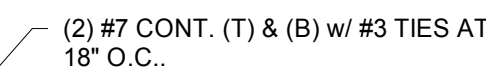
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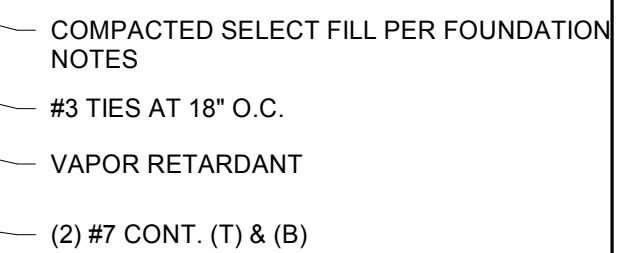
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S201	S402



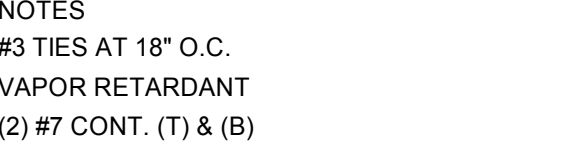
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S402	S402



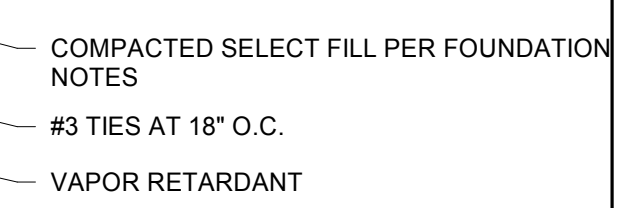
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S201	S402



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S201	S402

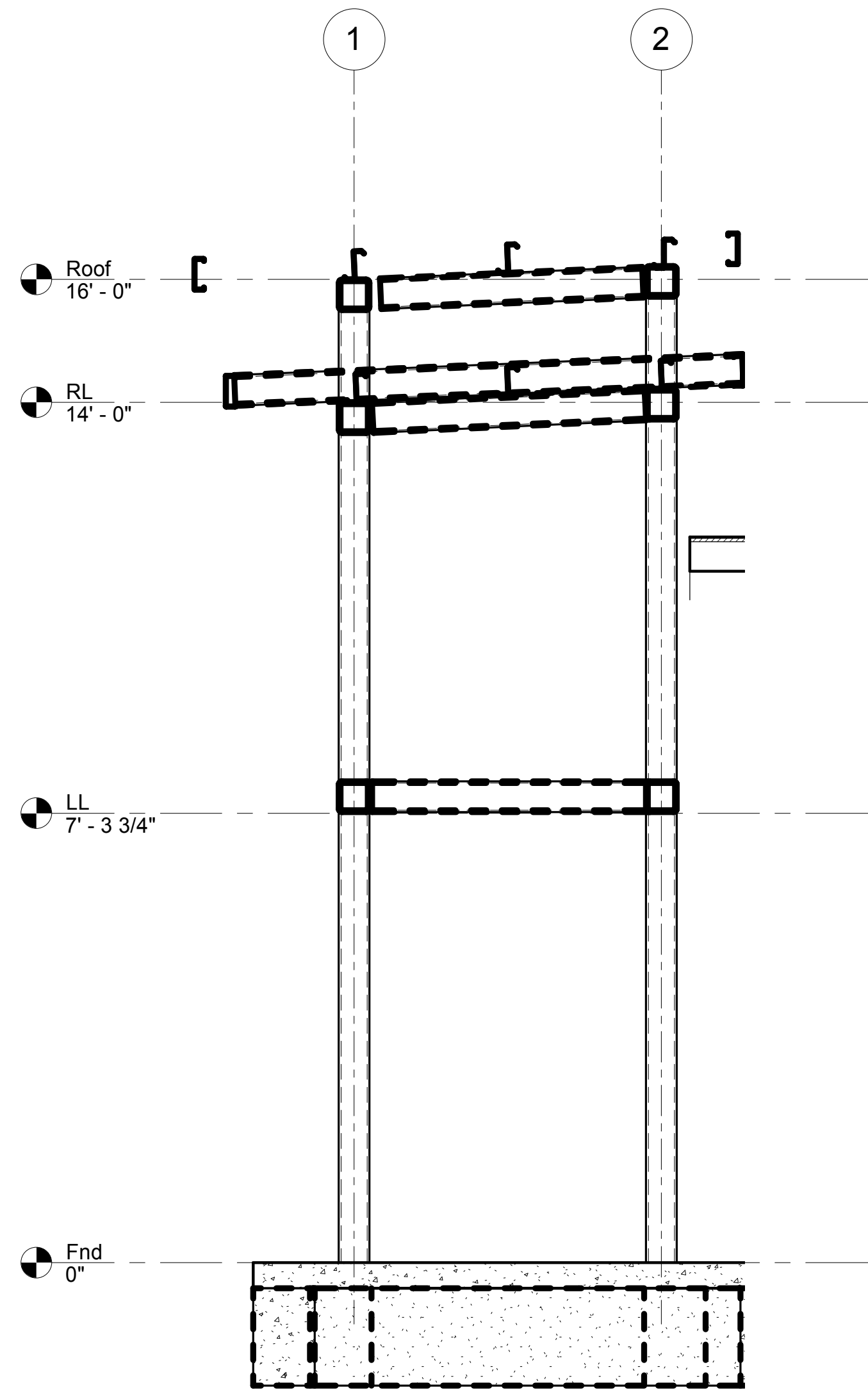


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S201	S402

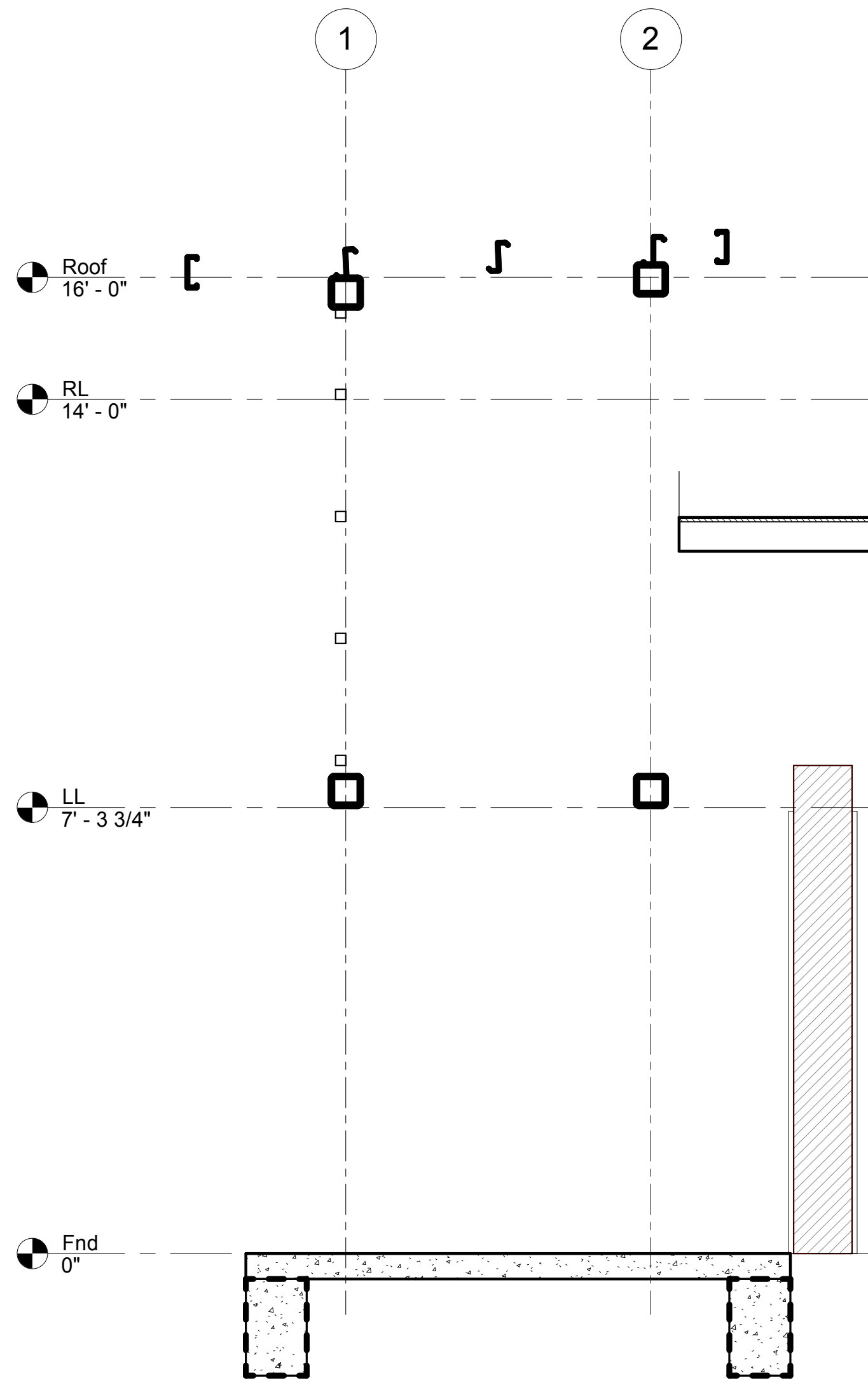


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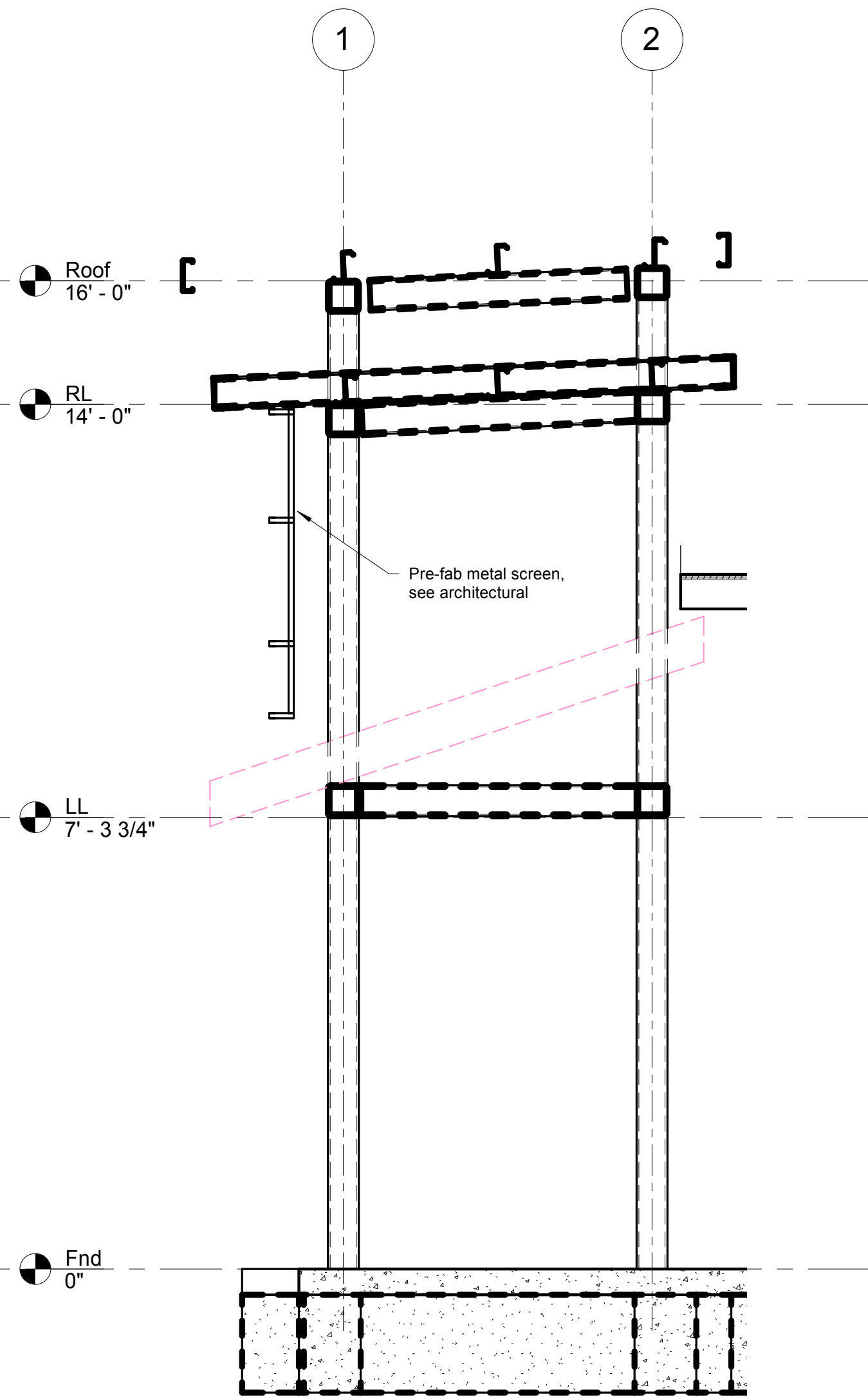
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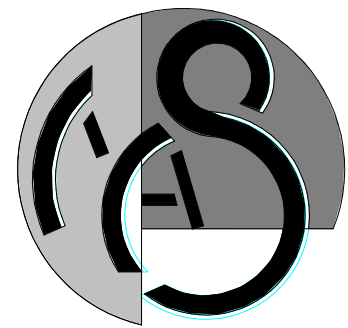
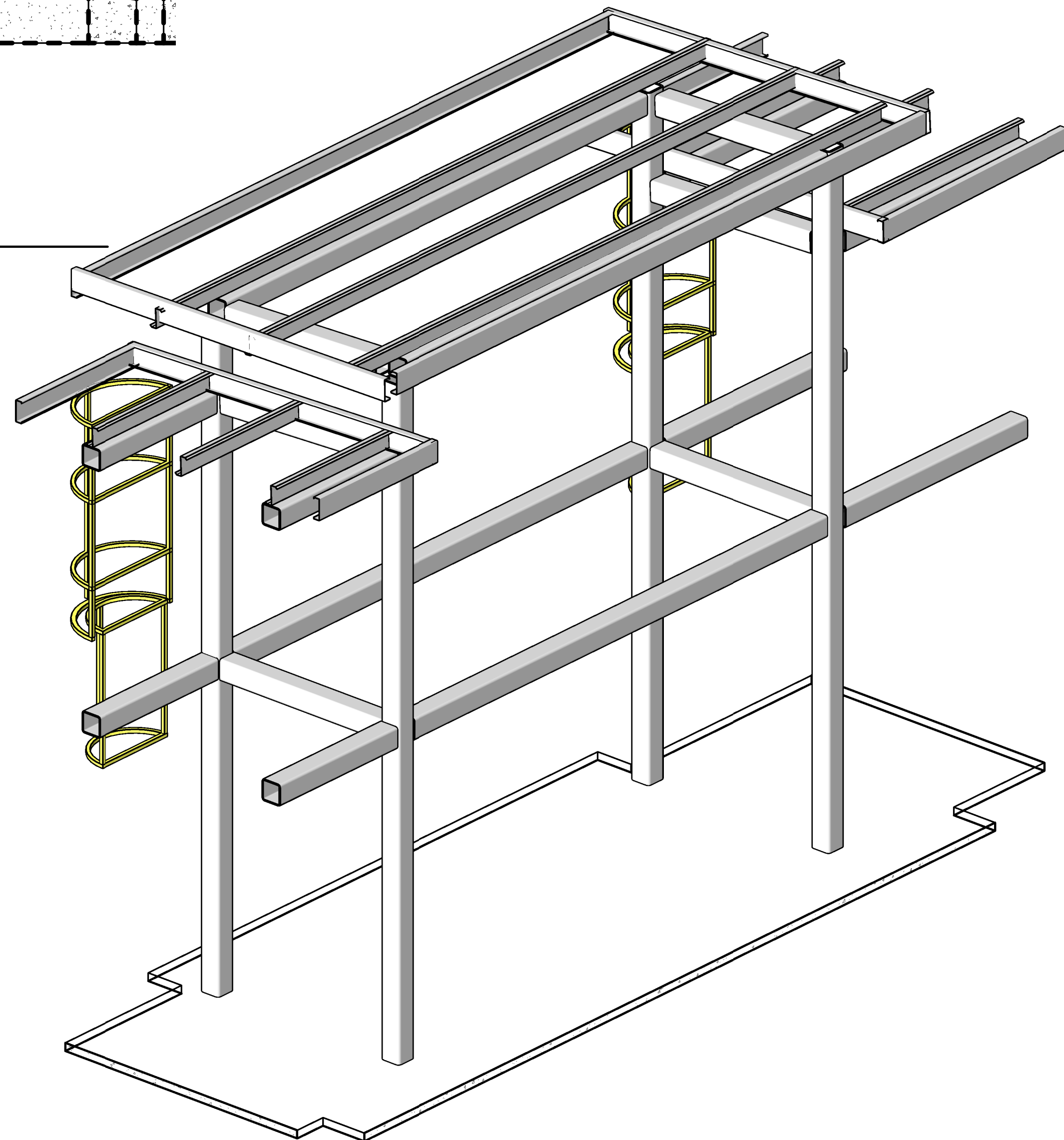
③ Detail 1
1/2" = 1'-0"



② Detail 1
1/2" = 1'-0"

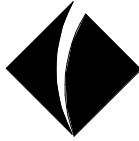


① Detail 5
1/2" = 1'-0"

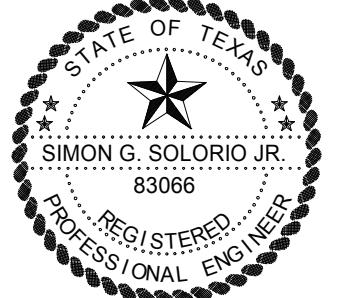


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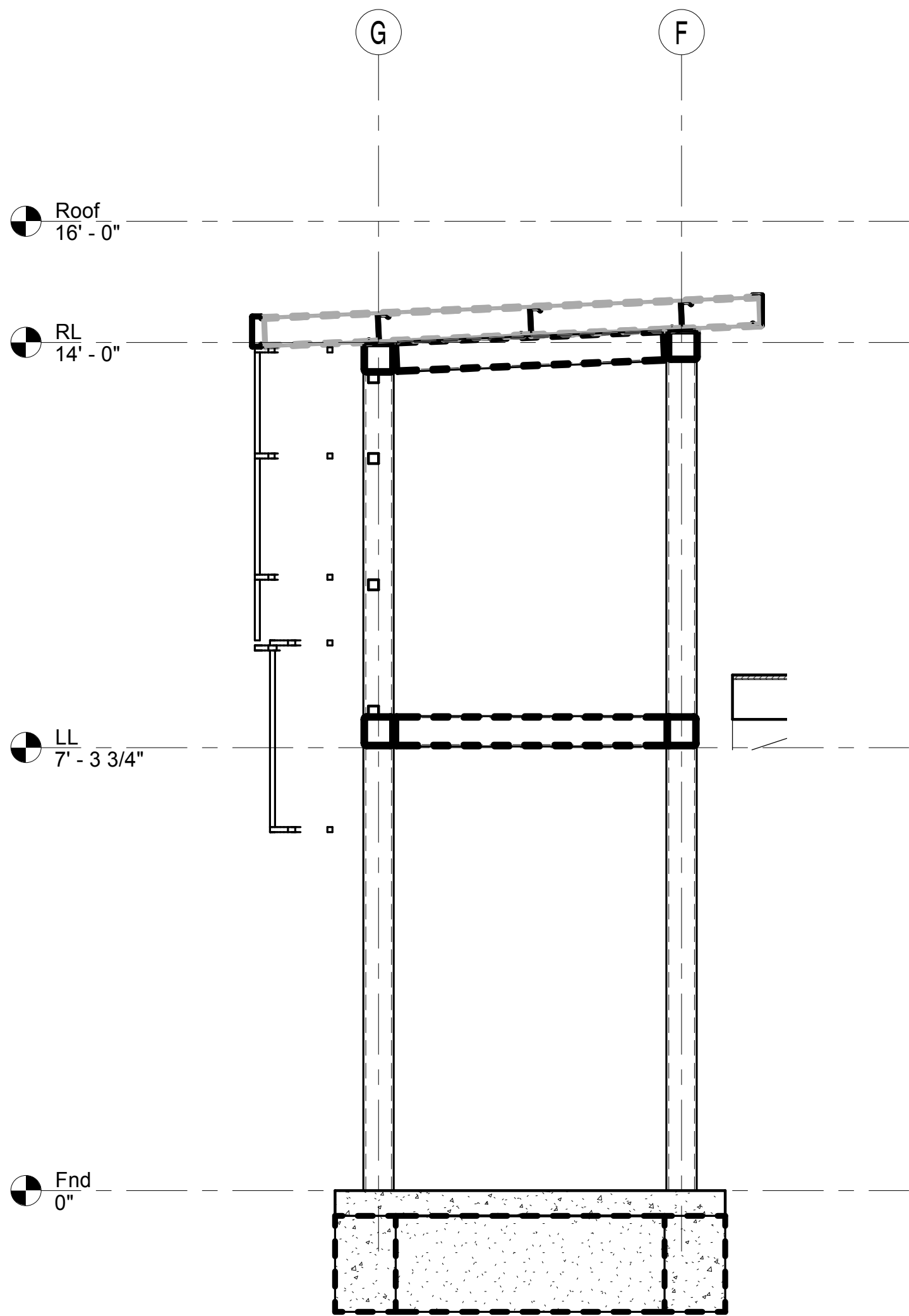
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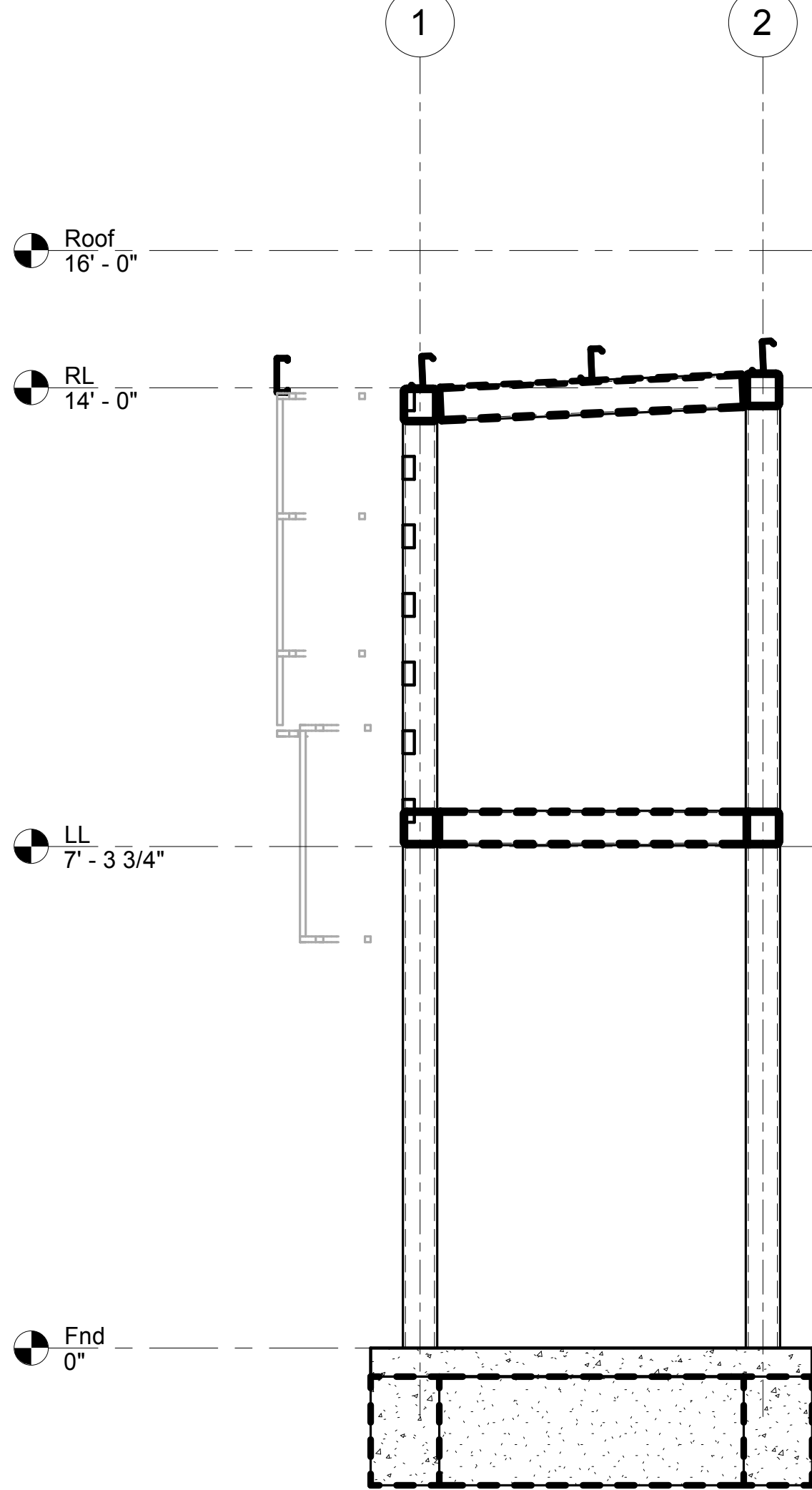
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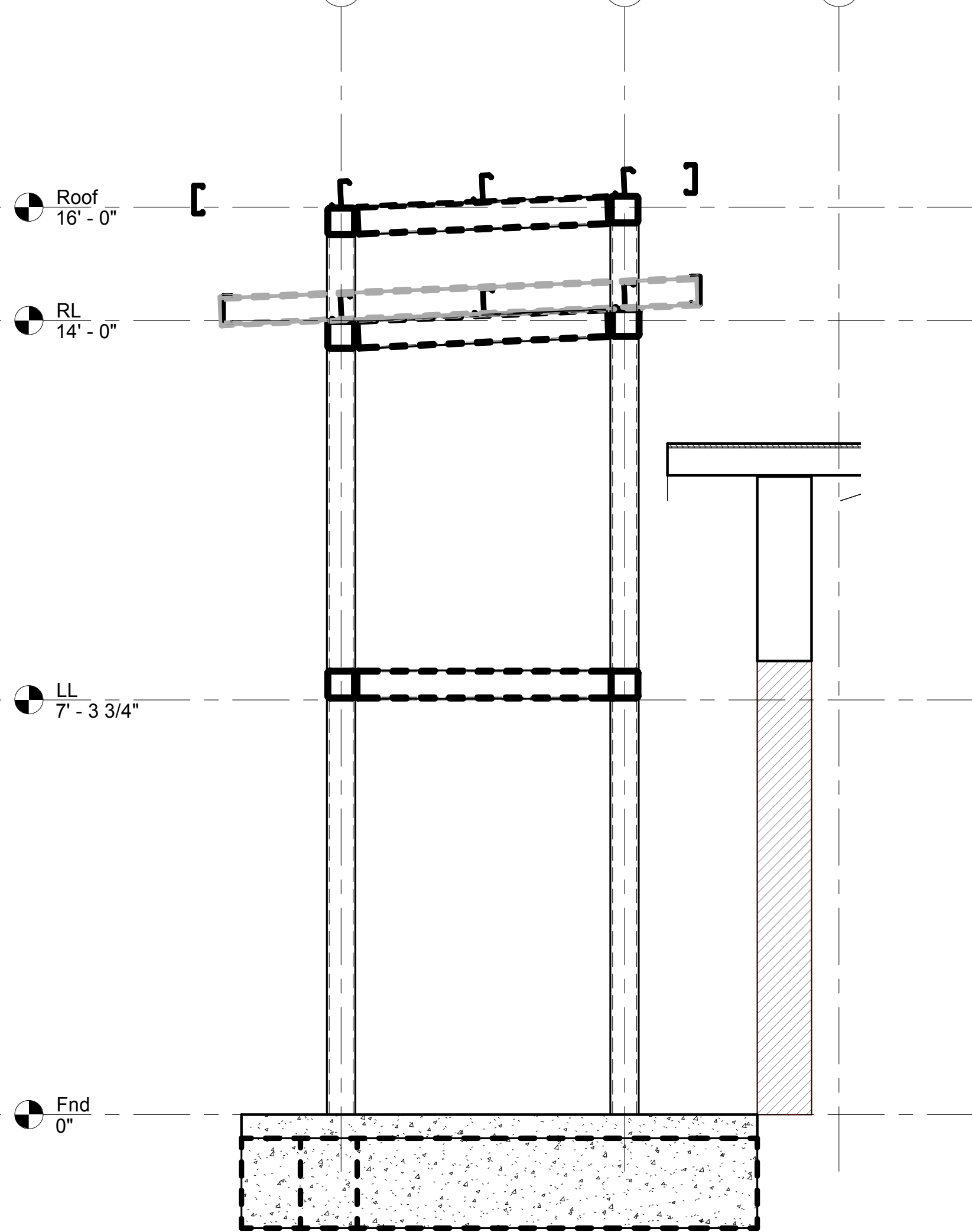
Detail 6
1/2" = 1'-0"

3
S201 S502



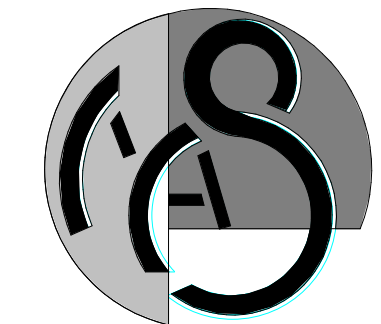
Detail 5
1/2" = 1'-0"

2
S201 S502



Detail 3
1/2" = 1'-0"

1
S201 S502



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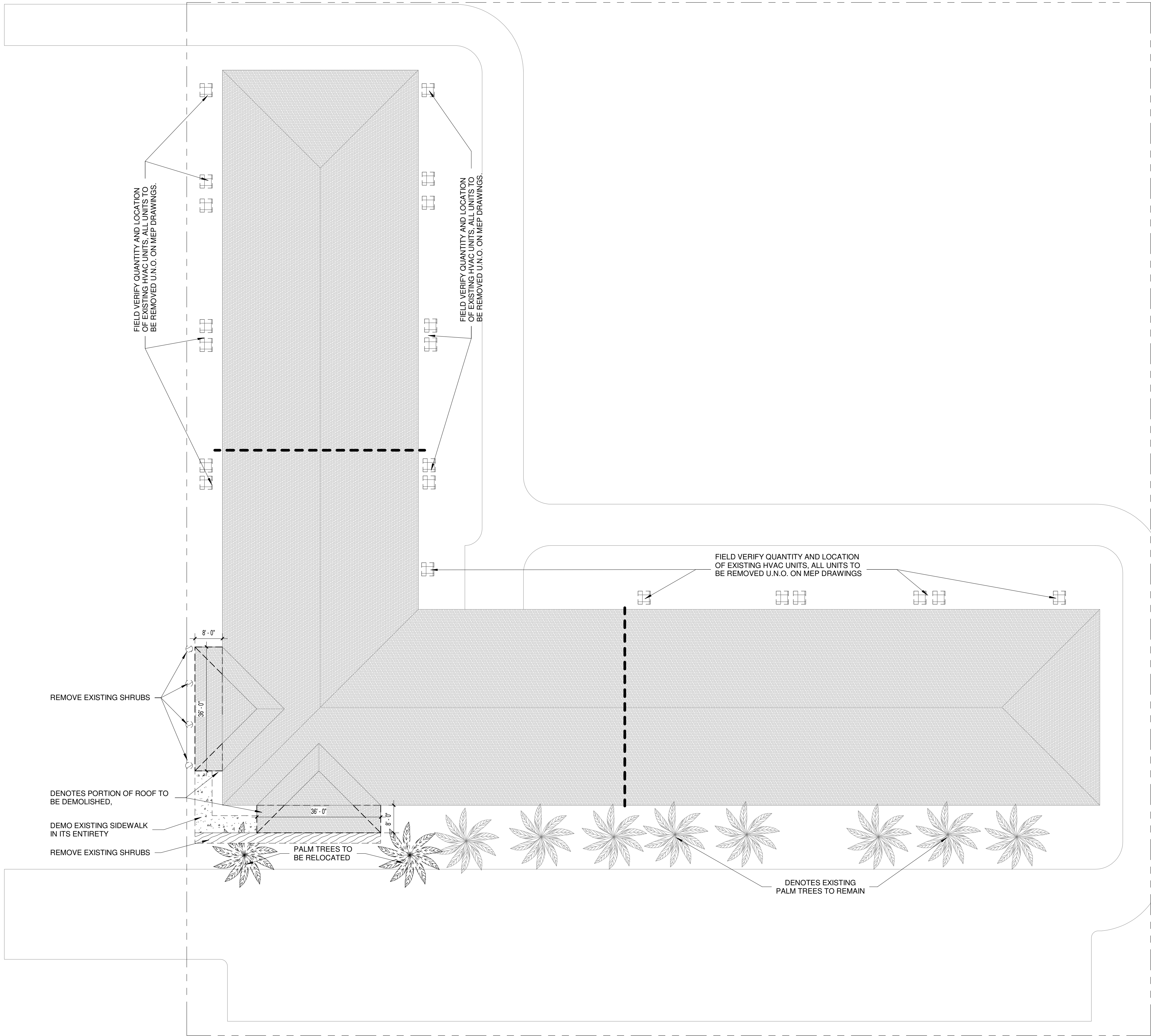
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S502



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

DEMOLITION GENERAL NOTES

1. GENERAL CONTRACTOR SHALL VISIT THE SITE TO FAMILIARIZE THEMSELVES WITH THE SCOPE OF WORK AND TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO BIDDING THIS PROJECT. ANY DISCREPENCIES OR AMBIGUOUS ITEMS MUST BE REPORTED TO THE ARCHITECT PRIOR TO BIDDING OR COMMENCING WORK FOR CLARIFICATION
2. REFER TO CIVIL, STRUCTURAL, & MEP DRAWINGS FOR ADDITIONAL DEMOLITION AND ALTERATION NOTES
3. THE OWNER HAS FIRST RIGHT OF SALVAGE OF ALL FIXTURES, EQUIPMENT, & BUILDING MATERIALS REMOVED AS PART OF THIS CONTRACT, AND SHALL NOT BE REUSED IN THE NEW CONSTRUCTION UNLESS OTHERWISE NOTED OR DIRECTED IN WRITING. REMOVE ALL OTHER DEBRIS AND WASTE FROM THE SITE AND DISPOSE OF PROPERLY, IN ACCORDANCE WITH FEDERAL, STATE, & LOCAL REGULATIONS
4. FIELD VERIFY LOCATIONS OF ALL EXISTING EXTERIOR PUBLIC ADDRESS SPEAKERS, INTERCOM SPEAKERS, PLUGS, SWITCHES, HOSE BIBS, LIGHTS AND CONTROLS PRIOR TO DEMOLITION. THESE SYSTEMS MUST BE PUT BACK IN ORIGINAL AND FUNCTIONING CONDITION AFTER NEW CONSTRUCTION IS COMPLETE, REPLACE, PATCH, OR REPAIR ANY DAMAGED EXISTING COMPONENTS OR SYSTEMS, WHICH ARE INTERRUPTED OR DISTURBED
5. STURCTURAL INTEGRITY: PROVIDE SUPPORT FOR THE EXISTING STRUCTURE TO REMAIN PRIOR TO PERFORMING ANY ALTERATION THERETO
6. STRUCTUAL INTEGRITY: UNLESS OTHERWISE INDICATED ON THE STRUCTURAL OR ARCHITECTURAL DRAWINGS, NEW OPENINGS CUT INTO EXISTING MASONRY WALLS, WHETHER BEARING OR NON-BEARING, SHALL RECEIVE LOOSE LINTELS WITH 8" BEARING AS A MINIMUM. REFER TO STRUCTURAL DRAWINGS AND NOTES FOR ADDITIONAL REQUIREMNTS
7. CUTTING & PATCHING: PROVIDE MATERIALS FOR CUTTING & PATCHING WHICH WILL RESULT IN EQUAL OR BETTER WORK THAN THAT BEING CUT OR PATCHED
8. ANY EXISTING CONSTRUCTION THAT IS TO BE REMOVED, SHALL BE REMOVED CAREFULLY SO AS NOT TO DAMAGE ANY EXISTING CONSTRUCTION THAT IS TO REMAIN. FLOORS, WALLS, AND CEILINGS ARE TO BE PATCHED TO MATCH EXISTING CONDITIONS AND MADE READY TO RECEIVE ANY NEW FINISHES WHERE APPLICABLE
9. PLUMBING LINES THAT ARE TO BE REMOVED SHALL BE REMOVED COMPLETELY, PATCH WALLS AND FLOOR TO MATCH EXISTING CONDITIONS, REFER TO PLUMBING DRAWINGS AND NOTES FOR ADDITIONAL REQUIREMENTS
10. WHERE EXISTING FLOOR, CEILING, OR WALL FINISHES ARE TO BE REPLACED WITH NEW FINISHES, EXISTING SURFACES SHALL BE STRIPPED CLEAN OF ALL EXISTING COVERINGS AND MADE READY TO RECEIVE NEW FINISHES, IN ACCORDACE WITH FINISH MANUFACTURERS WRITTEN INSTRUCTIONS AND RECOMMENDATIONS INCLUDING LEVEL 4 PLUMB TOLERANCES, REFER TO ROOM FINISH SCHEDULE FOR TYPES & LOCATIONS OF NEW FINISHES
11. ALL FLOOR FINISHED BEING REPLACED, SHALL BE COMPLETELY REMOVED & THE FLOOR CLEANED & PROPERLY PREPARED PRIOR TO INSTALLATION OF NEW FINISH MATERIAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTING ALL FLOORS THAT RECEIVE NEW FINISHES PRIOR TO BID AND CONSTRUCTION, FLOORS SHALL BE PATCHED, FILLED, & STRIPPED AS REQUIRED TO PROVIDE A SMOOTH, DURABLE SURFACE FREE OF ALL BURRS OR ADHESIVE, AND SUITABLE FOR APPLICATION OF NEW FINISH MATERIAL, ANY UNDER CUTTING OF DOORS REQUIRED TO ACCOMMODATE NEW FLOOR FINISHES SHALL BE RESPONSIBILITY OF THE CONTRACTOR
12. WHERE NEW CONCRETE TOPPING IS TO BE POURED OVER AN EXISTING CONCRETE SLAB, BUSH HAMMER THE EXISTING CONCRETE FINISH FOR A BETTER BOND
13. WHERE EXISTING MASONRY ABUTS NEW MASONRY, EXISTING MASONRY SHALL BE TOOTHED TO RECEIVE NEW MASONRY (U.O.N.) NEW MASONRY SHALL MATCH EXISTING COURSING, TYPICAL
14. WHERE A PORTION OF AN EXISTING MASONRY WALL IS TO BE REMOVED, PROVIDE A FINISHED EDGE BY TOOTHING IN NEW MASONRY TO MATCH EXISTING (U.O.N.)
15. REFER TO STRUCTURAL DRAWINGS & NOTES FOR ADDITIONAL NOTES
16. CONTRACTOR SHALL MAINTAIN BUILDING INTEGRITY, BUILDING SECURITY, AND WEATHER-TIGHT BUILDING ENVELOPE (TO INCLUDE EXTERIOR WALL(S), ROOF, EXTERIOR OPENINGS, ETC.) DURING CONSTRUCTION. CONTRACTOR TO COORDINATE BUILDING ACCESS WITH OWNER.

LEGEND

- DENOTES ITEMS TO BE DEMOLISHED
- DENOTES EXISTING TO REMAIN



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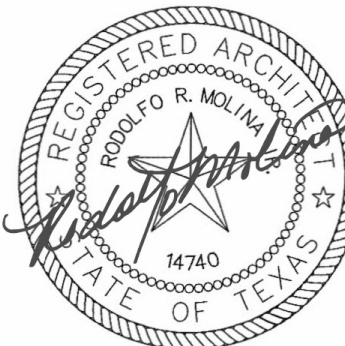
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DEMO KEYNOTE LEGEND

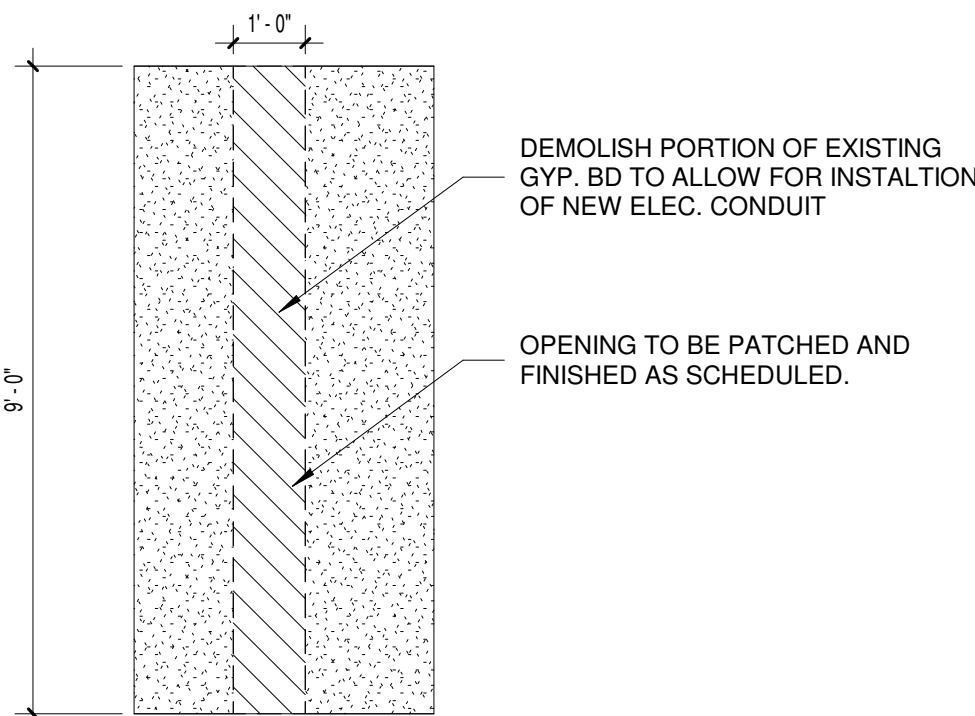
D1	REMOVE EXT. DOOR AND FRAME. FILL IN PER DETAIL
D2	REMOVE DOOR AND FRAME
D3	REMOVE WALL
D4	REMOVE PLUMBING FIXTURE
D7	REMOVE WINDOW
D8	REMOVE MILLWORK
D9	REMOVE SHOWER
D10	REMOVE FLOORING
D12	REMOVE CEILING

GENERAL DEMOLITION NOTES

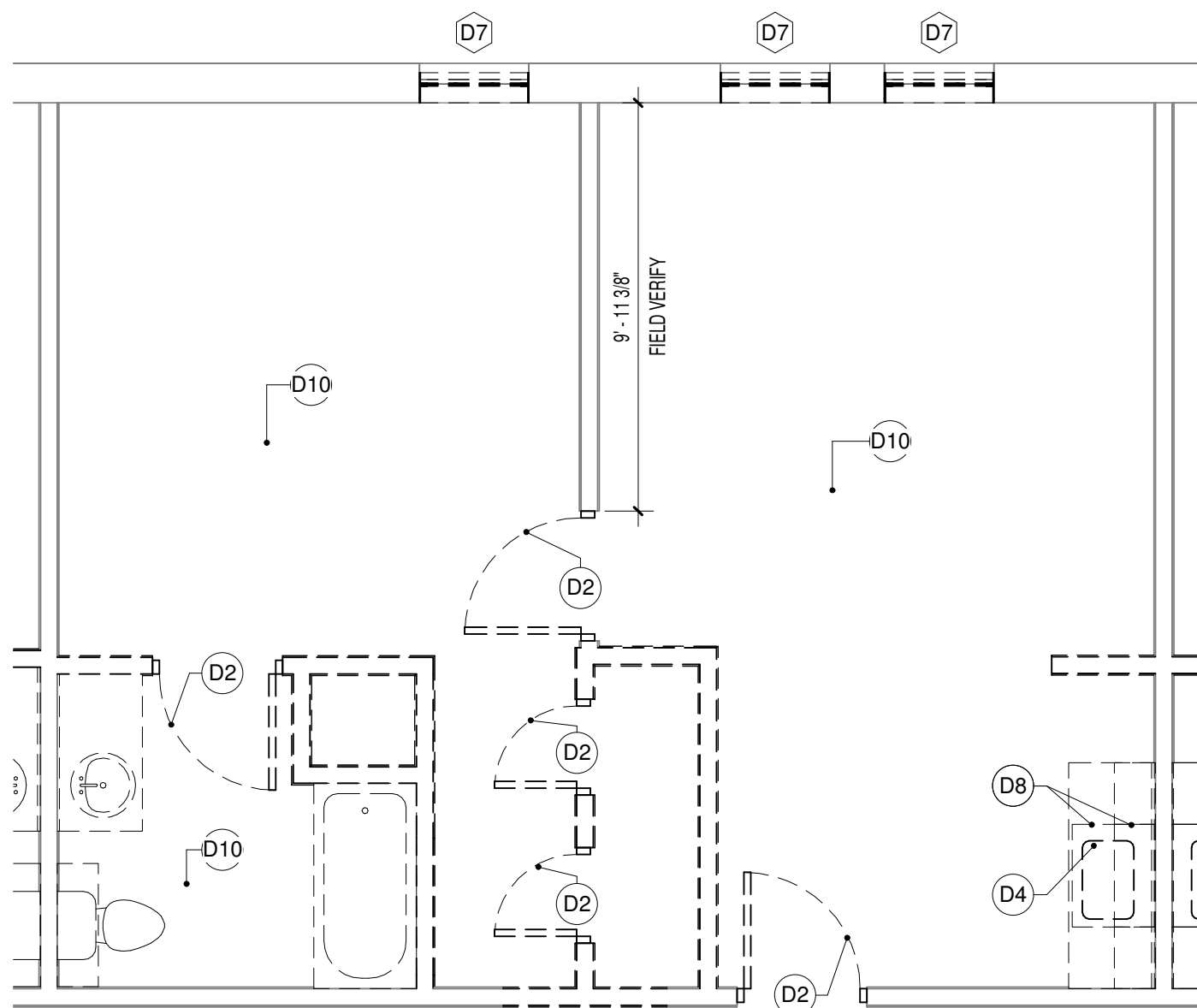
- CONTRACTOR SHALL REVIEW ARCHITECTURAL PLANS FOR REQUIREMENTS/COORDINATION PRIOR TO PERFORMING DEMOLITIONS. NEW WORK ON ARCHITECTURAL DRAWINGS TAKE PRECEDENCE.
- FIELD VERIFY ALL EXISTING DIMENSIONS, CONDITIONS AND LOCATIONS.
- PROTECT EXISTING WORK TO REMAIN AS REQUIRED TO PREVENT UNNECESSARY DAMAGE DUE TO DEMOLITION.
- COORDINATE SCHEDULING OF ALL UTILITY AND SERVICE REQUIRED BY THE WORK WITH THE CITY ENGINEER.
- GENERAL CONTRACTOR, OR ANY OF HIS SUBCONTRACTORS, ARE NOT TO SHUT OFF ANY UTILITIES OR SERVICES.
- REMOVE EXISTING ITEMS AS INDICATED ON PLANS. CUT AND REMOVE AS REQUIRED TO LEAVE A CLEAN EDGE ON REMAINING WORK.
- THE OWNER, UNDER A SEPARATE CONTRACT WILL HAVE HAZARDOUS MATERIALS (ASBESTOS CONTAINING) REMOVED FROM THE BUILDING AND SITE PRIOR TO THE CONTRACTOR'S DEMOLITION OR NEW WORK IN EFFECTED AREAS. THIS WORK GENERALLY PERTAINS TO THE REMOVAL OF COMPOSITION FLOORTILE, INSULATION AT MECHANICAL PIPING, OPAQUE SPANDRELS AT WINDOWS, ETC., AS DESCRIBED IN THE ASBESTOS CONSULTANTS REPORT.
- ALL LIGHTING TO BE REMOVED AND REPLACED. SEE MEP DRAWINGS FOR ADDITIONAL INFORMATION.
- ALL ELECTRICAL OUTLETS TO BE REMOVED AND REPLACED. SEE MEP DRAWINGS FOR ADDITIONAL INFORMATION.
- FIELD VERIFY LOCATIONS OF ALL NEW DOORS, WINDOWS AND OPENINGS. ENSURE THAT AN OPENING IS PROVIDED EVEN IF NOT SHOWN ON THE DEMO PLAN.
- ALL LIGHT FIXTURES ARE TO BE REMOVED. REFER TO MEP LIGHTING PLAN FOR ADDITIONAL INFORMATION.

LEGEND

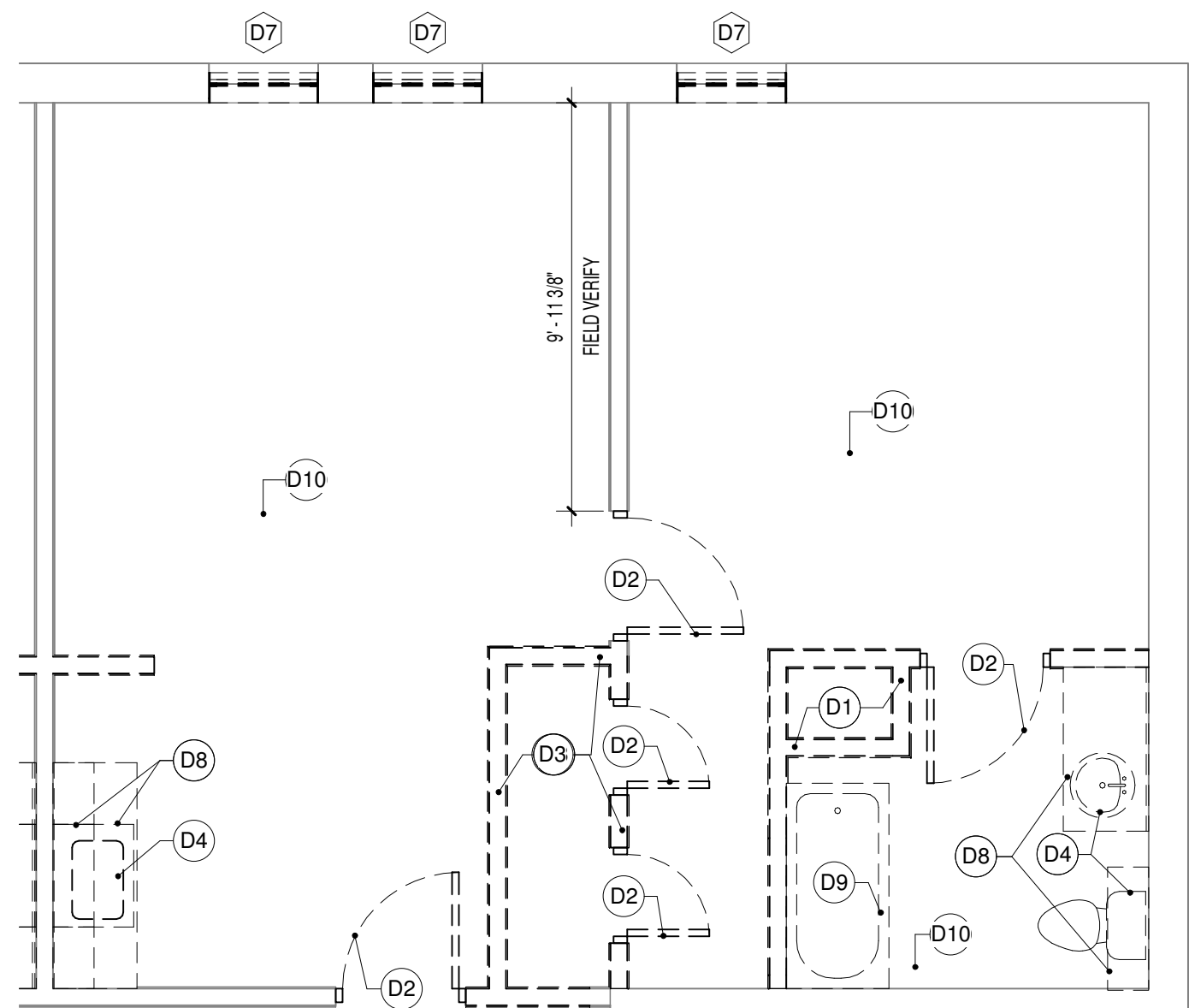
- DENOTES ITEMS TO BE DEMOLISHED
- DENOTES EXISTING TO REMAIN



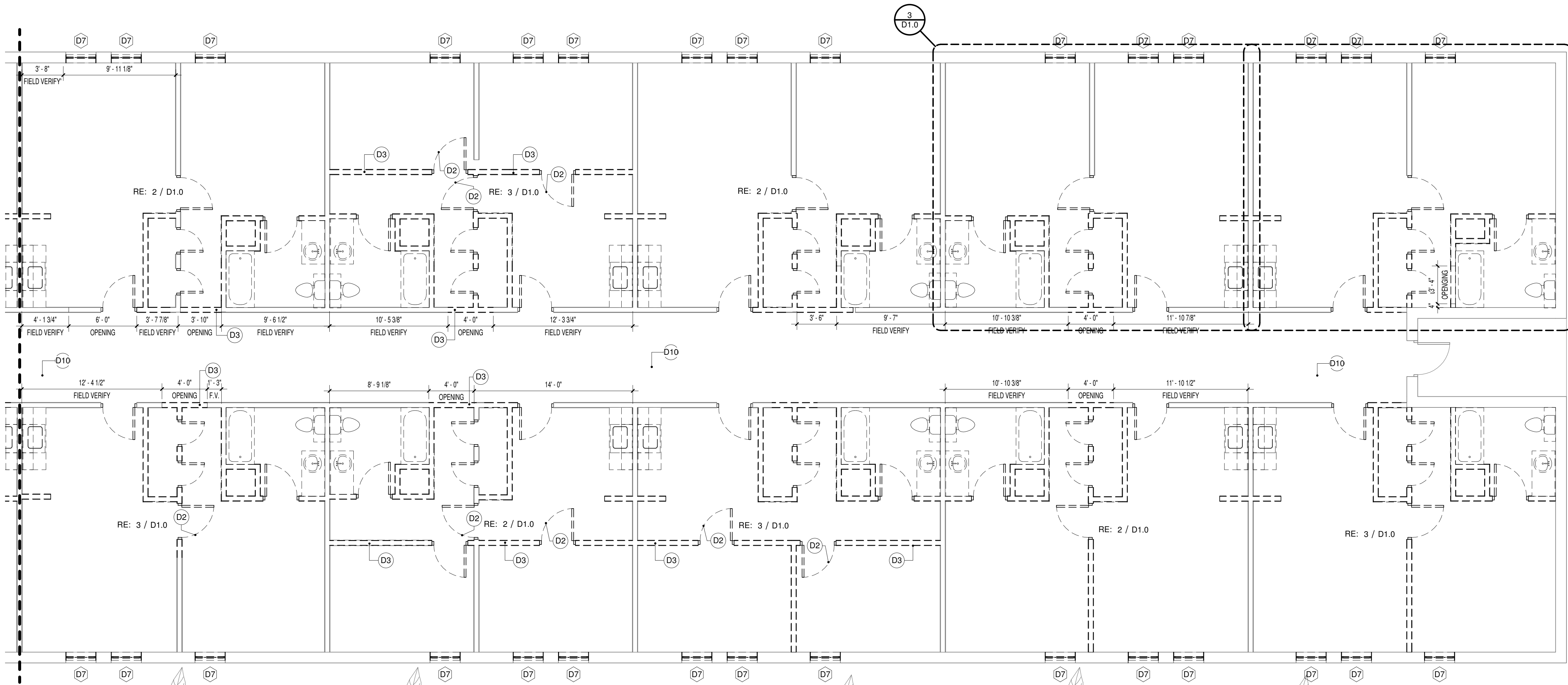
NOTE: REFER TO MEP DRAWINGS FOR LOCATIONS OF NEW CONDUIT.
④ TYPICAL DEMO DETAIL
3/8" = 1'-0"



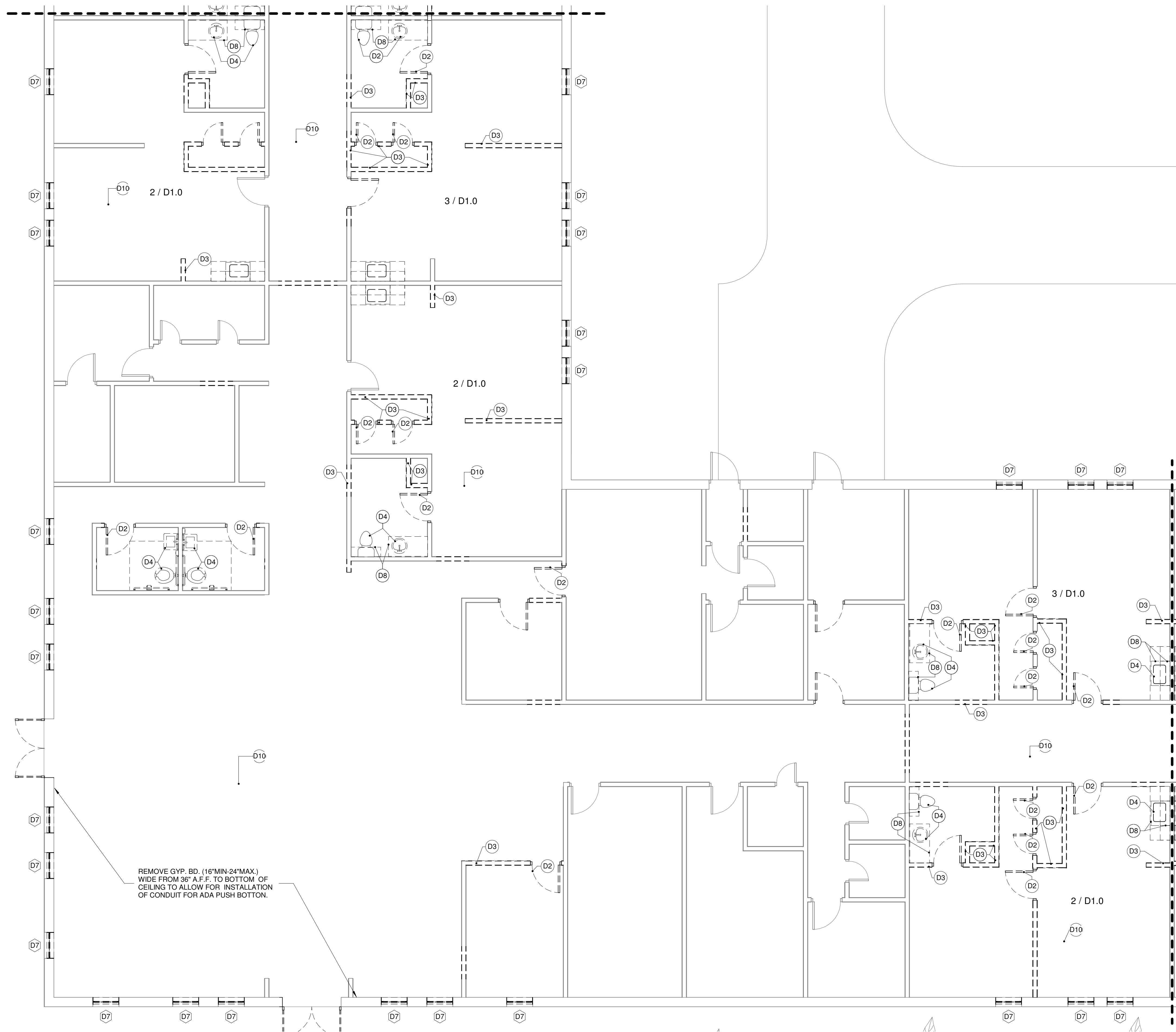
③ DEMO - TYPICAL DEMO PLAN
1/4" = 1'-0"



② DEMO - TYPICAL DEMO PLAN
1/4" = 1'-0"



① DEMO FLOOR PLAN - SECTION A
3/16" = 1'-0"



1 DEMO FLOOR PLAN - SECTION B
3/16" = 1'-0"

DEMO KEYNOTE LEGEND

D1	REMOVE EXT. DOOR AND FRAME. FILL IN PER DETAIL
D2	REMOVE DOOR AND FRAME
D3	REMOVE WALL
D4	REMOVE PLUMBING FIXTURE
D7	REMOVE WINDOW
D8	REMOVE MILLWORK
D9	REMOVE SHOWER
D10	REMOVE FLOORING
D12	REMOVE CEILING

GENERAL DEMOLITION NOTES

1. CONTRACTOR SHALL REVIEW ARCHITECTURAL PLANS FOR REQUIREMENTS/COORDINATION PRIOR TO PERFORMING DEMOLITIONS. NEW WORK ON ARCHITECTURAL DRAWINGS TAKE PRECEDENCE.
2. FIELD VERIFY ALL EXISTING DIMENSIONS, CONDITIONS AND LOCATIONS.
3. PROTECT EXISTING WORK TO REMAIN AS REQUIRED TO PREVENT UNNECESSARY DAMAGE DUE TO DEMOLITION.
4. COORDINATE SCHEDULING OF ALL UTILITY AND SERVICE REQUIRED BY THE WORK WITH THE CITY ENGINEER.
5. GENERAL CONTRACTOR, OR ANY OF HIS SUBCONTRACTORS, ARE NOT TO SHUT OFF ANY UTILITIES OR SERVICES.
6. REMOVE EXISTING ITEMS AS INDICATED ON PLANS. CUT AND REMOVE AS REQUIRED TO LEAVE A CLEAN EDGE ON REMAINING WORK.
7. THE OWNER, UNDER A SEPARATE CONTRACT WILL HAVE HAZARDOUS MATERIALS (ASBESTOS CONTAINING) REMOVED FROM THE BUILDING AND SITE PRIOR TO THE CONTRACTOR'S DEMOLITION OR NEW WORK IN EFFECTED AREAS. THIS WORK GENERALLY PERTAINS TO THE REMOVAL OF COMPOSITION FLOORTILE, INSULATION AT MECHANICAL PIPING, OPAQUE SPANDRELS AT WINDOWS, ETC., AS DESCRIBED IN THE ASBESTOS CONSULTANTS REPORT.
8. ALL LIGHTING TO BE REMOVED AND REPLACED, SEE MEP DRAWINGS FOR ADDITIONAL INFORMATION.
9. ALL ELECTRICAL OUTLETS TO BE REMOVED AND REPLACED, SEE MEP DRAWINGS FOR ADDITIONAL INFORMATION.
10. FIELD VERIFY LOCATIONS OF ALL NEW DOORS, WINDOWS AND OPENINGS, ENSURE THAT AN OPENING IS PROVIDED EVEN IF NOT SHOWN ON THE DEMO PLAN.
11. ALL LIGHT FIXTURES ARE TO BE REMOVED, REFER TO MEP LIGHTING PLAN FOR ADDITIONAL INFORMATION.

LEGEND

- DENOTES ITEMS TO BE DEMOLISHED
— DENOTES EXISTING TO REMAIN



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HOP VILLA RENOVATIONS
TROPICAL TEXAS BEHAVIORAL HEALTH
HARLINGEN, TX

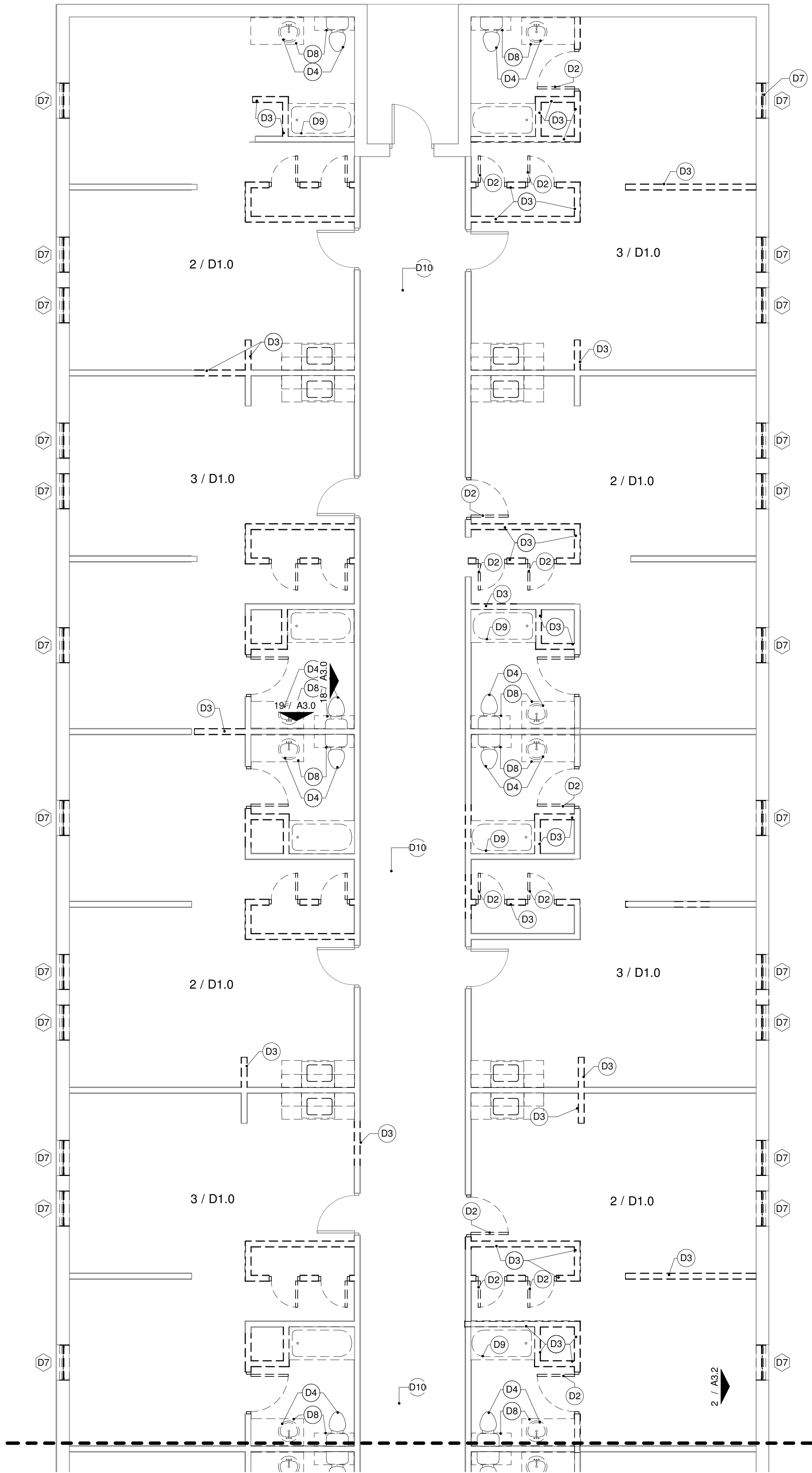
PROJECT NUMBER
217027

DATE
AUGUST 20, 2018

ISSUE FOR SEALED
PROPOSALS

SHEET NUMBER

D1.1



1 DEMO FLOOR PLAN - SECTION C
3/16" = 1'-0"

DEMO KEYNOTE LEGEND

- D1 REMOVE EXT. DOOR AND FRAME. FILL IN PER DETAIL
- D2 REMOVE DOOR AND FRAME
- D3 REMOVE WALL
- D4 REMOVE PLUMBING FIXTURE
- D7 REMOVE WINDOW
- D8 REMOVE MILLWORK
- D9 REMOVE SHOWER
- D10 REMOVE FLOORING
- D12 REMOVE CEILING

GENERAL DEMOLITION NOTES

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10. FEILD VERIFY LOCATIONS OF ALL NEW DOORS, WINDOWS AND OPENINGS, ENSURE THAT AN OPENING IS PROVIDED EVEN IF NOT SHOWN ON THE DEMO PLAN.
11. ALL LIGHT FIXTURES ARE TO BE REMOVED, REFER TO MEP LIGHTING PLAN FOR ADDITIONAL INFORMATION.

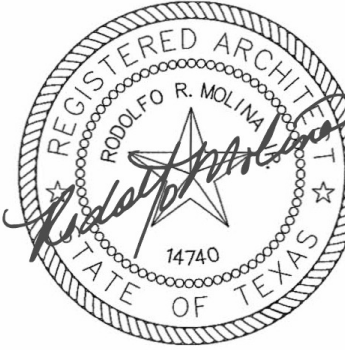
LEGEND

- DENOTES ITEMS TO BE DEMOLISHED
- DENOTES EXISTING TO REMAIN



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HOP VILLA RENOVATIONS
TROPICAL TEXAS BEHAVIORAL HEALTH
HARLINGEN, TX

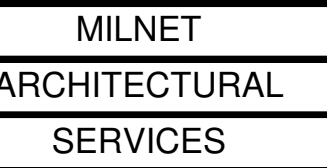
PROJECT NUMBER
217027

DATE
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ISSUE FOR SEALED
PROPOSALS

SHEET NUMBER

D1.2



D1	REMOVE EXT. DOOR AND FRAME. FILL IN PER DETAIL
D2	REMOVE DOOR AND FRAME
D3	REMOVE WALL
D4	REMOVE PLUMBING FIXTURE
D7	REMOVE WINDOW
D8	REMOVE MILL/WORK
D9	REMOVE SHOWER
D10	REMOVE FLOORING
D12	REMOVE CEILING

GENERAL DEMOLITION NOTES

1. CONTRACTOR SHALL REVIEW ARCHITECTURAL PLANS FOR REQUIREMENTS/COORDINATION PRIOR TO PERFORMING DEMOLITIONS. NEW WORK ON ARCHITECTURAL DRAWINGS TAKE PRECEDENCE.

2. FIELD VERIFY ALL EXISTING DIMENSIONS, CONDITIONS AND LOCATIONS.

3. PROTECT EXISTING WORK TO REMAIN AS REQUIRED TO PREVENT UNNECESSARY DAMAGE DUE TO DEMOLITION.

4. COORDINATE SCHEDULING OF ALL UTILITY AND SERVICE REQUIRED BY THE WORK WITH THE CITY ENGINEER.

5. GENERAL CONTRACTOR, OR ANY OF HIS SUBCONTRACTORS, ARE NOT TO SHUT OFF ANY UTILITIES OR SERVICES.

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CUT AND REMOVE AS REQUIRED TO LEAVE A CLEAN
EDGE ON REMAINING WORK.

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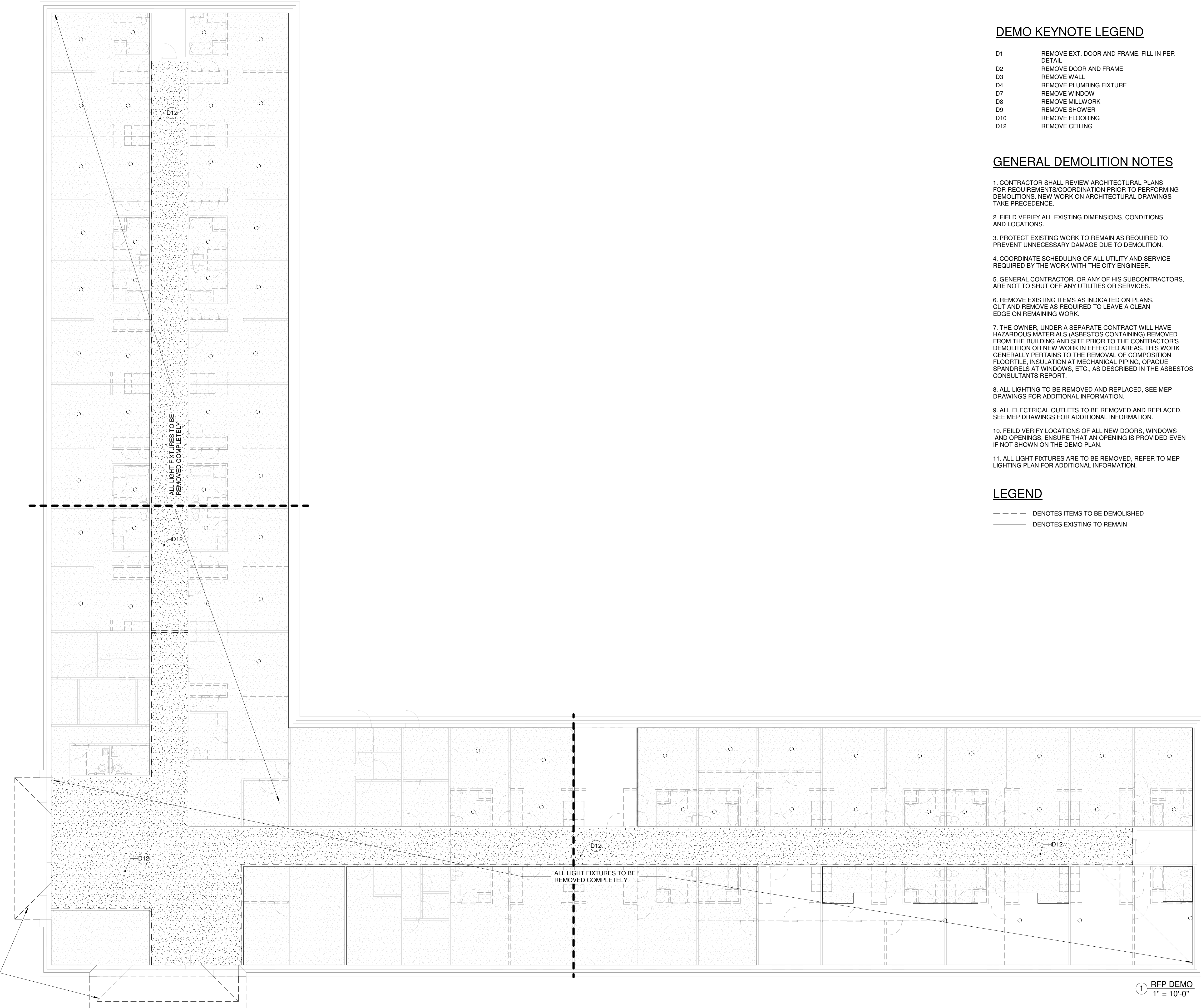
9. ALL ELECTRICAL OUTLETS TO BE REMOVED AND REPLACED, SEE MEP DRAWINGS FOR ADDITIONAL INFORMATION.

10. FIELD VERIFY LOCATIONS OF ALL NEW DOORS, WINDOWS AND OPENINGS, ENSURE THAT AN OPENING IS PROVIDED EVEN IF NOT SHOWN ON THE DEMO PLAN.

11. ALL LIGHT FIXTURES ARE TO BE REMOVED, REFER TO MEP LIGHTING PLAN FOR ADDITIONAL INFORMATION.

LEGEND

— — — — DENOTES ITEMS TO BE DEMOLISHED
 ————— DENOTES EXISTING TO REMAIN



PORTION OF EXISTING ROOF AND STRUCTURE TO
BE REMOVED, SEE ROOF PLAN FOR ADDITIONAL
INFORMATION

① RFP DEMO
1" = 10'-0"

NOT VILLA RENOVATIONS

TROPICAL TEXAS BEHAVIORAL HEALTH

HARLINGEN, TX

PROJECT NUMBER
217027

DATE
AUGUST 20, 2018

ISSUE FOR SEALED
PROPOSALS

SHEET NUMBER

01.3

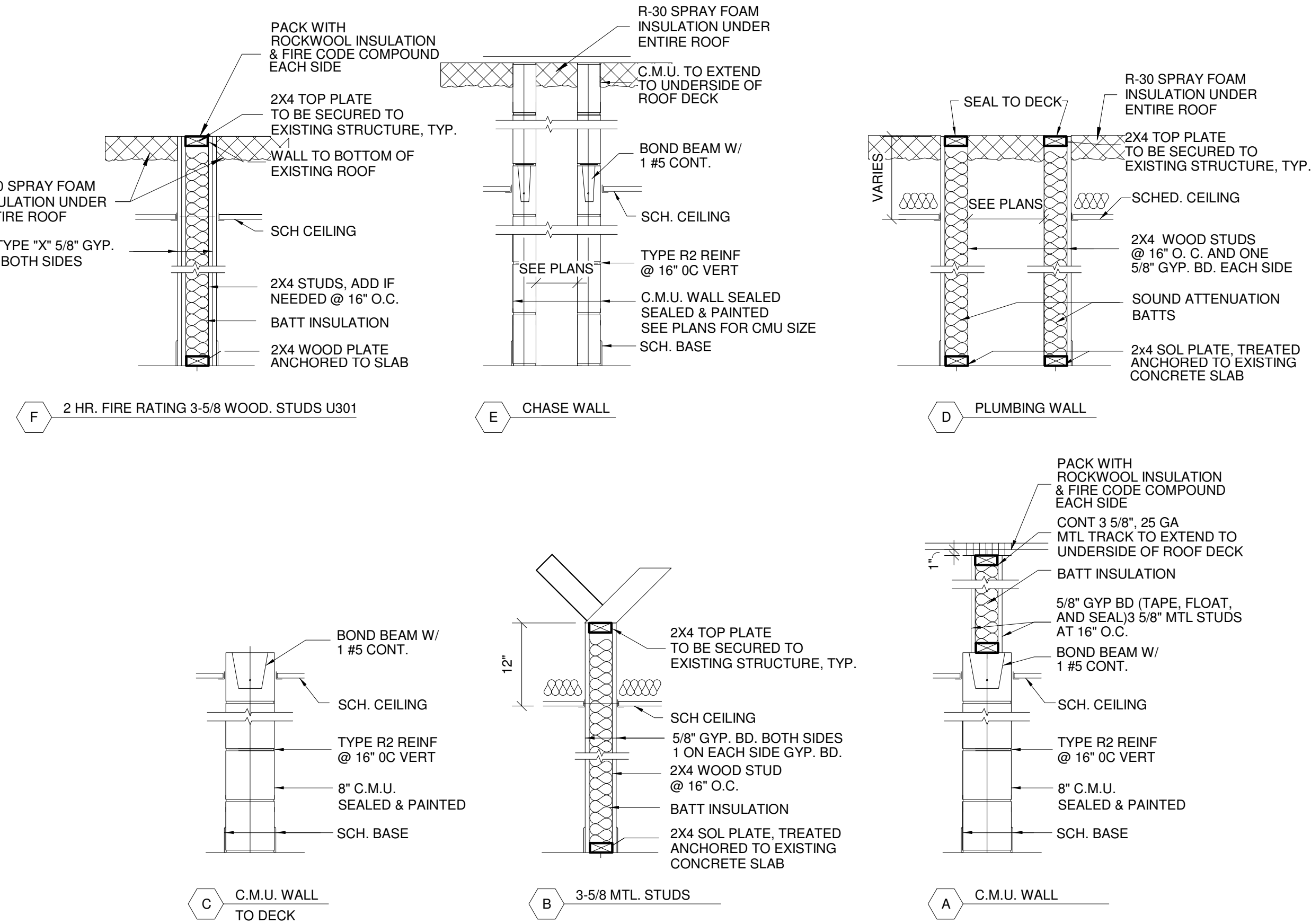


BUILDING GROSS AREA__	
EXISTING BUILDING:	22,000 SQ. FT.
<hr/>	
TOTAL (BASE BID):	22,000 SQ. FT.

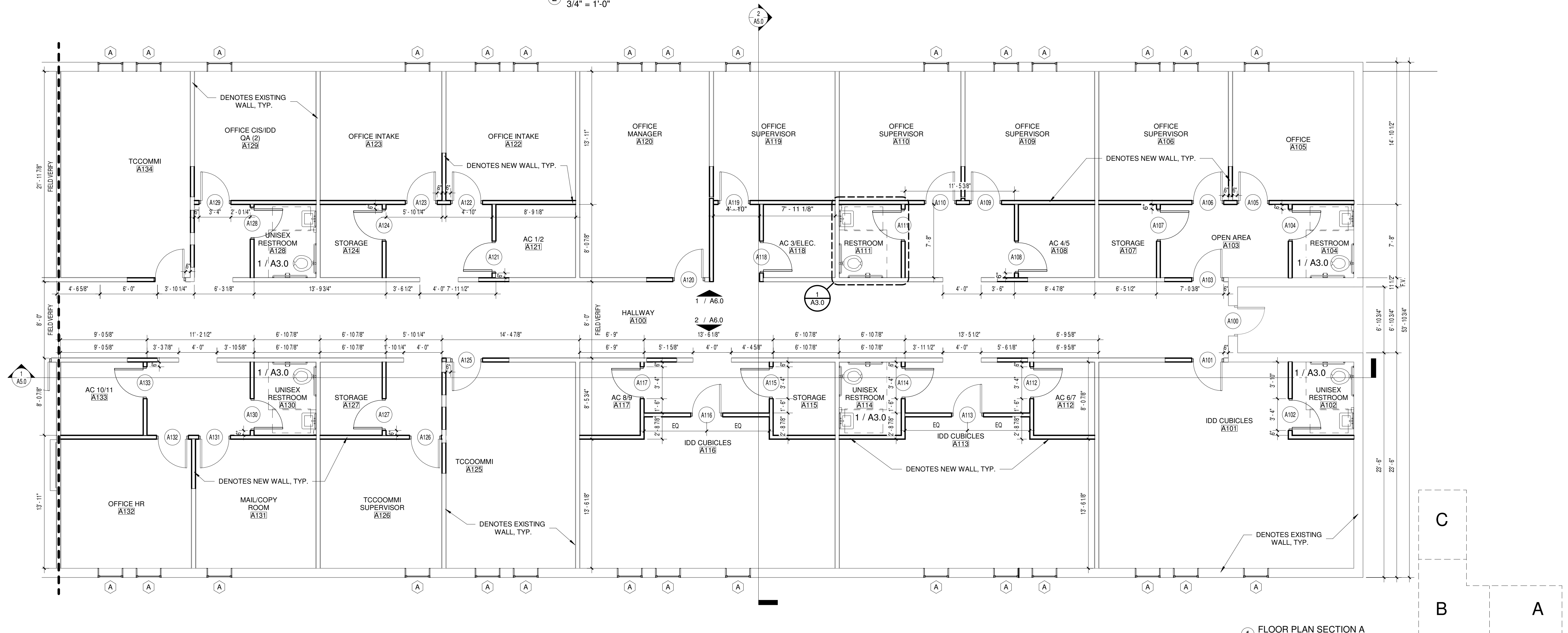
1 FLOOR PLAN SECTION A
3/16" = 1'-0"

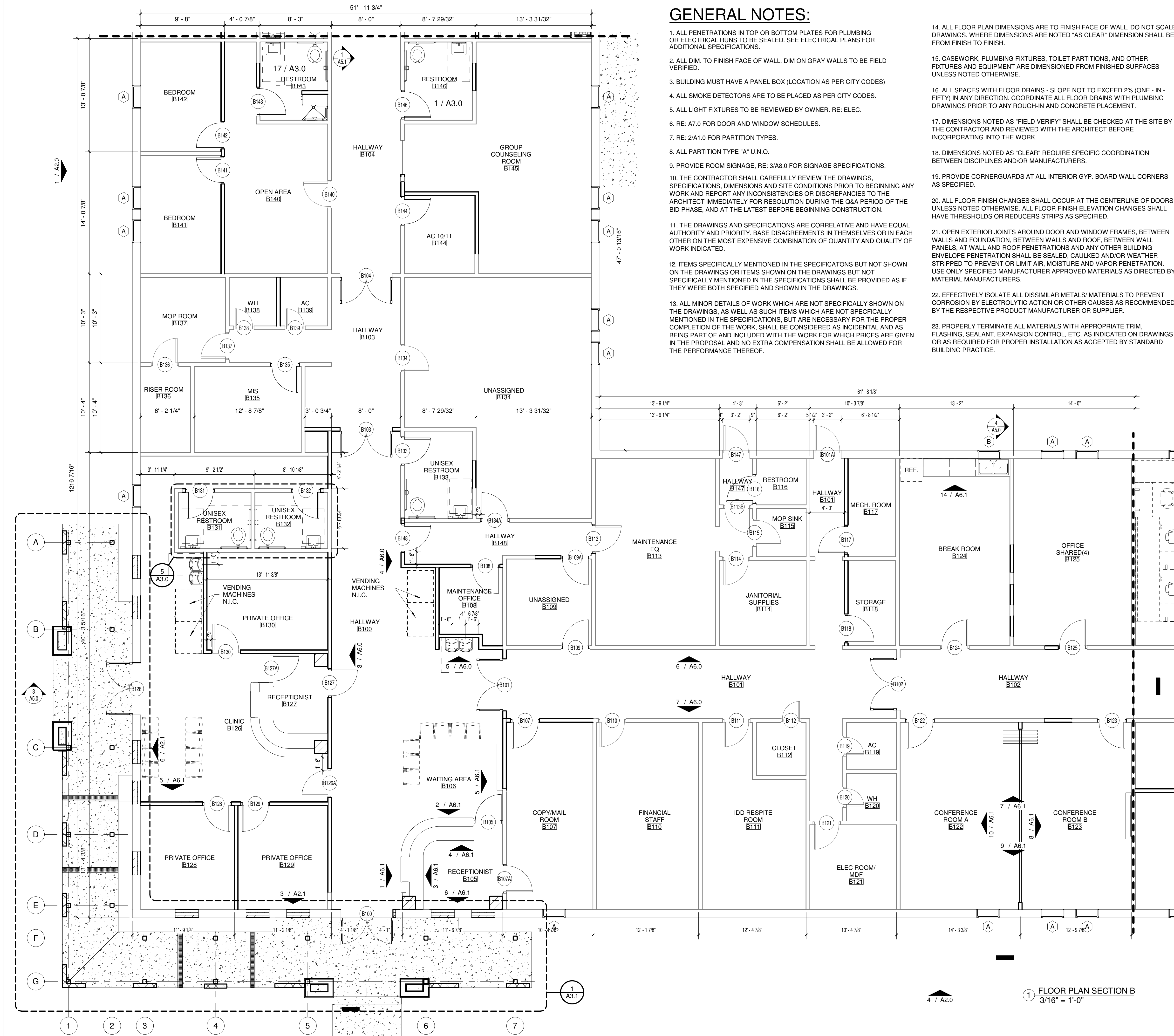
GENERAL NOTES:

9. ALL PENETRATIONS IN TOP OR BOTTOM PLATES FOR PLUMBING OR ELECTRICAL RUNS TO BE SEALED. SEE ELECTRICAL PLANS FOR ADDITIONAL SPECIFICATIONS.
10. ALL DIM. TO FINISH FACE OF WALL. DIM ON GRAY WALLS TO BE FIELD VERIFIED.
11. BUILDING MUST HAVE A PANEL BOX (LOCATION AS PER CITY CODES)
12. ALL SMOKE DETECTORS ARE TO BE PLACED AS PER CITY CODES.
13. ALL LIGHT FIXTURES TO BE REVIEWED BY OWNER. RE: ELEC.
14. RE: A7.0 FOR DOOR AND WINDOW SCHEDULES.
15. RE: 2/A1.0 FOR PARTITION TYPES.
16. ALL PARTITION TYPE "A" U.N.O.
17. PROVIDE ROOM SIGNAGE, RE: 3/A8.0 FOR SIGNAGE SPECIFICATIONS.
18. THE CONTRACTOR SHALL CAREFULLY REVIEW THE DRAWINGS, SPECIFICATIONS, DIMENSIONS AND SITE CONDITIONS PRIOR TO BEGINNING ANY WORK AND REPORT ANY INCONSISTENCIES OR DISCREPANCIES TO THE ARCHITECT IMMEDIATELY FOR RESOLUTION DURING THE Q&A PERIOD OF THE BID PHASE, AND AT THE LATEST BEFORE BEGINNING CONSTRUCTION.
19. THE DRAWINGS AND SPECIFICATIONS ARE CORRELATIVE AND HAVE EQUAL AUTHORITY AND PRIORITY. BASE DISAGREEMENTS IN THEMSELVES OR IN EACH OTHER ON THE MOST EXPENSIVE COMBINATION OF QUANTITY AND QUALITY OF WORK INDICATED.
20. ITEMS SPECIFICALLY MENTIONED IN THE SPECIFICATIONS BUT NOT SHOWN ON THE DRAWINGS OR ITEMS SHOWN ON THE DRAWINGS BUT NOT SPECIFICALLY MENTIONED IN THE SPECIFICATIONS SHALL BE PROVIDED AS IF THEY WERE BOTH SPECIFIED AND SHOWN IN THE DRAWINGS.
21. ALL MINOR DETAILS OF WORK WHICH ARE NOT SPECIFICALLY SHOWN ON THE DRAWINGS, AS WELL AS SUCH ITEMS WHICH ARE NOT SPECIFICALLY MENTIONED IN THE SPECIFICATIONS, BUT ARE NECESSARY FOR THE PROPER COMPLETION OF THE WORK, SHALL BE CONSIDERED AS INCIDENTAL, AND AS BEING PART OF AND INCLUDED WITH THE WORK FOR WHICH PRICES ARE GIVEN IN THE PROPOSAL, AND NO EXTRA COMPENSATION SHALL BE ALLOWED FOR THE PERFORMANCE THEREOF.



② PARTITION TYPES
3/4" = 1'-0"





GENERAL NOTES:

1. ALL PENETRATIONS IN TOP OR BOTTOM PLATES FOR PLUMBING OR ELECTRICAL RUNS TO BE SEALED. SEE ELECTRICAL PLANS FOR ADDITIONAL SPECIFICATIONS.
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14. ALL FLOOR PLAN DIMENSIONS ARE TO FINISH FACE OF WALL. DO NOT SCALE DRAWINGS. WHERE DIMENSIONS ARE NOTED "AS CLEAR" DIMENSION SHALL BE FROM FINISH TO FINISH.
15. CASEWORK, PLUMBING FIXTURES, TOILET PARTITIONS, AND OTHER FIXTURES AND EQUIPMENT ARE DIMENSIONED FROM FINISHED SURFACES UNLESS NOTED OTHERWISE.
16. ALL SPACES WITH FLOOR DRAINS - SLOPE NOT TO EXCEED 2% (ONE - IN - FIFTY) IN ANY DIRECTION. COORDINATE ALL FLOOR DRAINS WITH PLUMBING DRAWINGS PRIOR TO ANY ROUGH-IN AND CONCRETE PLACEMENT.
17. DIMENSIONS NOTED AS "FIELD VERIFY" SHALL BE CHECKED AT THE SITE BY THE CONTRACTOR AND REVIEWED WITH THE ARCHITECT BEFORE INCORPORATING INTO THE WORK.
18. DIMENSIONS NOTED AS "CLEAR" REQUIRE SPECIFIC COORDINATION BETWEEN DISCIPLINES AND/OR MANUFACTURERS.
19. PROVIDE CORNERGUARDS AT ALL INTERIOR GYP. BOARD WALL CORNERS AS SPECIFIED.
20. ALL FLOOR FINISH CHANGES SHALL OCCUR AT THE CENTERLINE OF DOORS UNLESS NOTED OTHERWISE. ALL FLOOR FINISH ELEVATION CHANGES SHALL HAVE THRESHOLDS OR REDUCERS STRIPS AS SPECIFIED.
21. OPEN EXTERIOR JOINTS AROUND DOOR AND WINDOW FRAMES, BETWEEN WALLS AND FOUNDATION, BETWEEN WALLS AND ROOF, BETWEEN WALL PANELS, AT WALL AND ROOF PENETRATIONS AND ANY OTHER BUILDING ENVELOPE PENETRATION SHALL BE SEALED, CAULKED AND/OR WEATHER-STRIPPED TO PREVENT OR LIMIT AIR, MOISTURE AND VAPOR PENETRATION. USE ONLY SPECIFIED MANUFACTURER APPROVED MATERIALS AS DIRECTED BY MATERIAL MANUFACTURERS.
22. EFFECTIVELY ISOLATE ALL DISSIMILAR METALS/ MATERIALS TO PREVENT CORROSION BY ELECTROLYTIC ACTION OR OTHER CAUSES AS RECOMMENDED BY THE RESPECTIVE PRODUCT MANUFACTURER OR SUPPLIER.
23. PROPERLY TERMINATE ALL MATERIALS WITH APPROPRIATE TRIM, FLASHING, SEALANT, EXPANSION CONTROL, ETC. AS INDICATED ON DRAWINGS OR AS REQUIRED FOR PROPER INSTALLATION AS ACCEPTED BY STANDARD BUILDING PRACTICE.
24. COORDINATE AND PROVIDE APPROPRIATE BLOCKING IN WALLS AS REQUIRED TO SECURE ALL EQUIPMENT, HANDRAILS, CASEWORK, ETC. AS REQUIRED. WOOD BLOCKING SHALL MEET CODE REQUIREMENTS.
25. SINGLE USER TOILET ROOMS MAY BE CONFIGURED IN ACCORDANCE WITH TECHNICAL MEMORANDUM TM 03-02 ISSUED BY THE TEXAS DEPARTMENT OF LICENSING AND REGULATIONS, ARCHITECTURAL BARRIERS DIVISION ALLOWING THE DOOR SWING TO ENCRROACH INTO THE 5 FOOT DIAMETER TURNING CIRCLE SPACE SO LONG AS A CLEAR FLOOR SPACE OF 30" X 48" IS PROVIDED.
26. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR CEILING TYPES AND HEIGHTS. COORDINATE ALL LIGHT FIXTURES, MECHANICAL DIFFUSERS, NOTIFICATION DEVICES, ETC. WITH MEP DRAWINGS. NOTIFY ARCHITECT OF ANY DISCREPANCIES FOR RESOLUTION.
27. COORDINATE HOUSEKEEPING PAD DIMENSIONS AND LOCATIONS WITH EQUIPMENT TO BE INSTALLED. ALL HOUSEKEEPING PADS SHALL BE A MINIMUM OF 4" TALL REINF. W/ #3 BARS AT 15" O.C.B.W. AND PROVIDE 1" (45- DEGREE) CHAMFERED EDGES UNLESS NOTED OTHERWISE.
28. ALL INTERIOR DOORS IN STUD WALL ASSEMBLIES SHALL BE SET A MINIMUM OF 4" OFF THE PERPENDICULAR ADJACENT WALL ON THE HINGE SIDE OF THE DOOR UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY CONFLICTS FOR RESOLUTION.
29. SET ALL EXTERIOR DOOR THRESHOLDS IN FULL BED OF MANUFACTURER APPROVED SEALANT IN ACCORDANCE WITH MANUFACTURER INSTALLATION INSTRUCTIONS.
30. REFER A3.0 AND A8.0 SHEET FOR MOUNTING HEIGHTS OF FIXTURES AND EQUIPMENT AS SCHEDULED. REFER TO THE TEXAS DEPARTMENT OF LICENSING AND REGULATIONS, ARCHITECTURAL BARRIERS DIVISION TEXAS ACCESSIBILITY STANDARDS FOR ALL MOUNTING HEIGHTS NOT LISTED AND FOR FURTHER CLARIFICATION AS NEEDED.

BUILDING GROSS AREA
EXISTING BUILDING: 22,000 SQ. FT.
TOTAL (BASE BID): 22,000 SQ. FT.

HOP VILLA RENOVATIONS

TROPICAL TEXAS BEHAVIORAL HEALTH

HARLINGEN, TX

PROJECT NUMBER
217027

DATE
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ISSUE FOR SEALED
PROPOSALS

SHEET NUMBER

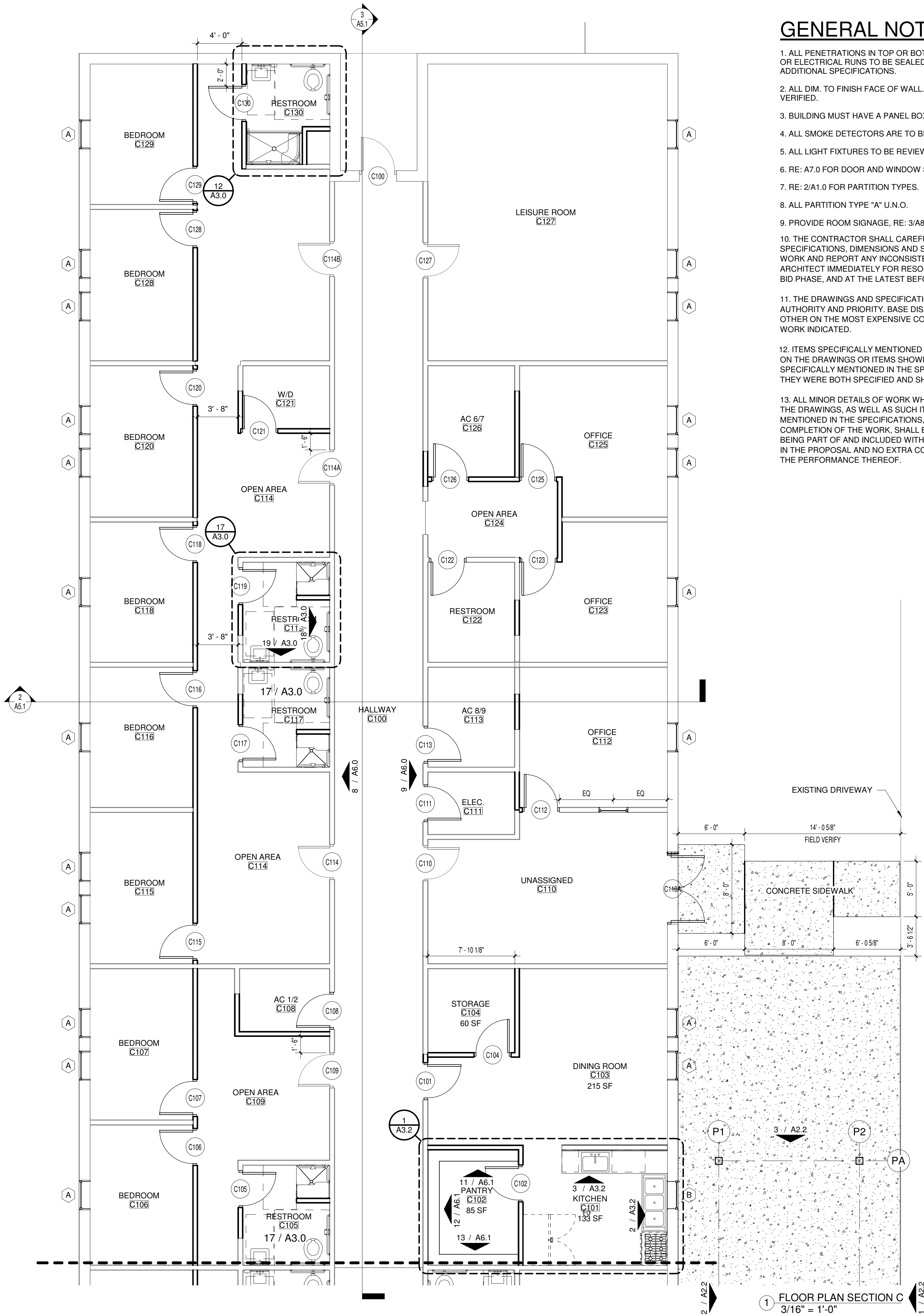
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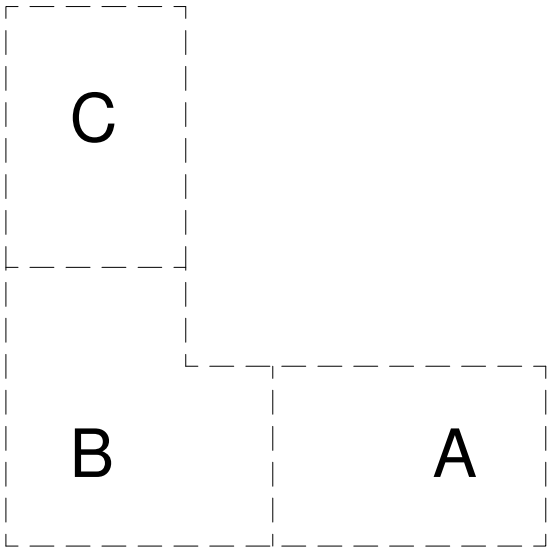




GENERAL NOTES:

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2. ALL DIM. TO FINISH FACE OF WALL. DIM ON GRAY WALLS TO BE FIELD VERIFIED.
3. BUILDING MUST HAVE A PANEL BOX (LOCATION AS PER CITY CODES)
4. ALL SMOKE DETECTORS ARE TO BE PLACED AS PER CITY CODES.
5. ALL LIGHT FIXTURES TO BE REVIEWED BY OWNER. RE: ELEC.
6. RE: A7.0 FOR DOOR AND WINDOW SCHEDULES.
7. RE: 2/A1.0 FOR PARTITION TYPES.
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24. COORDINATE AND PROVIDE APPROPRIATE BLOCKING IN WALLS AS REQUIRED TO SECURE ALL EQUIPMENT, HANDRAILS, CASEWORK, ETC. AS REQUIRED. WOOD BLOCKING SHALL MEET CODE REQUIREMENTS.
25. SINGLE USER TOILET ROOMS MAY BE CONFIGURED IN ACCORDANCE WITH TECHNICAL MEMORANDUM TM 03-02 ISSUED BY THE TEXAS DEPARTMENT OF LICENSING AND REGULATIONS, ARCHITECTURAL BARRIERS DIVISION ALLOWING THE DOOR SWING TO ENCRACH INTO THE 5 FOOT DIAMETER TURNING CIRCLE SPACE SO LONG AS A CLEAR FLOOR SPACE OF 30" X 48" IS PROVIDED.
26. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR CEILING TYPES AND HEIGHTS. COORDINATE ALL LIGHT FIXTURES, MECHANICAL DIFFUSERS, NOTIFICATION DEVICES, ETC. WITH MEP DRAWINGS. NOTIFY ARCHITECT OF ANY DISCREPANCIES FOR RESOLUTION.
27. COORDINATE HOUSEKEEPING PAD DIMENSIONS AND LOCATIONS WITH EQUIPMENT TO BE INSTALLED. ALL HOUSEKEEPING PADS SHALL BE A MINIMUM OF 4" TALL REIN. W/ #3 BARS AT 15" O.C.B.W. AND PROVIDE 1" (45- DEGREE) CHAMFERED EDGES UNLESS NOTED OTHERWISE.
28. ALL INTERIOR DOORS IN STUD WALL ASSEMBLIES SHALL BE SET A MINIMUM OF 4" OFF THE PERPENDICULAR ADJACENT WALL ON THE HINGE SIDE OF THE DOOR UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY CONFLICTS FOR RESOLUTION.
29. SET ALL EXTERIOR DOOR THRESHOLDS IN FULL BED OF MANUFACTURER APPROVED SEALANT IN ACCORDANCE WITH MANUFACTURER INSTALLATION INSTRUCTIONS.
30. REFER A3.0 AND A8.0 SHEET FOR MOUNTING HEIGHTS OF FIXTURES AND EQUIPMENT AS SCHEDULED. REFER TO THE TEXAS DEPARTMENT OF LICENSING AND REGULATIONS, ARCHITECTURAL BARRIERS DIVISION TEXAS ACCESSIBILITY STANDARDS FOR ALL MOUNTING HEIGHTS NOT LISTED AND FOR FURTHER CLARIFICATION AS NEEDED.

BUILDING GROSS AREA _____
EXISTING BUILDING: 22,000 SQ. FT.
TOTAL (BASE BID): 22,000 SQ. FT.



1 FLOOR PLAN SECTION C
3/16" = 1'-0"



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HOP VILLA RENOVATIONS
TROPICAL TEXAS BEHAVIORAL HEALTH
HARLINGEN, TX

PROJECT NUMBER
217027

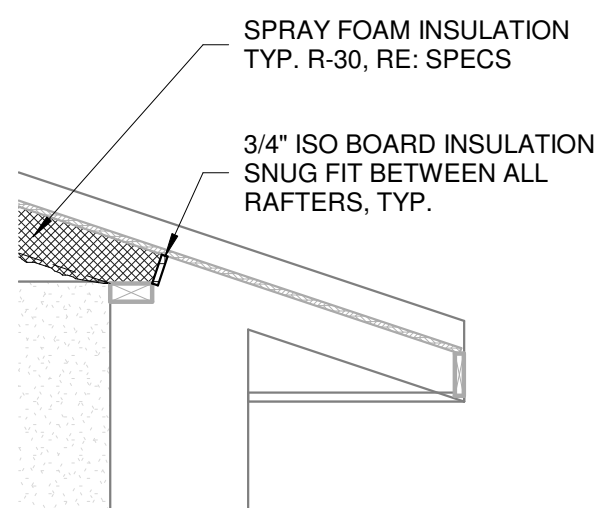
DATE
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A1.2

1. CONTRACTOR IS TO SEAL ROOF PENETRATION ON THE REMOVAL OF EXISTING MECHANICAL ROOF CAPS NOT NOTED FOR REUSE.



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TROPICAL TEXAS BEHAVIORAL HEALTH
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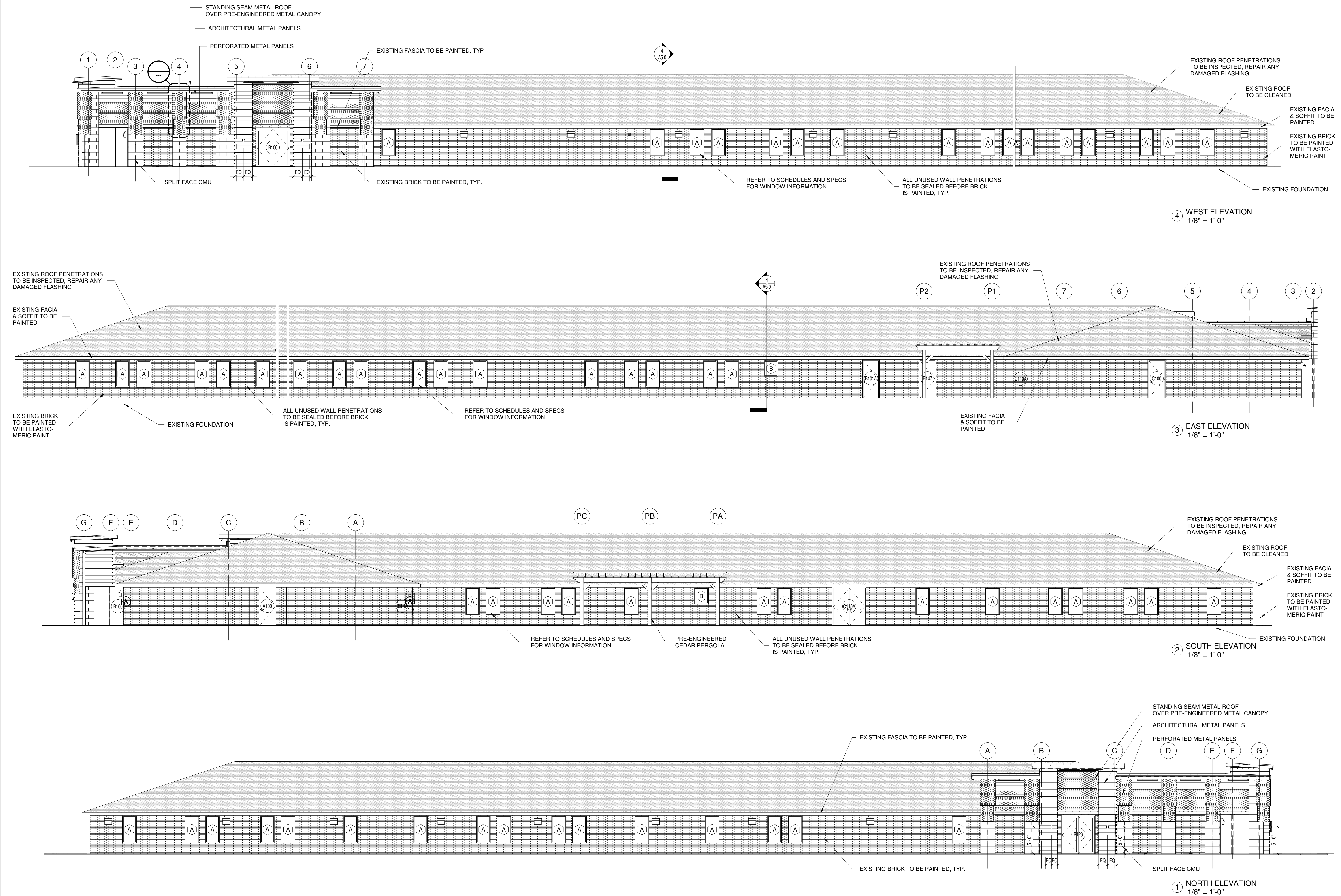
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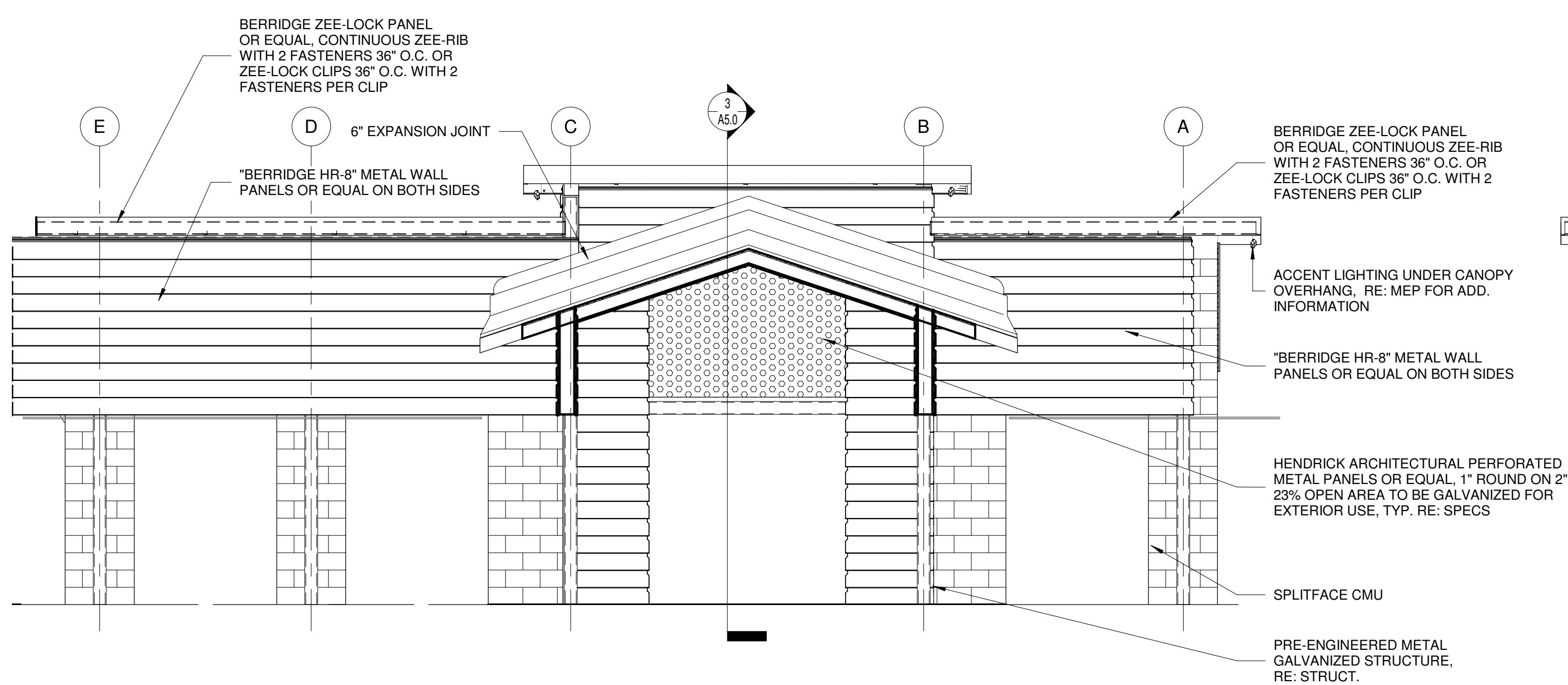
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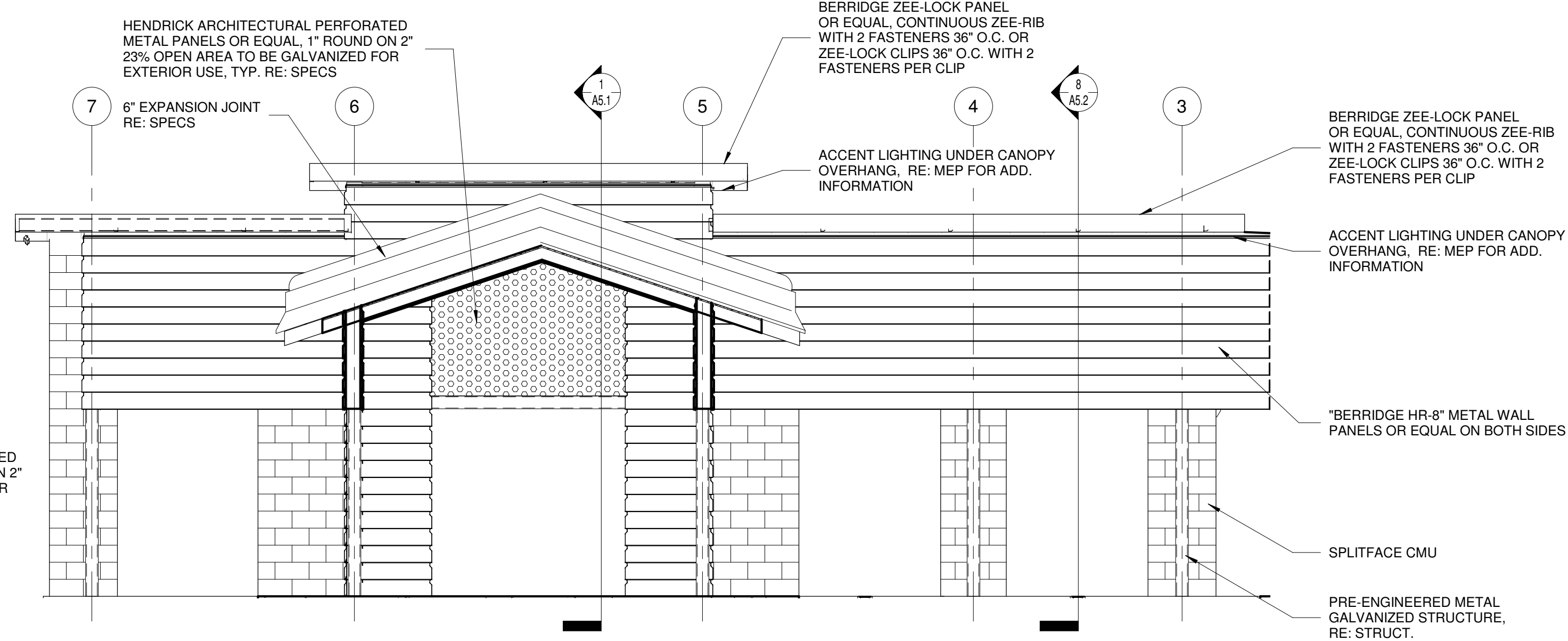
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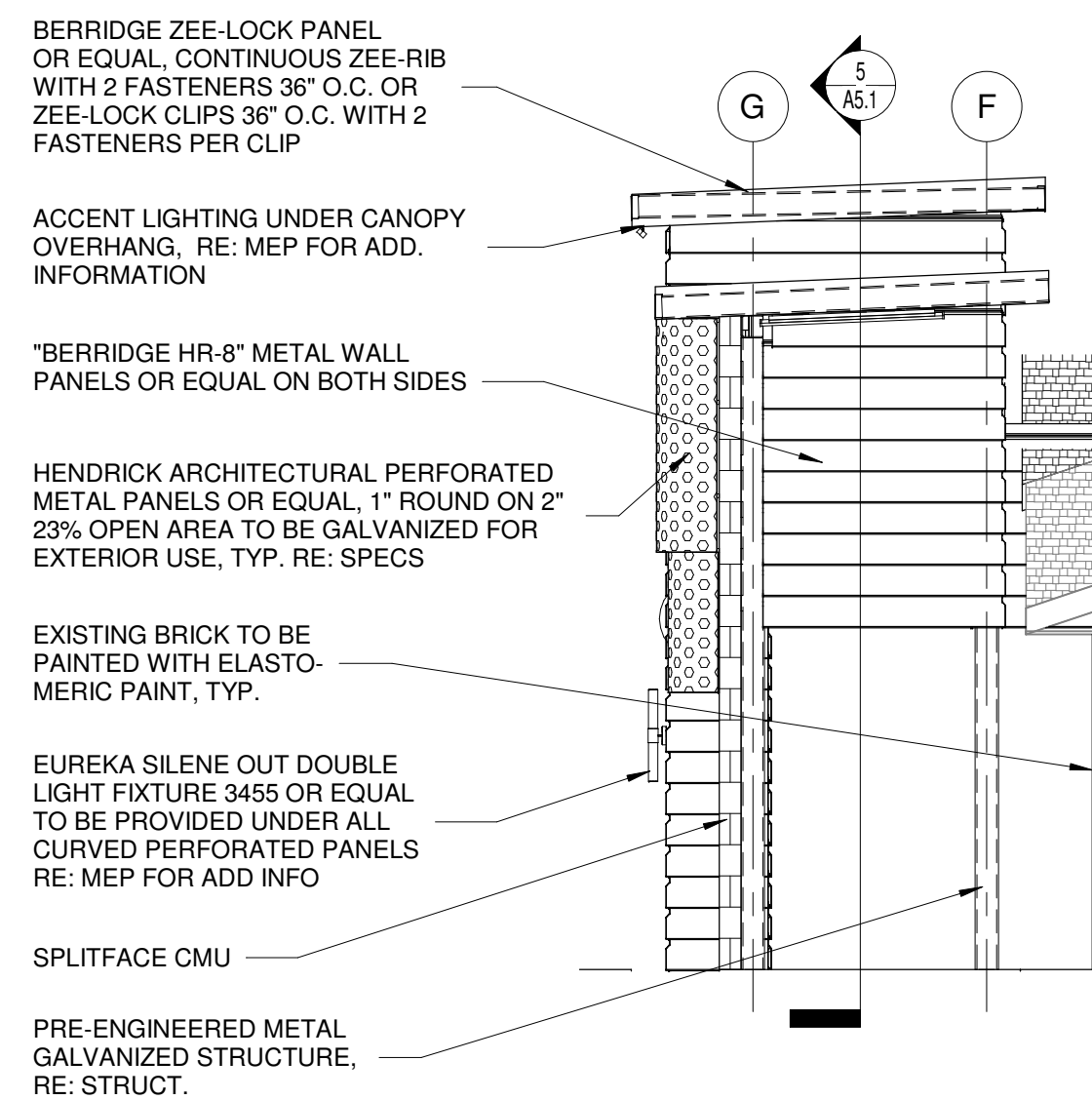




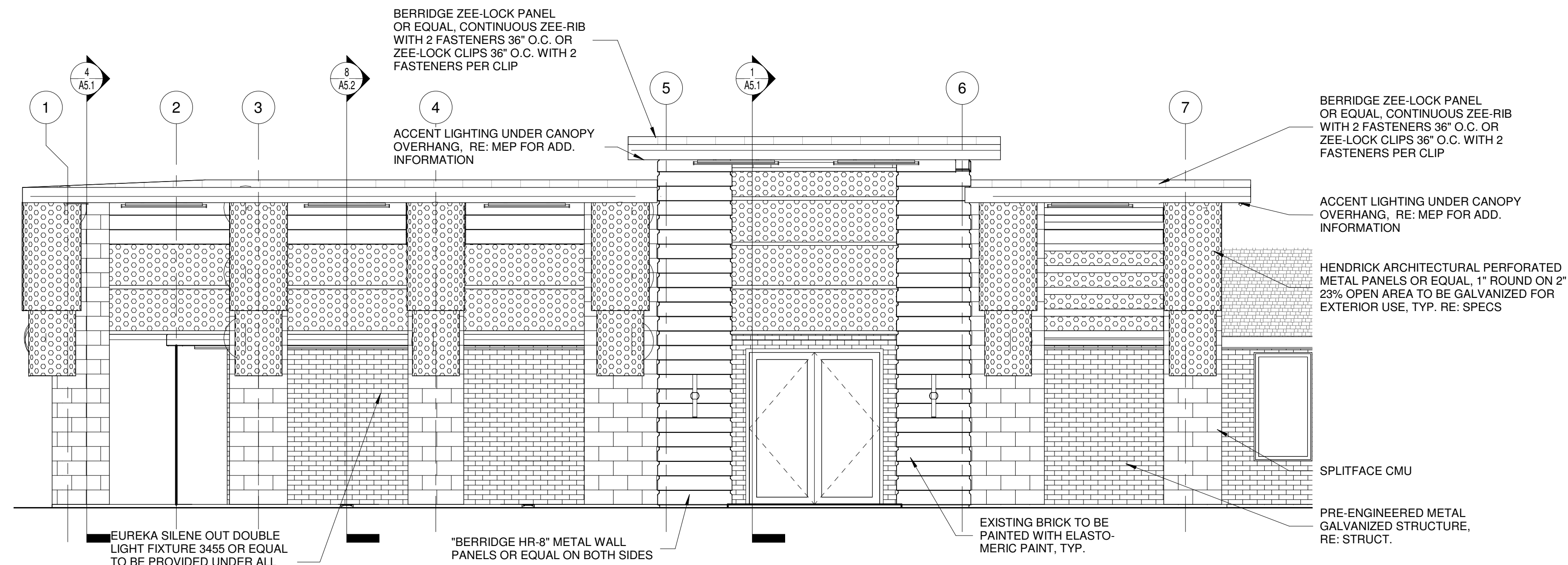
6 ELEVATION - PRE-ENG. CANOPY
1/4" = 1'-0"



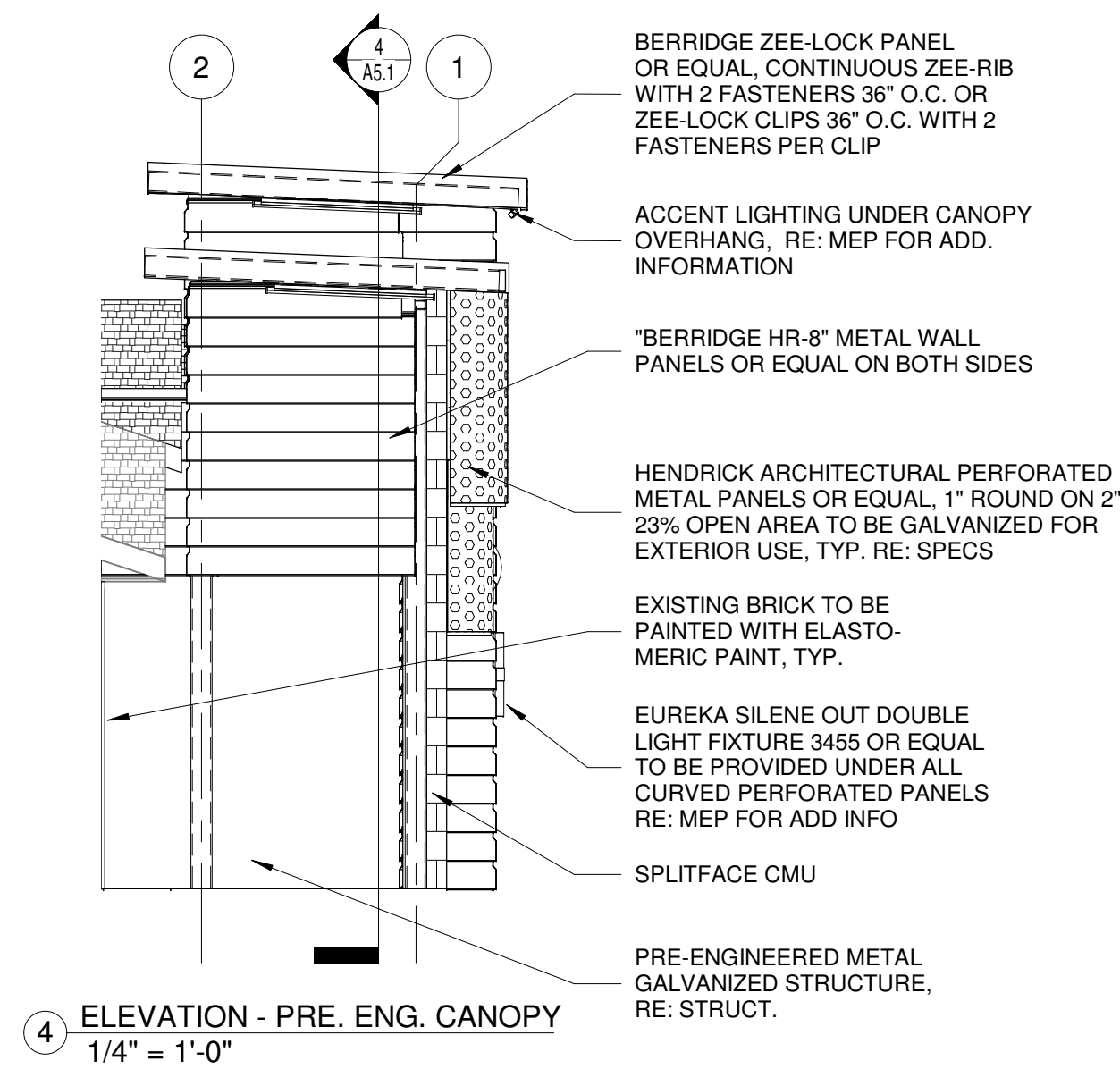
3 ELEVATION - PRE-ENG. CANOPY
1/4" = 1'-0"



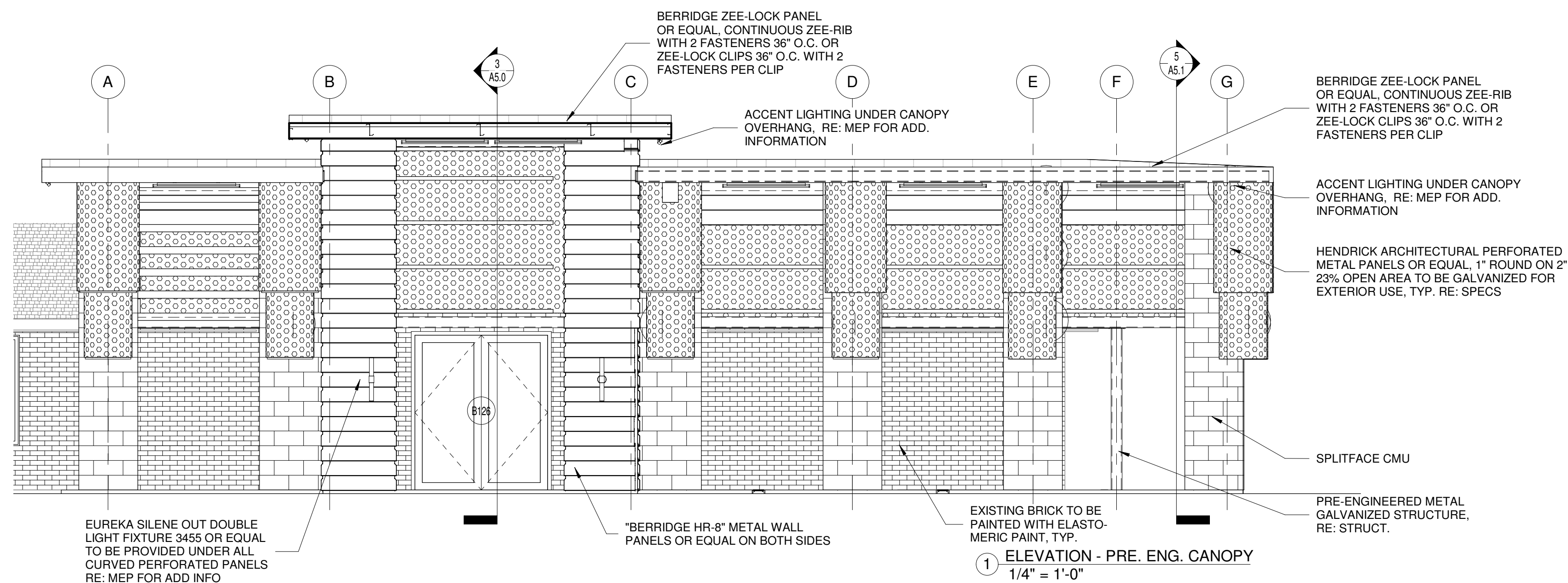
5 ELEVATION - PRE. ENG. CANOPY
1/4" = 1'-0"



2 ELEVATION - PRE. ENG. CANOPY
1/4" = 1'-0"



4 ELEVATION - PRE. ENG. CANOPY
1/4" = 1'-0"

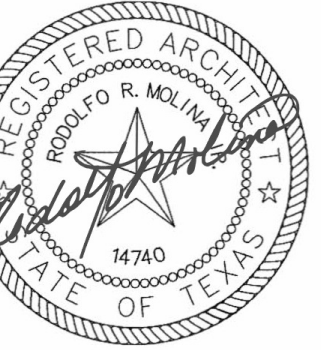


1 ELEVATION - PRE. ENG. CANOPY
1/4" = 1'-0"



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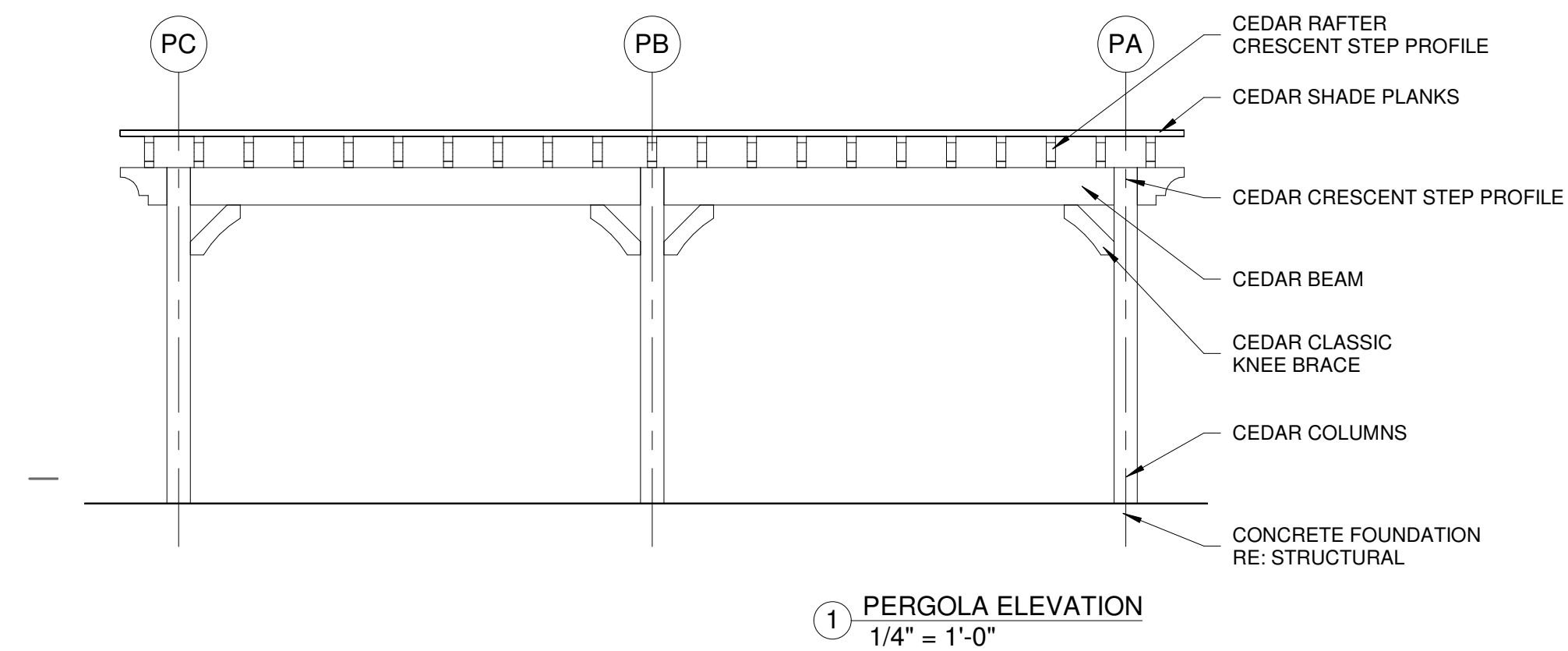
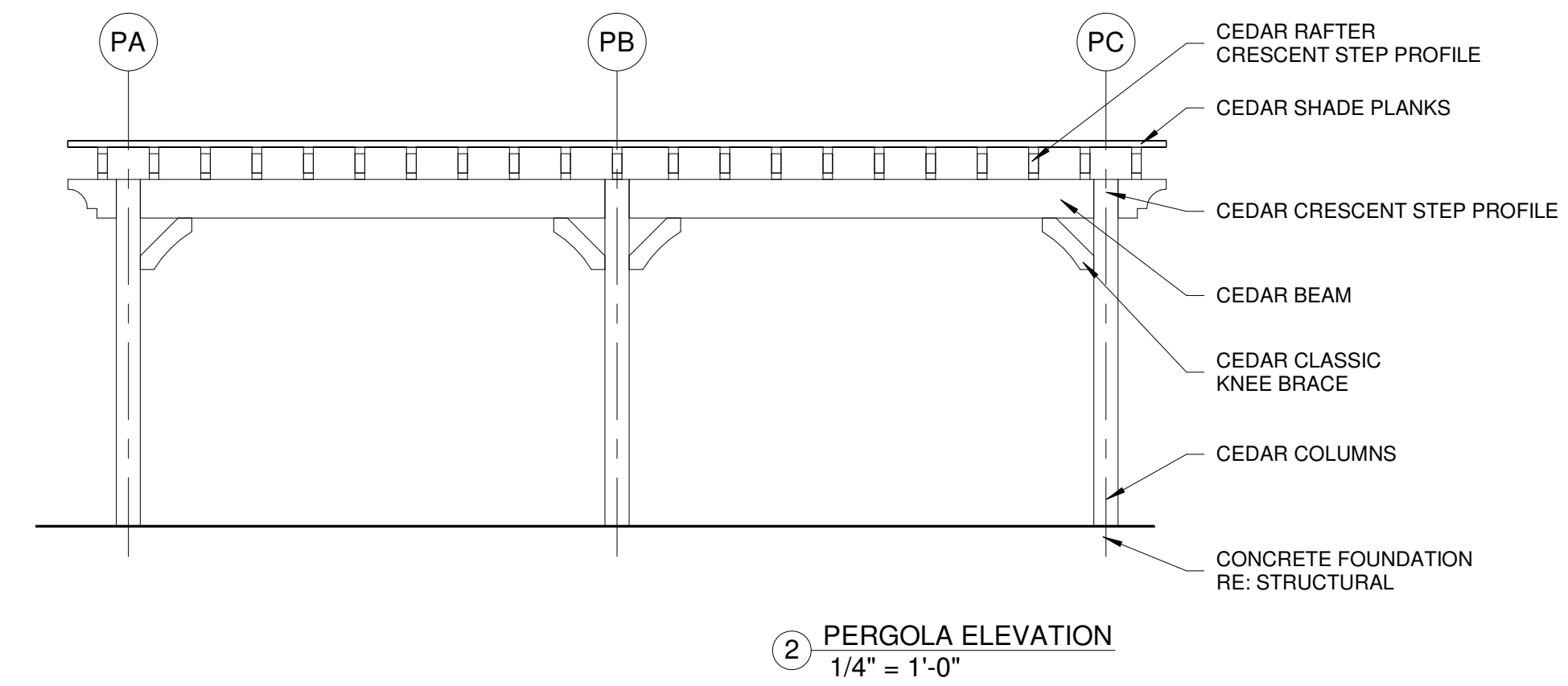
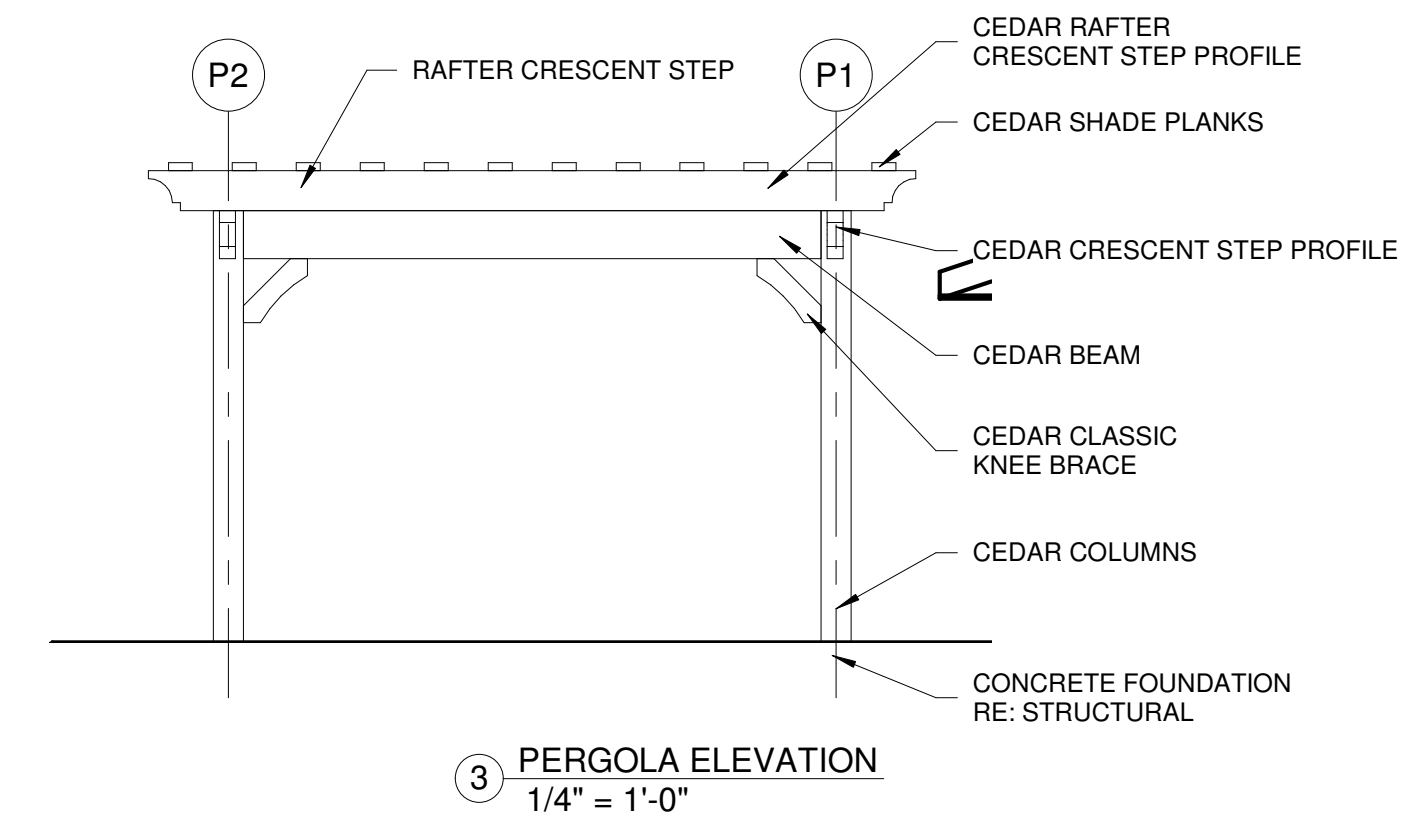
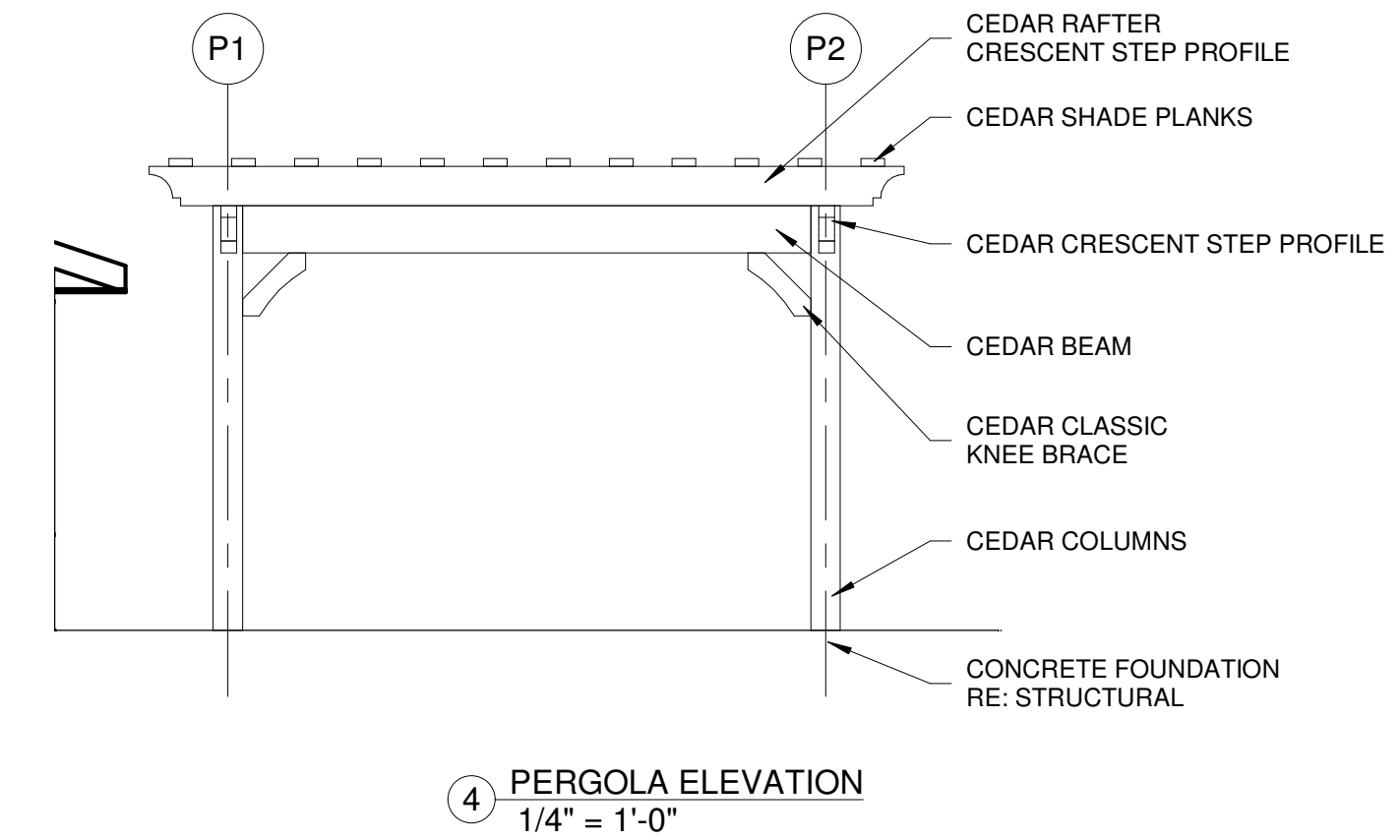
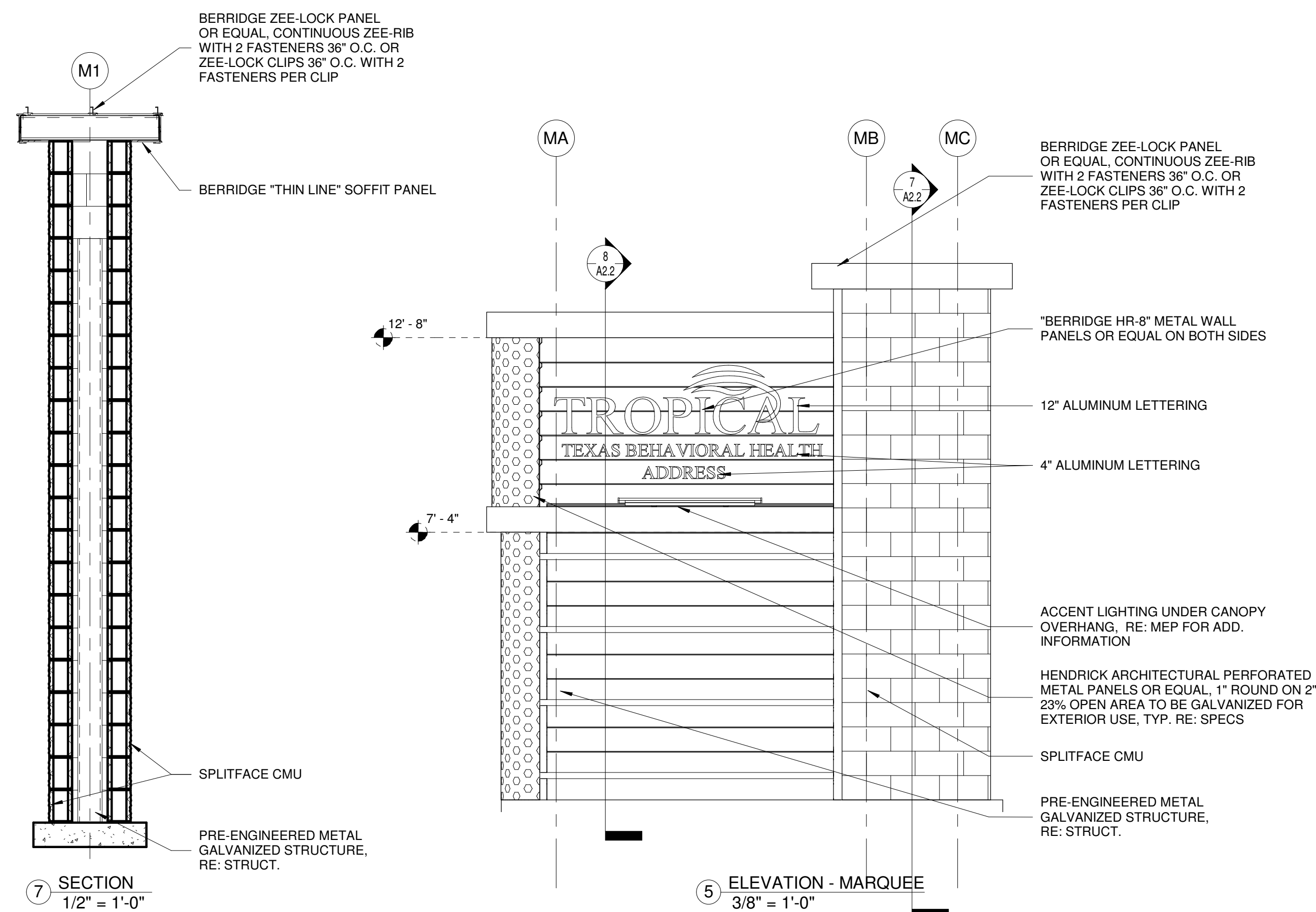
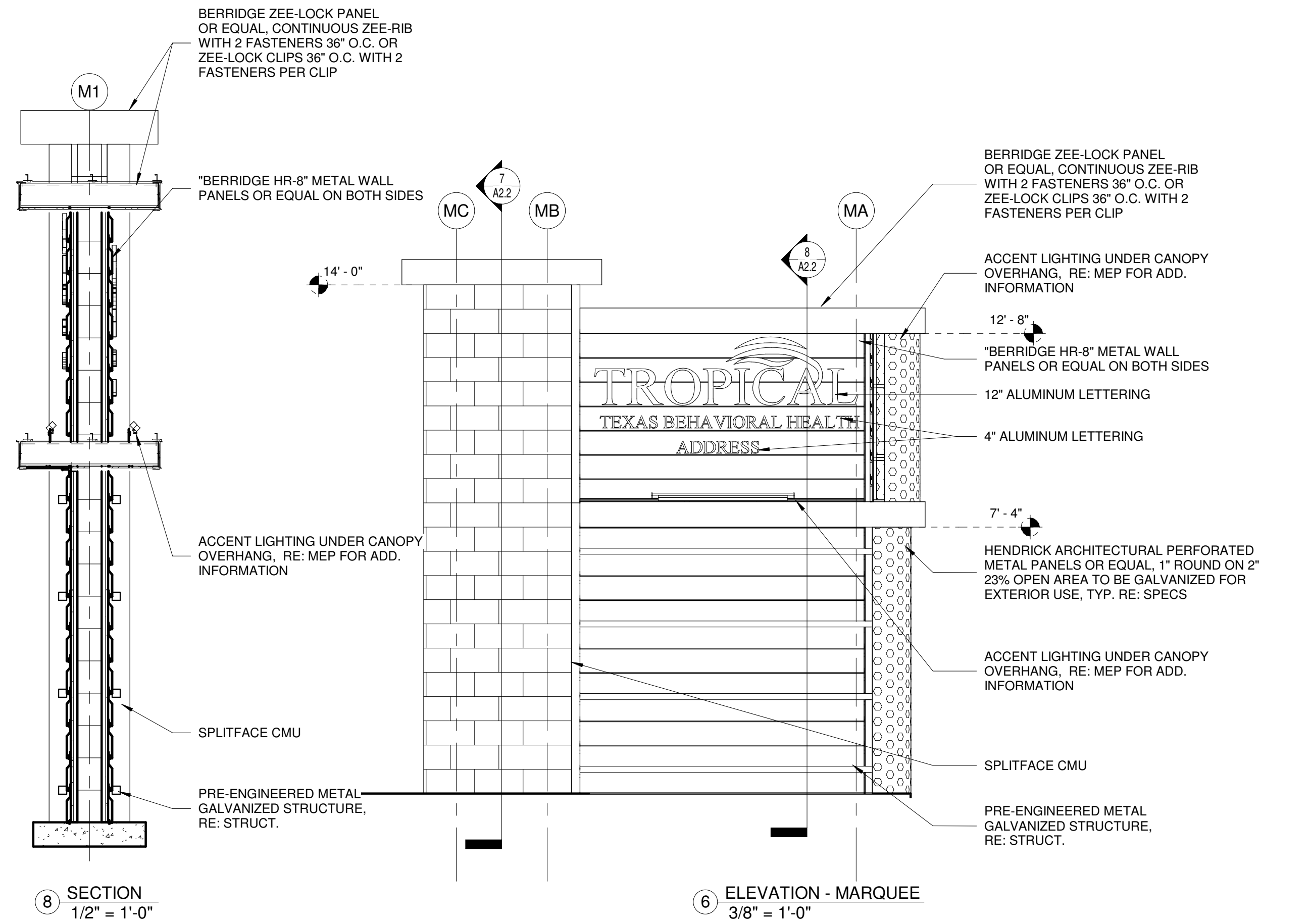
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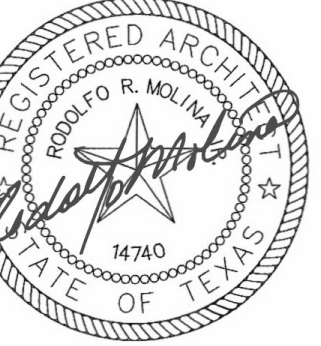
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TOILET ACCESSORIES LEGEND

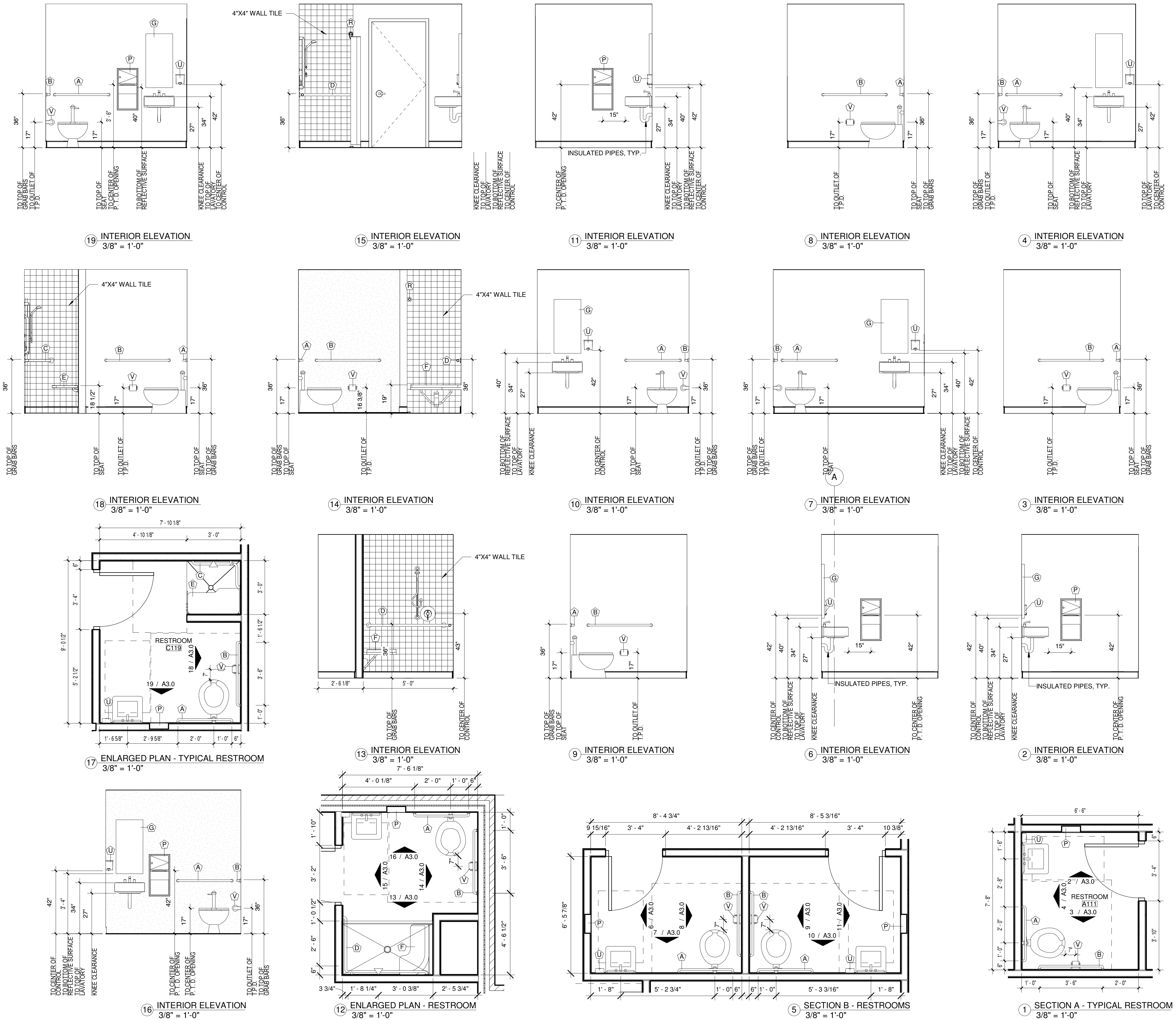
DESCRIPTION	MODEL NO.	NOTES
A STAINLESS STL GRAB BAR 36" LONG	B-6206-36	1
B STAINLESS STL GRAB BAR 42" LONG	B-6206-42	1
C STAINLESS STL GRAB BAR 24"x36"	B-68616	1
D STAINLESS STL GRAB BAR 36"x54"	B-58616	1
E RIGHT HAND FOLDING H.C. SHOWER SEAT	B-517	1
F LEFT HAND FOLDING H.C. SHOWER SEAT	B-518	1
G FRAMED 1/4" PLATE GLASS MIRROR 18"x36"	B-290-1836	2
H FRAMED 1/4" PLATE GLASS MIRROR 24"x72"	B-290-2472	2
I STAINLESS STL MOP & BROOM HOLDER 24" LONG	B-223X24	-
J SURFACE MOUNTED TOWEL HOOKS	B-981	
K RECESSED SOAP DISH	B-439	
L TOWEL PIN	B-677	
M NOT USED		
N NOT USED		
O RECESSED PAPER TOWEL DISPENSER	B-369	9 & 10
P SHOWER ROD	B-207	
R SHOWER CURTAIN & HOOKS	B-204-1 B-204-2	8
S NOT USED		
T NOT USED		
U BOBRICK CONTURA SERIES SURFACE MOUNTED SOAP DISPENSER	B-4112	9 & 10
V BOBRICK CLASSIC SERIES SURFACE-MOUNTED TOILET TISSUE DISPENSER FOR TWO ROLLS	B-265	

TOILET ACCESSORIES NOTES

1. PROVIDE ALL NECESSARY ANCHORING PLATES AND FASTENERS.
2. PROVIDE EXPANSION SHIELDS FOR CMU PTN OR ANCHORING PLATE AND TOGGLE BOLTS AT GYP BD WALL CONDITIONS FOR SECURE ATTACHMENT.
3. COORDINATE WITH WALL PTN CONSTRUCTION FOR RECESSED ACCESSORY.
4. COLOR TO BE SELECTED BY ARCHITECT FROM MANUFACTURERS STANDARD COLORS.
5. COORDINATE ELECTRICAL REQUIREMENTS AND ANCHORING.
6. LENGTH OF ROD SHALL BE FIELD VERIFIED AND COORDINATED BY CONTRACTOR.
7. QUANTITY OF HOOKS AND SIZE OF CURTAIN TO BE PROVIDED AS REQUIRED TO FIT OPENING.
8. COORDINATE LOCATION WITH OTHER ACCESSORIES ON WALL.
9. UNIT SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AS PART OF BASE BID.
10. RE: A3.0 FOR MOUNTING HEIGHTS

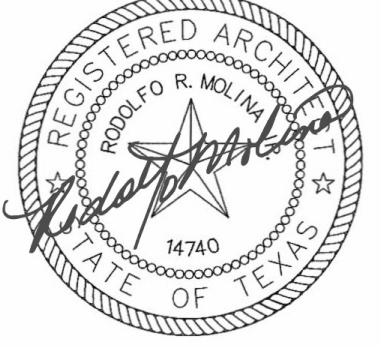
GENERAL NOTES

1. GENERAL CONTRACTOR SHALL VISIT SITE AND FAMILIARIZE WITH ALL EXISTING CONDITIONS AND CONTRACT DOCUMENTS. CONTRACTOR SHALL REPORT TO THE ARCHITECT ANY DISCREPANCIES OR IRREGULARITIES THAT MAY EXIST PRIOR TO SUBMITTING A BID.
2. GENERAL CONTRACTOR SHALL REMOVE ALL DEBRIS AND CONSTRUCTION MATERIAL OFF OF SITE AND DISPOSE ON APPROPRIATE DUMPSITE.
3. IT IS THE CONTRACTORS RESPONSIBILITY TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, QUANTITIES, ETC. PRIOR TO BIDDING.
4. PAINT ALL (4) WALLS WHERE NEW CONSTRUCTION HAS OCCURRED
5. PROVIDE A 24X24 CEILING ACCESS PANEL AT ALL RESTROOMS.
6. PROVIDE A FLOOR DRAIN AT EVERY RESTROOM.
7. PROVIDE A STAINLESS STL. MOP & BROOM HOLDER 24" LONG. AT MOP SINK RM. B115, B137.



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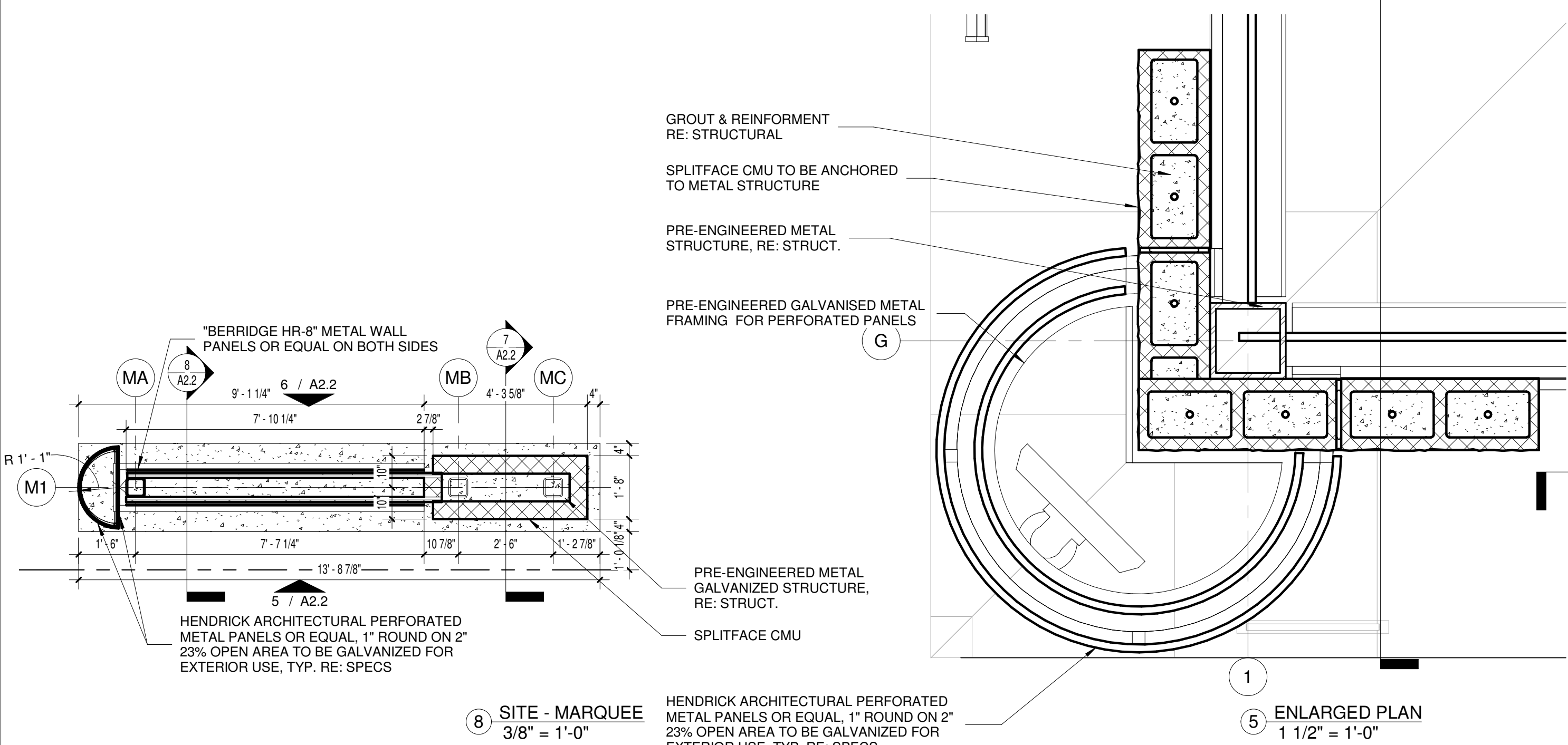
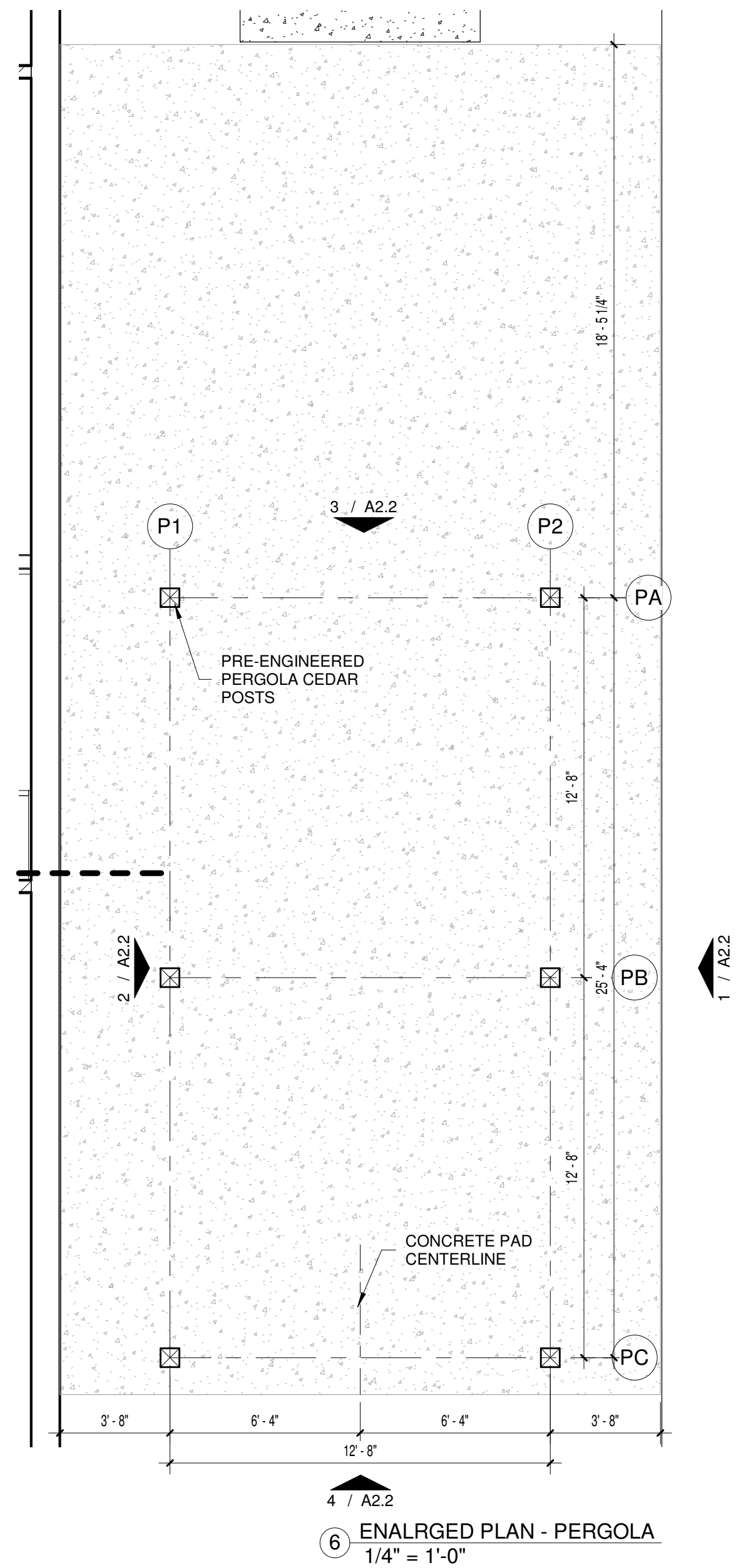
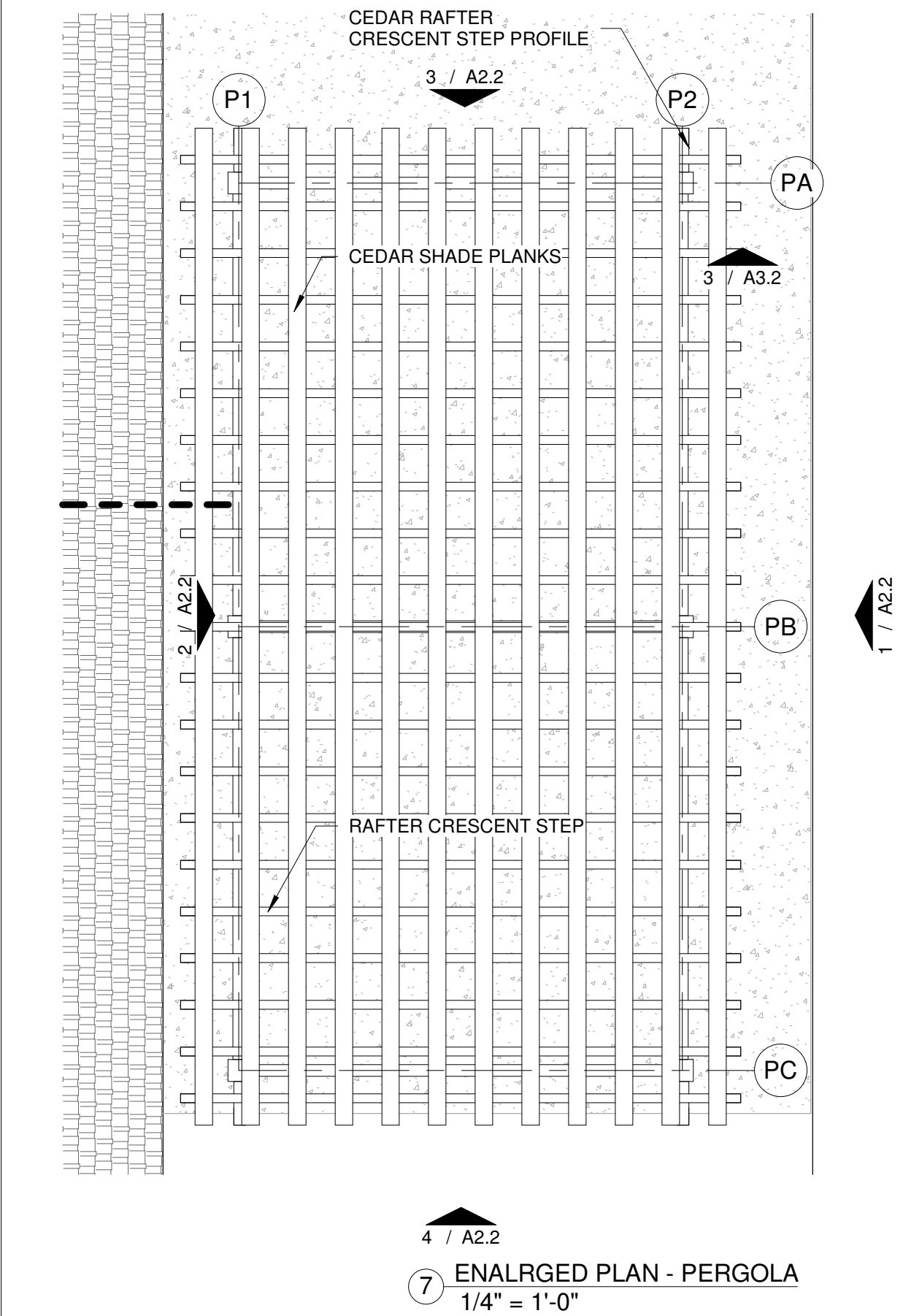
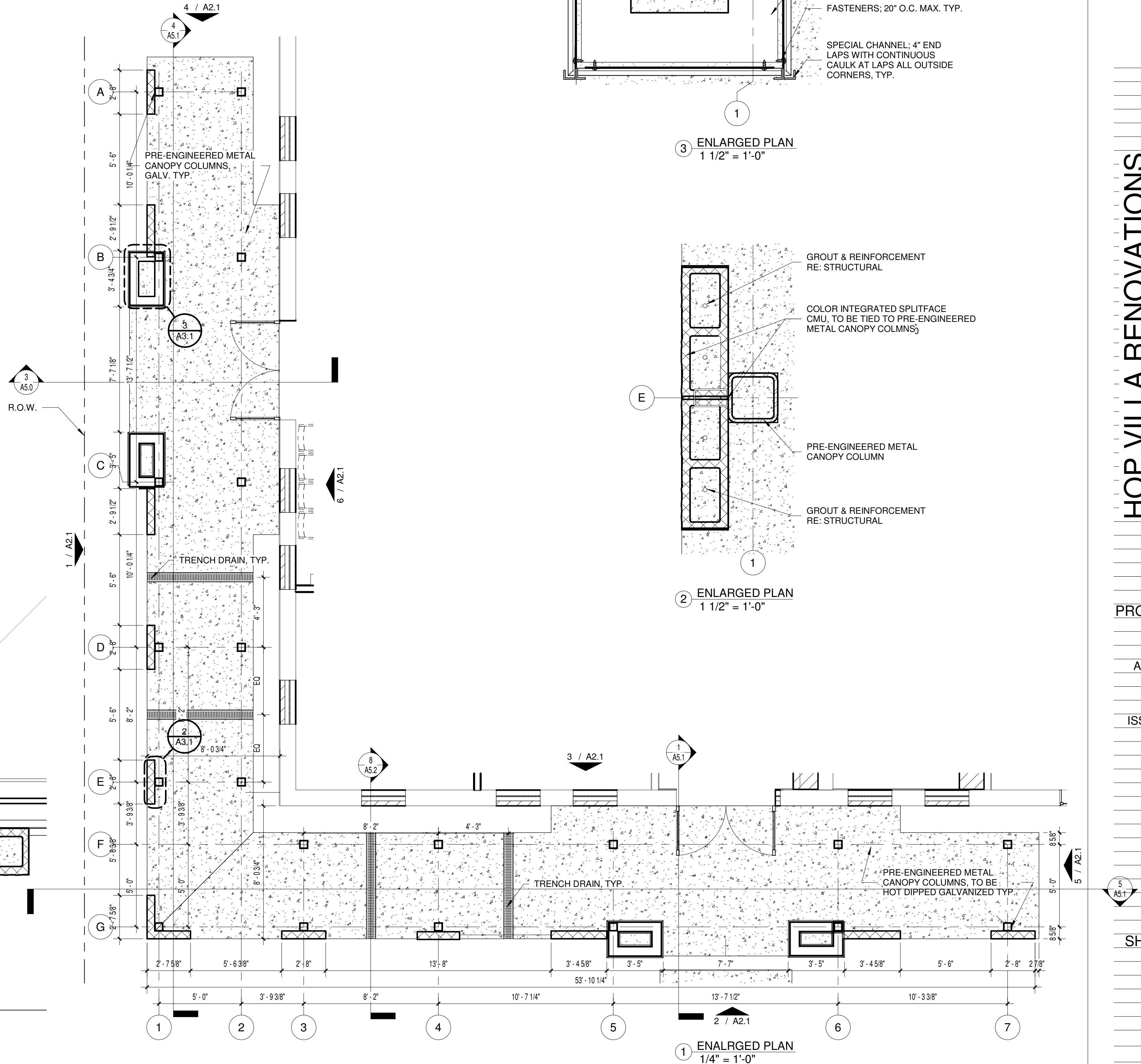
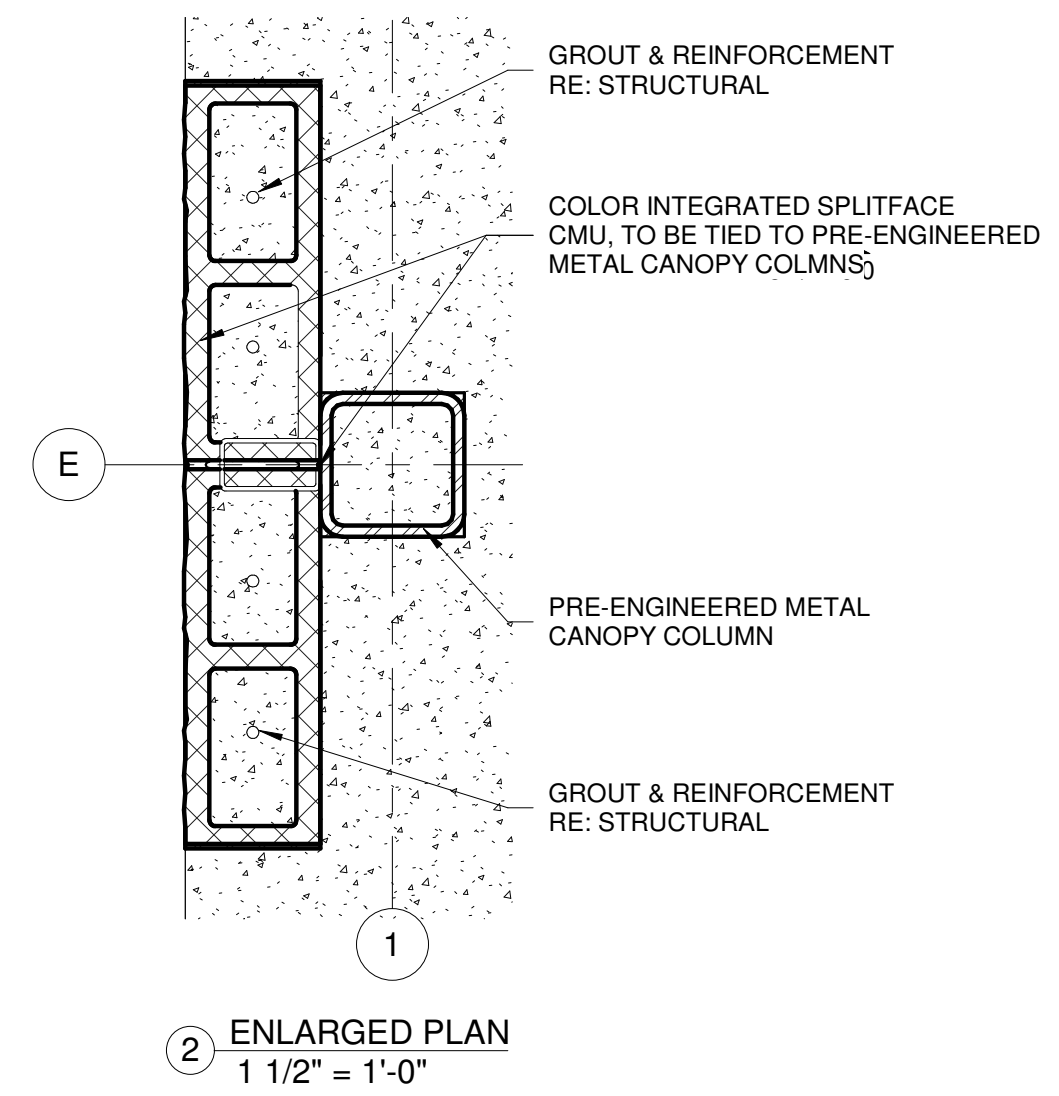
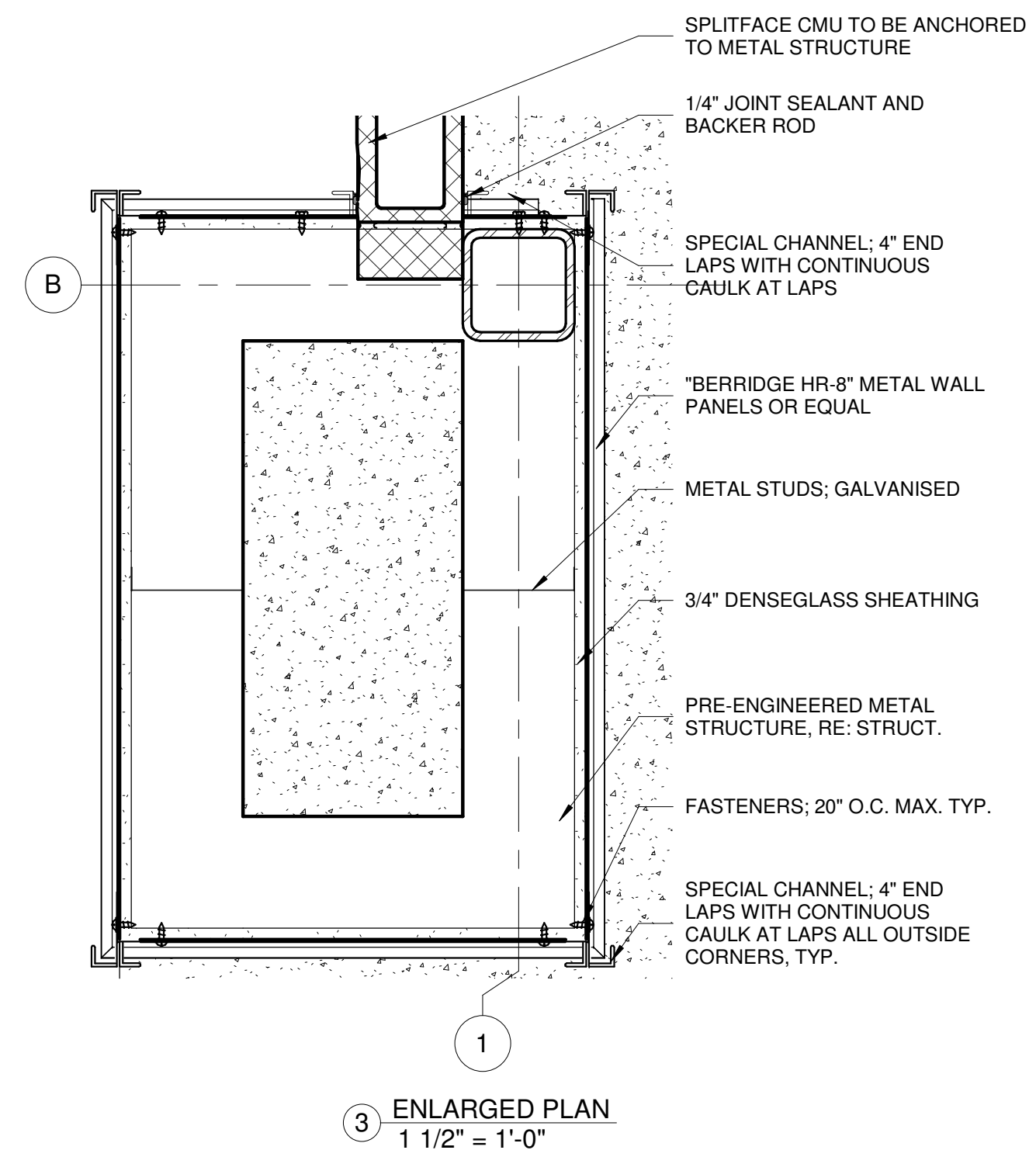
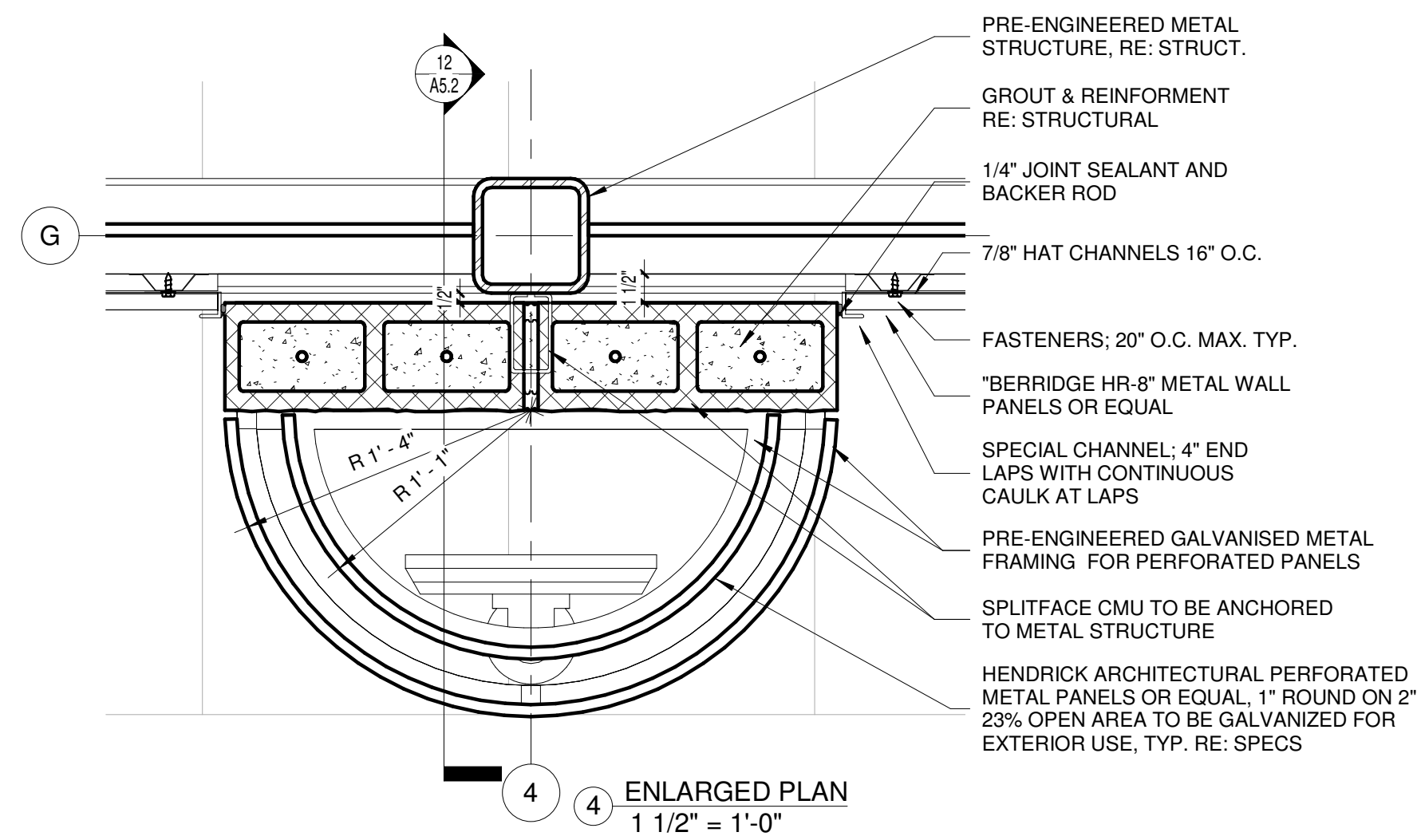
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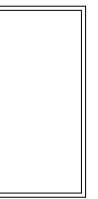
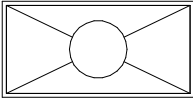







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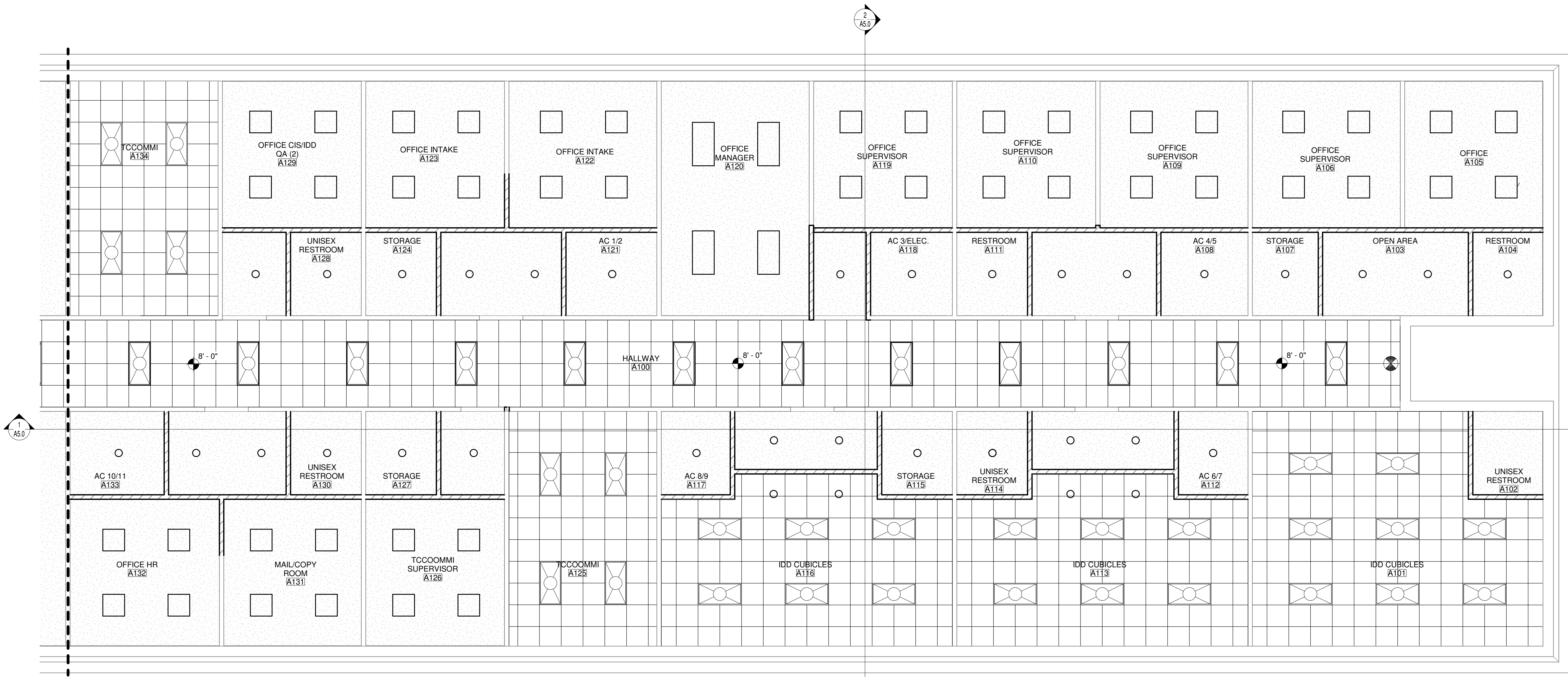
A3.1

CEILING LEGEND

- 
- 2X4 SURFACE MOUNTED LIGHT FIXTURE
- 
- 2X4 SUSPENDED LIGHT FIXTURE
- 
- RECESSED CAN LIGHT FIXTURE
- 
- PHILIPS 48 VAYA LINEAR LP BCP421
- 
- PHILIPS COLOR KINETICS COLORBLAST POWERCORE
- 
- 2'X2' SUSPENDED CEILING
- 
- EXISTING GYP. BD. CEILING
- 
- ARMSTRONG WOODWORKS GRILLE TEGULAR 2'X4'
- 
- EXIT LIGHTS

GENERAL NOTES

1. ALL CEILING AND SOFFIT HEIGHTS ARE GIVEN ABOVE FINISHED FLOOR ELEVATION (EL. 0'-0")
2. GENERALLY ONLY CEILING MOUNTED FIXTURES ARE SHOWN ON THIS PLAN. COORDINATE WITH MEP PLANS FOR ADDITIONAL INFORMATION.
3. IF SPRINKLER SYSTEM IS REQUIRED OR IN PLACE, SOME OR ALL SPRINKLERS MAY NOT BE SHOWN ON THIS PLAN. COORDINATE WITH MEP DRAWINGS FOR ADDITIONAL INFORMATION. SPRINKLER HEADS TO BE CENTERED ON CEILING TILE, TYP.
4. VERIFY LOCATIONS OF ALL CEILING ACCESS PANELS WITH MEP DRAWINGS. COORDINATE LOCATIONS OF PANELS WITH ARCHITECT PRIOR TO INSTALLATION. ACCESS PANEL FIRE RATINGS MUST MATCH CEILING ASSEMBLY FIRE RATINGS.
5. LIGHTING FIXTURES TO BE CENTERED AND SPACED EQUALLY UNLESS NOTED OTHERWISE.
6. LIGHT FIXTURES ARE SHOWN FOR DIMENSIONAL PURPOSES ONLY. COORDINATE WITH ELECTRICAL DRAWINGS FOR FIXTURE DESIGNATIONS.
7. IF PROJECT INCLUDES FIRE RATED CEILINGS, LIGHT FIXTURES LOCATED IN RATED CEILING ASSEMBLIES ARE TO BE TENTED OR OTHERWISE RATED TO MATCH THE CEILING.



1 REFLECTED CEILING PLAN - SECTION A
3/16" = 1'-0"



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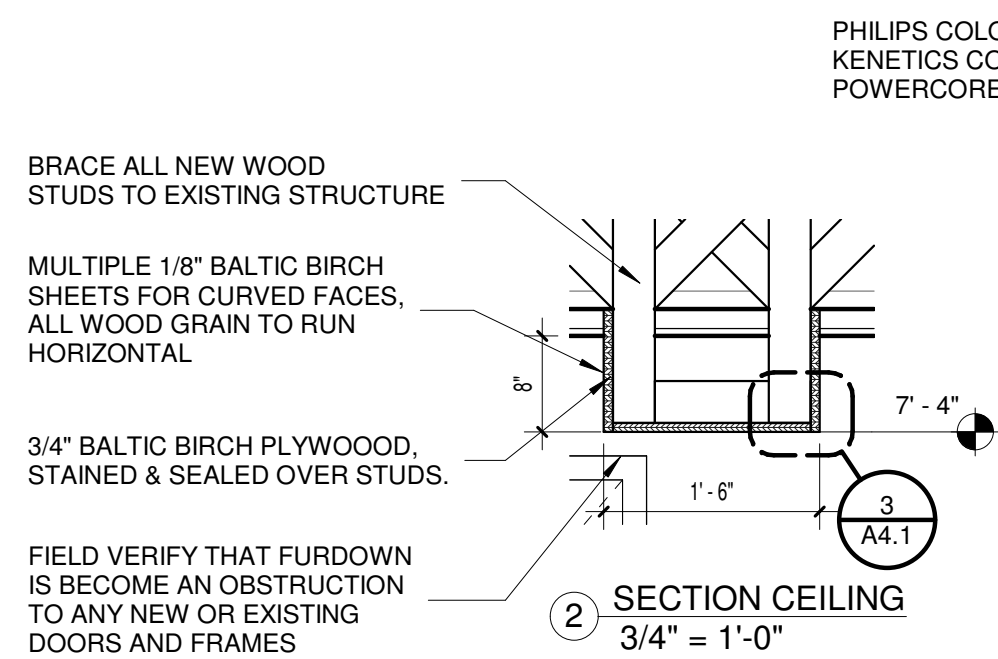
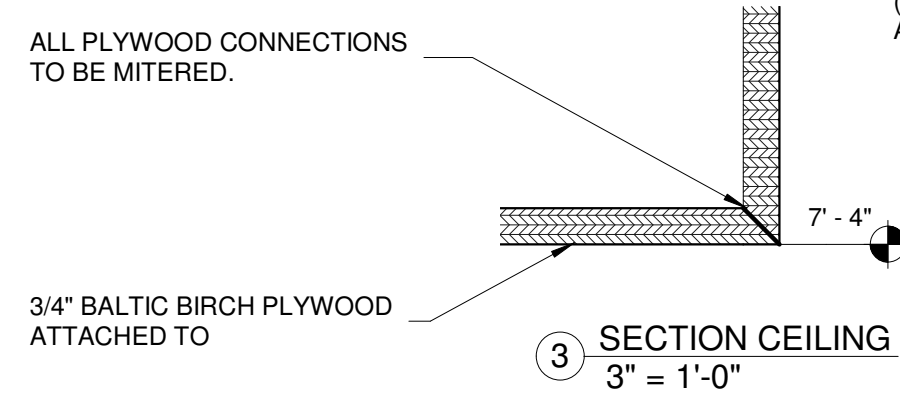
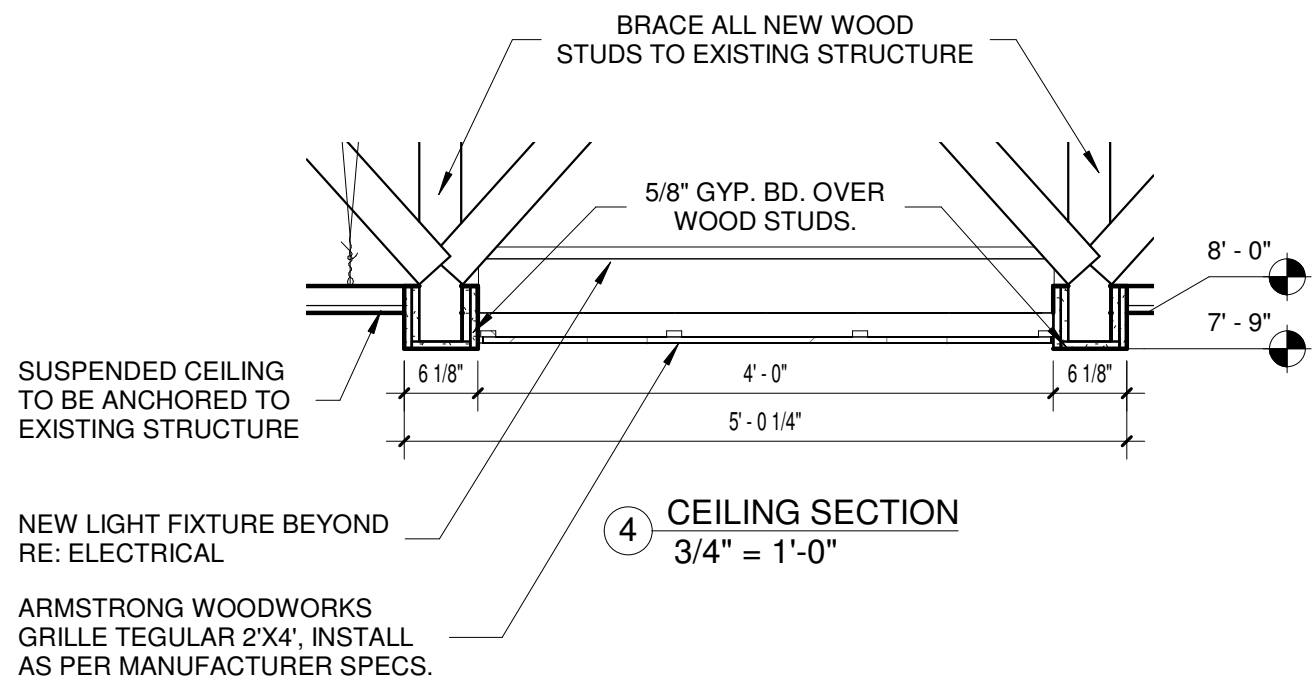
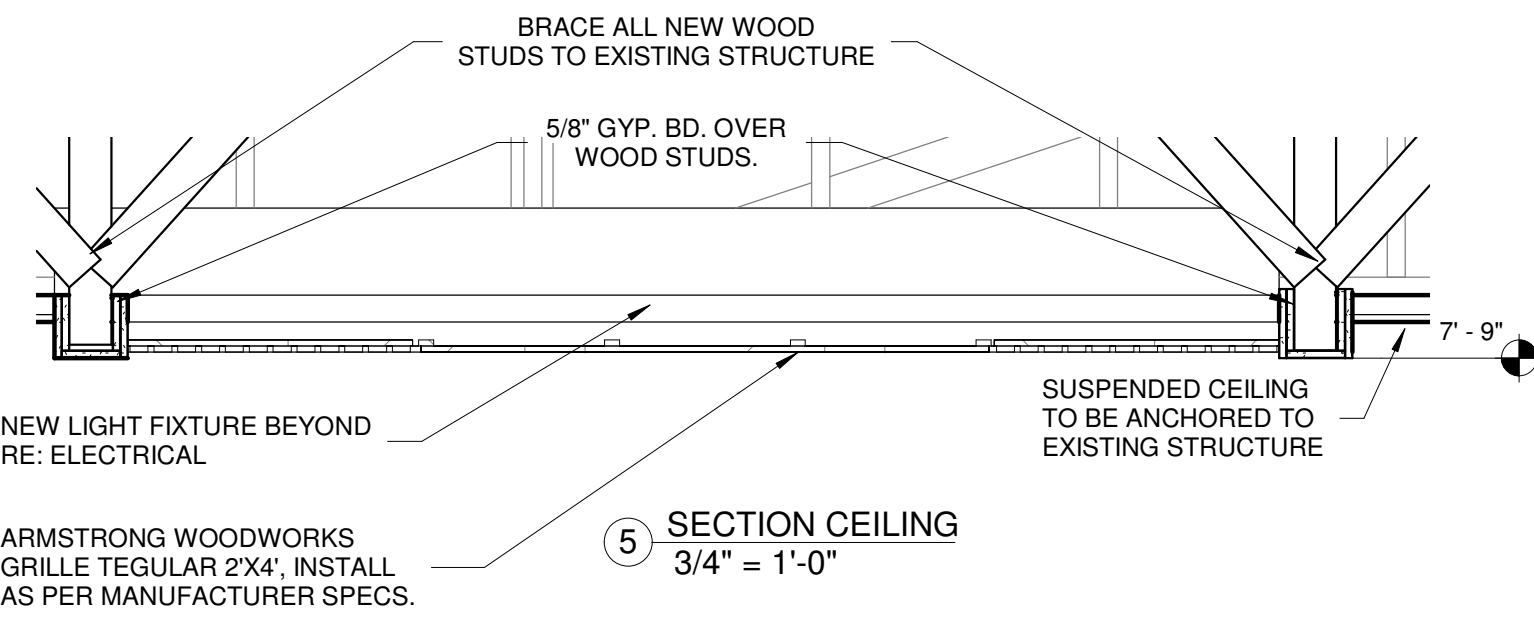
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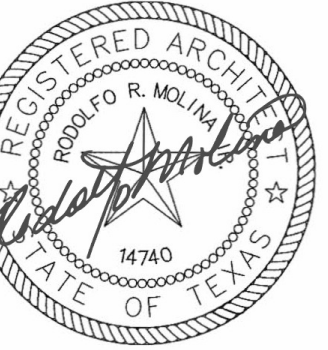
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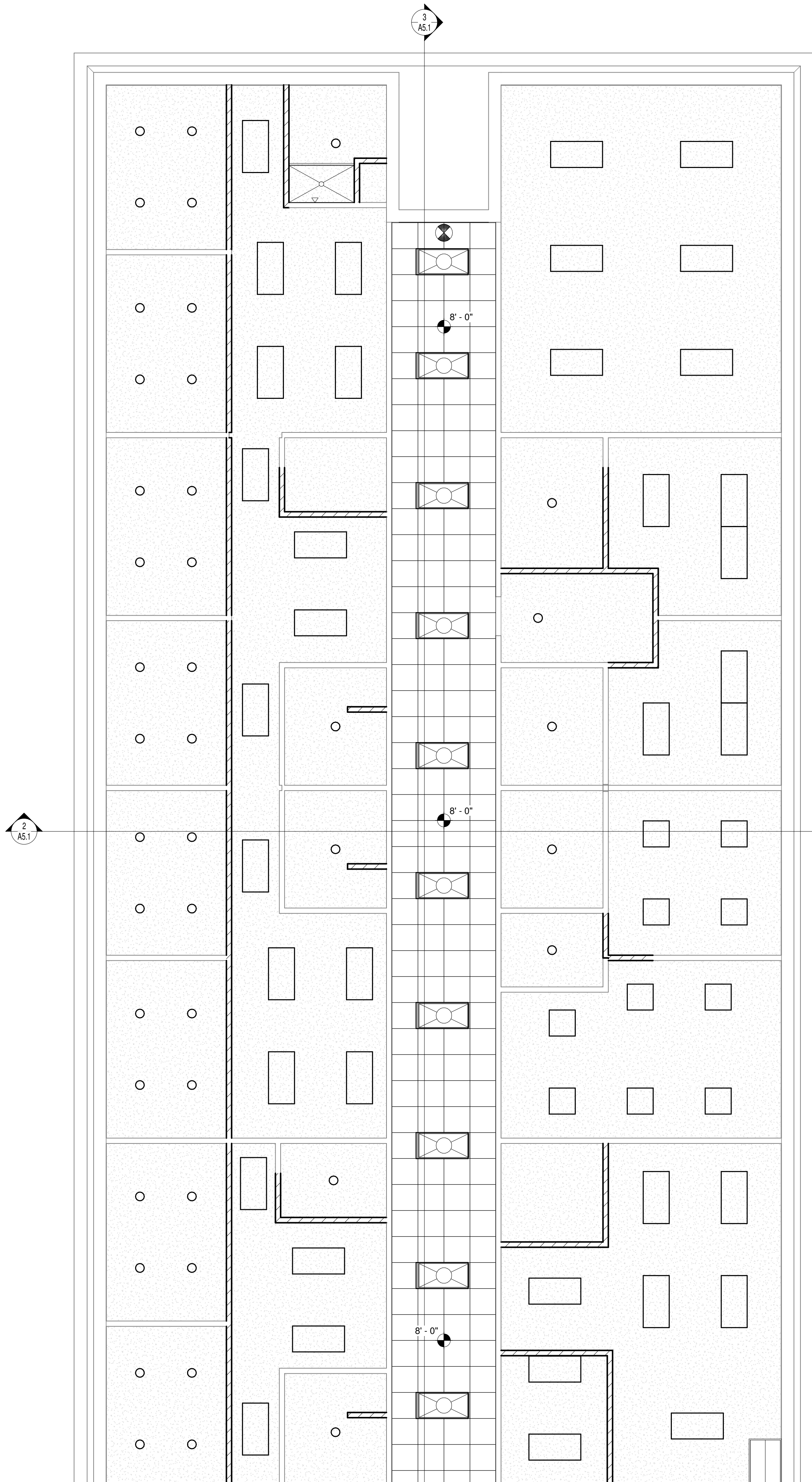
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A4.1



CEILING LEGEND

- 2X4 SURFACE MOUNTED LIGHT FIXTURE
- 2X4 SUSPENDED LIGHT FIXTURE
- RECESSED CAN LIGHT FIXTURE
- PHILIPS 48 VAYA LINEAR LP BCP421
- PHILIPS COLOR KINETICS COLORBLAST POWERCORE
- 2'X2' SUSPENDED CEILING
- EXISTING GYP. BD. CEILING
- ARMSTRONG WOODWORKS GRILLE TEGULAR 2'X4'
- EXIT LIGHTS

GENERAL NOTES

- ALL CEILING AND SOFFIT HEIGHTS ARE GIVEN ABOVE FINISHED FLOOR ELEVATION (EL. 0'-0")
- GENERALLY ONLY CEILING MOUNTED FIXTURES ARE SHOWN ON THIS PLAN. COORDINATE WITH MEP PLANS FOR ADDITIONAL INFORMATION.
- IF SPRINKLER SYSTEM IS REQUIRED OR IN PLACE, SOME OR ALL SPRINKLERS MAY NOT BE SHOWN ON THIS PLAN. COORDINATE WITH MEP DRAWINGS FOR ADDITIONAL INFORMATION. SPRINKLER HEADS TO BE CENTERED ON CEILING TILE, TYP.
- VERIFY LOCATIONS OF ALL CEILING ACCESS PANELS WITH MEP DRAWINGS. COORDINATE LOCATIONS OF PANELS WITH ARCHITECT PRIOR TO INSTALLATION. ACCESS PANEL FIRE RATINGS MUST MATCH CEILING ASSEMBLY FIRE RATINGS.
- LIGHTING FIXTURES TO BE CENTERED AND SPACED EQUALLY UNLESS NOTED OTHERWISE.
- LIGHT FIXTURES ARE SHOWN FOR DIMENSIONAL PURPOSES ONLY. COORDINATE WITH ELECTRICAL DRAWINGS FOR FIXTURE DESIGNATIONS.
- IF PROJECT INCLUDES FIRE RATED CEILINGS, LIGHT FIXTURES LOCATED IN RATED CEILING ASSEMBLIES ARE TO BE TENTED OR OTHERWISE RATED TO MATCH THE CEILING.

1 REFLECTED CEILING PLAN - SECTION C
3/16" = 1'-0"



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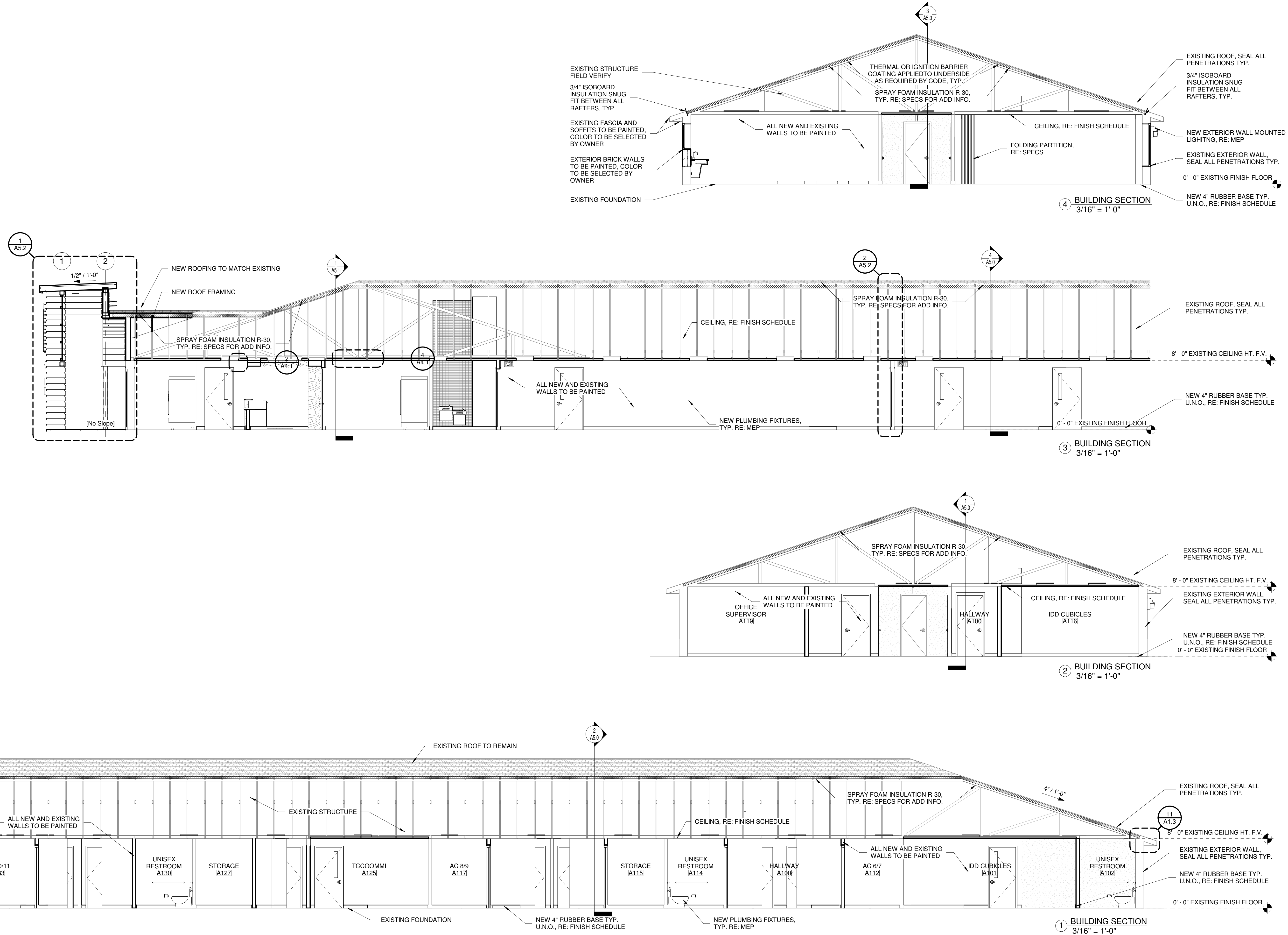
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A5.0

GENERAL NOTES

1. GENERAL CONTRACTOR TO FIELD VERIFY EXISTING STRUCTURE PRIOR TO SUBMITTING HVAC SUBMITTALS. DUE TO EXISTING CONDITIONS, DUCTS RUNS WILL HAVE TO BE DESIGNED TAKING INTO ACCOUNT THE LAYOUT OF EXISTING STRUCTURAL MEMBERS. SEE STRUCTURAL FOR ADDITIONAL INFORMATION.





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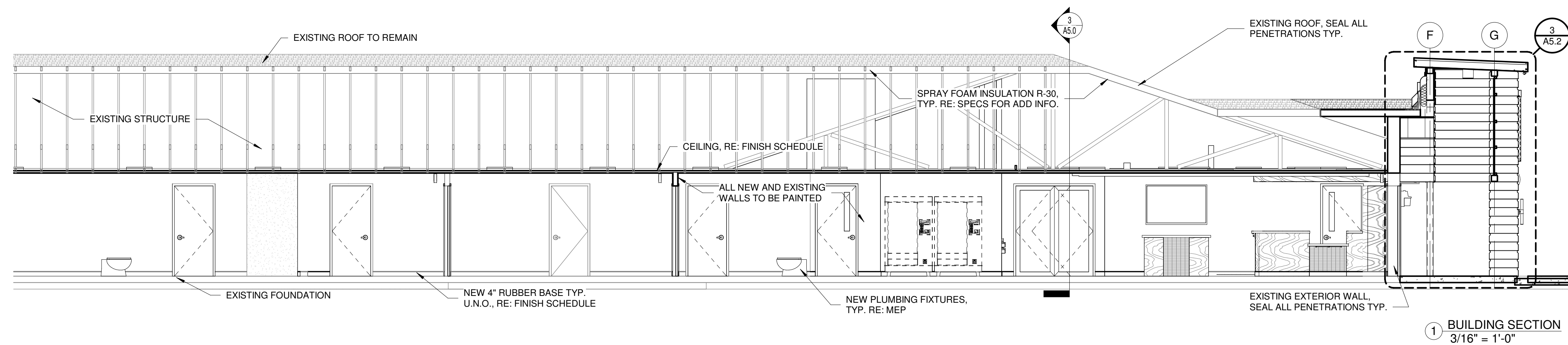
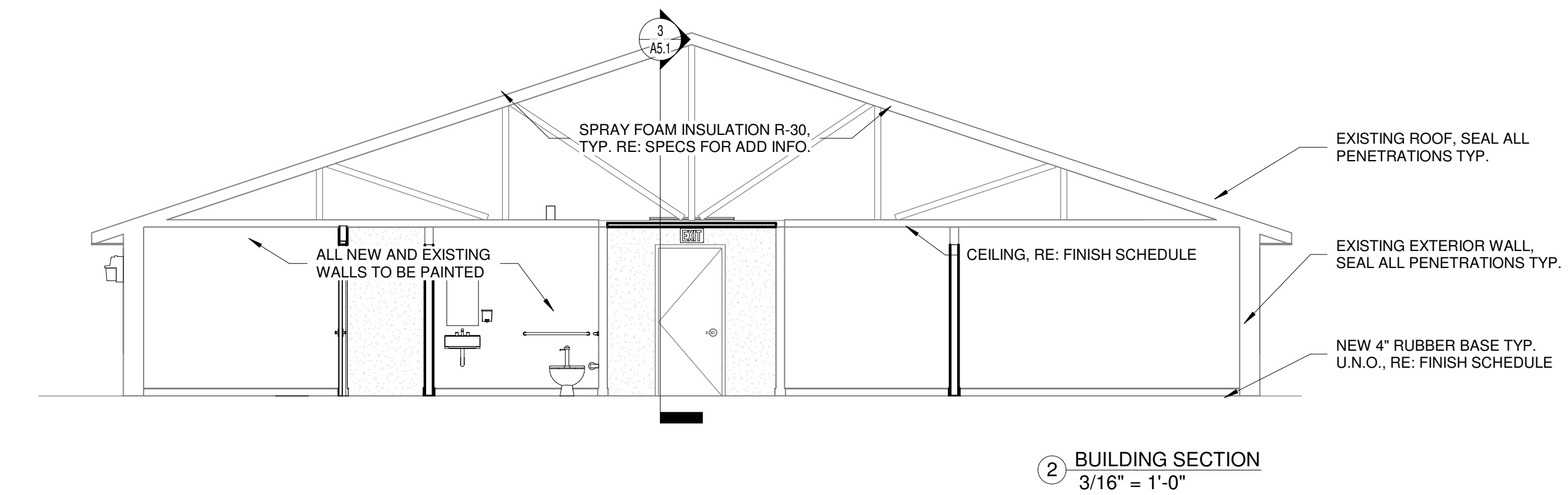
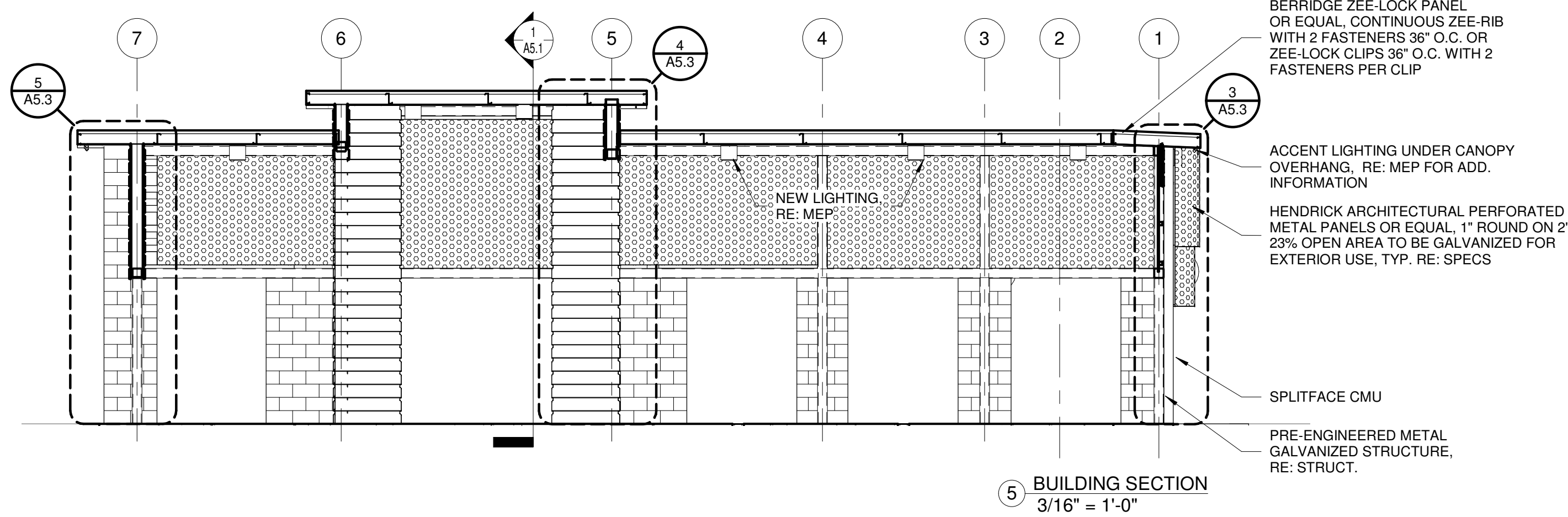
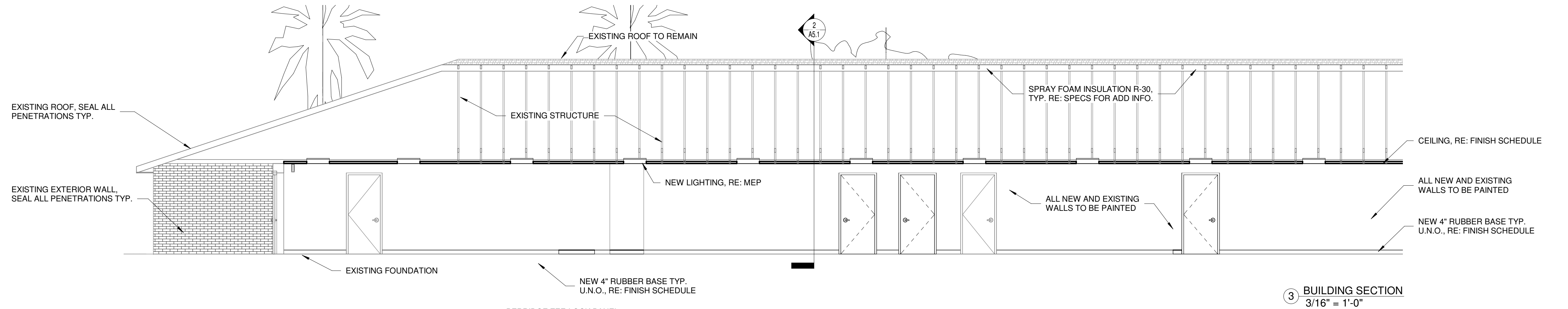
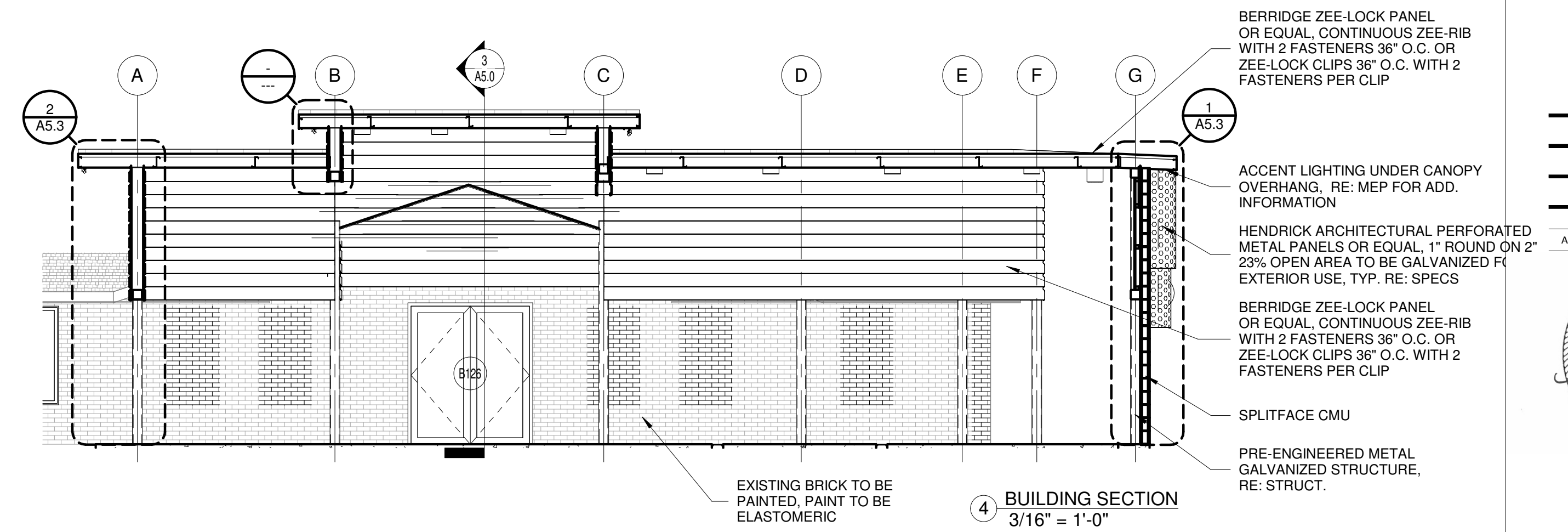
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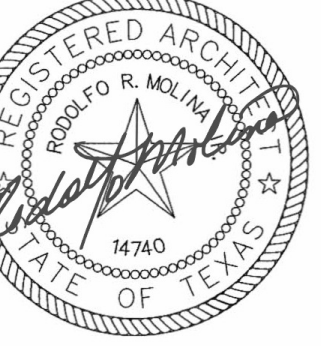
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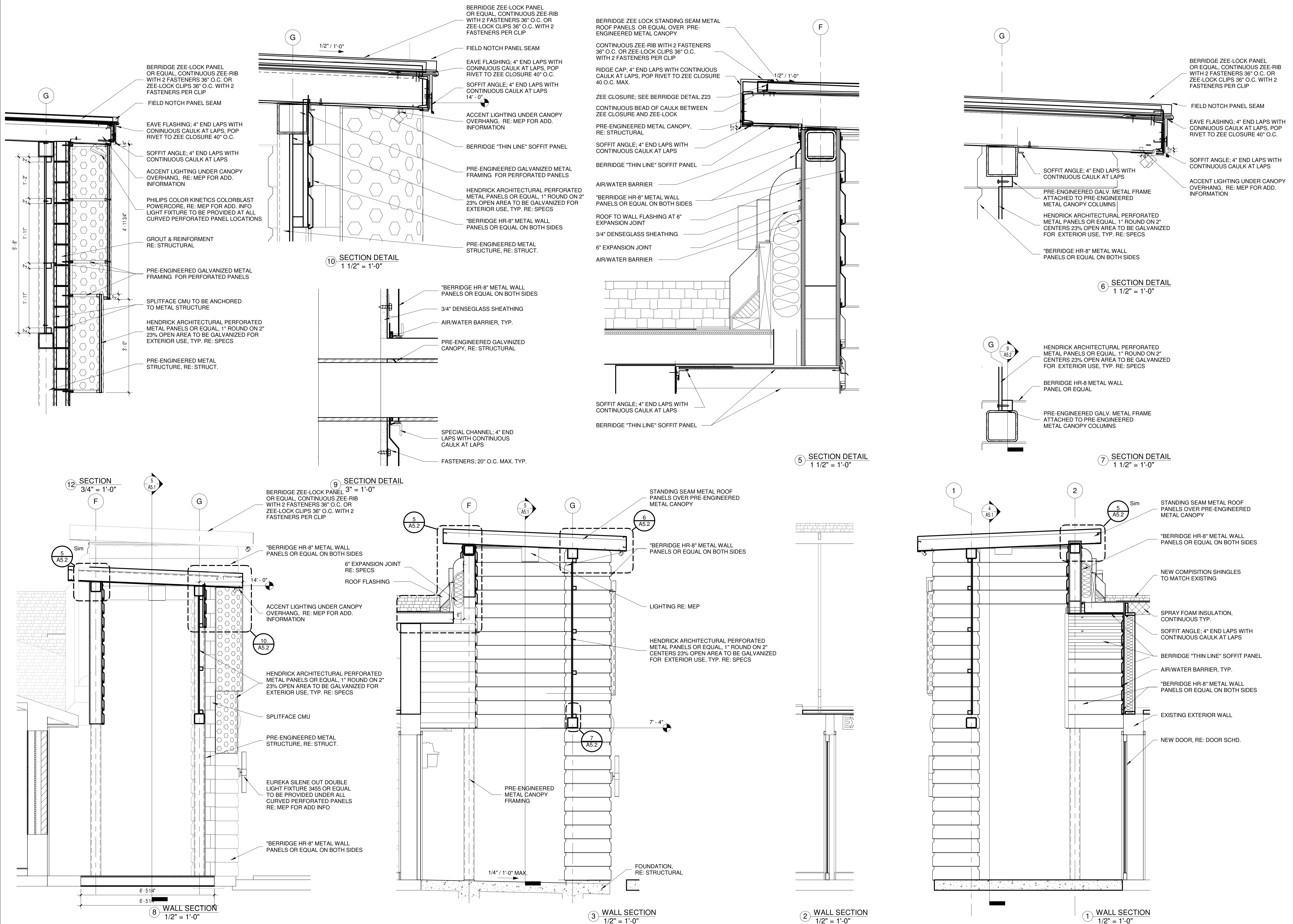
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A5.2





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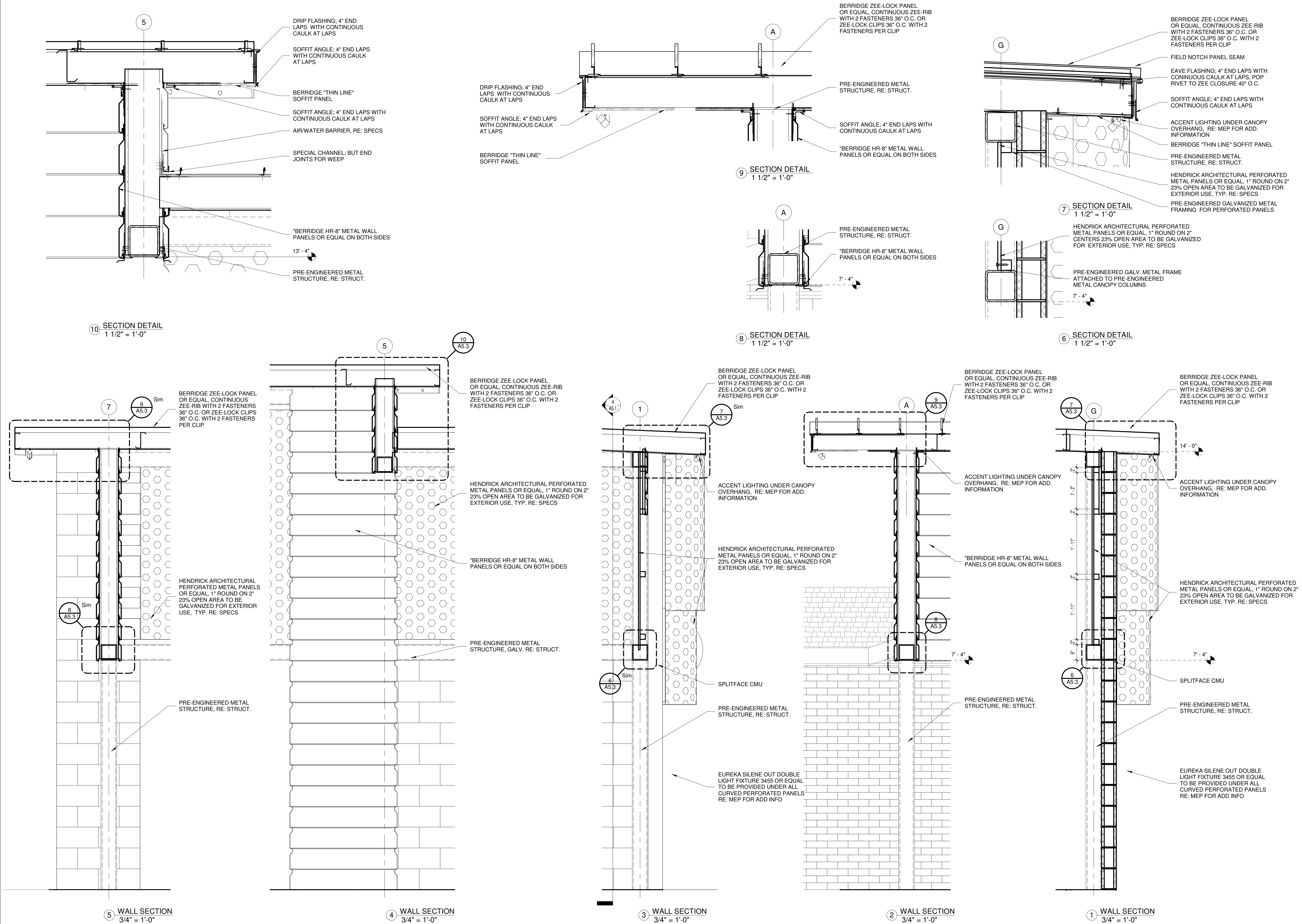
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A5.3





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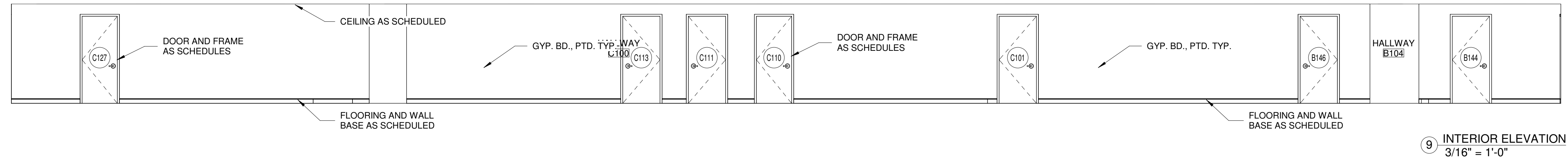
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DATE
AUGUST 20, 2018

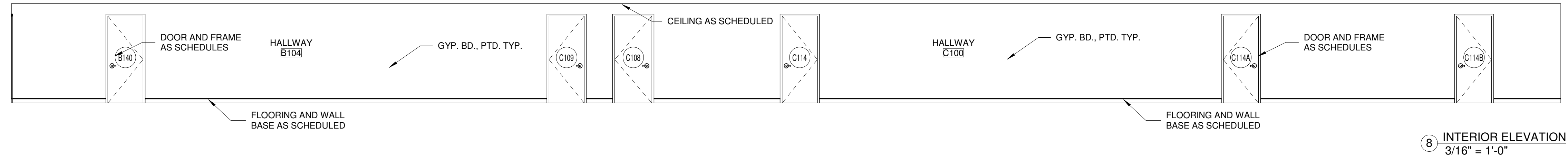
ISSUE FOR SEALED
PROPOSALS

SHEET NUMBER

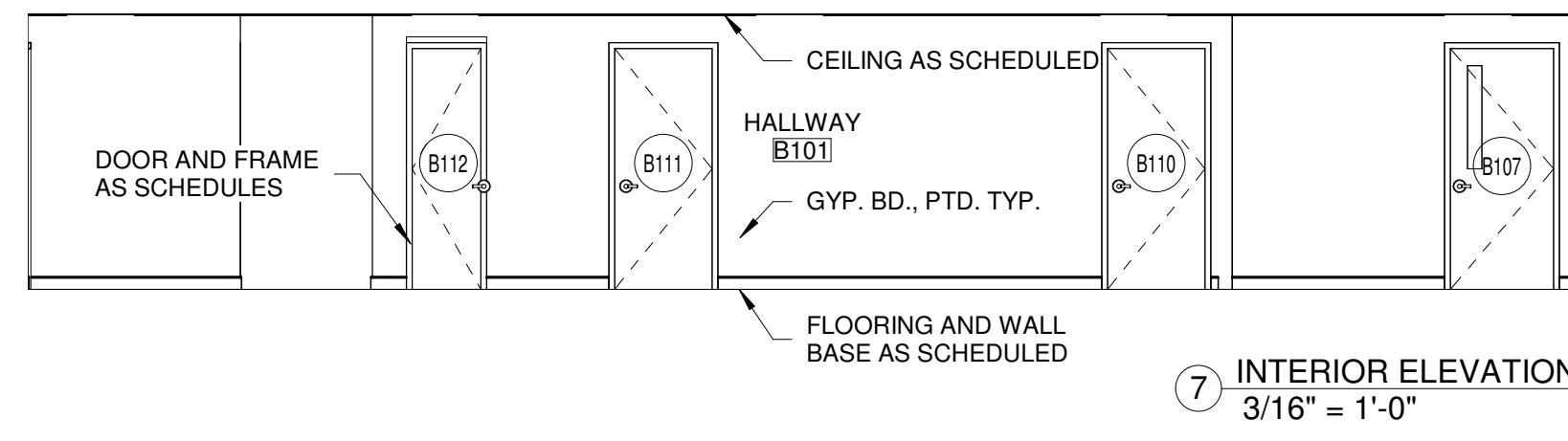
A6.0



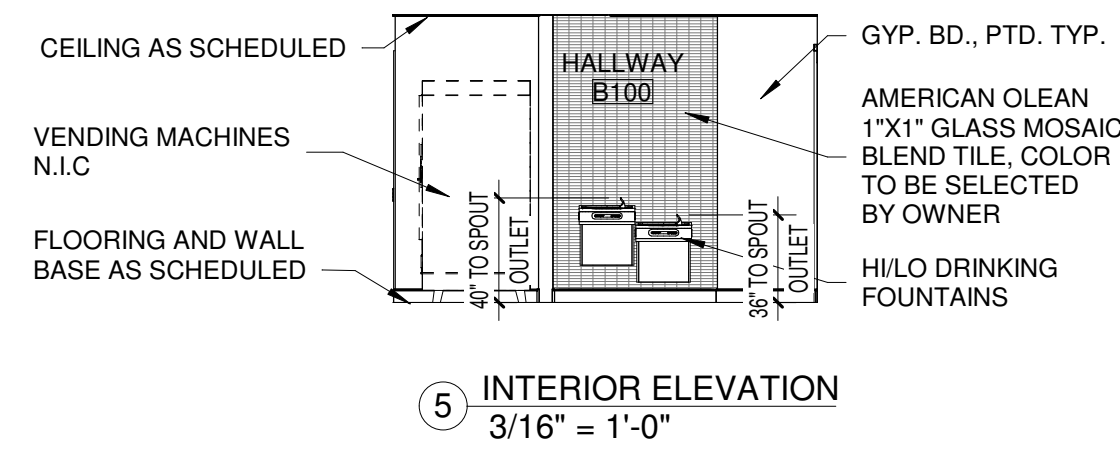
9 INTERIOR ELEVATION
3/16" = 1'-0"



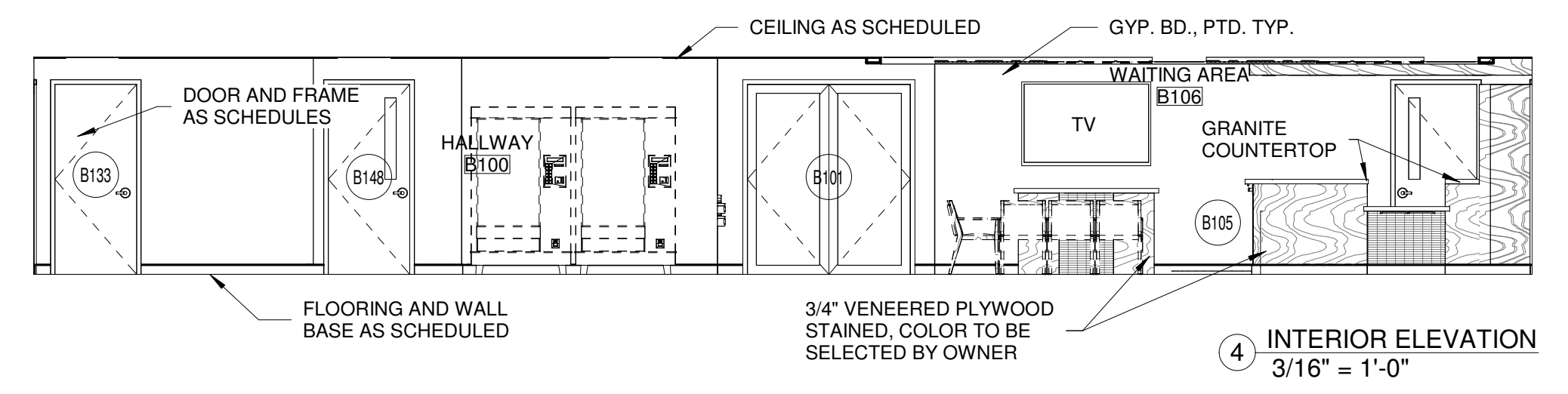
8 INTERIOR ELEVATION
3/16" = 1'-0"



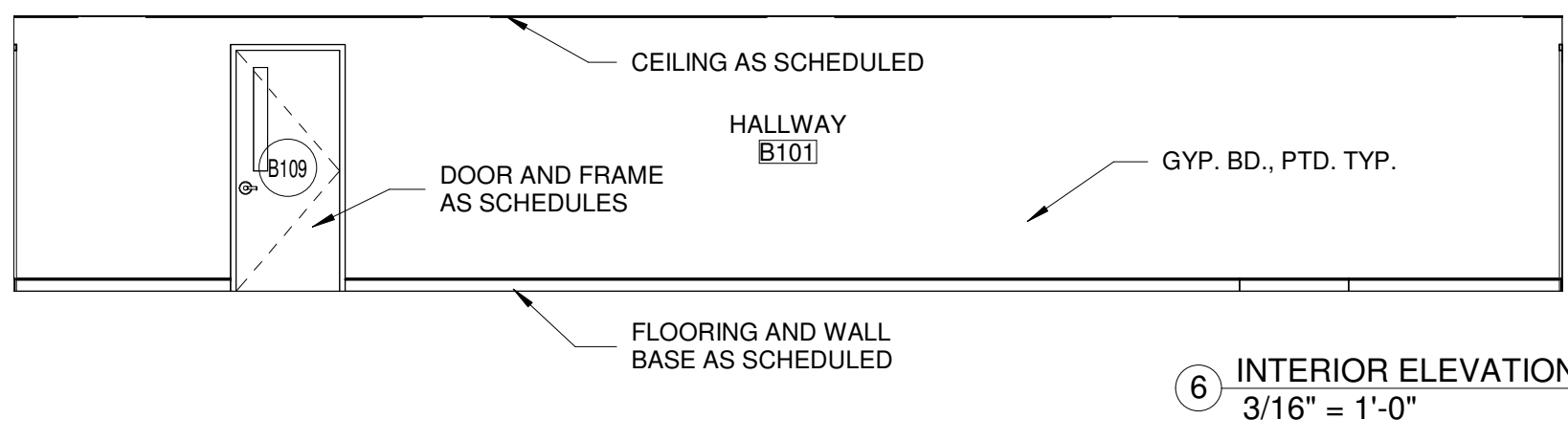
7 INTERIOR ELEVATION
3/16" = 1'-0"



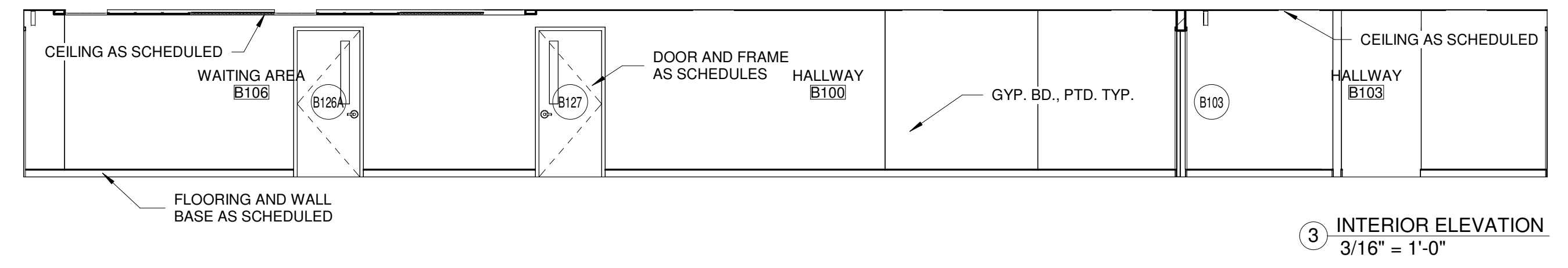
5 INTERIOR ELEVATION
3/16" = 1'-0"



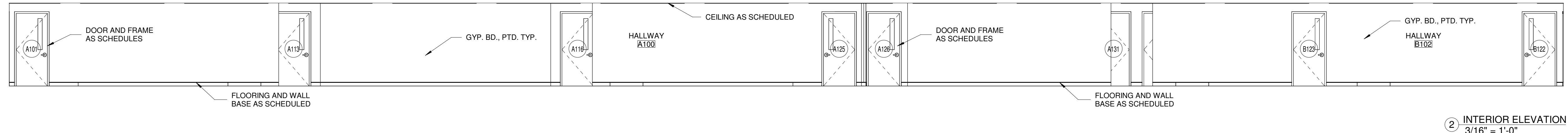
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3/16" = 1'-0"



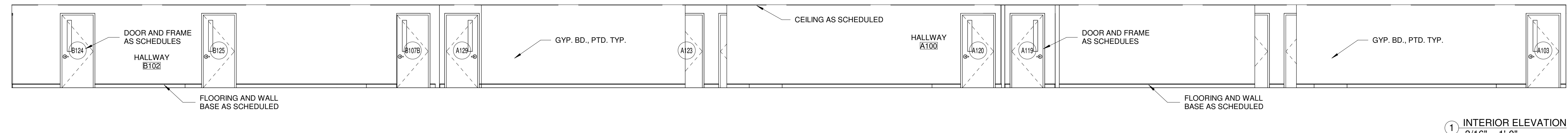
6 INTERIOR ELEVATION
3/16" = 1'-0"



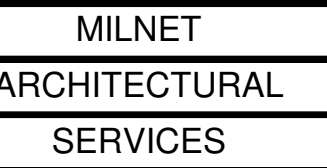
3 INTERIOR ELEVATION
3/16" = 1'-0"



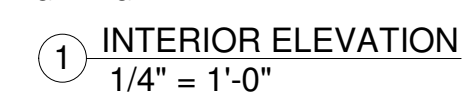
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3/16" = 1'-0"

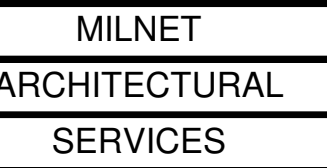


1 INTERIOR ELEVATION
3/16" = 1'-0"

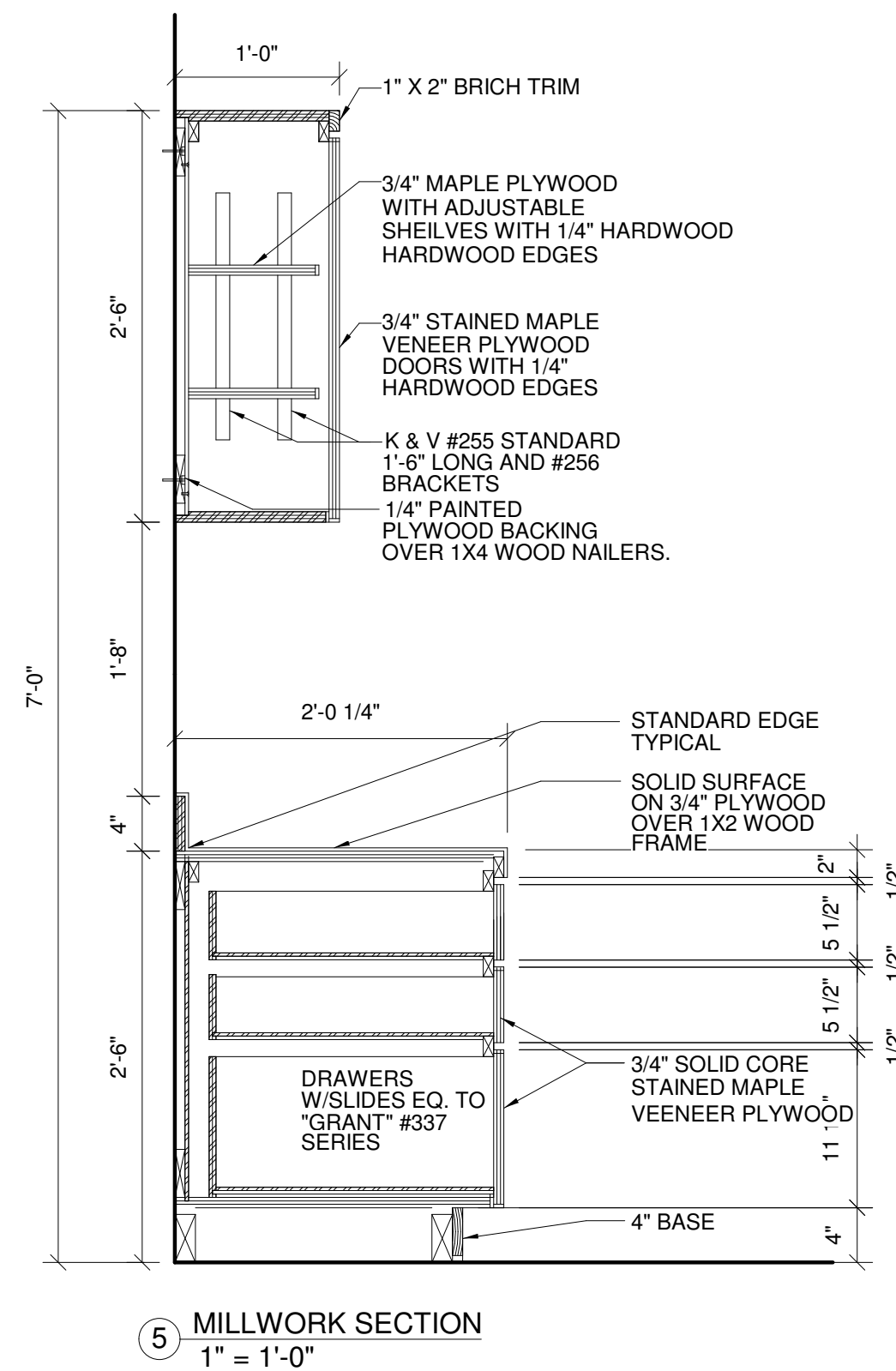
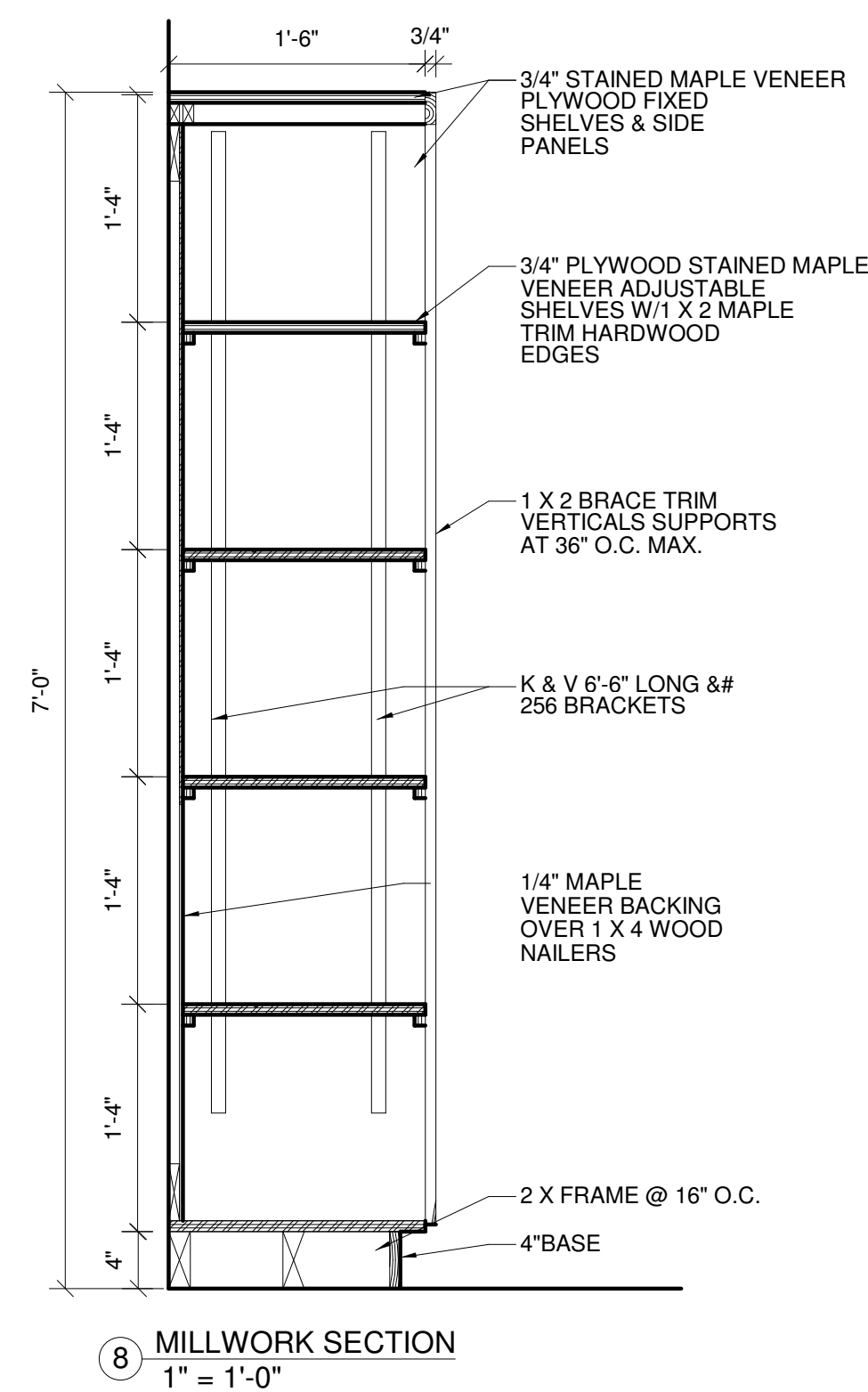
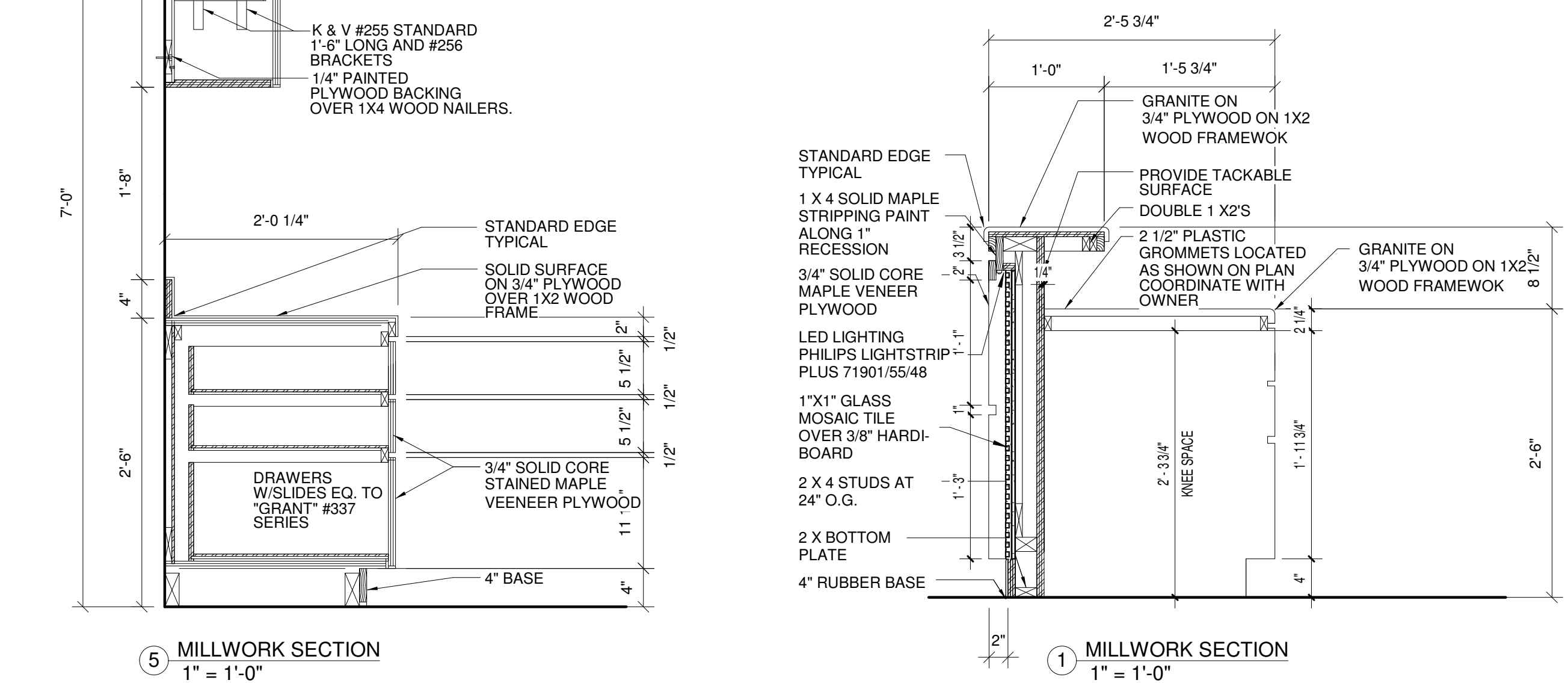


A6.1





A6.2



DOOR SCHEDULE - SECTION A														
DOOR	DOOR LOCATION	DOOR TYPE	WIDTH	HEIGHT	THICKNESS	PAIR OR SINGLE	MATERIAL	FINISH	FRAME TYPE	DOOR HARDWARE	HEAD DETAIL	JAMB DETAIL	SILL DETAIL	Comments
A100	HALLWAY	EXST.	2' - 10"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & PAINT	EXST.	001	EXST.	EXST.	EXST.	2, 4, 5
A101	IDD CUBICLES	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	101	4/A7.1	5/A7.1	6/A7.1	
A102	UNISEX RESTROOM	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	343	4/A7.1	5/A7.1	6/A7.1	
A103	OPEN AREA	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	101	4/A7.1	5/A7.1	6/A7.1	
A104	RESTROOM	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	341	4/A7.1	5/A7.1	6/A7.1	
A105	OFFICE	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	103	4/A7.1	5/A7.1	6/A7.1	
A106	OFFICE SUPERVISOR	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	103	4/A7.1	5/A7.1	6/A7.1	
A107	STORAGE	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	203	4/A7.1	5/A7.1	6/A7.1	
A108	AC 4/5	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	203	4/A7.1	5/A7.1	6/A7.1	
A109	OFFICE SUPERVISOR	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	103	4/A7.1	5/A7.1	6/A7.1	
A110	OFFICE SUPERVISOR	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	103	4/A7.1	5/A7.1	6/A7.1	
A111	RESTROOM	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	341	4/A7.1	5/A7.1	6/A7.1	
A112	HALLWAY	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B		4/A7.1	5/A7.1	6/A7.1	
A113	IDD CUBICLES	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	101	4/A7.1	5/A7.1	6/A7.1	
A114	UNISEX RESTROOM	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	341	4/A7.1	5/A7.1	6/A7.1	
A115	STORAGE	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	203	4/A7.1	5/A7.1	6/A7.1	
A116	IDD CUBICLES	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	101	4/A7.1	5/A7.1	6/A7.1	
A117	AC 8/9	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	203	4/A7.1	5/A7.1	6/A7.1	
A118	AC 3/ELEC.	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	203	4/A7.1	5/A7.1	6/A7.1	
A119	OFFICE SUPERVISOR	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	103	4/A7.1	5/A7.1	6/A7.1	
A120	OFFICE MANAGER	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	101	4/A7.1	5/A7.1	6/A7.1	
A121	AC 1/2	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	203	4/A7.1	5/A7.1	6/A7.1	
A122	OFFICE INTAKE	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	103	4/A7.1	5/A7.1	6/A7.1	
A123	OFFICE INTAKE	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	103	4/A7.1	5/A7.1	6/A7.1	
A124	STORAGE	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	203	4/A7.1	5/A7.1	6/A7.1	
A125	TCOOOMMI	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	101	4/A7.1	5/A7.1	6/A7.1	
A126	TCOOOMMI SUPERVISOR	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	103	4/A7.1	5/A7.1	6/A7.1	
A127	STORAGE	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	203	4/A7.1	5/A7.1	6/A7.1	
A128	UNISEX RESTROOM	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	341	4/A7.1	5/A7.1	6/A7.1	
A129	OFFICE CIS/IDD QA (2)	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	103	4/A7.1	5/A7.1	6/A7.1	
A130	UNISEX RESTROOM	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	341	4/A7.1	5/A7.1	6/A7.1	
A131	MAIL/COPY ROOM	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B		4/A7.1	5/A7.1	6/A7.1	
A132	OFFICE HR	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	103	4/A7.1	5/A7.1	6/A7.1	
A133	AC 10/11	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	203	4/A7.1	5/A7.1	6/A7.1	

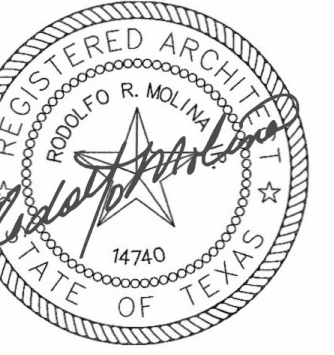
DOOR SCHEDULE - SECTION B														
DOOR	DOOR LOCATION	DOOR TYPE	WIDTH	HEIGHT	THICKNESS	PAIR OR SINGLE	MATERIAL	FINISH	FRAME TYPE	DOOR HARDWARE	HEAD DETAIL	JAMB DETAIL	SILL DETAIL	Comments
B100	WAITING AREA	A	6' - 0"	7' - 0"	0' - 2"	PAIR	ALUM. & GLASS	ANODIZED CLEAR	A	AW714A	1/A7.1	2/A7.1	3/A7.1	1
B101	HALLWAY	A	6' - 0"	7' - 0"	0' - 2"	PAIR	ALUM. & GLASS	ANODIZED CLEAR	A	CYX710A	10/A7.1	11/A7.1	12/A7.1	3
B101A	HALLWAY	EXST.	2' - 10"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & PAINT	EXST.		EXST.	EXST.	EXST.	4, 5
B102	HALLWAY	A	6' - 0"	7' - 0"	0' - 2"	PAIR	ALUM. & GLASS	ANODIZED CLEAR	A	800AV	10/A7.1	11/A7.1	12/A7.1	
B103	HALLWAY	A	6' - 0"	7' - 0"	0' - 2"	PAIR	ALUM. & GLASS	ANODIZED CLEAR	A	CYX710RW.1	10/A7.1	11/A7.1	12/A7.1	3
B104	HALLWAY	A	6' - 0"	7' - 0"	0' - 2"	PAIR	ALUM. & GLASS	ANODIZED CLEAR	A	800AV	10/A7.1	11/A7.1	12/A7.1	3
B105	RECEPTIONIST	F	3' - 0"	3' - 2"	0' - 2"		SOLID CORE WOOD	PAINTED	E	403BB	4/A7.1	5/A7.1	6/A7.1	
B107	COPY/MAIL ROOM	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	501	4/A7.1	5/A7.1	6/A7.1	
B107A	COPY/MAIL ROOM	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	501	4/A7.1	5/A7.1	6/A7.1	
B107B	TCOOMMI	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B		4/A7.1	5/A7.1	6/A7.1	
B108	MAINTENANCE OFFICE	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	103	4/A7.1	5/A7.1	6/A7.1	
B109	UNASSIGNED	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B		4/A7.1	5/A7.1	6/A7.1	
B109A	UNASSIGNED	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B		4/A7.1	5/A7.1	6/A7.1	
B110	FINANCIAL STAFF	EXST.	2' - 10"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & PAINT	EXST.	101	EXST.	EXST.	EXST.	4, 5
B111	IDD RESPITE ROOM	EXST.	2' - 10"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & PAINT	EXST.	101	EXST.	EXST.	EXST.	4, 5
B112	HALLWAY	EXST.	2' - 0"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & STAIN	EXST.	203S	EXST.	EXST.	EXST.	4, 5
B113	MAINTENANCE EQ	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	201	4/A7.1	5/A7.1	6/A7.1	
B113B	MAINTENANCE EQ	EXST.	2' - 10"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & PAINT	EXST.	403B	EXST.	EXST.	EXST.	4, 5
B114	JANITORIAL SUPPLIES	EXST.	2' - 10"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & PAINT	EXST.	503	EXST.	EXST.	EXST.	4, 5
B115	MOP SINK	EXST.	2' - 10"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & PAINT	EXST.	503	EXST.	EXST.	EXST.	4, 5
B116	RESTROOM	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	343B	4/A7.1	5/A7.1	6/A7.1	
B117	MECH. ROOM	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	002	4/A7.1	5/A7.1	6/A7.1	
B118	STORAGE	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	203	4/A7.1	5/A7.1	6/A7.1	
B119	AC	EXST.	2' - 0"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & STAIN	EXST.		EXST.	EXST.	EXST.	
B120	VH	EXST.	2' - 0"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & STAIN	EXST.		EXST.	EXST.	EXST.	
B121	ELEC ROOM/ MDF	EXST.	2' - 10"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & PAINT	EXST.	201	EXST.	EXST.	EXST.	2, 4, 5
B122	CONFERENCE ROOM A	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	501	4/A7.1	5/A7.1	6/A7.1	
B123	CONFERENCE ROOM B	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	501	4/A7.1	5/A7.1	6/A7.1	
B124	BREAK ROOM	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	401	4/A7.1	5/A7.1	6/A7.1	
B125	OFFICE SHARED(4)	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	101	4/A7.1	5/A7.1	6/A7.1	
B126	CLINIC	A	6' - 0"	7' - 0"	0' - 2"	PAIR	ALUM. & GLASS	ANODIZED CLEAR	A	AW714A	1/A7.1	2/A7.1	3/A7.1	1
B126A	CLINIC	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	CZ221	4/A7.1	5/A7.1	6/A7.1	3, 6
B127	HALLWAY	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	501	4/A7.1	5/A7.1	6/A7.1	
B127A	RECEPTIONIST	F	3' - 0"	3' - 2"	0' - 2"		SOLID CORE WOOD	PAINTED	E	403BB	4/A7.1	5/A7.1	6/A7.1	
B128	PRIVATE OFFICE	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	101	4/A7.1	5/A7.1	6/A7.1	
B129	PRIVATE OFFICE	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	101	4/A7.1	5/A7.1	6/A7.1	
B130	PRIVATE OFFICE	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	101	4/A7.1	5/A7.1	6/A7.1	
B131	UNISEX RESTROOM	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	341	4/A7.1	5/A7.1	6/A7.1	
B132	UNISEX RESTROOM	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	341	4/A7.1	5/A7.1	6/A7.1	
B133	UNISEX RESTROOM	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	341	4/A7.1	5/A7.1	6/A7.1	
B134	HALLWAY	EXST.	2' - 10"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & PAINT	EXST.		EXST.	EXST.	EXST.	4, 5
B134A	UNASSIGNED	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B		4/A7.1	5/A7.1	6/A7.1	
B135	MIS	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	B203	4/A7.1	5/A7.1	6/A7.1	
B136	MOP ROOM	EXST.	2' - 10"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & PAINT	EXST.	B203	EXST.	EXST.	EXST.	4, 5
B137	MOP ROOM	EXST.	2' - 10"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & PAINT	EXST.	B203	EXST.	EXST.	EXST.	4, 5
B138	VH	EXST.	2' - 0"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & STAIN	EXST.	B203	EXST.	EXST.	EXST.	4, 5
B139	AC	EXST.	2' - 0"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & STAIN	EXST.		EXST.	EXST.	EXST.	
B140	HALLWAY	EXST.	2' - 10"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & PAINT	EXST.	B403	EXST.	EXST.	EXST.	4, 5
B141	OPEN AREA	EXST.	2' - 10"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & PAINT	EXST.	B403	EXST.	EXST.	EXST.	4, 5
B142	BEDROOM	EXST.	2' - 10"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & PAINT	EXST.	B403	EXST.	EXST.	EXST.	4, 5
B143	RESTROOM	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	B343	4/A7.1	5/A7.1	6/A7.1	
B144	AC 10/11	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	B203	4/A7.1	5/A7.1	6/A7.1	
B146	RESTROOM	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	B343	4/A7.1	5/A7.1	6/A7.1	
B147	HALLWAY	EXST.	2' - 10"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & PAINT	EXST.	002	EXST.	EXST.	EXST.	4, 5
B148	HALLWAY	B	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B		4/A7.1	5/A7.1	6/A7.1	

DOOR SCHEDULE - SECTION C														
DOOR	DOOR LOCATION	DOOR TYPE	WIDTH	HEIGHT	THICKNESS	PAIR OR SINGLE	MATERIAL	FINISH	FRAME TYPE	DOOR HARDWARE	HEAD DETAIL	JAMB DETAIL	SILL DETAIL	Comments
C100	HALLWAY	EXST.	3' - 0"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & PAINT	EXST.	001	EXST.	EXST.	EXST.	2
C101	HALLWAY	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	B503	4/A7.1	5/A7.1	6/A7.1	
C102	KITCHEN	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	B503	4/A7.1	5/A7.1	6/A7.1	
C104	STORAGE	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	B203	4/A7.1	5/A7.1	6/A7.1	
C105	OPEN AREA	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	B343	4/A7.1	5/A7.1	6/A7.1	
C106	OPEN AREA	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	B403	4/A7.1	5/A7.1	6/A7.1	
C107	OPEN AREA	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	B403	4/A7.1	5/A7.1	6/A7.1	
C108	AC 1/2	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	B203	4/A7.1	5/A7.1	6/A7.1	
C109	OPEN AREA	EXST.	2' - 10"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & PAINT	EXST.	B403	EXST.	EXST.	EXST.	4, 5
C110	UNASSIGNED	EXST.	2' - 10"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & PAINT	EXST.		EXST.	EXST.	EXST.	4, 5
C110A	UNASSIGNED	E	6' - 0"	7' - 0"	0' - 2"	PAIR	INS. HOLLOW METAL	PAINTED	D	W214	7/A7.1	8/A7.1	9/A7.1	
C111	ELEC.	EXST.	3' - 0"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & PAINT	EXST.		EXST.	EXST.	EXST.	
C112	OFFICE	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	B103	4/A7.1	5/A7.1	6/A7.1	
C113	AC 8/9	EXST.	3' - 0"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & PAINT	EXST.		EXST.	EXST.	EXST.	
C114	HALLWAY	EXST.	2' - 10"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & PAINT	EXST.	B403	EXST.	EXST.	EXST.	4, 5
C114A	OPEN AREA	EXST.	2' - 10"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & PAINT	EXST.	B403	EXST.	EXST.	EXST.	4, 5
C114B	HALLWAY	EXST.	2' - 10"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & PAINT	EXST.	B403	EXST.	EXST.	EXST.	4, 5
C115	BEDROOM	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	B403	4/A7.1	5/A7.1	6/A7.1	
C116	BEDROOM	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	B343	4/A7.1	5/A7.1	6/A7.1	
C117	RESTROOM	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	B403	4/A7.1	5/A7.1	6/A7.1	
C118	BEDROOM	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	B403	4/A7.1	5/A7.1	6/A7.1	
C119	RESTROOM	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	B343	4/A7.1	5/A7.1	6/A7.1	
C120	BEDROOM	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B		4/A7.1	5/A7.1	6/A7.1	
C121	W/D	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	B503	4/A7.1	5/A7.1	6/A7.1	
C122	RESTROOM	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	B343	4/A7.1	5/A7.1	6/A7.1	
C123	OFFICE	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	B103	4/A7.1	5/A7.1	6/A7.1	
C125	OFFICE	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	B103	4/A7.1	5/A7.1	6/A7.1	
C126	AC 6/7	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	B203	4/A7.1	5/A7.1	6/A7.1	
C127	LEISURE ROOM	EXST.	2' - 10"	7' - 0"	0' - 2"	SINGLE	EXST.	SAND & PAINT	EXST.	B403	EXST.	EXST.	EXST.	4, 5
C128	BEDROOM	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	B403	4/A7.1	5/A7.1	6/A7.1	
C129	BEDROOM	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	B403	4/A7.1	5/A7.1	6/A7.1	
C130	RESTROOM	D	3' - 0"	7' - 0"	0' - 2"	SINGLE	SOLID CORE WOOD	PAINTED	B	B343	4/A7.1	5/A7.1	6/A7.1	



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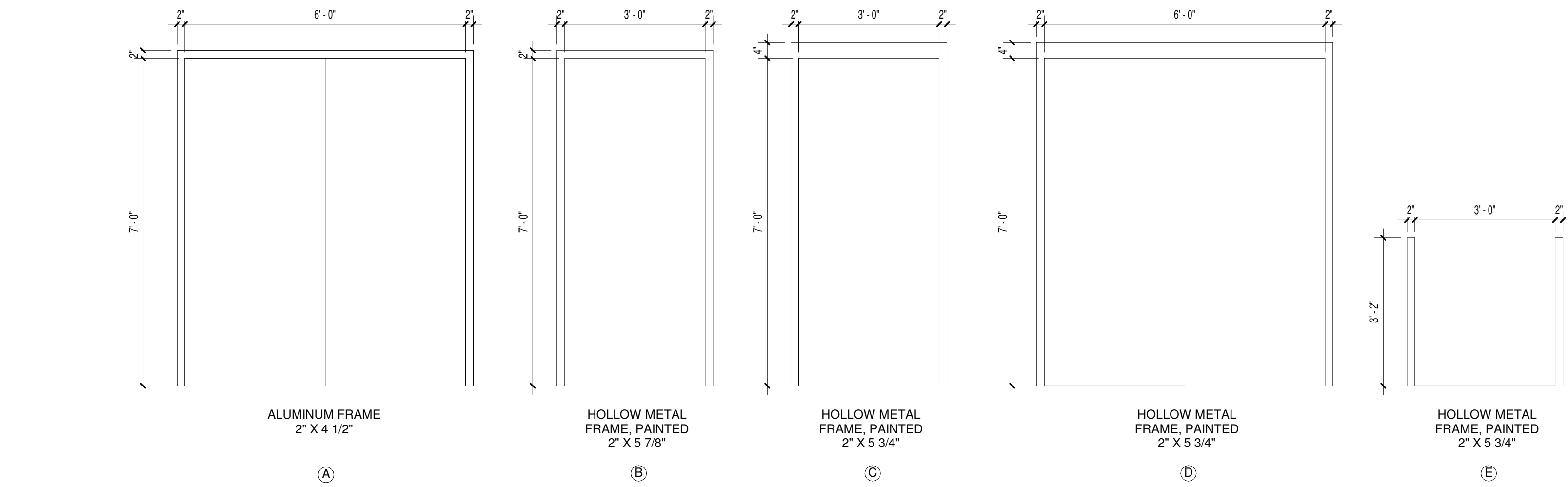
PROJECT NUMBER
217027

DATE
AUGUST 20, 2018

ISSUE FOR SEALED
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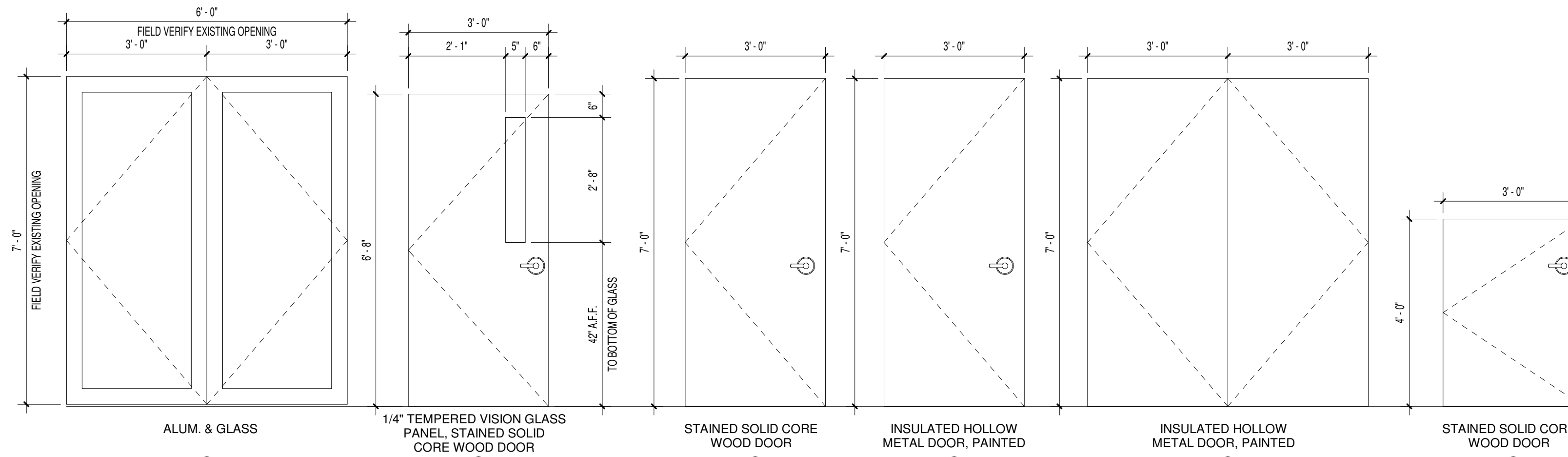
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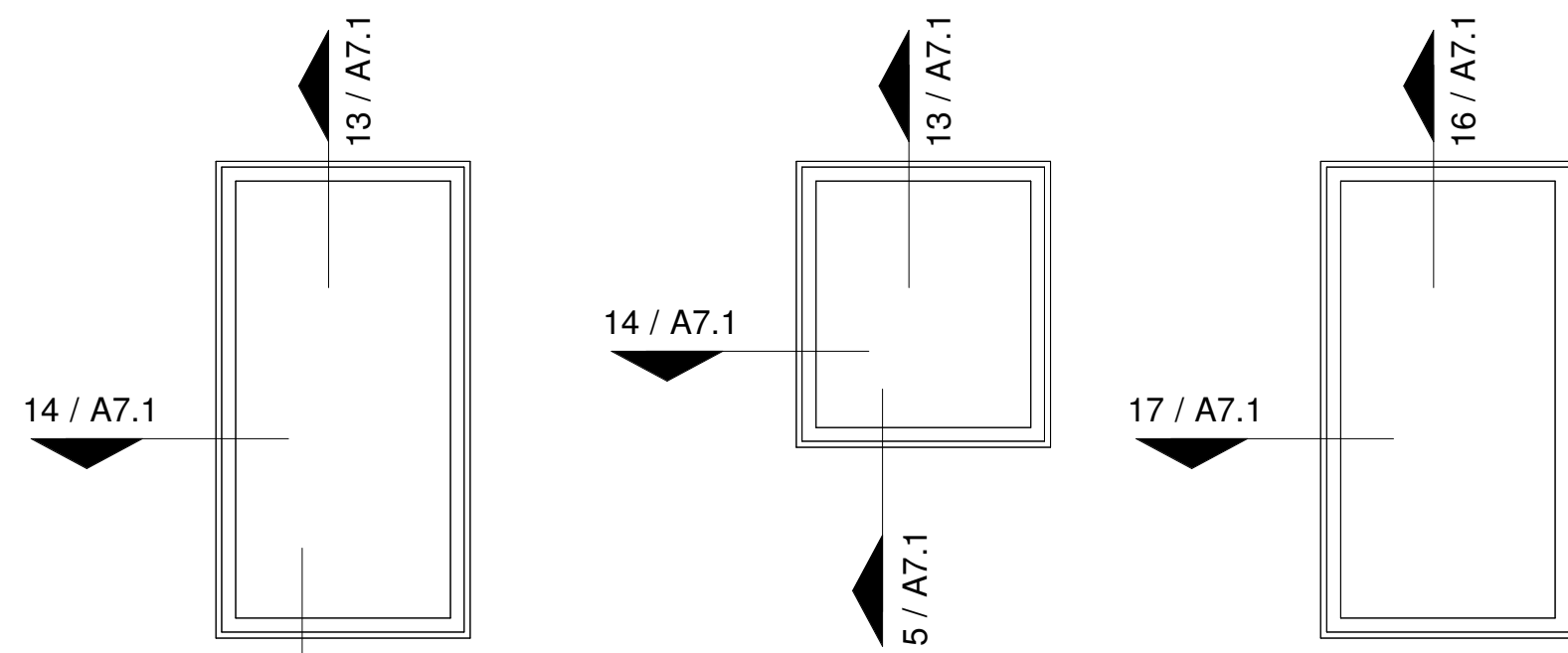


FRAME TYPES
1/2" = 1'-0"

NOTE: EXTERIOR DOORS TO CONFORM TO CURRENT TEXAS DEPARTMENT OF INSURANCE GUIDELINES. THESE ARE TO COMPLY WITH WINDSTORM INLAND I REQUIREMENTS



DOOR TYPES
1/2" = 1'-0"



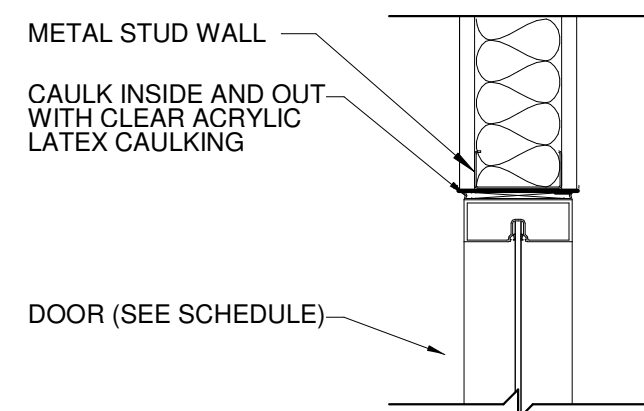
1/4" DOUBLE PANE
TEMPERED LOW-E
GLASS, TINTED WITH
ALUMINUM FRAME
RE: SPECS 2" X 4 1/2"

1/4" DOUBLE PANE
TEMPERED LOW-E
GLASS, TINTED WITH
ALUMINUM FRAME
RE: SPECS 2" X 4 1/2"

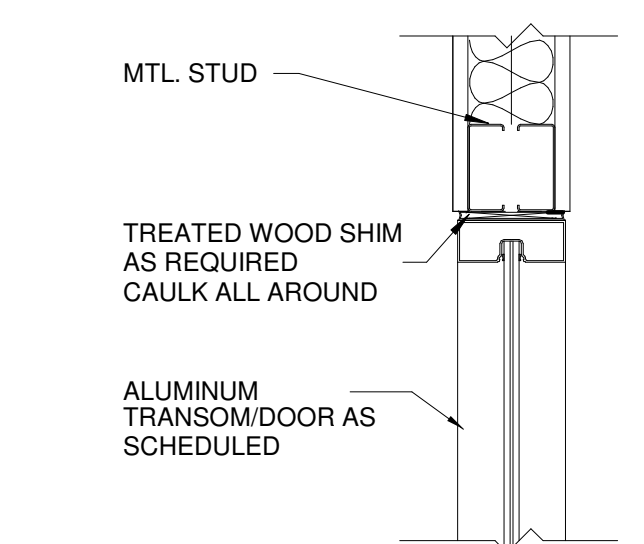
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RE: SPECS 2" X 4 1/2"

WINDOW TYPES
1/2" = 1'-0"

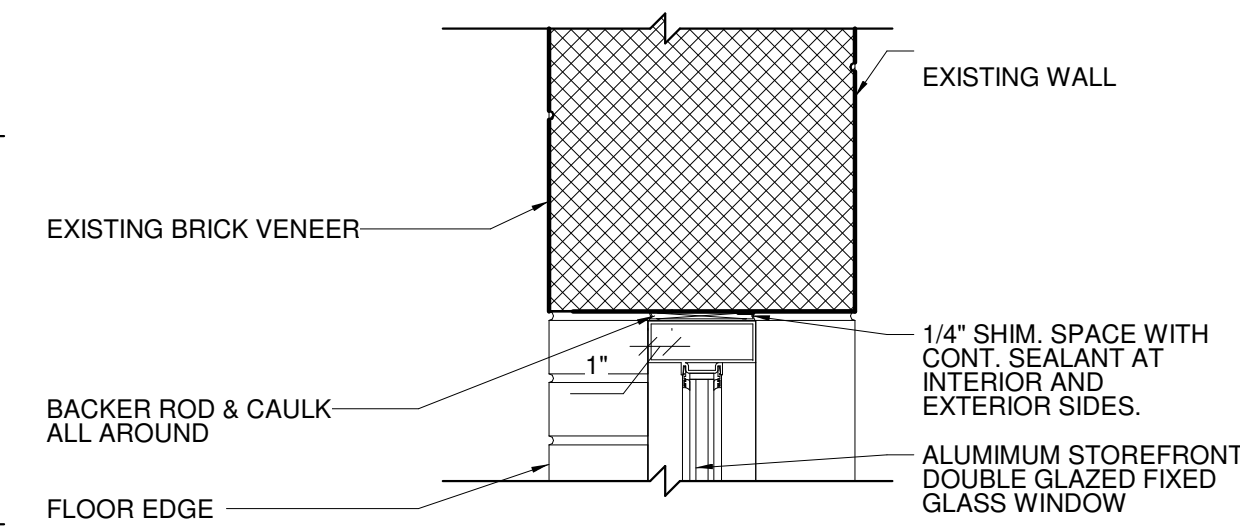
NOTE: EXTERIOR WINDOWS TO CONFORM TO CURRENT TEXAS DEPARTMENT OF INSURANCE GUIDELINES. THESE ARE TO COMPLY WITH WINDSTORM INLAND I REQUIREMENTS



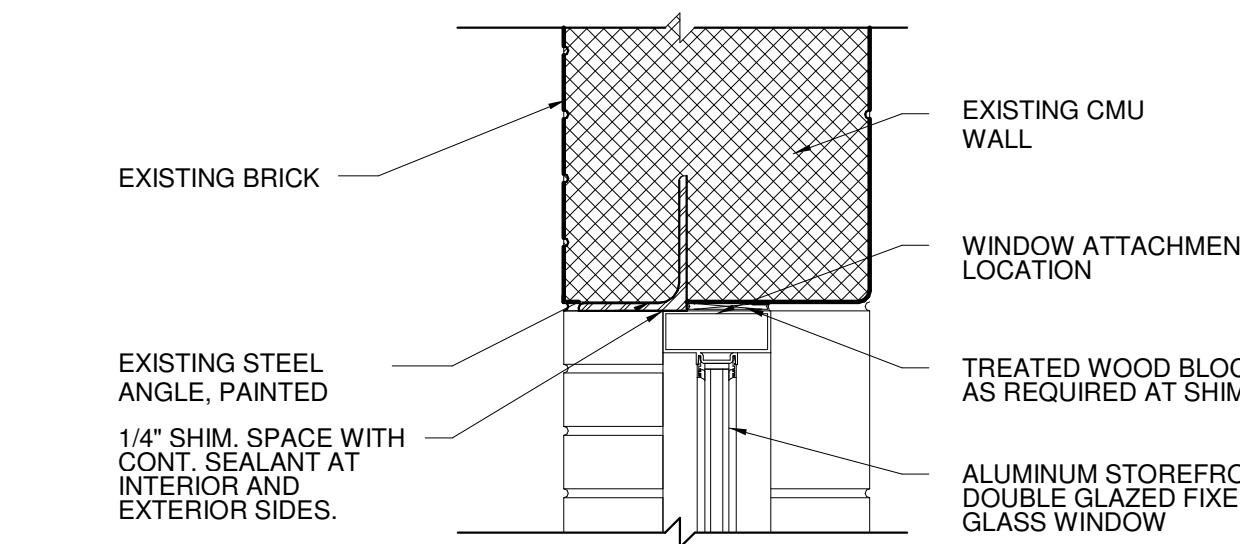
17 INT. DOOR/WINDOW JAMB DETAIL
1 1/2" = 1'-0"



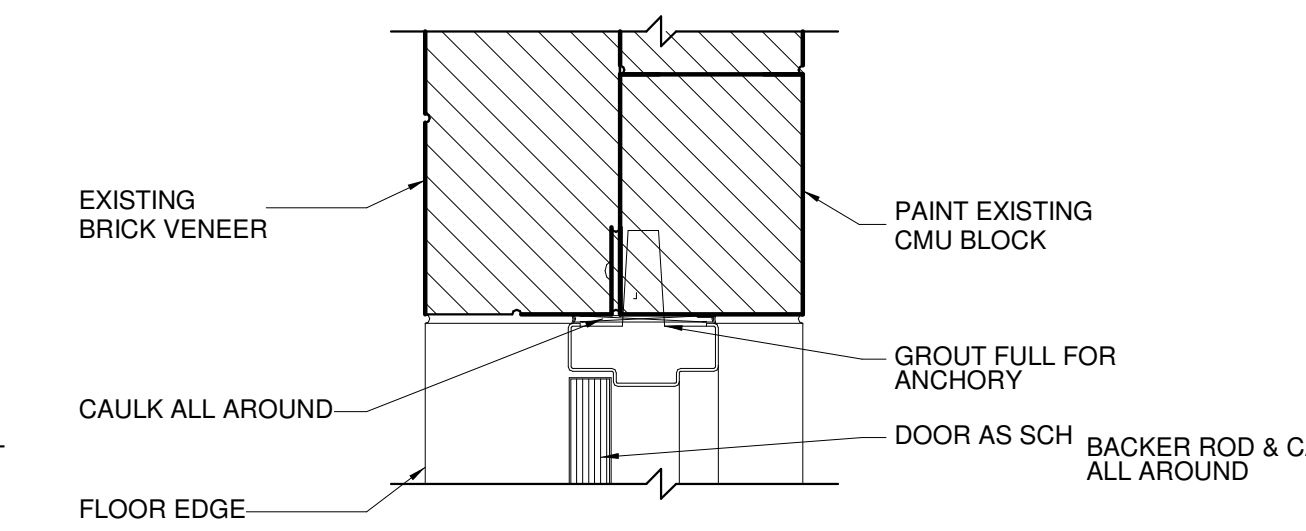
16 INT. DOOR/WIND HEAD DETAIL
1 1/2" = 1'-0"



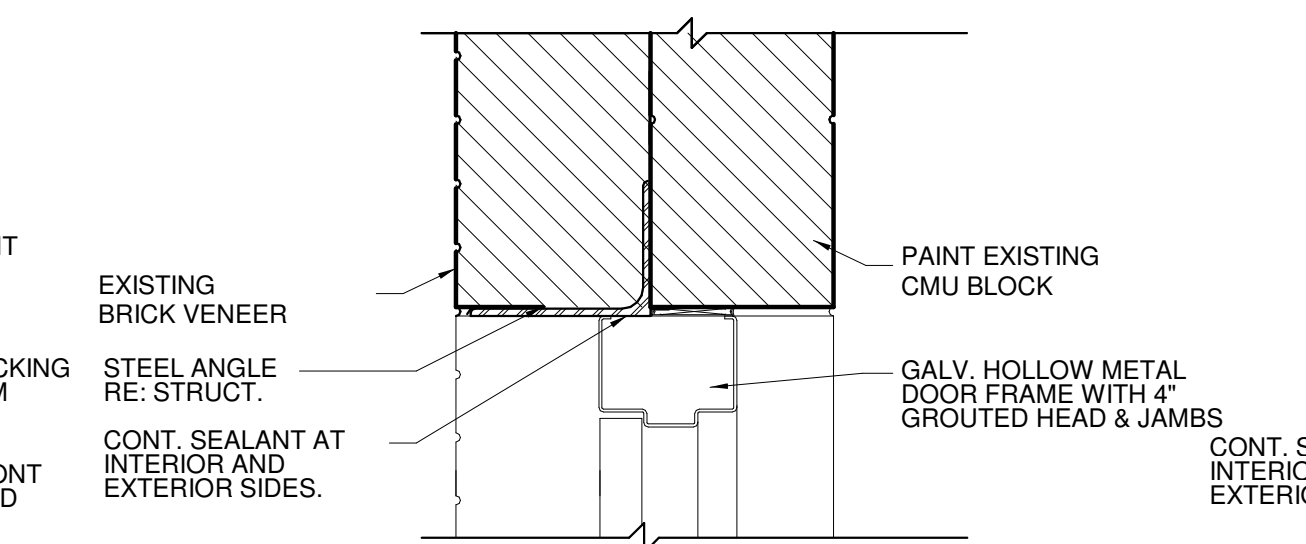
14 WINDOW JAMB DETAIL
1 1/2" = 1'-0"



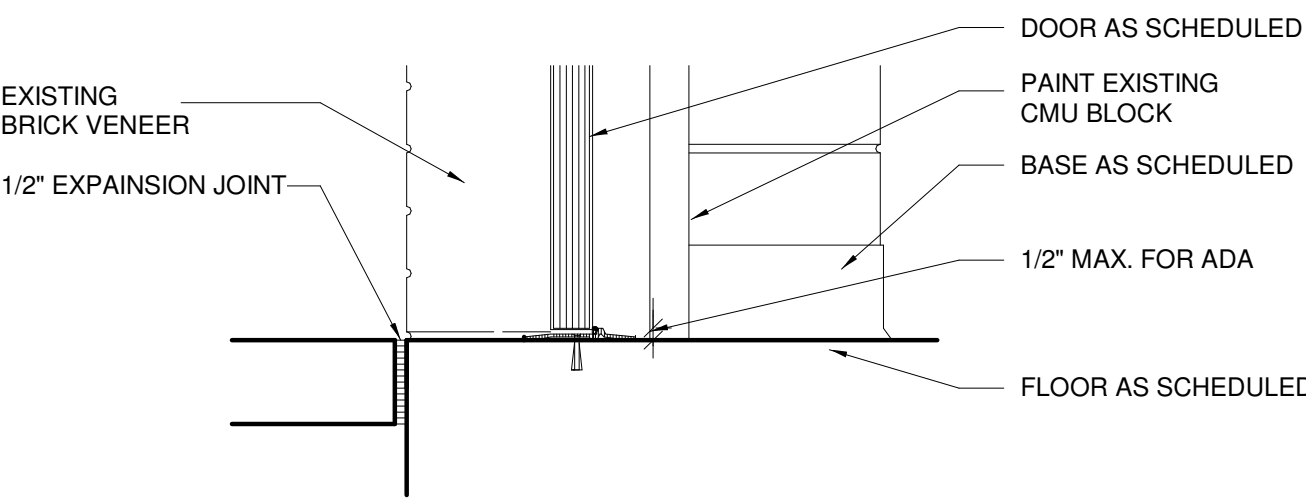
13 WINDOW HEAD DETAIL
1 1/2" = 1'-0"



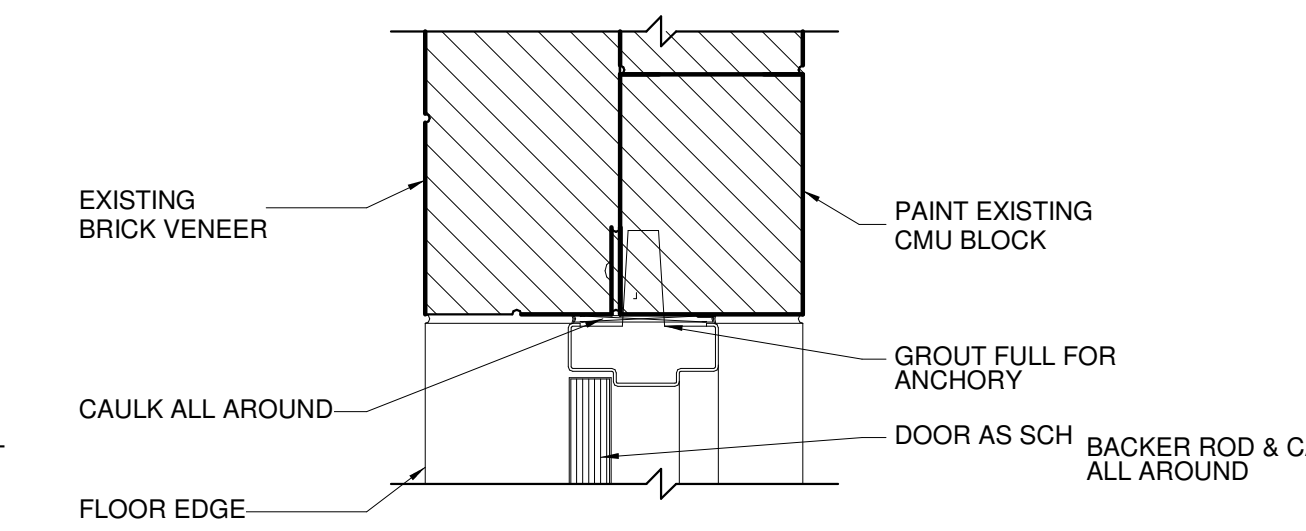
8 DOOR JAMB DETAIL
1 1/2" = 1'-0"



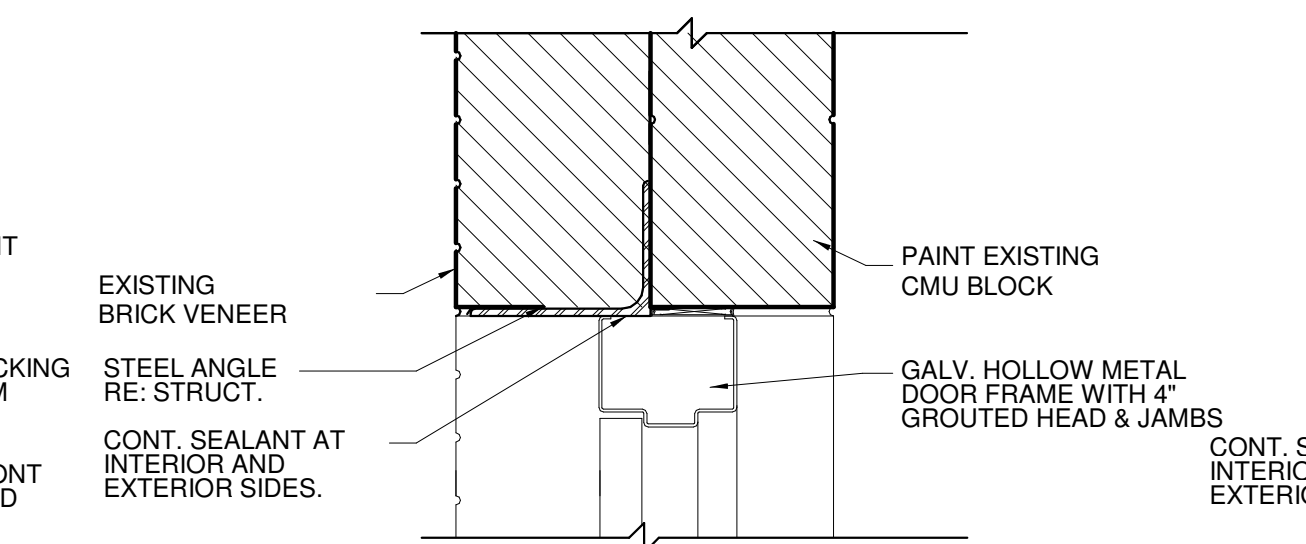
7 DOOR HEAD DETAIL
1 1/2" = 1'-0"



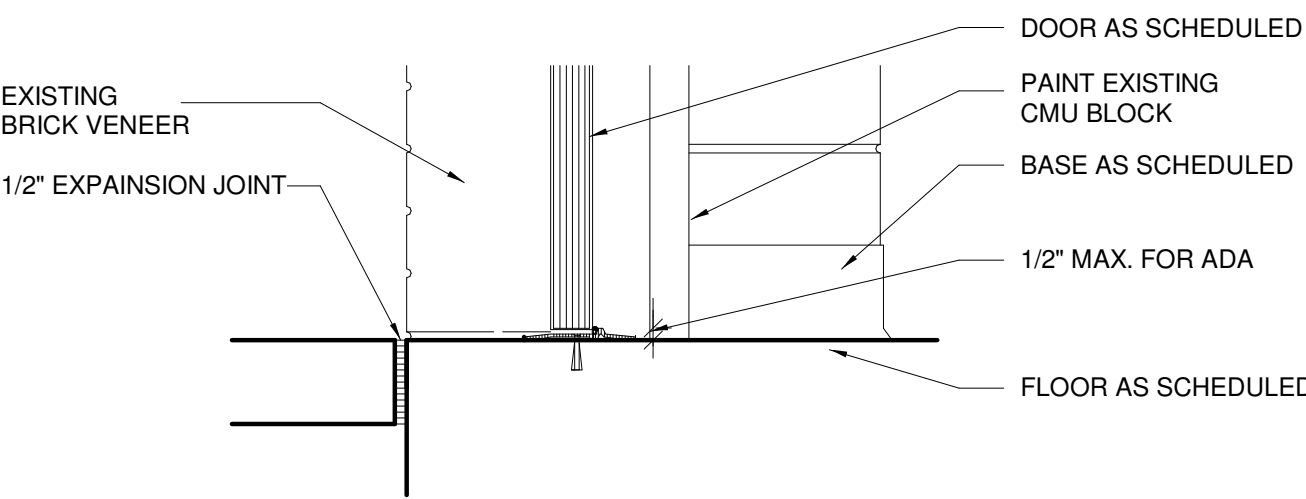
9 DOOR SILL DETAIL
1 1/2" = 1'-0"



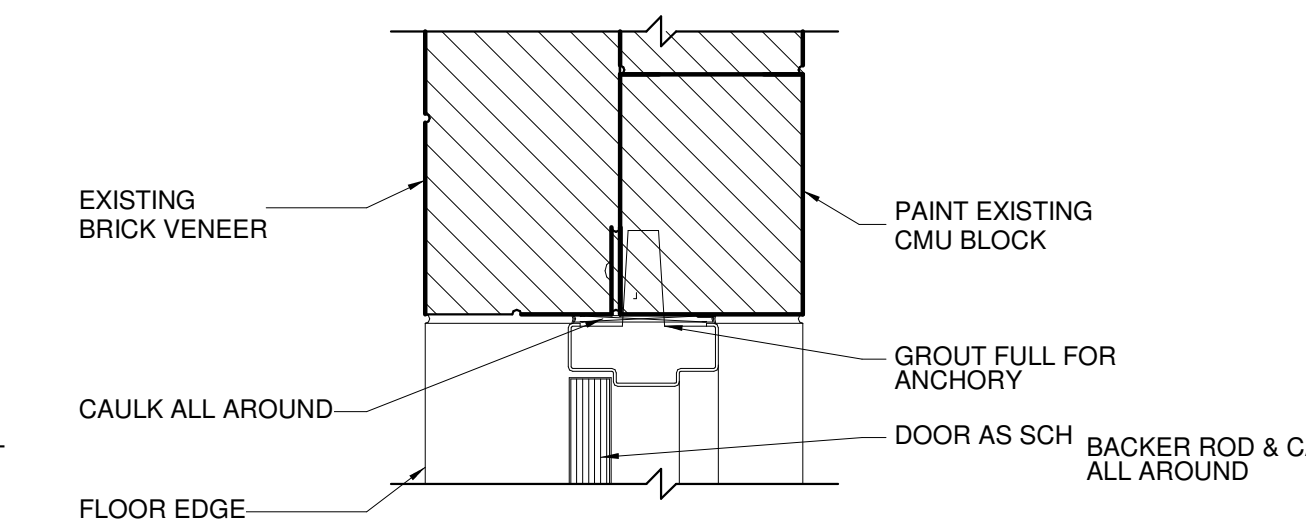
2 DOOR JAMB DETAIL
1 1/2" = 1'-0"



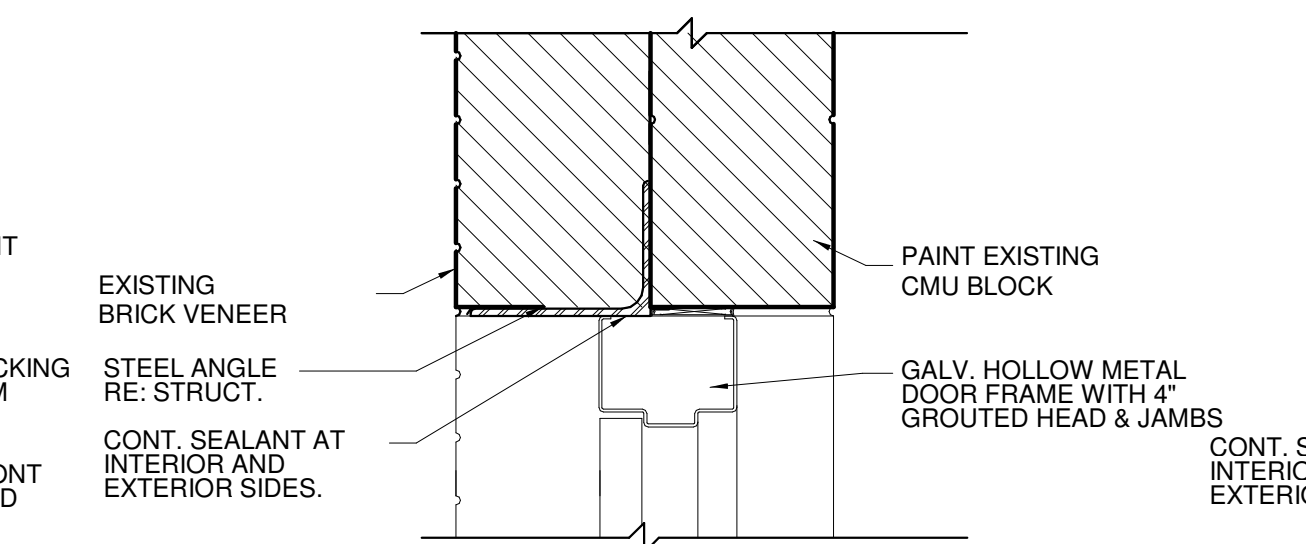
1 DOOR HEAD DETAIL
1 1/2" = 1'-0"



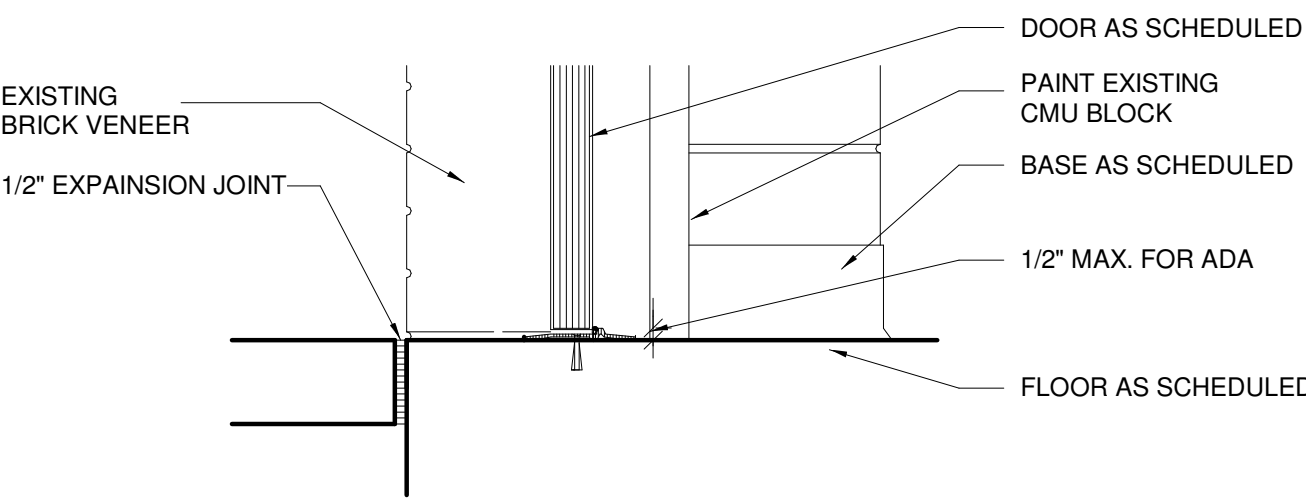
3 DOOR SILL DETAIL
1 1/2" = 1'-0"



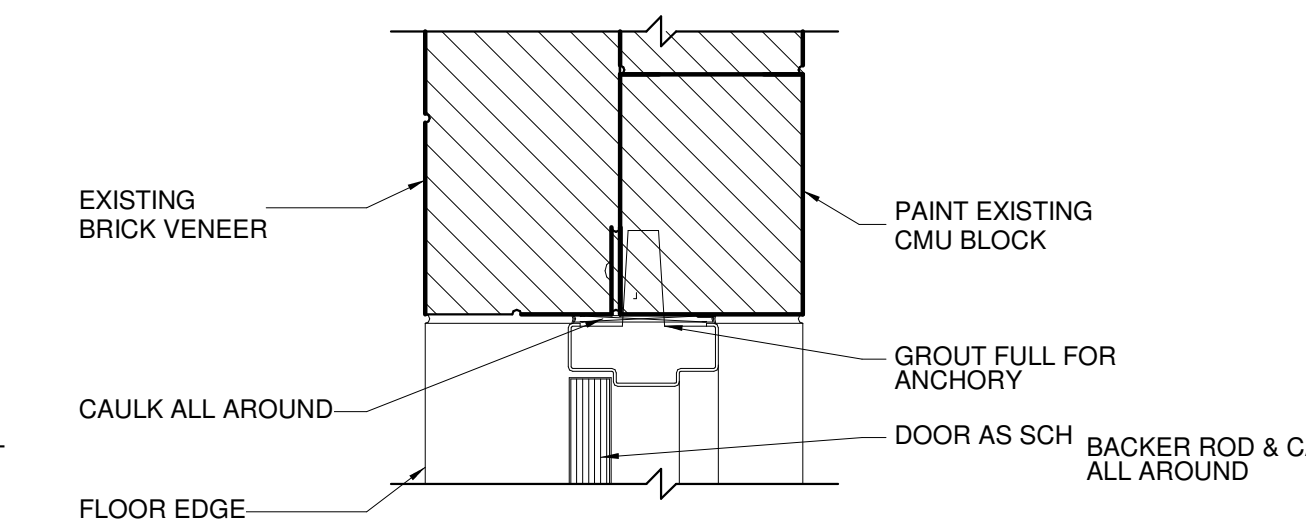
4 DOOR JAMB DETAIL
1 1/2" = 1'-0"



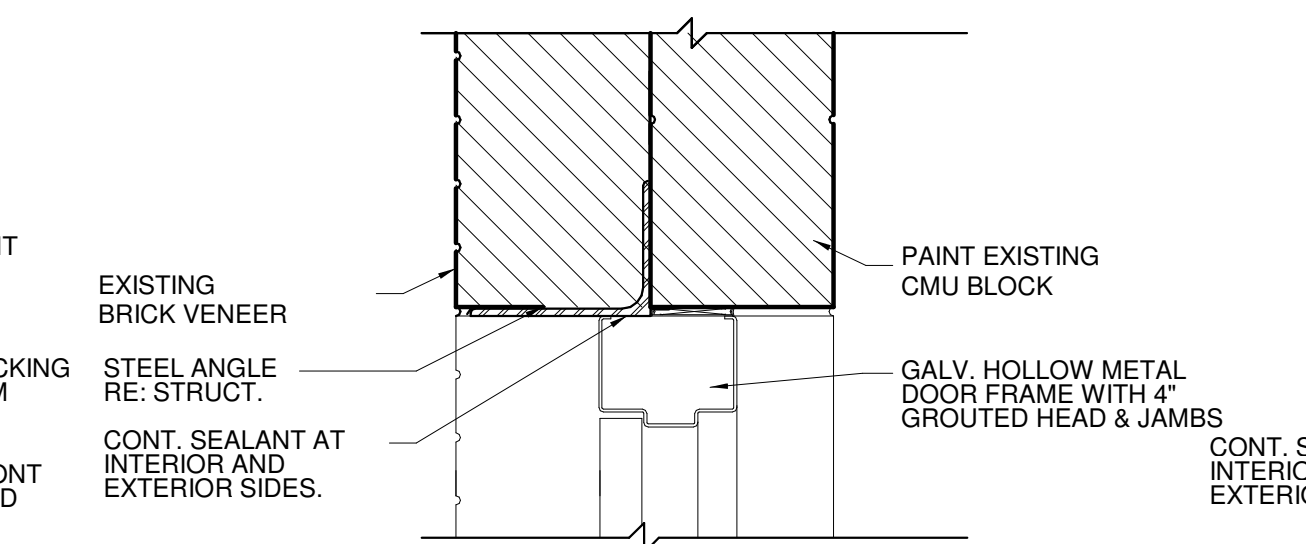
5 DOOR HEAD DETAIL
1 1/2" = 1'-0"



6 DOOR SILL DETAIL
1 1/2" = 1'-0"



11 DOOR JAMB DETAIL
1 1/2" = 1'-0"



12 DOOR HEAD DETAIL
1 1/2" = 1'-0"

ROOM SCHEDULE - SECTION A							
Number	Name	FINISH KEY NOTE	WALLS	BASE	FLOOR	CEILING	Comments
A100	HALLWAY	F1	W-1	B-1	CT-1	AC-1	
A101	IDD CUBICLES	F2	W-1	B-1	CT-1	GB-1	
A102	UNISEX RESTROOM	F3	W-1	B-2	CT-2	GB-2	
A103	OPEN AREA	F2	W-1	B-1	CT-1	GB-1	
A104	RESTROOM	F3	W-1	B-2	CT-2	GB-2	
A105	OFFICE	F2	W-1	B-1	CT-1	GB-1	
A106	OFFICE SUPERVISOR	F2	W-1	B-1	CT-1	GB-1	
A107	STORAGE	F2	W-1	B-1	CT-1	GB-1	
A108	AC 4/5	F4	W-1	B-1	SC	GB-2	
A109	OFFICE SUPERVISOR	F2	W-1	B-1	CT-1	GB-1	
A110	OFFICE SUPERVISOR	F2	W-1	B-1	CT-1	GB-1	
A111	RESTROOM	F3	W-1	B-2	CT-2	GB-2	
A112	AC 6/7	F4	W-1	B-1	SC	GB-2	
A113	IDD CUBICLES	F2	W-1	B-1	CT-1	GB-1	
A114	UNISEX RESTROOM	F3	W-1	B-2	CT-2	GB-2	
A115	STORAGE	F2	W-1	B-1	CT-1	GB-1	
A116	IDD CUBICLES	F2	W-1	B-1	CT-1	GB-1	
A117	AC 8/9	F4	W-1	B-1	SC	GB-2	
A118	AC 3/ELEC.	F4	W-1	B-1	SC	GB-2	
A119	OFFICE SUPERVISOR	F2	W-1	B-1	CT-1	GB-1	
A120	OFFICE MANAGER	F2	W-1	B-1	CT-1	GB-1	
A121	AC 1/2	F4	W-1	B-1	SC	GB-2	
A122	OFFICE INTAKE	F2	W-1	B-1	CT-1	GB-1	
A123	OFFICE INTAKE	F2	W-1	B-1	CT-1	GB-1	
A124	STORAGE	F2	W-1	B-1	CT-1	GB-1	
A125	TCCOOMMI	F2	W-1	B-1	CT-1	GB-1	
A126	TCCOOMMI SUPERVISOR	F2	W-1	B-1	CT-1	GB-1	
A127	STORAGE	F2	W-1	B-1	CT-1	GB-1	
A128	UNISEX RESTROOM	F3	W-1	B-2	CT-2	GB-2	
A129	OFFICE C/S/IDD OA (2)	F2	W-1	B-1	CT-1	GB-1	
A130	UNISEX RESTROOM	F3	W-1	B-2	CT-2	GB-2	
A131	MAIL/COPY ROOM	F2	W-1	B-1	CT-1	GB-1	
A132	OFFICE HR	F2	W-1	B-1	CT-1	GB-1	
A133	AC 10/11	F4	W-1	B-1	SC	GB-2	
A134	TCCOMMI	F2	W-1	B-1	CT-1	GB-1	

ROOM SCHEDULE - SECTION B							
Number	Name	FINISH KEY NOTE	WALLS	BASE	FLOOR	CEILING	Comments
B100	HALLWAY	F1	W-1	B-1	CT-1	AC-1	
B101	HALLWAY	F1	W-1	B-1	CT-1	AC-1	
B101	HALLWAY	F1	W-1	B-1	CT-1	AC-1	
B102	HALLWAY	F1	W-1	B-1	CT-1	AC-1	
B103	HALLWAY	F1	W-1	B-1	CT-1	AC-1	
B104	HALLWAY	F1	W-1	B-1	CT-1	AC-1	
B105	RECEPTIONIST	F1	W-1	B-1	CT-1	AC-1	
B106	WAITING AREA	F1	W-1	B-1	CT-1	AC-1	
B107	COPY/MAIL ROOM	F2	W-1	B-1	CT-1	GB-1	
B108	MAINTENANCE OFFICE	F2	W-1	B-1	CT-1	GB-1	
B109	UNASSIGNED	F1	W-1	B-1	CT-1	AC-1	
B110	FINANCIAL STAFF	F2	W-1	B-1	CT-1	GB-1	
B111	IDD RESPITE ROOM	F2	W-1	B-1	CT-1	GB-1	
B112	CLOSET	F2	W-1	B-1	CT-1	GB-1	
B113	MAINTENANCE EQ	F4	W-1	B-1	SC	GB-2	
B114	JANITORIAL SUPPLIES	F4	W-1	B-1	SC	GB-2	
B115	MOP SINK	F4	W-1	B-1	SC	GB-2	
B116	RESTROOM	F3	W-1	B-2	CT-2	GB-2	
B117	MECH. ROOM	F4	W-1	B-1	SC	GB-2	
B118	STORAGE	F2	W-1	B-1	CT-1	GB-1	
B119	AC	F4	W-1	B-1	SC	GB-2	
B120	WH	F4	W-1	B-1	SC	GB-2	
B121	ELEC ROOM/ MDF	F4	W-1	B-1	SC	GB-2	
B122	CONFERENCE ROOM A	F2	W-1	B-1	CT-1	GB-1	
B123	CONFERENCE ROOM B	F2	W-1	B-1	CT-1	GB-1	
B124	BREAK ROOM	F2	W-1	B-1	CT-1	GB-1	
B125	OFFICE SHARED(4)	F2	W-1	B-1	CT-1	GB-1	
B126	CLINIC	F2	W-1	B-1	CT-1	GB-1	
B127	RECEPTIONIST	F1	W-1	B-1	CT-1	AC-1	
B128	PRIVATE OFFICE	F2	W-1	B-1	CT-1	GB-1	
B129	PRIVATE OFFICE	F2	W-1	B-1	CT-1	GB-1	
B130	PRIVATE OFFICE	F2	W-1	B-1	CT-1	GB-1	
B131	UNISEX RESTROOM	F3	W-1	B-2	CT-2	GB-2	
B132	UNISEX RESTROOM	F3	W-1	B-2	CT-2	GB-2	
B133	UNISEX RESTROOM	F3	W-1	B-2	CT-2	GB-2	
B134	UNASSIGNED	F2	W-1	B-1	CT-1	GB-1	
B135	MIS	F2	W-1	B-1	CT-1	GB-1	
B136	RISER ROOM	F4	W-1	B-1	SC	GB-2	
B137	MOP ROOM	F4	W-1	B-1	SC	GB-2	
B138	WH	F4	W-1	B-1	SC	GB-2	
B139	AC	F4	W-1	B-1	SC	GB-2	
B140	OPEN AREA	F2	W-1	B-1	CT-1	GB-1	
B141	BEDROOM	F2	W-1	B-1	CT-1	GB-1	
B142	BEDROOM	F2	W-1	B-1	CT-1	GB-1	
B143	RESTROOM	F3	W-1	B-2	CT-2	GB-2	
B144	AC 10/11	F4	W-1	B-1	SC	GB-2	
B145	GROUP COUNSELING ROOM	F2	W-1	B-1	CT-1	GB-1	
B146	RESTROOM	F3	W-1	B-2	CT-2	GB-2	
B147	HALLWAY	F1	W-1	B-1	CT-1	AC-1	
B148	HALLWAY	F1	W-1	B-1	CT-1	AC-1	

ROOM SCHEDULE - SECTION C							
Number	Name	FINISH KEY NOTE	WALLS	BASE	FLOOR	CEILING	Comments
C100	HALLWAY	F1	W-1	B-1	CT-1	AC-1	
C101	KITCHEN	F2	W-1	B-1	CT-1	GB-1	
C102	PANTRY	F2	W-1	B-1	CT-1	GB-1	
C103	DINING ROOM	F2	W-1	B-1	CT-1	GB-1	
C104	STORAGE	F2	W-1	B-1	CT-1	GB-1	
C105	RESTROOM	F3	W-1	B-2	CT-2	GB-2	
C106	BEDROOM	F2	W-1	B-1	CT-1	GB-1	
C107	BEDROOM	F2	W-1	B-1	CT-1	GB-1	
C108	AC 1/2	F4	W-1	B-1	SC	GB-2	
C109	OPEN AREA	F2	W-1	B-1	CT-1	GB-1	
C110	UNASSIGNED	F1	W-1	B-1	CT-1	AC-1	
C111	ELEC.	F4	W-1	B-1	SC	GB-2	
C112	OFFICE	F2	W-1	B-1	CT-1	GB-1	
C113	AC 8/9	F4	W-1	B-1	SC	GB-2	
C114	OPEN AREA	F2	W-1	B-1	CT-1	GB-1	
C115	BEDROOM	F2	W-1	B-1	CT-1	GB-1	
C116	BEDROOM	F2	W-1	B-1	CT-1	GB-1	
C117	RESTROOM	F3	W-1	B-2	CT-2	GB-2	
C118	BEDROOM	F2	W-1	B-1	CT-1	GB-1	
C119	RESTROOM	F3	W-1	B-2	CT-2	GB-2	
C120	BEDROOM	F2	W-1	B-1	CT-1	GB-1	
C121	W/D	F3	W-1	B-2	CT-2	GB-2	
C122	RESTROOM	F3	W-1	B-2	CT-2	GB-2	
C123	OFFICE	F2	W-1	B-1	CT-1	GB-1	
C124	OPEN AREA	F2	W-1	B-1	CT-1	GB-1	
C125	OFFICE	F2	W-1	B-1	CT-1	GB-1	
C126	AC 6/7	F4	W-1	B-1	SC	GB-2	
C127	LEISURE ROOM	F2	W-1	B-1	CT-1	GB-1	
C128	BEDROOM	F2	W-1	B-1	CT-1	GB-1	
C129	BEDROOM	F2	W-1	B-1	CT-1	GB-1	
C130	RESTROOM	F3	W-1	B-2	CT-2	GB-2	

ROOM FINISH SCHEDULE							
KEY NOTE	WALLS	BASE	FLOOR	CEILING	MISC.	REMARKS	

F1	W-1	B-1	CT-1	AC-1		WALL PAINT LATEX
F2	W-1	B-1	CT-1	GB-1		WALL PAINT LATEX
F3	W-1	B-2	CT-2	GB-2		WALL PAINT EPOXY IN RESTROOMS
F4	W-1	B-1	SC	GB-2		WALL PAINT EPOXY

BASE FINISH	
TYPE	FINISH DESCRIPTION

B1	4" RUBBER COVE BASE
B2	4-1/4" CERAMIC TILE COVE BASE
B3	NONE

CEILING FINISH	
TYPE	FINISH DESCRIPTION

AC-1	2'X2' LAY-IN ACOUSTICAL CEILING TILE SYSTEM
GB-1	TAPE, FLOAT, TEXTURE AND PAINT EXISTING GYP. BD. CEILING
GB-2	5/8" THICK, MOISTURE RESISTANT GYP. BD. ON SUSPENDED GRID SYSTEM (2-LAYERS OF 5/8" GYP BD AT FIRE RATED CONDITIONS)

FLOOR FINISH	
TYPE	FINISH DESCRIPTION

CT-1	PORCELAIN TILE
CT-2	CERAMIC MOSAIC TILE (2"X2")
SC	SEALED CONCRETE

WALL FINISH	
TYPE	FINISH DESCRIPTION

W-1	5/8" GYP. BD. T.F.T.&P.
W-2	CERAMIC TILE 4-1/4"X4-1/4" WAINSCOT UP TO 48" HIGH WITH GYP. BD. (MOISTURE RES.) T.F.T. & P. ABOVE

GENERAL FINISH NOTES

- ALL FINISH MATERIALS MUST MEET THE FLAME SPREAD RATINGS PER THE BUILDING CODE.
- REFER TO INTERIOR ELEVATIONS FOR SPECIFIC MATERIAL LOCATIONS.
- PAINT ALL EXPOSED DUCTWORK, CONDUIT, ELECTRICAL EQUIPMENT, ETC TO MATCH ADJACENT SURFACES.
- PAINT ALL NON-FACTORY FINISHED EXPOSED METAL.
- REFER TO TYPICAL FLOORING TRANSITION DETAILS FOR ALL FLOORING MATERIALS.
- FLOORING TRANSITIONS AT DOORS SHOULD BE LOCATED UNDER THE DOOR IN THE CLOSED POSITION, UNLESS NOTED OTHERWISE.
- CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING FINISHED FLOORING SURFACES FROM DAMAGE DURING ALL CONSTRUCTION PHASES.
- PROVIDE BULLNOSE TRIM AT TRANSITIONS FROM CERAMIC WALL TILE TO OTHER MATERIAL, UNLESS NOTED OTHERWISE.
- REFER TO REFLECTED CEILING PLANS FOR CEILING HEIGHTS.
- ALL ELECTRICAL DEVICE COVERS ARE TO BE WHITE UNLESS NOTED OTHERWISE.
- CARPET PATTERNS TO RUN PARALLEL TO CORRIDOR, UNLESS NOTED OTHERWISE.
- ALL HOLLOW METAL DOOR FRAMES TO BE PAINTED TO MATCH ADJACENT WALL COLOR.



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HOP VILLA RENOVATIONS

TROPICAL TEXAS BEHAVIORAL HEALTH

HARLINGEN, TX

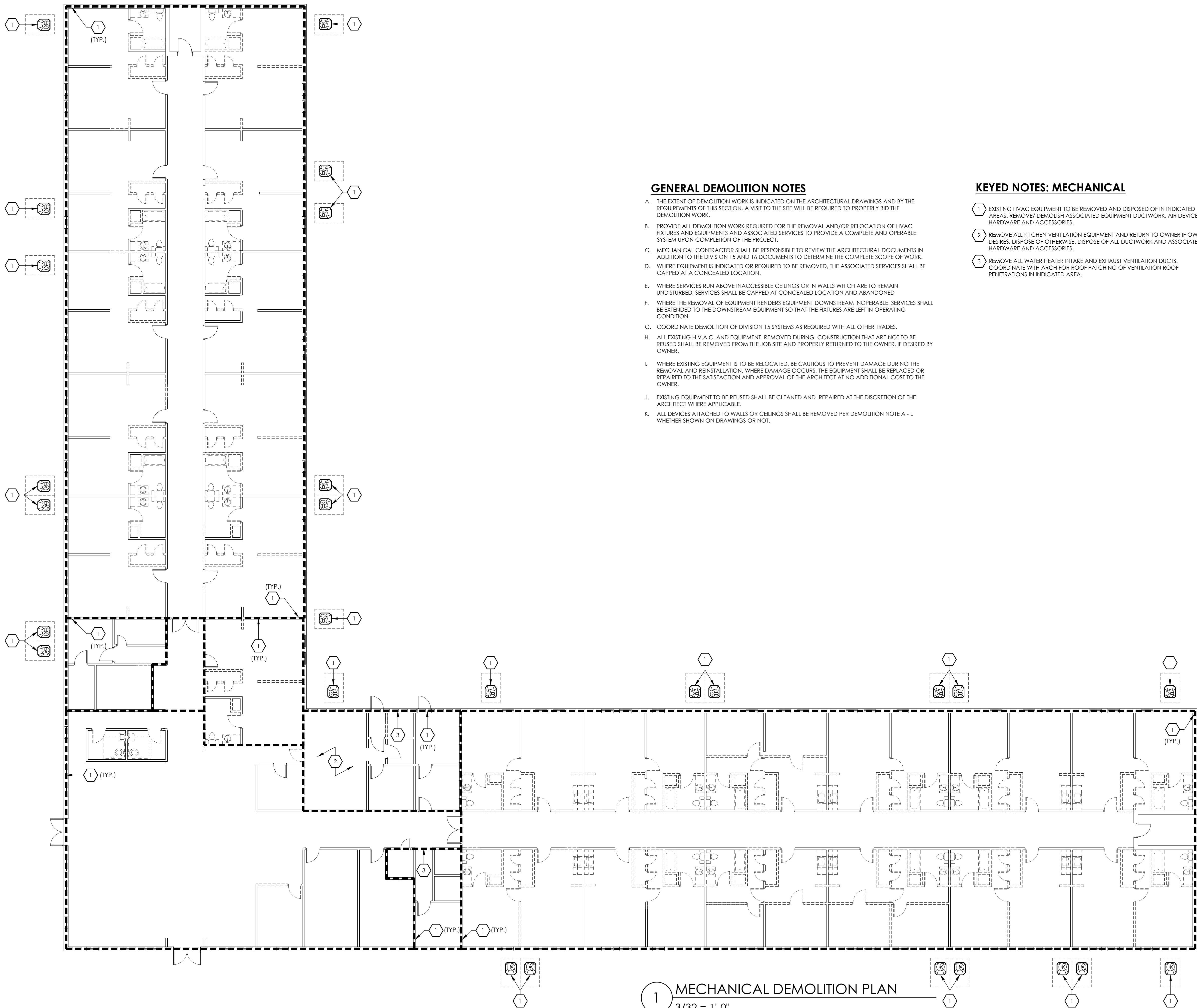
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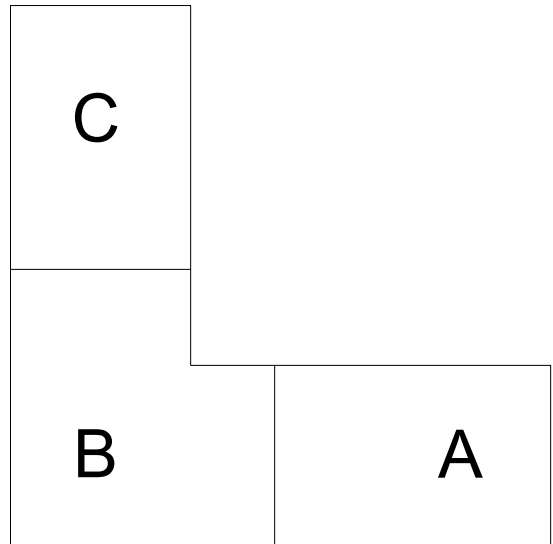


GENERAL DEMOLITION NOTES

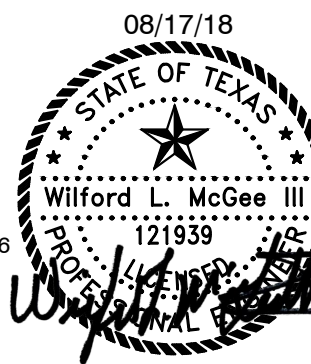
- A. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE ARCHITECTURAL DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE WILL BE REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
- B. PROVIDE ALL DEMOLITION WORK REQUIRED FOR THE REMOVAL AND/OR RELOCATION OF HVAC FIXTURES AND EQUIPMENTS AND ASSOCIATED SERVICES TO PROVIDE A COMPLETE AND OPERABLE SYSTEM UPON COMPLETION OF THE PROJECT.
- C. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW THE ARCHITECTURAL DOCUMENTS IN ADDITION TO THE DIVISION 15 AND 16 DOCUMENTS TO DETERMINE THE COMPLETE SCOPE OF WORK.
- D. WHERE EQUIPMENT IS INDICATED OR REQUIRED TO BE REMOVED, THE ASSOCIATED SERVICES SHALL BE CAPPED AT A CONCEALED LOCATION.
- E. WHERE SERVICES RUN ABOVE INACCESSIBLE CEILINGS OR IN WALLS WHICH ARE TO REMAIN UNDISTURBED, SERVICES SHALL BE CAPPED AT CONCEALED LOCATION AND ABANDONED.
- F. WHERE THE REMOVAL OF EQUIPMENT RENDERS EQUIPMENT DOWNSTREAM INOPERABLE, SERVICES SHALL BE EXTENDED TO THE DOWNSTREAM EQUIPMENT SO THAT THE FIXTURES ARE LEFT IN OPERATING CONDITION.
- G. COORDINATE DEMOLITION OF DIVISION 15 SYSTEMS AS REQUIRED WITH ALL OTHER TRADES.
- H. ALL EXISTING H.V.A.C. AND EQUIPMENT REMOVED DURING CONSTRUCTION THAT ARE NOT TO BE REUSED SHALL BE REMOVED FROM THE JOB SITE AND PROPERLY RETURNED TO THE OWNER, IF DESIRED BY OWNER.
- I. WHERE EXISTING EQUIPMENT IS TO BE RELOCATED, BE CAUTIOUS TO PREVENT DAMAGE DURING THE REMOVAL AND REINSTALLATION. WHERE DAMAGE OCCURS, THE EQUIPMENT SHALL BE REPLACED OR REPAIRED TO THE SATISFACTION AND APPROVAL OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
- J. EXISTING EQUIPMENT TO BE REUSED SHALL BE CLEANED AND REPAIRED AT THE DISCRETION OF THE ARCHITECT WHERE APPLICABLE.
- K. ALL DEVICES ATTACHED TO WALLS OR CEILINGS SHALL BE REMOVED PER DEMOLITION NOTE A - L WHETHER SHOWN ON DRAWINGS OR NOT.

KEYED NOTES: MECHANICAL

- 1 EXISTING HVAC EQUIPMENT TO BE REMOVED AND DISPOSED OF IN INDICATED AREAS. REMOVE/DEMOLISH ASSOCIATED EQUIPMENT DUCTWORK, AIR DEVICES, HARDWARE AND ACCESSORIES.
- 2 REMOVE ALL KITCHEN VENTILATION EQUIPMENT AND RETURN TO OWNER IF OWNER DESIRES. DISPOSE OF OTHERWISE. DISPOSE OF ALL DUCTWORK AND ASSOCIATED HARDWARE AND ACCESSORIES.
- 3 REMOVE ALL WATER HEATER INTAKE AND EXHAUST VENTILATION DUCTS. COORDINATE WITH ARCH FOR ROOF PATCHING OF VENTILATION ROOF PENETRATIONS IN INDICATED AREA.



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TROPICAL TEXAS BEHAVIORAL HEALTH
HARLINGEN, TX.

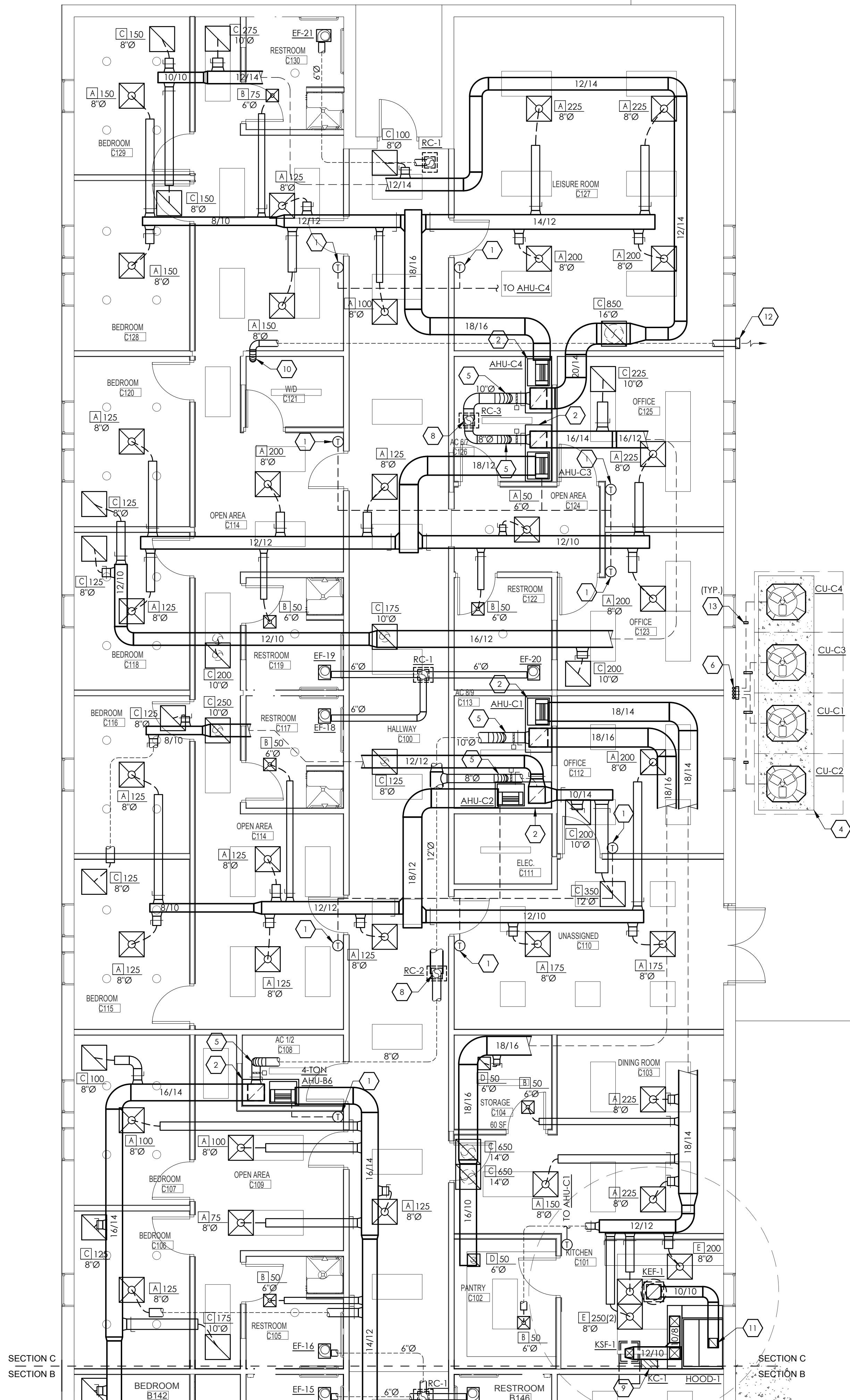
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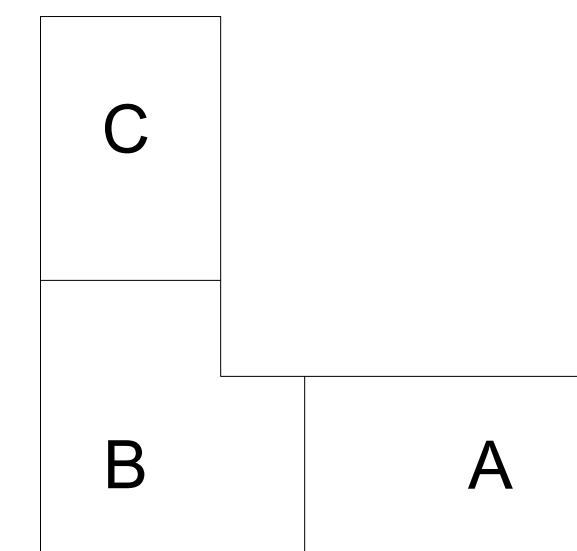
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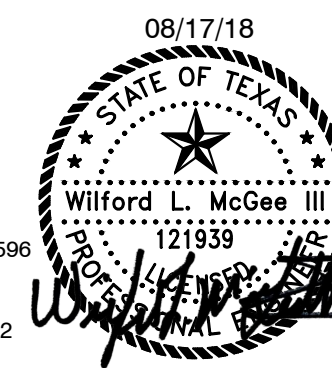
KEYED NOTES: MECHANICAL

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- 3 EXHAUST DUCT UP TO ROOF MOUNTED EXHAUST FAN.
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- 6 PROVIDE W/ REFRIGERANT LINE WALL PENETRATION HOUSING/PANEL EQUAL TO "WALL VAULT" MADE BY "ROOF PENETRATION HOUSINGS, LLC". WALL PANEL TO BE SIZED TO ACCOMMODATE REFRIGERANT LINES & CONDUIT. COORDINATE W/ ELECTRICAL. REFRIGERANT CIRCUIT ACCESS PORTS LOCATED OUTDOORS SHALL BE TITLED WITH LOCK-TYPE TAMPER-RESISTANT CAPS OR SHALL BE OTHERWISE SCORED TO PREVENT UNAUTHORIZED ACCESS.
- 7 MOUNT UNIT HEATER RECESSED IN WALL OR SURFACE MOUNTED ON WALL @ 4'-0" A.F.F. PROVIDE W/ ACCESSORIES AS REQUIRED FOR WALL MOUNTING APPLICATION.
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- 13 PROVIDE ALUMINUM PIPING SUPPORTS AT EVERY 4' FEET. PROVIDE ALUMINUM JACKETING ON ALL LINES EXTERIOR TO THE BUILDING.



1 MECHANICAL FLOOR PLAN SECTION C
3/16 = 1'-0"

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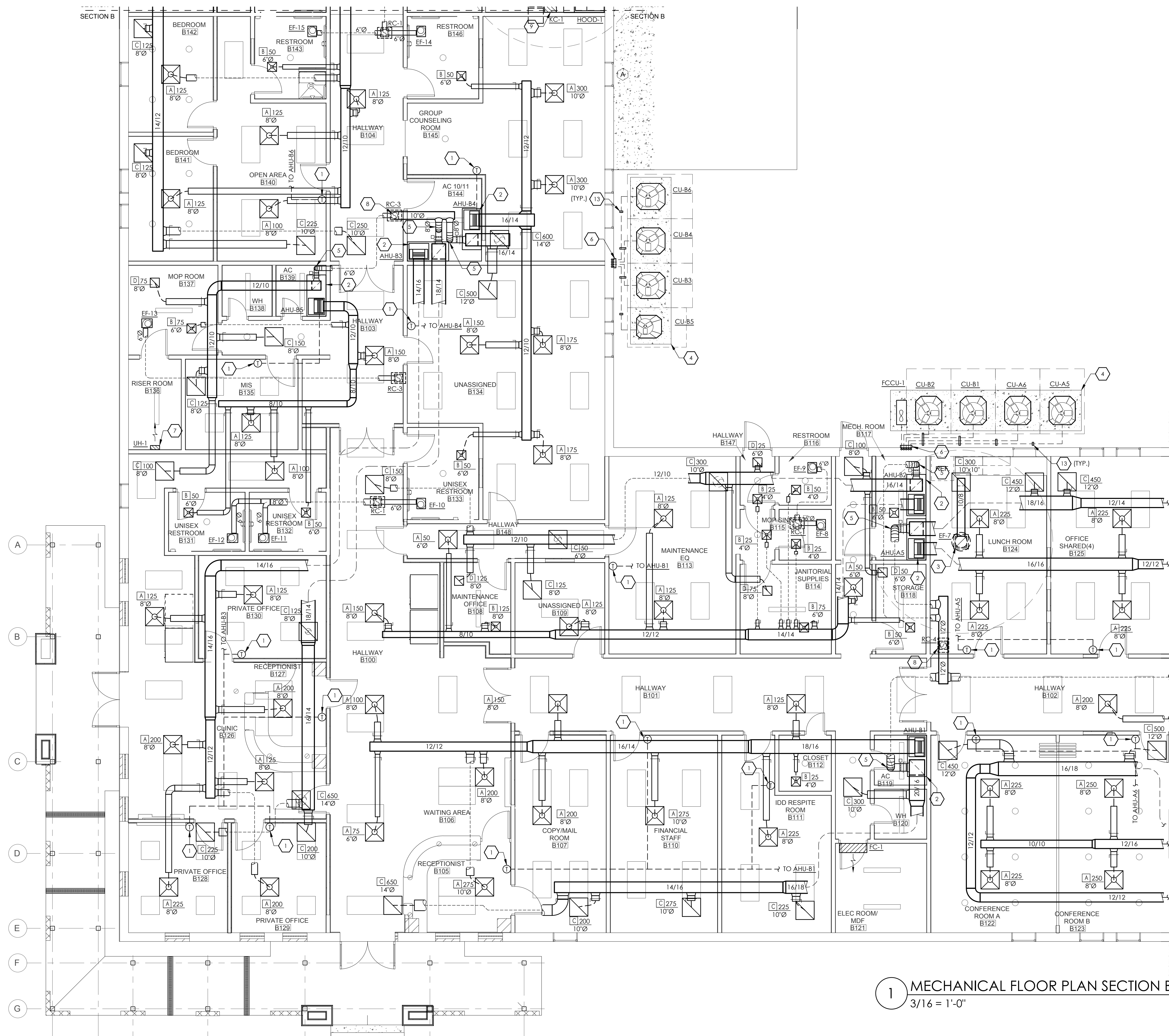
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HOP VILLA RENOVATIONS

TROPICAL TEXAS BEHAVIORAL HEALTH HARLINGEN, TX.

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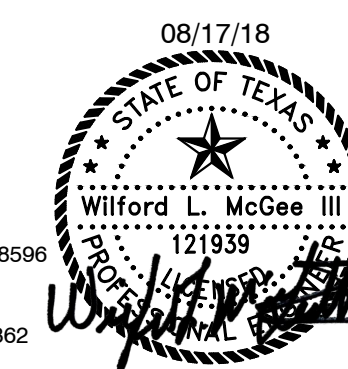
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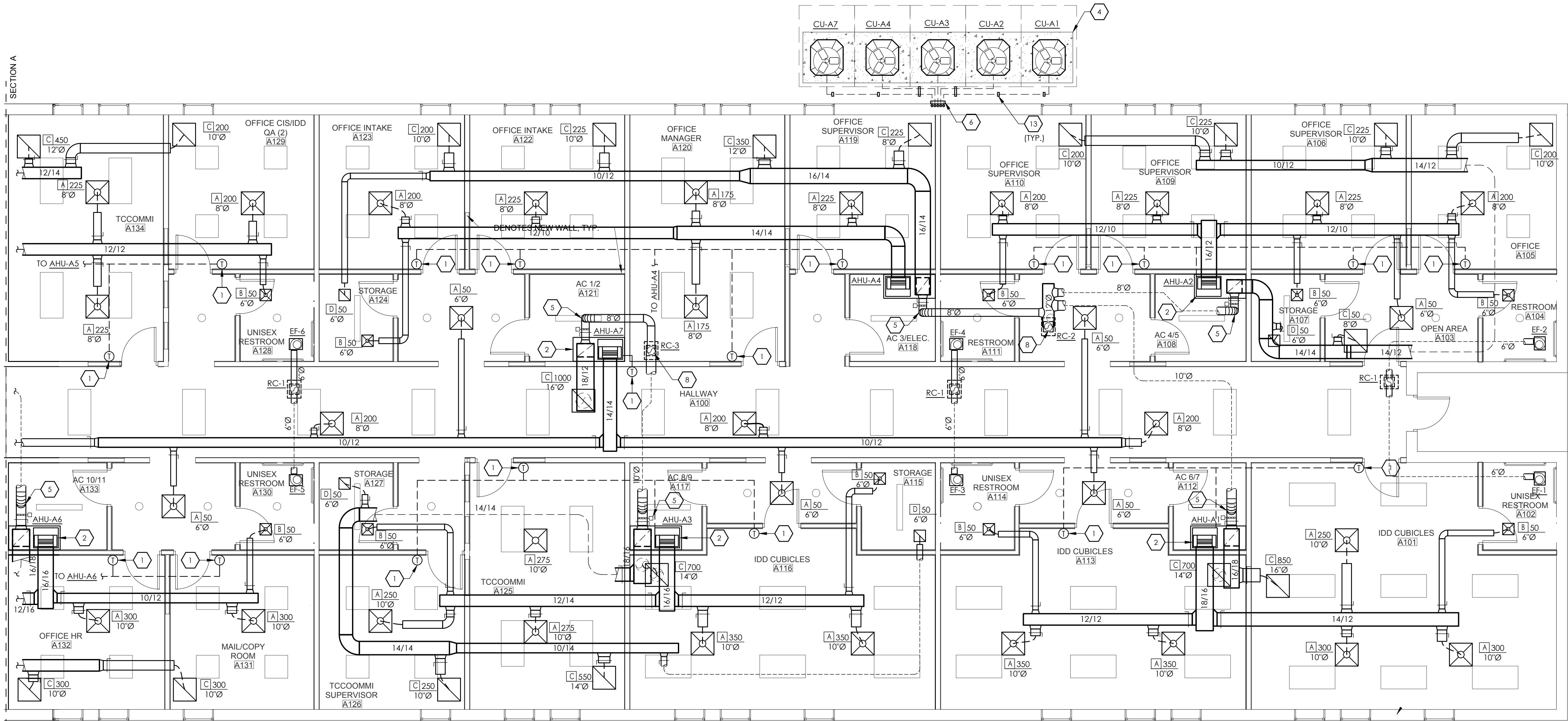
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1 MECHANICAL FLOOR PLAN SECTION A
3/16 = 1'-0"

C

B

A

HOP VILLA RENOVATIONS

TROPICAL TEXAS BEHAVIORAL HEALTH
HARLINGEN, TX.

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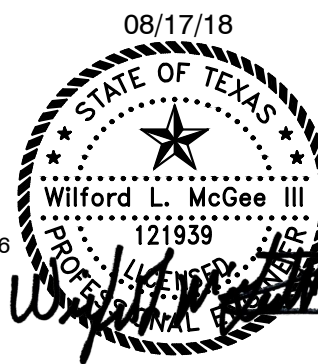
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GENERAL NOTES - MECHANICAL:

- (1) THE MECHANICAL CONTRACTOR IS FULLY RESPONSIBLE FOR PERFORMING THE WORK IN FULL COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES UNDER THIS SECTION OF THE CONTRACT. IF THE CONTRACTOR DETERMINES THAT THE CONTRACT DOCUMENTS AND PLANS ARE NOT IN COMPLIANCE WITH THE APPLICABLE LOCAL CODES, HE/SHE SHALL INFORM THE ARCHITECT PRIOR TO CONSTRUCTION START FOR DIRECTION. FAILURE TO DO SO SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO MEET APPLICABLE LOCAL CODES, AND RE-WORK SHALL BE AT CONTRACTOR'S EXPENSE.
- (2) CONTRACTOR SHALL HANG AND INSTALL ALL DUCTWORK FLUSH WITH THE BUILDING STRUCTURE TO ACCOMMODATE NEW CEILINGS. CONTRACTOR SHALL COORDINATE ALL INSTALLATION WORK WITH ARCHITECTURAL AND ELECTRICAL DESIGN. ALL DUCTWORK SHALL BE MODIFIED AS NECESSARY AND REQUIRED TO FIT AROUND BUILDING STRUCTURES, ARCHITECTURAL BUILD-OUT AND ELECTRICAL CABLE TRAY INSTALLATIONS. MECHANICAL CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE WORK SCOPE OF OTHER TRADES AND PARTICIPATE IN COORDINATING ALL CONSTRUCTION EFFORTS.
- (3) CONNECT EACH DIFFUSER TO THE MAIN DISTRIBUTION DUCTS WITH A FLEX-DUCT SECTION; CONNECTIONS SHALL BE COMPLETED IN ACCORDANCE WITH THE DETAIL. EACH FLEX-DUCT CONNECTION SHALL INCLUDE A BUTTERFLY DAMPER TO BE INSTALLED AT THE TRUNK DUCT.
- (4) CONTRACTOR SHALL PROVIDE ALL DUCTWORK REQUIRED TO COMPLETE THE HVAC SYSTEM. TIE IN BRANCH DUCTS TO MAIN DUCTS WITH SHEET METAL FLANGES. FLANGE CONNECTION SHALL BE FASTENED WITH CRIMPED SHEET METAL STRIPS AND SEALED WITH SILICONE CAULK.
- (5) CONTRACTOR SHALL SUPPLY AND INSTALL FIRE DAMPERS AND ACCESS DOORS IN THE HORIZONTAL DUCTS WHERE THEY PENETRATE FIRE WALLS & BARRIERS.
- (6) ALL OPENINGS CUT IN MASONRY AND PLASTER WALLS OR CONCRETE FLOORS SHALL BE CORE DRILLED OR SAWED WHEN POSSIBLE. CONTRACTOR SHALL CHECK BUILDING CONSTRUCTION BEFORE MAKING PENETRATIONS TO AVOID CUTTING THROUGH STRUCTURAL BEAMS AND REINFORCING. CONTRACTOR SHALL INFORM THE ENGINEER IF REINFORCING IS CUT OR DAMAGED WHILE MAKING OPENINGS. CONTRACTOR SHALL REINFORCE ALL OPENINGS AS REQUIRED BY DRAWINGS AND SPECIFICATIONS. PATCH AND SEAL OPENINGS WITH 8000 PSI CEMENT GROUT. INSTALL DECORATIVE TRIM (EQUIPMENT FLANGES, FRAMING OR ESCUTCHEONS) AROUND OPENINGS IN FINISHED AREAS. COORDINATE ALL CUTTING AND PATCHING WITH THE OTHER TRADES.
- (7) ON ANY WORK SHOWN ON MECHANICAL DRAWINGS REQUIRING DEMOLITION OF EXISTING OR NEW BUILDING STRUCTURES AND FINISHES, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLETE THE NECESSARY DEMOLITION. CONTRACTOR SHALL PATCH AND REPAIR ALL DEMOLITION WORK. PATCHING SHALL BE COMPLETED WITH THE SAME MATERIALS AS THE SURROUNDING AREAS, OR WITH ARCHITECT-APPROVED PATCHING MATERIALS. REPAIRS SHALL BE COMPLETED ACCORDING TO ARCHITECTURAL SPECIFICATIONS. ALL REFINISHING SHALL BE APPROVED BY THE ARCHITECT.
- (8) CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETING THE INSTALLATION OF THE AIR DISTRIBUTION SYSTEM SHOWN. DUCTWORK, DUCT ACCESSORIES AND CONTROLS SHOWN AND REQUIRED SHALL BE SUPPLIED AND INSTALLED. ALL INSTALLATION WORK SHALL BE DONE IN ACCORDANCE WITH APPLICABLE CODES, INCLUDING NFPA 90A AND 90B, (NFPA 90A: STANDARD FOR THE INSTALLATION OF AIR-CONDITIONING AND VENTILATING SYSTEMS) (NFPA 90B: STANDARD FOR THE INSTALLATION OF WARM AIR HEATING AND AIR-CONDITIONING SYSTEMS).
- (9) CONTRACTOR SHALL BALANCE ALL AIR DISTRIBUTION SYSTEMS TO ACHIEVE THE AIR VOLUME REQUIREMENTS INDICATED. BALANCING SHALL INCLUDE ADJUSTMENT OF ALL MANUAL VOLUME DAMPERS, SPITTER DAMPERS, ZONE DAMPERS (IF REQUIRED), BUTTERFLY DAMPERS AND INDIVIDUAL DIFFUSER VOLUME DAMPERS (FINAL BALANCING ONLY). CONTRACTOR SHALL SUPPLY THE ENGINEER WITH A COMPLETE BALANCING REPORT WHICH INCLUDES, VOLUME, ROOM REFERENCE AND ZONE VOLUME TOTALS.
- (10) MOUNT ALL THERMOSTATS (SENSORS) 48" ABOVE THE FINISHED FLOOR LEVEL. THERMOSTATS SHOWN SHALL BE IN CONTROL OF THE ZONE SYSTEM WHICH IS SUPPLYING AIR TO THE AREA WHERE THE THERMOSTAT IS LOCATED. CONTRACTOR SHALL SUPPLY AND INSTALL ALL CONTROL VOLTAGE WIRING AND CONDUIT FOR THERMOSTAT (DDC CONTROL) INSTALLATION.
- (11) CONTRACTOR SHALL INSTALL NEW REFRIGERANT PIPING FLUSH WITH THE BUILDING STRUCTURE AND MECHANICAL ROOM BOUNDARIES AS SHOWN. CONTRACTOR SHALL COORDINATE ALL INSTALLATION WORK WITH DUCTS AND ELECTRICAL CONDUIT. MECHANICAL CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE WORK SCOPE OF OTHER TRADES AND PARTICIPATE IN COORDINATING ALL CONSTRUCTION EFFORTS.
- (12) ALL PIPING SHALL BE INSULATED AND JACKETED. REFER TO THE SPECIFICATIONS, THE CONDENSING AND ROOF TOP CONDENSER COILS ARE TO BE COATED IN ACCORDANCE WITH THE SPECIFICATIONS.
- (13) PROVIDE SMOKE DETECTOR AND SHUTDOWN CONTROLS ON AIR HANDLERS AND SUPPLY FANS. SMOKE DETECTORS SHALL BE PROVIDED BY ELECTRICAL AND INSTALLED BY MECHANICAL. COORDINATE TO PROVIDE A COMPLETE SYSTEM. PROVIDE BOTH SUPPLY AND RETURN SIDE DEVICES.
- (14) PROVIDE SEVEN DAY PROGRAMMABLE THERMOSTAT, 24 HOUR SINGLE/MULTI STAGE COMMERCIAL THERMOSTAT. DUAL SET POINTS, OCCUPIED AND UNOCCUPIED PERIODS, UNIT OPTIMIZATION, AUTO HEATING/COOLING AND AUTO CHANGE OVER. SUB-BASE BACK-UP BATTERY AND TEMPORARY OVER-RIDE. 24 VAC CONTROL VOLTAGE. PROVIDE PLASTIC SEE THRU PROTECTIVE COVER WITH KEY LOCK.
- (15) **FILTER INSTALLATION AND REPLACEMENT**
A. INSTALL CONSTRUCTION RETURN FILTER AT EACH RETURN GRILLE BEFORE OPERATING PERMANENT AIR HANDLERS DURING CONSTRUCTION.
B. REPLACE FILTERS AFTER COMPLETING CONSTRUCTION AND BEFORE CONDUCTING BUILDING FLUSH-OUT.
1. REPLACE CONSTRUCTION RETURN FILTERS WITH FLUSH-OUT RETURN FILTERS.
2. REPLACE SUPPLY FILTERS.

MECHANICAL SYMBOL LEGEND		MECHANICAL ABBREVIATIONS			
		A/C	AIR CONDITIONED	MAX	MAXIMUM
		AD	ACCESS DOOR	MBD	MANUAL BALANCING DAMPER
		AFF	ABOVE FINISHED FLOOR	MD	MOTORIZED DAMPER
		AHU	AIR HANDLING UNIT	MECH	MECHANICAL
		APPROX	APPROXIMATE	MIN	MINIMUM
		ARCH	ARCHITECTURAL	MS	MOTOR STARTER
		BDD	BACK DRAFT DAMPER	NA	NOT APPLICABLE
		BHP	BRAKE HORSEPOWER	NC	NORMALLY CLOSED
		BTU	BRITISH THERMAL UNIT	NIC	NOT IN CONTRACT
		CFM	CUBIC FEET PER MINUTE	NO	NORMALLY OPEN
		CH	CHILLER	NTS	NOT TO SCALE
		CHP	CHILLED WATER PUMP		
		CLG	CEILING	OA	OUTSIDE AIR
		CWP	CONDENSER WATER PUMP	OAH	OUTSIDE AIR INTAKE HOOD
		CO	CLEANOUT	OPD	OPPOSED BLADE DAMPER
		CT	COOLING TOWER	OC	ON CENTER
		CW	CONDENSING WATER		
		CL	CENTER LINE	P	PUMP
		DB	DRY BULB	PBD	PARALLEL BLADE DAMPER
		DIA	DIAMETER	PP	PRIMARY CHILLED WATER PUMP
		DN	DOWN	PRESS	PRESSURE
		DWG	DRAWING	PSIG	PRESSURE REDUCING VALVE
		DX	DIRECT EXPANSION		
		EAT	ENTERING AIR TEMPERATURE	R	RETURN (AIR DEVICE)
		EDH	ELECTRIC DUCT HEATER	RA	RETURN AIR
		EF	EXHAUST FAN	RE: 4M7.01	REFER TO DETAIL 4, SHEET M7.01
		ELEC	ELECTRICAL	RET	RETURN
		ELEV	ELEVATION	RH	RELATIVE HUMIDITY
		F	DEGREES FAHRENHEIT	RHD	RELIEF HOOD
		FC	FAN COIL	RPM	REVOLUTIONS PER MINUTE
		FD	FIRE DAMPER W/ DUCT ACCESS DOOR	RTU	ROOF TOP UNIT
		FLEX	FLEXIBLE	S	SUPPLY (AIR DEVICE)
		FLG	FLANGE	SA	SUPPLY AIR
		FLR	FLOOR	SCH	SCHEDULE
		FPM	FEET PER MINUTE	SCHP	SECONDARY CHILLED WATER PUMP
		FT	FEET, FOOT	SD	SMOKE DAMPER
		FS	FLOW SWITCH	SEC	SECOND
		GAL	GALLON	SF	SUPPLY FAN
		GALV	GALVANIZED	SMACNA	SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION
		GPM	GALLONS PER MINUTE	SP	STATIC PRESSURE
		H8	HOSE BIBB	SPEC	SPECIFICATION
		HP	HORSEPOWER	STD	STANDARD
		HR	HEAT PUMP (WATER SOURCE)		
		HR	HOUR	TEMP	TEMPERATURE
		HVAC	HEATING/VENTILATING/ AIR CONDITIONING	TSTAT	THERMOSTAT
		HWP	HOT WATER PUMP	TYP	TYPICAL
		HZ	HERTZ	UF	UNDER FLOOR
		ID	INSIDE DIAMETER	UH	UNIT HEATER
		IE	INVERT ELEVATION (FLOW LINE)	UL	UNDERWRITERS LABORATORIES
		IN	INCHES	VEL	VELOCITY
		INSUL	INSULATION	VENT	VENTILATE
		IN WG	INCHES OF WATER	VF	VENTILATION FAN
		KW	KILOWATT(S)	VOL	VOLUME
				VOLT	VOLTAGE
		LAT	LEAVING AIR TEMPERATURE	W	WIDE, WIDTH
		LB	POUND	W/	WITH
		L	LOUVER	WB	WET BULB
				W/O	WITHOUT

H.V.A.C. SYSTEM

THE WORK INCLUDES PROVIDING THE HVAC SYSTEMS, INCLUDING DUCTWORK, DIFFUSERS AND GRILLES, INSULATION, CONTROLS, AND ALL OTHER EQUIPMENT NECESSARY FOR A COMPLETE FUNCTIONING SYSTEM. HVAC SYSTEM SHALL INCLUDE BUT IS NOT LIMITED TO THE FOLLOWING:

- HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) UNITS.
- SUPPLY AND RETURN DUCTWORK SYSTEMS WITH GRILLES, DIFFUSERS, FILTERS, AND DAMPERS.
- TEMPERATURE CONTROL SYSTEM INCLUDING LOW VOLTAGE WIRING AND CONDUIT.
- DUCT, PIPING, AND EQUIPMENT INSULATION, WHERE INDICATED HEREIN.
- CONTROLS AND WIRING FOR CONNECTION TO LANDLORD'S FIRE-SMOKE ALARM SYSTEM (WHERE APPLICABLE).

SECTION 15500

THE CONTRACTOR SHALL COORDINATE ALL NEW DUCTWORK INCLUDING DUCTWORK INSULATION AND REINFORCING WITH EXISTING DUCTWORK AND DUCTWORK ANGLE BRACING SUCH THAT THE NEW DUCTWORK WILL FIT WITHIN THE SPACE LIMITATIONS OF THE PROJECT.

CONDENSATE PIPING: CONDENSATE PIPING SHALL BE A MINIMUM OF 3/4" COPPER TYPE "L" PIPE. ALL CONDENSATE DRAINS SHALL BE INSULATED WITH 1/2" THICK CLOSED CELL INSULATION SIMILAR TO ARMAFLEX 2000.

THE DESIGN, SELECTION, SPACING AND APPLICATION OF HORIZONTAL PIPE HANGERS, SUPPORTS, RESTRAINTS, ANCHORS AND GUIDES SHALL BE IN ACCORDANCE WITH THE STANDARD CODE FOR PRESSURE PIPING ANSI B31.1 AND THE LATEST EDITION OF THE MANUFACTURERS' STANDARDIZATION SOCIETY STANDARDS MSS SP-69, "PIPE HANGERS AND SUPPORTS-SELECTION AND APPLICATION".

PROVIDE PIPE COVERING PROTECTION SHIELDS AND SADDLES FOR ALL INSULATED PIPING AT THE LOCATIONS OF ALL SUPPORTS. THE PROTECTION SHIELD LENGTH AND GAUGE THICKNESS FOR USE AT EACH CLEVIS HANGER SHALL BE AS SPECIFIED FOR TYPE 40 PROTECTION SHIELDS IN THE CURRENT EDITION OF MSS SP-69. PROTECTION SHIELDS SHALL BE GALVANIZED AND SHALL BE ARRANGED TO COVER ONE-HALF OF THE CIRCUMFERENCE OF THE INSULATION AND SHALL BE MOUNTED ON THE OUTSIDE OF THE INSULATION WITH INSULATION BLOCKING BETWEEN THE PIPE AND SADDLE TO PREVENT CRUSHING OF THE INSULATION. INSULATION BLOCKING SHALL BE UPJOHN 2 POUND HIGH DENSITY MOLDED URETHANE OR SEGMENTED MACHINERY CORK DIPPED IN HOT ASPHALT VAPOR SEAL OF NOT LESS THAN THE SAME LENGTH AND CIRCUMFERENCE AS THE PIPE PROTECTION SHIELD.

ALL HANGERS, HARDWARE, RODS, CLAMPS, CHANNELS, BASE PLATES, ANGLES, BOLTS, NUTS AND OTHER FACTORY BUILT OR SHOP FABRICATED PIPE SUPPORT DEVICES SHALL BE GALVANIZED OR CADMIUM PLATED UNLESS NOTED OTHERWISE ON THE DRAWINGS. ALL SHOP FABRICATED AND WELDED STEEL SUPPORTS SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION.

ALL CONCRETE INSERTS FOR HANGER RODS SHALL BE NATIONAL PIPE HANGERS CORPORATION FIGURE 606 WITH FIGURE 607, OR GRINNELL FIGURE 282, FIGURE 152, OR APPROVED EQUAL. METAL DECK CONCRETE INSERT SHALL BE F & S MANUFACTURING CORPORATION FIGURE 282. GALVANIZED FABRICATED STEEL METAL DECK CEILING BOLT, PHILIPS RED HEAD, OR APPROVED EQUAL. HANGER RODS, INSERTS, ETC., SHALL BE SIZED AND INSTALLED AS RECOMMENDED BY THE HANGER MANUFACTURER FOR THE SERVICE INTENDED.

FIELD VERIFY THE EXACT SIZES AND LOCATIONS OF ALL EXISTING DUCTWORK AND PIPING PRIOR TO DEMOLITION OF ANY EXISTING WORK. THE DEMOLITION WORK SHALL BE COORDINATED WITH THE NEW WORK TO ASSURE PROPER LIMITS OF DEMOLITION.

WARRANTY: PROVIDE LABOR AND MATERIALS TO REPAIR OR REPLACE DEFECTIVE PARTS AND MATERIALS AS REQUIRED FOR ONE YEAR AFTER SUBSTANTIAL COMPLETION OR OWNER ACCEPTANCE OF THE COMPLETED PROJECT. PROVIDE A SEPARATE LINE ITEM DEDUCT AMOUNT ON THE PROPOSAL FORM TO DELETE WARRANTY SERVICE, AT THE OWNER'S OPTION.

DRAWINGS FOR HVAC WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS. REFER TO MANUFACTURERS STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS, AS REQUIRED. PROVIDE ALL DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY TO FACILITATE THE SYSTEM FUNCTIONING AS INDICATED BY THE DESIGN AND THE EQUIPMENT INDICATED. THE WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES OR ORDINANCES AND SUBJECT TO INSPECTION.

COORDINATE WITH THE WORK OF OTHER SECTIONS, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE LANDLORD, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE.

EXTRA STOCK: PROVIDE TWO SETS OF REPLACEMENT FILTERS PER EACH INSTALLED FOR ALL THE ROOFTOP UNITS, AND OTHER EQUIPMENT AND DEVICES. AND PROVIDE AN ITEMIZED LIST OF THE NUMBER, TYPE REQUIRED, AND WHERE USED. OBTAIN RECEIPT FROM OWNER THAT THESE ITEMS HAVE BEEN DELIVERED AND ACCEPTED BY THE OWNER'S REPRESENTATIVE.

DUCT DIMENSIONS: UNLESS OTHERWISE NOTED, DUCT DIMENSIONS ON DRAWING ARE SHEET METAL DIMENSIONS ON UNLINED DUCTS (INTERIOR DIMENSIONS).

SHEET METAL DUCTWORK: SHEET METAL DUCTWORK SHALL BE FABRICATED AND INSTALLED TO MEET ASHRAE AND SMACNA STANDARDS. FOR 1" W.G. PRESSURE CLASS, SHEET METAL SHALL BE GALVANIZED SHEET STEEL OF LOCK FORMING QUALITY, ASTM A-525. ALL ANGLE IRON USED FOR SUPPORT SHALL BE GALVANIZED. CONNECTIONS TO WALLS OR FLOOR SHALL BE AIR TIGHT WITH ANGLE IRON AND CAULKING. SEAL ALL DUCT SEAMS, TRANSVERSE AND LONGITUDINAL. AIR TIGHT. PROVIDE TURNING VANES AT ALL ELBOWS OR OFFSETS EXCEEDING 30°.

DUCT SHALL BE EXTERNALLY WRAPPED W/ 2" FIBERGLASS BLANKET INSULATION.

RIGID ROUND GALVANIZED DUCT SHALL BE SPIRAL OR SNAP LOCK GALVANIZED SHEETMETAL COMPLYING WITH SMACNA.

FIBERGLASS DUCT BOARD IS AN ACCEPTABLE W/ PRIOR WRITTEN OWNER PERMISSION. MINIMUM R-VALUE OF 5 REQUIRED FOR CONDITIONED SPACES AND MINIMUM R-VALUE OF 8 FOR UNCONDITIONED SPACES.

FLEXIBLE DUCT CONNECTOR: WHERE INDICATED PROVIDE U.L. LABELED 30oz. NEOPRENE COATED FIBERGLASS FABRIC DUCT CONNECTORS.

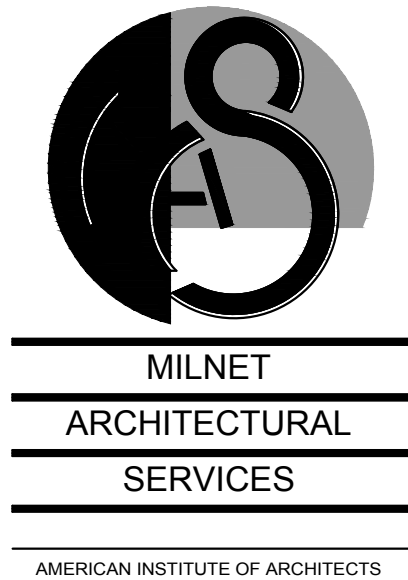
GRILLES AND DIFFUSERS: PROVIDE GRILLES, DIFFUSERS, AND DAMPERS IN SIZES, CAPACITIES, MATERIALS, AND PATTERN INDICATED ON THE DRAWINGS.

ACCESS PANELS: PROVIDE HINGED ACCESS PANELS IN DUCTWORK WHERE REQUIRED FOR ACCESS TO EQUIPMENT. PROVIDE INSULATED ACCESS DOORS IN INSULATED DUCTWORK.

PROVIDE WHERE APPLICABLE, DUCT MOUNTED SUPPLY AND/OR RETURN AIR PHOTOELECTRIC TYPE UL LISTED SMOKE DETECTORS. DETECTORS SHALL BE LISTED FOR THE AIR VELOCITIES ENCOUNTERED. PROVIDE INTERLOCK WIRING AND RELAYS FOR UNIT SHUT DOWN. ON ACTIVATION OF ANY DETECTOR, ALL HVAC UNIT FANS SHALL STOP.

TEST AND ADJUST EACH PIECE OF EQUIPMENT AND EACH SYSTEM AS REQUIRED TO ASSURE PROPER BALANCE AND OPERATION. TEST AND BALANCE SHALL BE PERFORMED BY AN INDEPENDENT NEBB OR AABC REGISTERED CONTRACTOR. ELIMINATE NOISE AND VIBRATION. AND ASSURE PROPER FUNCTION OF ALL CONTROLS, MAINTENANCE OF TEMPERATURE, AND OPERATION. BALANCE MECHANICAL SYSTEM, AND SUBMIT COMPLETED TEST

EXPOSED ROUND (SPIRAL) DUCT TO BE INTERNALLY LINED. SUPPLY DUCTWORK SHALL BE LINED W/1" INSULATION. RETURN/EXHAUST/VENTILATION DUCT TO BE LINED W/1/2" INSULATION. CONCEALED ROUND DUCT TO BE EXTERNALLY INSULATED. USING R-5 INSULATION MIN FOR CONDITIONED SPACES (WHERE PLENUM RETURN IS USED) OR R-8 INSULATION MIN FOR UNCONDITIONED SPACES.



HOP VILLA RENOVATIONS

TROPICAL TEXAS BEHAVIORAL HEALTH
HARLINGEN, TX.

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217027

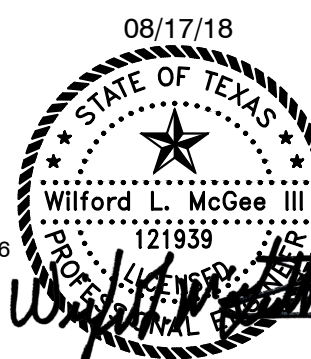
DATE
AUG 17, 2018

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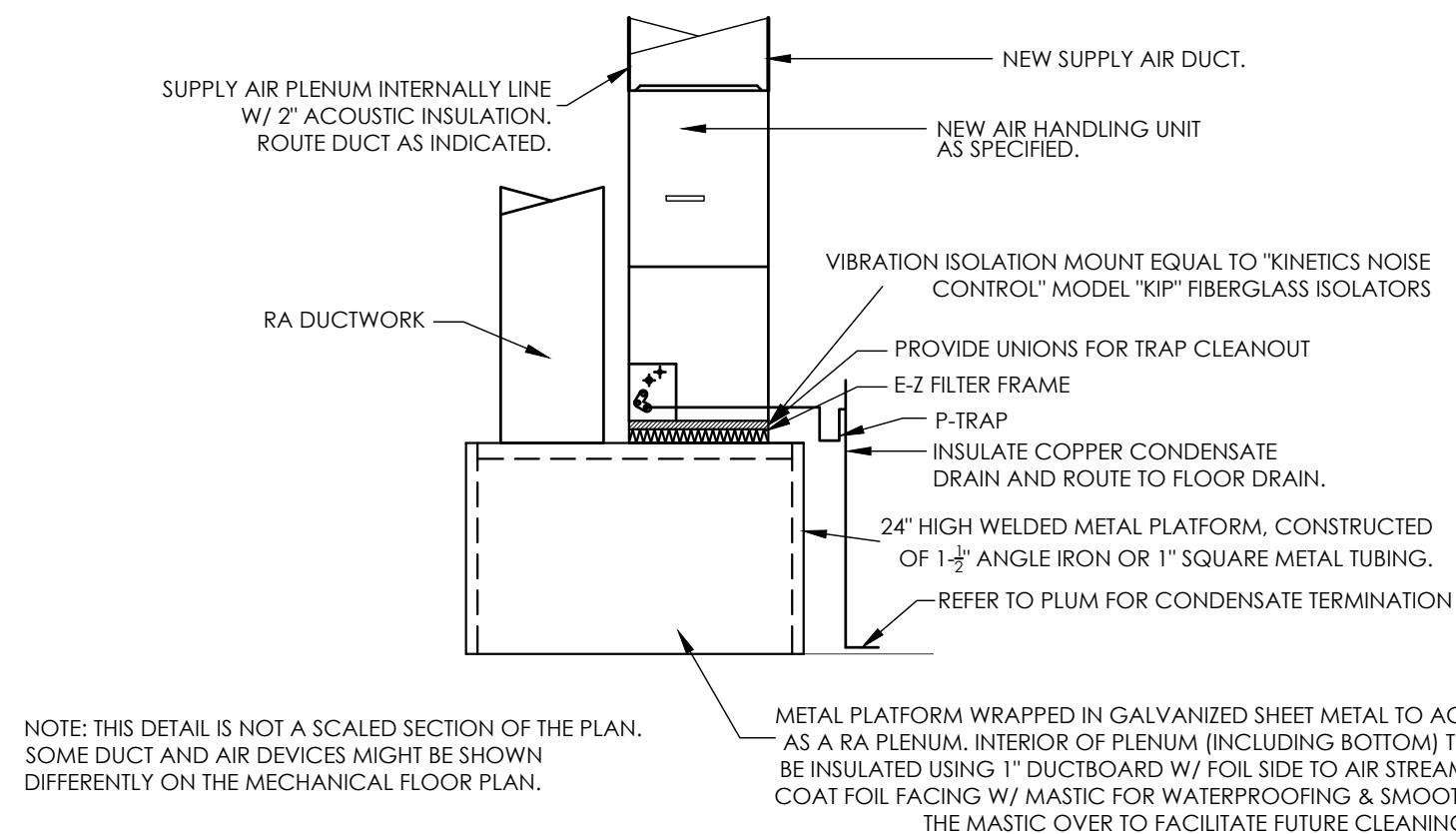
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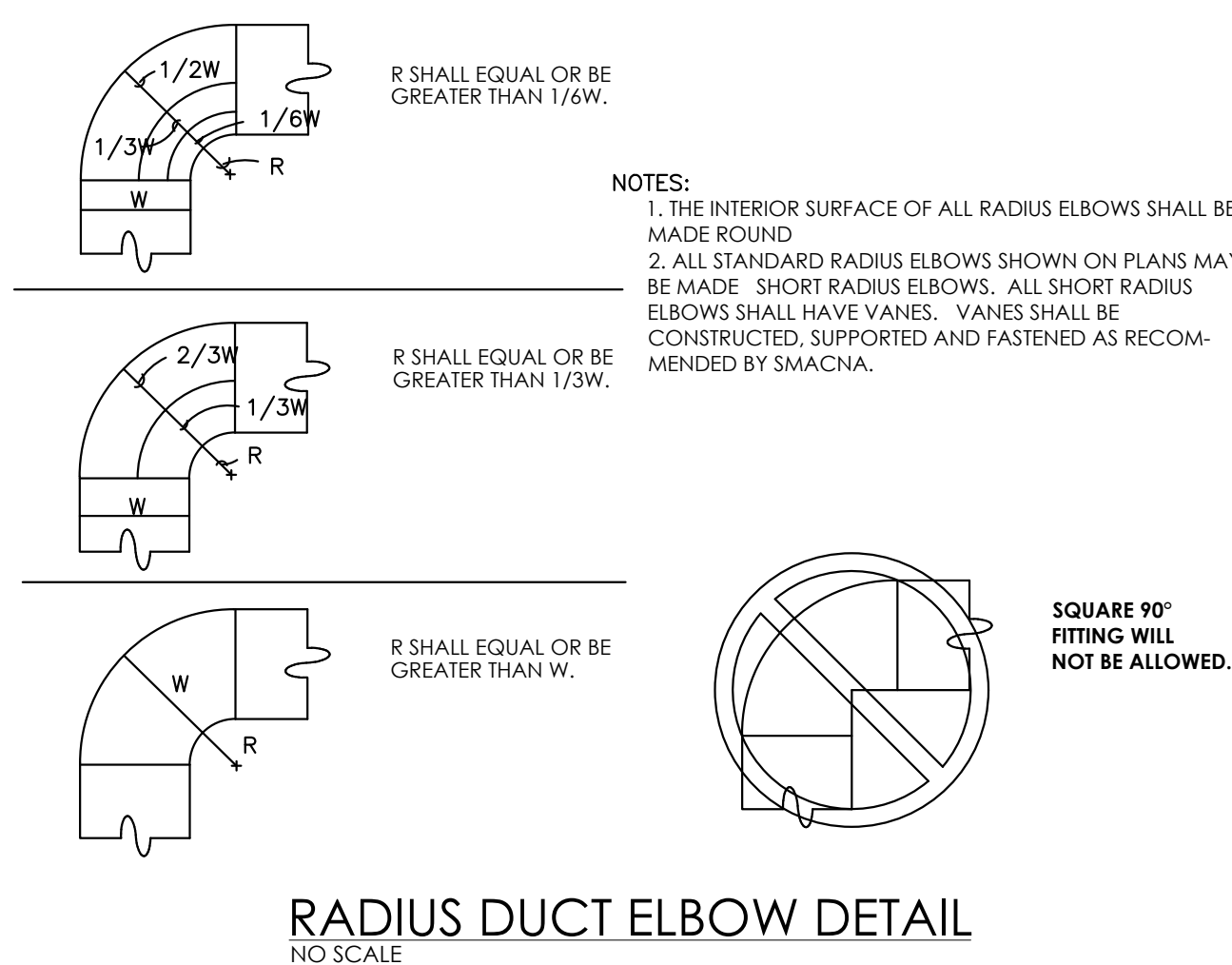
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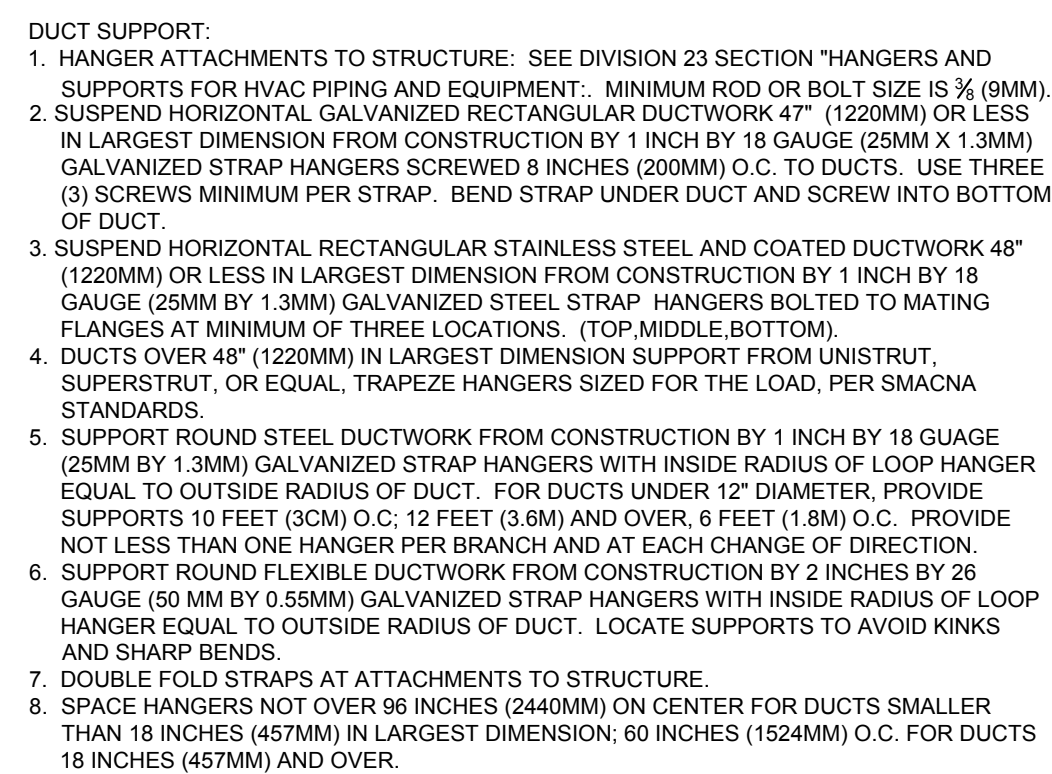
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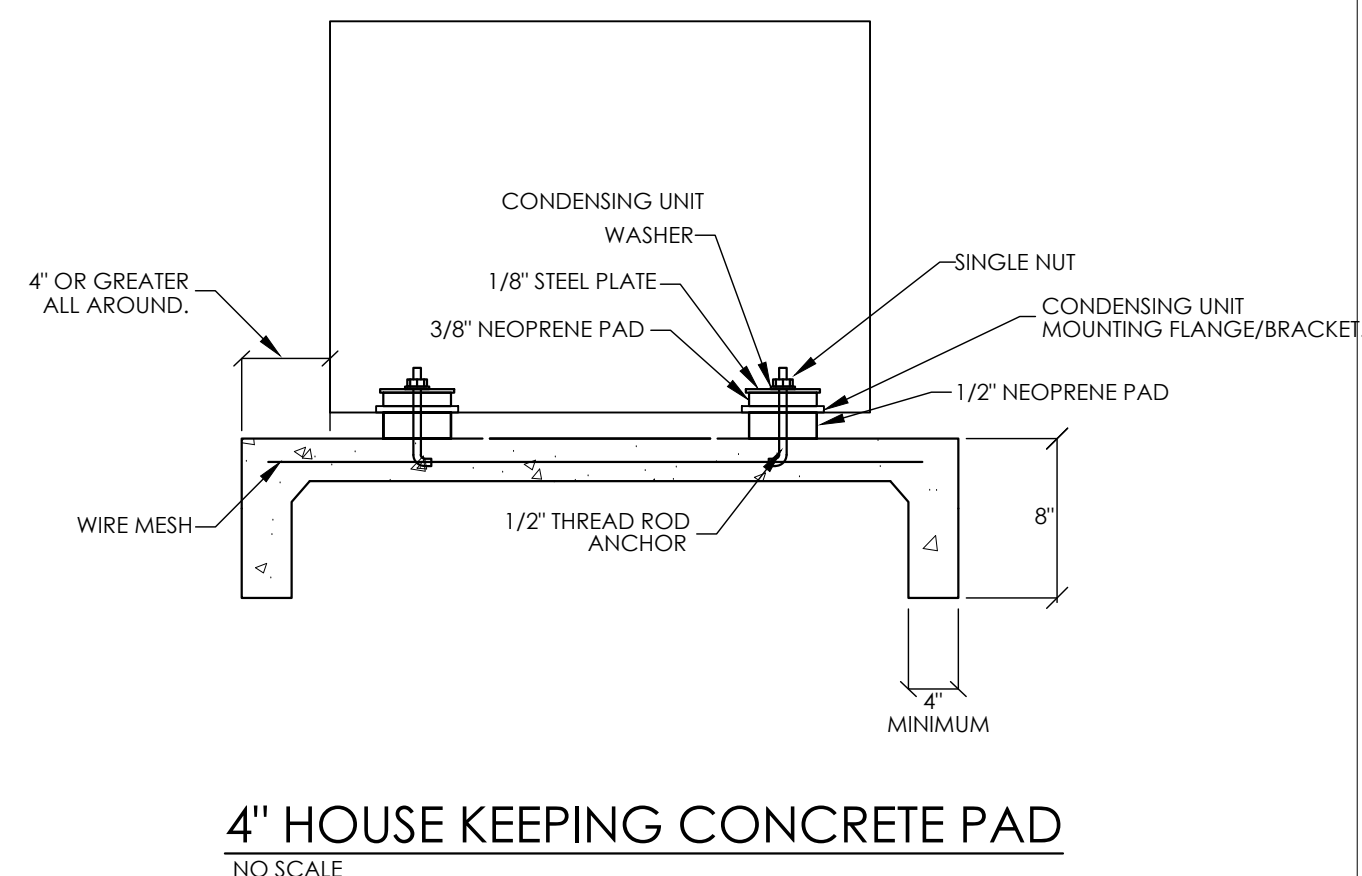
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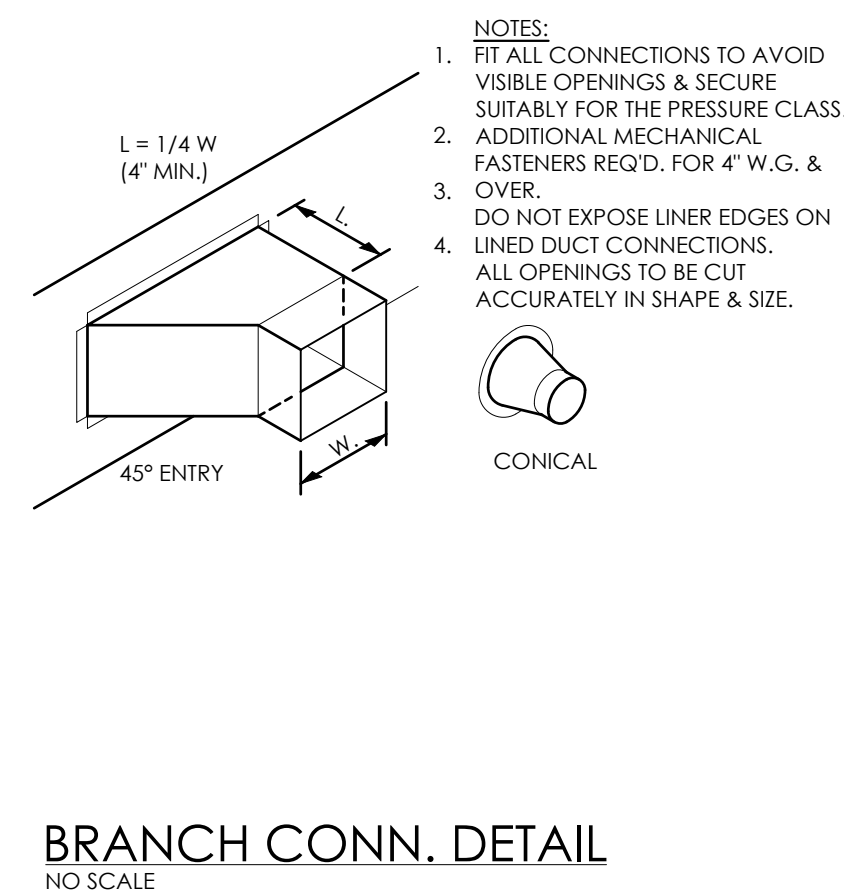
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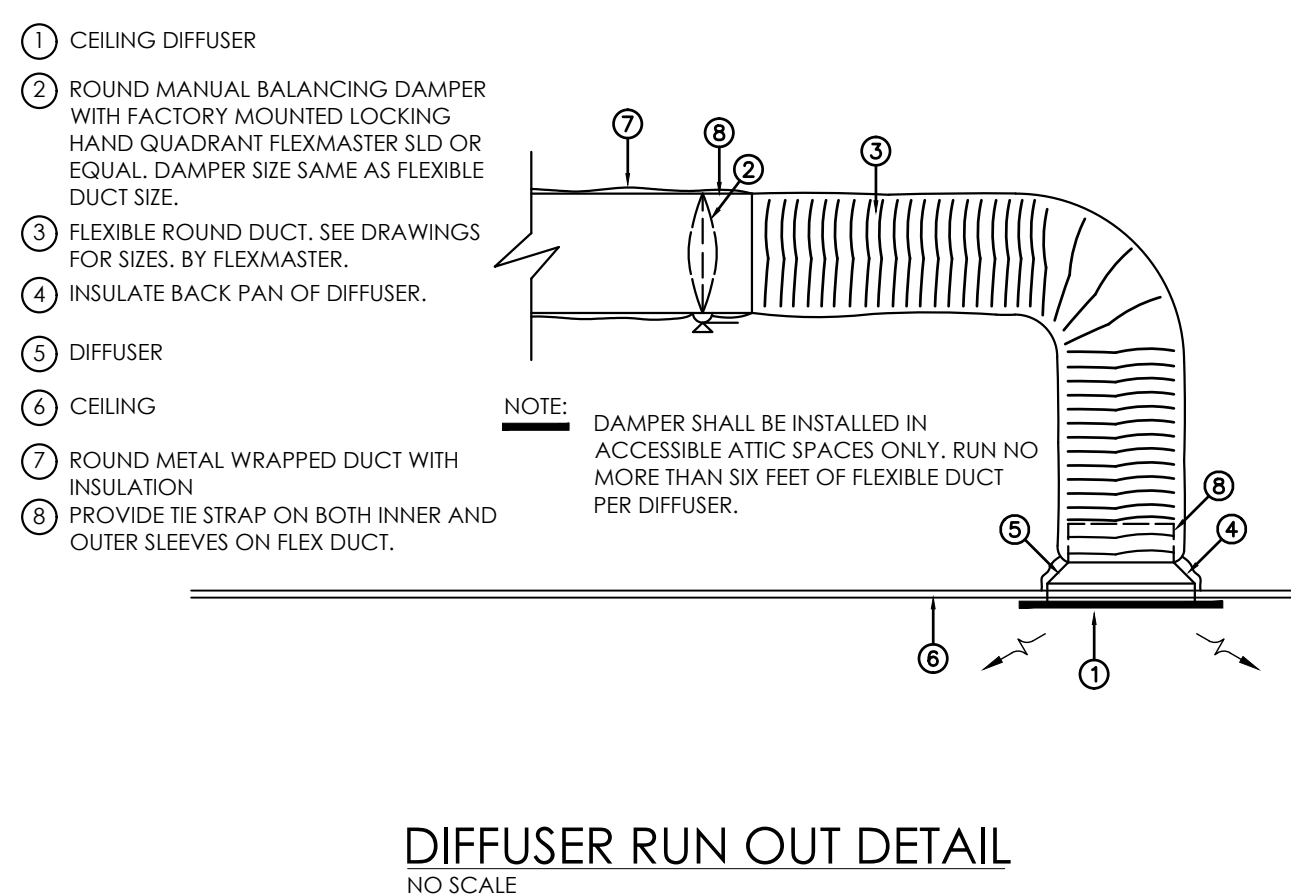
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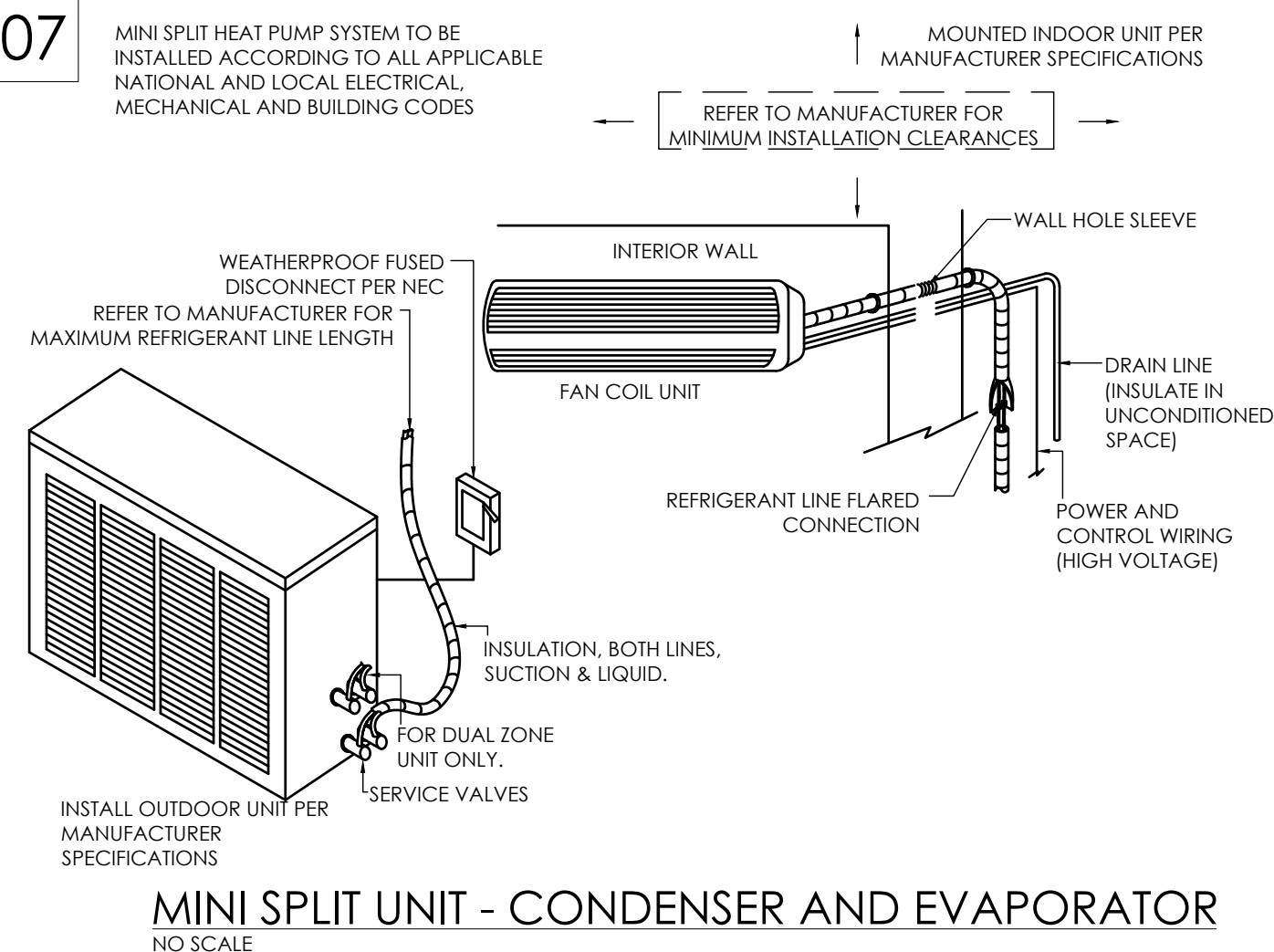
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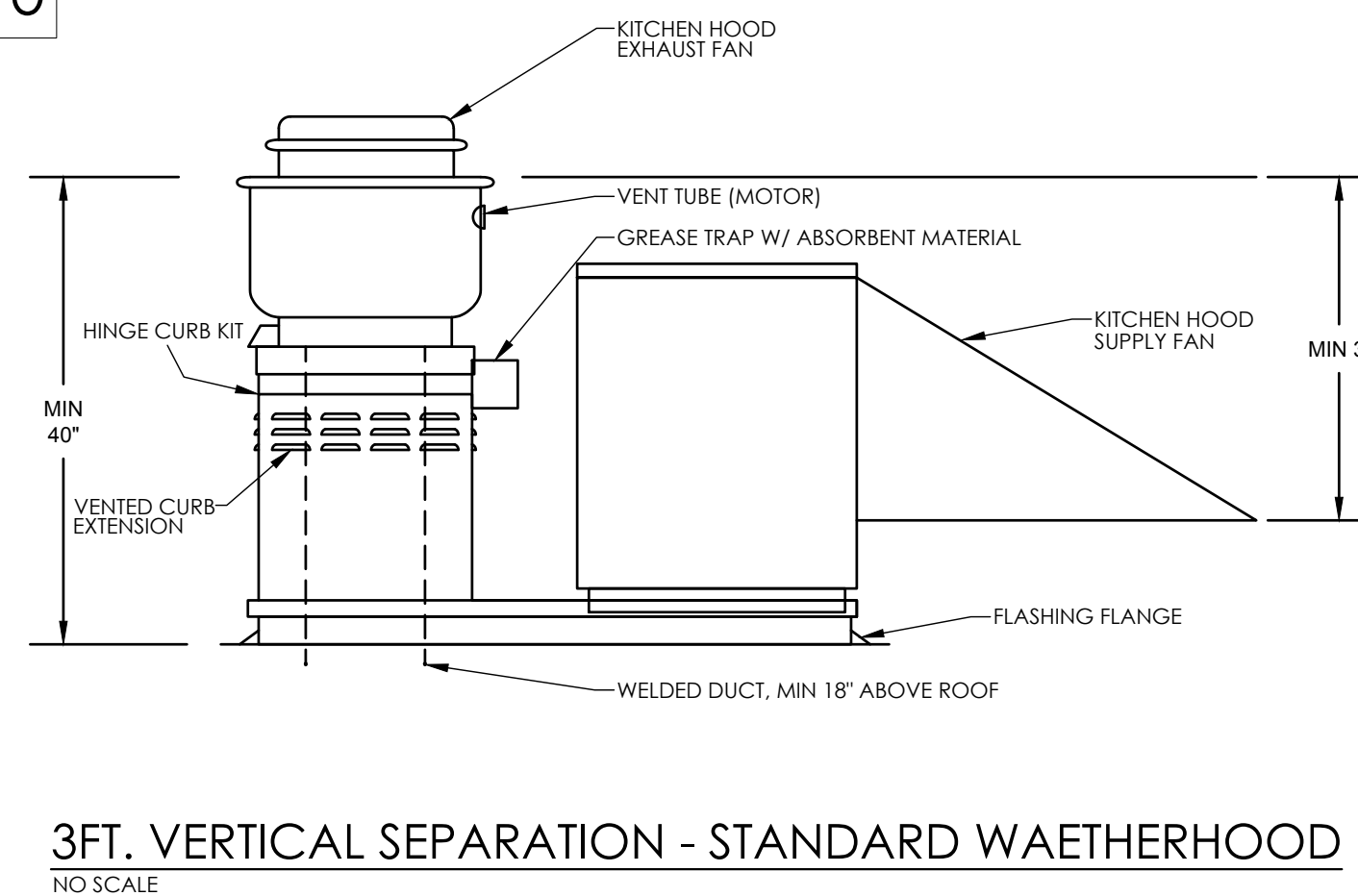
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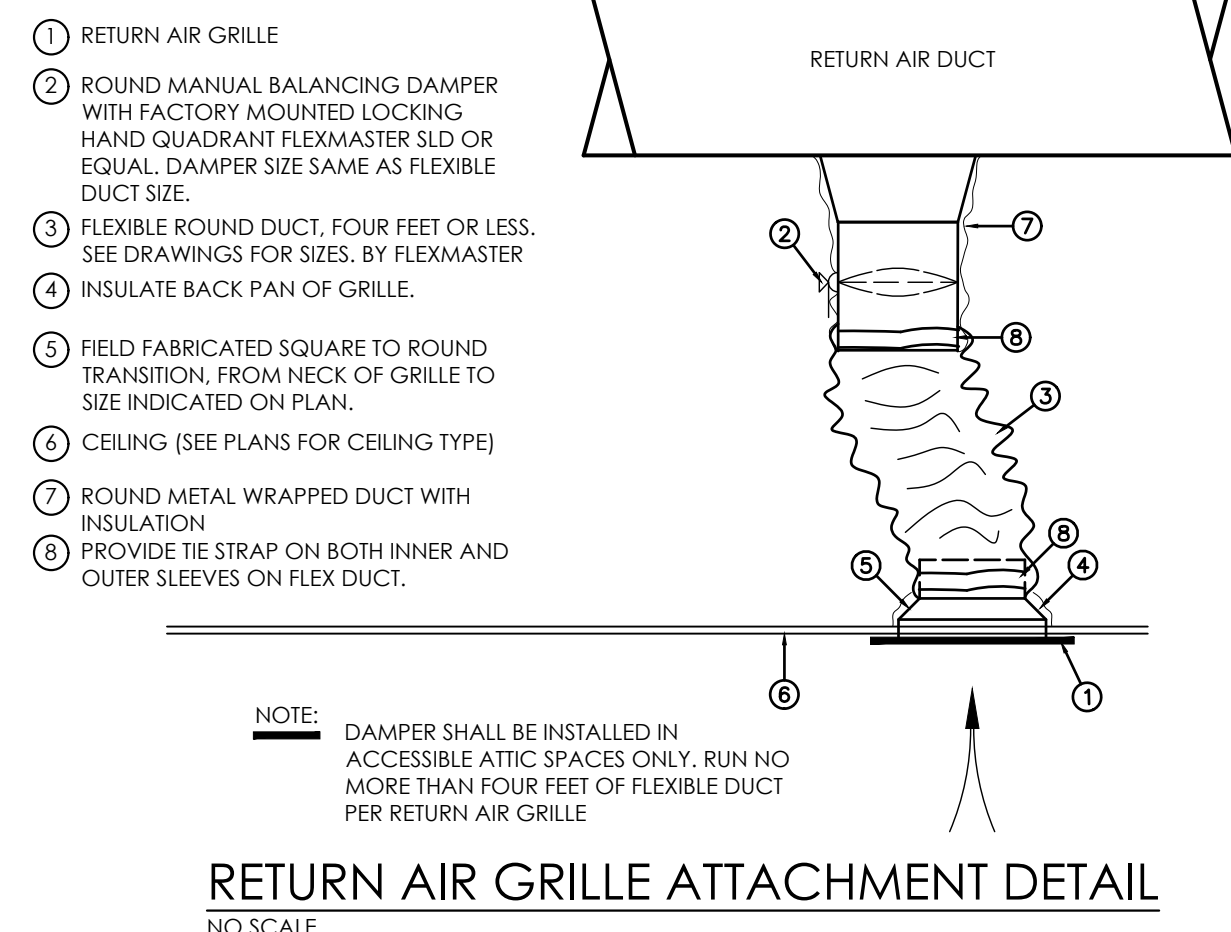
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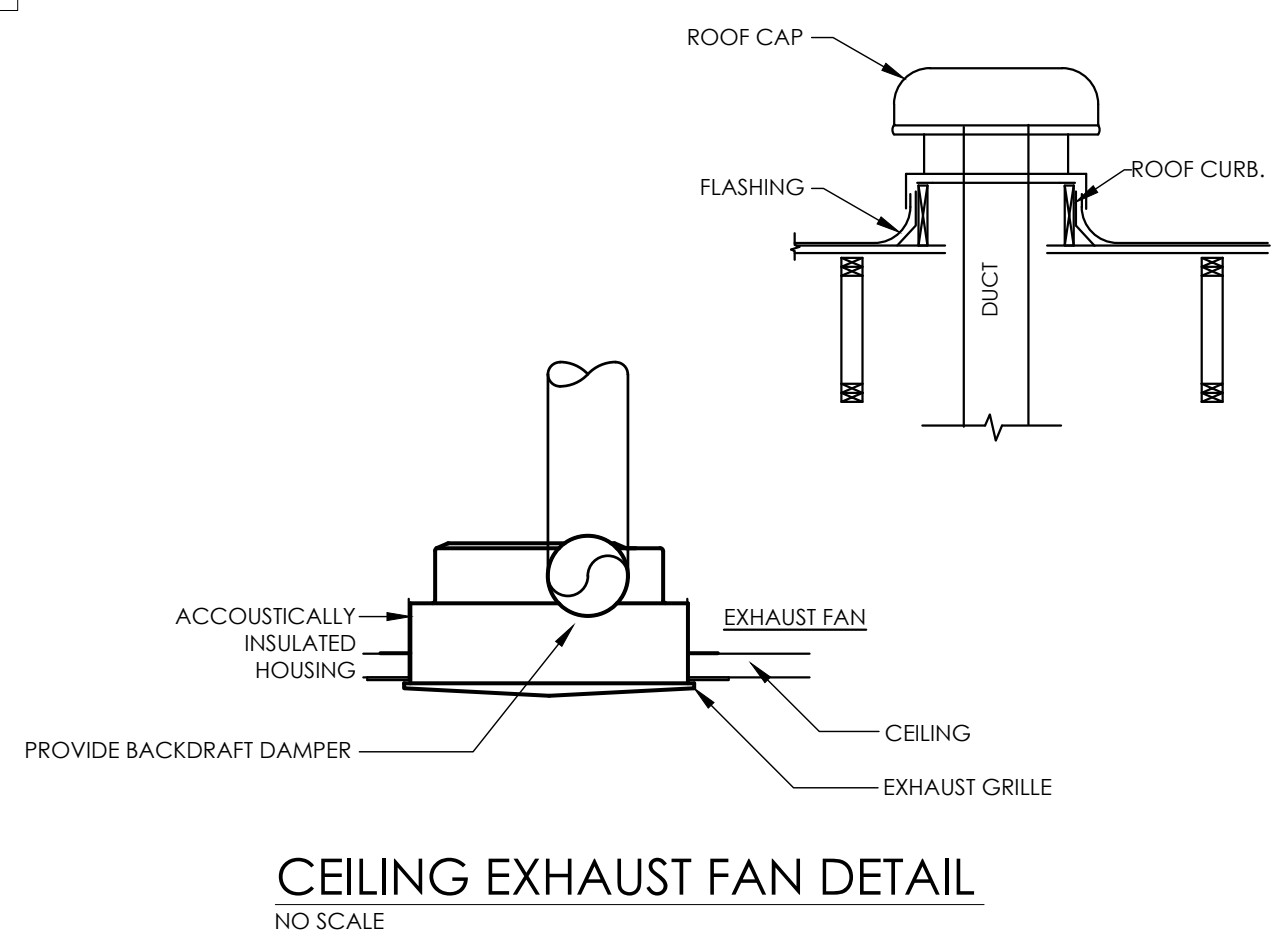
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04



08



HOP VILLA RENOVATIONS

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HARLINGEN, TX.

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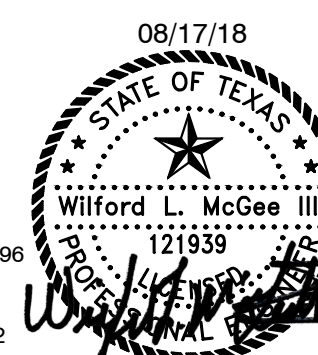
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SHEET NUMBER

M3.0

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FAN SCHEDULE

01. PROVIDE WITH FACTORY INSTALLED DISCONNECT.
02. INTERLOCK FAN W/ LIGHTS.
03. PROVIDE W/ BACKDRAFT DAMPER.
04. PROVIDE W/ FAN SPEED CONTROL.
05. PROVIDE W/ FAN MOUNTED POTENTIOMETER FOR SPEED CONTROL.
06. PROVIDE W/ LIFTING LUGS.
07. PROVIDE IBC 2015 COMPLIANT CURB & ATTACHMENTS FROM UNIT TO CURB & CURB TO STRUCTURE. EQUIPMENT OR CURB MANUFACTURER IS RESPONSIBLE FOR PROVIDING ENGINEERED DETAIL ANALYSIS OF:
 - A) ATTACHMENT OF EQUIPMENT TO CURB.
 - B) CURB TO STRUCTURE.
 - C) CURB & ATTACHMENT HARDWARE STRENGTH.

REFER TO ARCHITECTURAL & STRUCTURAL DRAWINGS FOR ROOF SUBSTRATE DETAILS. EQUIPMENT OR CURB MANUFACTURER ALSO RESPONSIBLE FOR PROVIDING ENGINEERED INSTALLATION DRAWINGS FOR ITEMS 'A' & 'B' LISTED ABOVE. BOTH, THE ENGINEERED ANALYSIS & THE ENGINEERED INSTALLATION DRAWINGS SHALL BE PERFORMED SPECIFICALLY FOR THIS BUILDING PROJECT SITE & STAMPED & SEALED BY A TEXAS LICENSED ENGINEER. SUBMITTALS WILL NOT BE APPROVED UNTIL ALL DOCUMENTATION LISTED ABOVE IS PROVIDED ACCURATELY.

08. PROVIDE W/ WALL MOUNTED ROTARY TIMED DIAL SWITCH, 0-60 MINS, LABELED "VENT FAN".
09. PROVIDE KITCHEN HOOD EXHAUST FAN W/ VENTED & CANTED CURB, FLASHING FLANGE & HINGE CURB KIT
10. FAN TO BE UL/ULC 762 LISTED - "POWER VENTILATORS FOR RESTAURANT EXHAUST APPLIANCES".
11. PROVIDE FAN W/ NONSTICK COATING & GREASE KIT FOR RESTAURANT APPLICATIONS.
12. KSF & KEF TO BE CONTROLLED VIA KITCHEN CONTROL PANEL, KC-1.
13. INTERLOCK KITCHEN SUPPLY FAN W/ RESPECTIVE EXHAUST FAN, AS PER IMC 508.
14. PROVIDE W/ AUTOMATIC BELT TENSIONERS.

01. ELECTRICAL CONTRACTOR TO PROVIDE SINGLE CIRCUIT POWER FROM SERVICE TO OUTDOOR UNIT & WIRE TO INDOOR UNIT.
02. WIRELESS REMOTE CONTROLLER.
03. PROVIDE INDOOR UNITS WITH MOUNTING BRACKETS IF REQUIRED.
04. SEE PLUMBING FOR CONDENSATE ROUTING.
05. CONTRACTOR TO PROVIDE CONCRETE PAD TO ANCHOR CONDENSER TO.
06. CONTRACTOR TO PROVIDE LINE SETS.
07. SIGHT GLASSES, FILTER DRYERS, & FIELD SUPPLIED EXPANSION VALVES ARE NOT TO BE USED ON THIS EQUIPMENT.
08. INSTALL PER MANUFACTURERS INSTRUCTIONS & PIPING RECOMMENDATIONS.
09. PROVIDE W/ OPTIONS/ACCESSORIES REQ. FOR LOW AMBIENT COOLING.

TROPICAL TEXAS BEHAVIORAL HEALTH
HARLINGEN, TX.

DATE
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SHEET NUMBER

M3.1

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HOOD INFORMATION

HOOD NO.	MARK	MODEL	HOOD DIMENSIONS (IN.)			HOOD CONSTR.	COOKING LOAD / DUTY RATING	EXHAUST						SUPPLY		TOTAL WEIGHT LBS.	SECTION LOCATION
			LENGTH	WIDTH	HEIGHT			TOTAL CFM	COLLAR(S)				MUA CFM	AC CFM			
									WIDTH	LENGTH	DIA.	CFM			S.P.		
1	HOOD-1	GXEW-48-S	48	39	24	430 SS WHERE EXPOSED	HEAVY	800	8	9		800	0.516	550		124	SINGLE

HOOD INFORMATION

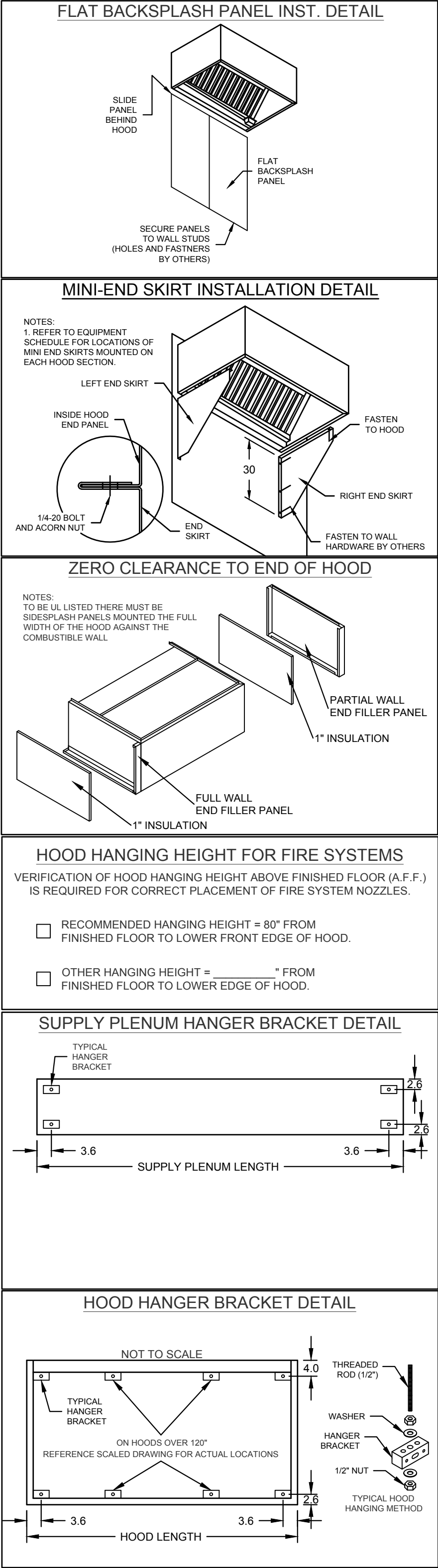
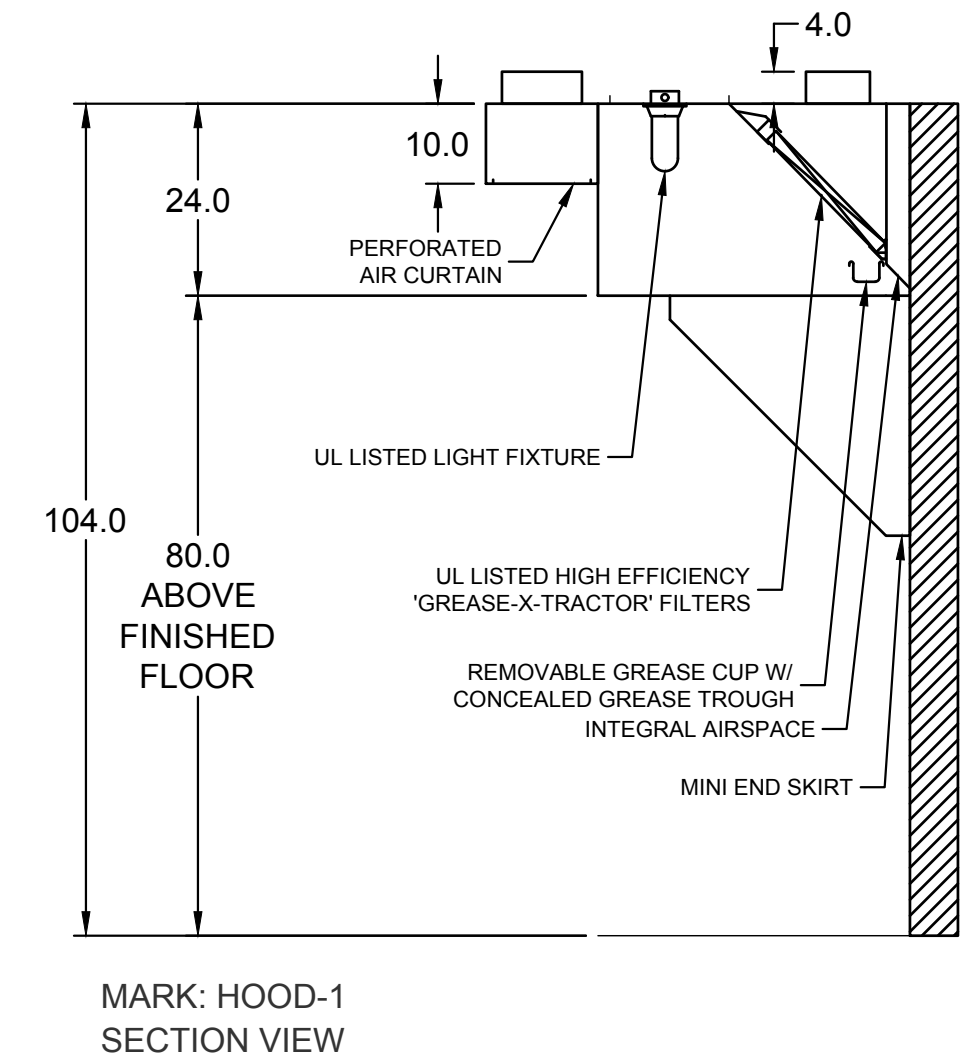
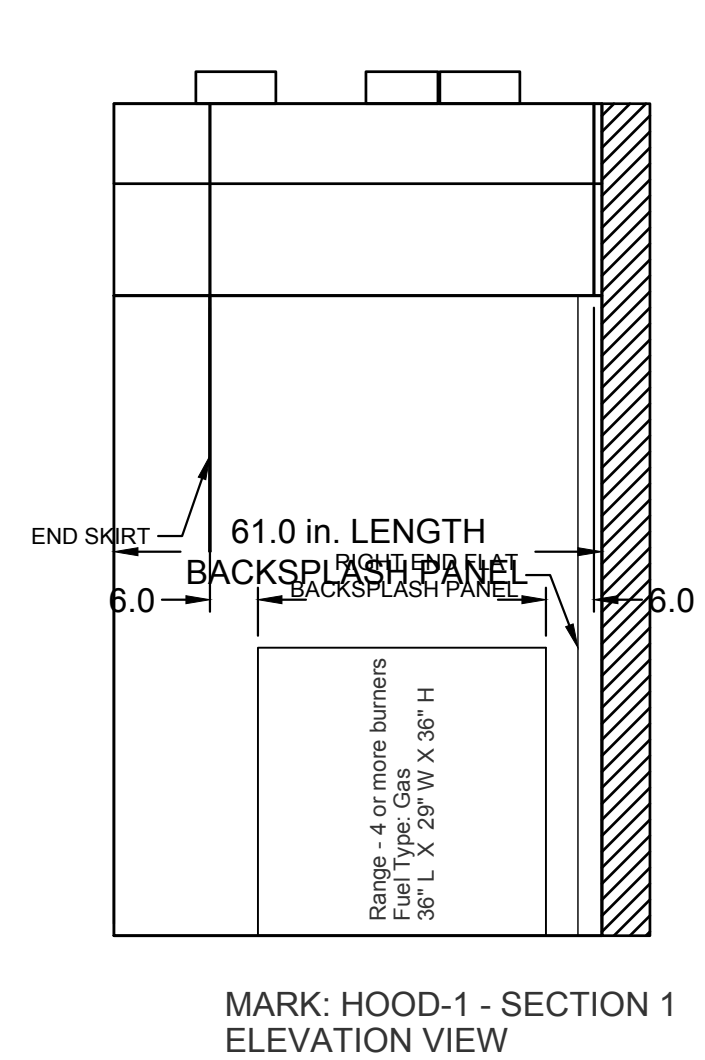
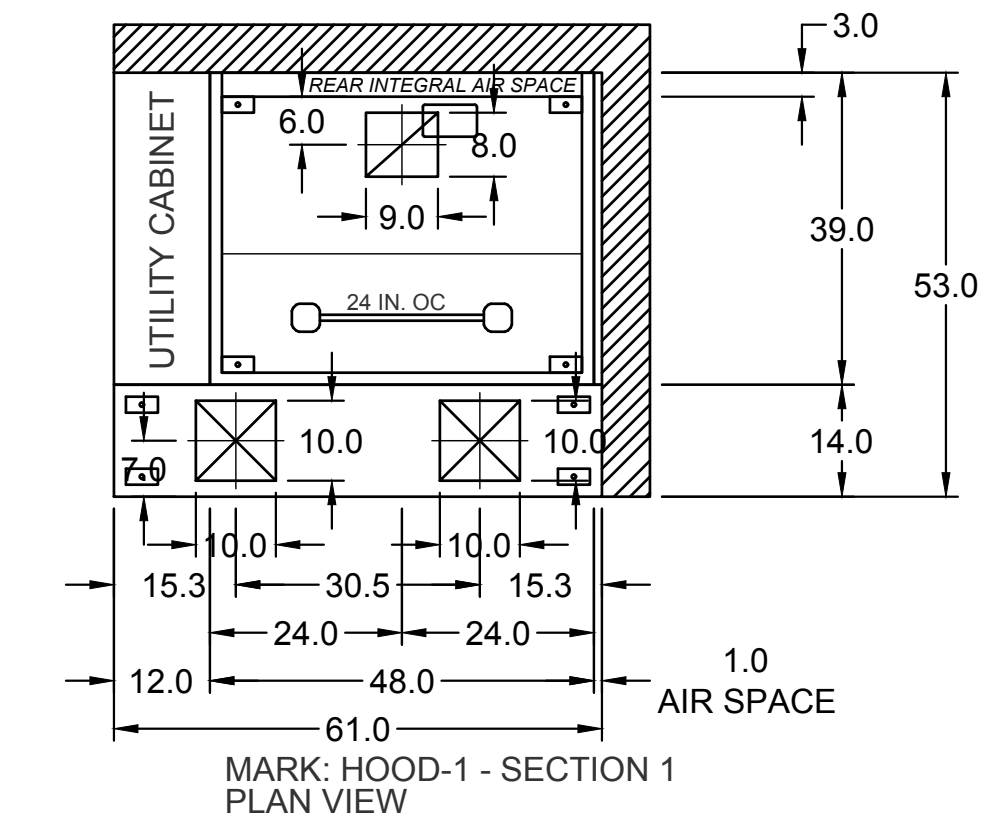
HOOD NO.	MARK	LIGHTING DETAILS			FOOT CANDLES	GREASE FILTRATION DETAILS			UTILITY CABINET(S)							
		FIXTURE TYPE	BULB / LAMP INFO	QTY		TYPE / MODEL	MATERIAL	QTY	SIZE (IN.)	LOCATION	FIRE SYSTEM		CONTROLS		MODEL	INTERFACE
1	HOOD-1	INCANDESCENT (GLOBE)	100W A19 (BULBS NOT INCL.)	2	39.86	X-TRACTOR	STAINLESS STEEL	3	16	LEFT	TYPE	SIZE				
								0	20							

SUPPLY PLENUM INFORMATION

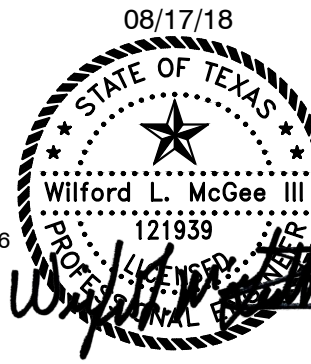
HOOD NO.	MARK	POS.	TYPE	SIZE (IN.)			INSULATED	DAMPER(S)	LED LIGHT(S)		TOTAL CFM	COLLARS								
				L	W	H			SUPPLIED	QTY		TYPE	MOUNTING	QTY	W	L	DIA.	CFM	S.P.	VEL.
1	HOOD-1	FRONT	ASP	61	14	10	NO	NO	NO		550	MUA	FACTORY	2	10	10		275	0.05	396

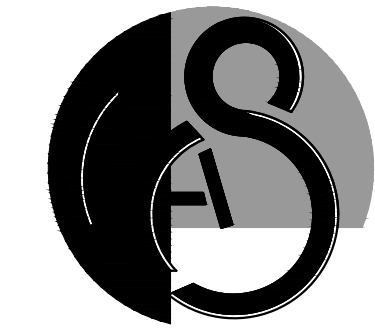
HOOD OPTIONS

UL 710 LISTED W/ OUT EXHAUST FIRE DAMPER - UL #MH11726
BACK INTEGRAL AIR SPACE - 3 IN WIDE
RIGHT NON-INTEGRAL AIR SPACE - 1 IN THICK - ZERO CLEARANCE
FACTORY MOUNTED EXHAUST COLLAR(S)
LEFT MINI END SKIRT - 30 IN HIGH 30.00 IN TOP WIDTH 4.0 IN BOTTOM WIDTH
BACKSPLASH 80.00 IN HIGH 61.00 IN LONG
RIGHT SIDESPLASH 80.00 IN HIGH 39.00 IN LONG
PERFORMANCE ENHANCING LIP (PEL) TECHNOLOGY
STANDING SEAM CONSTRUCTION FOR SUPERIOR STRENGTH



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HOP VILLA RENOVATIONS

TROPICAL TEXAS BEHAVIORAL HEALTH
HARLINGEN, TX.

PROJECT NUMBER
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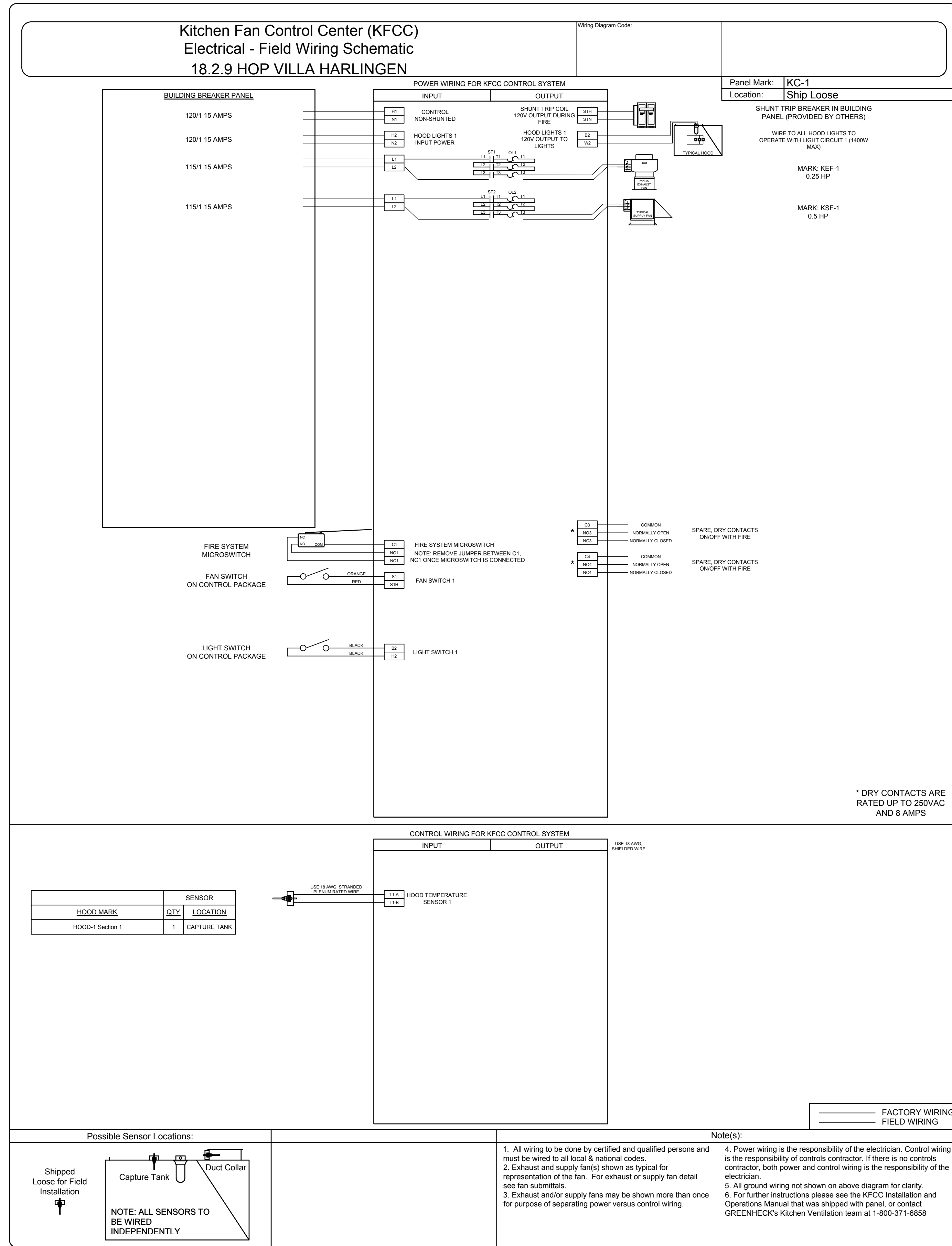
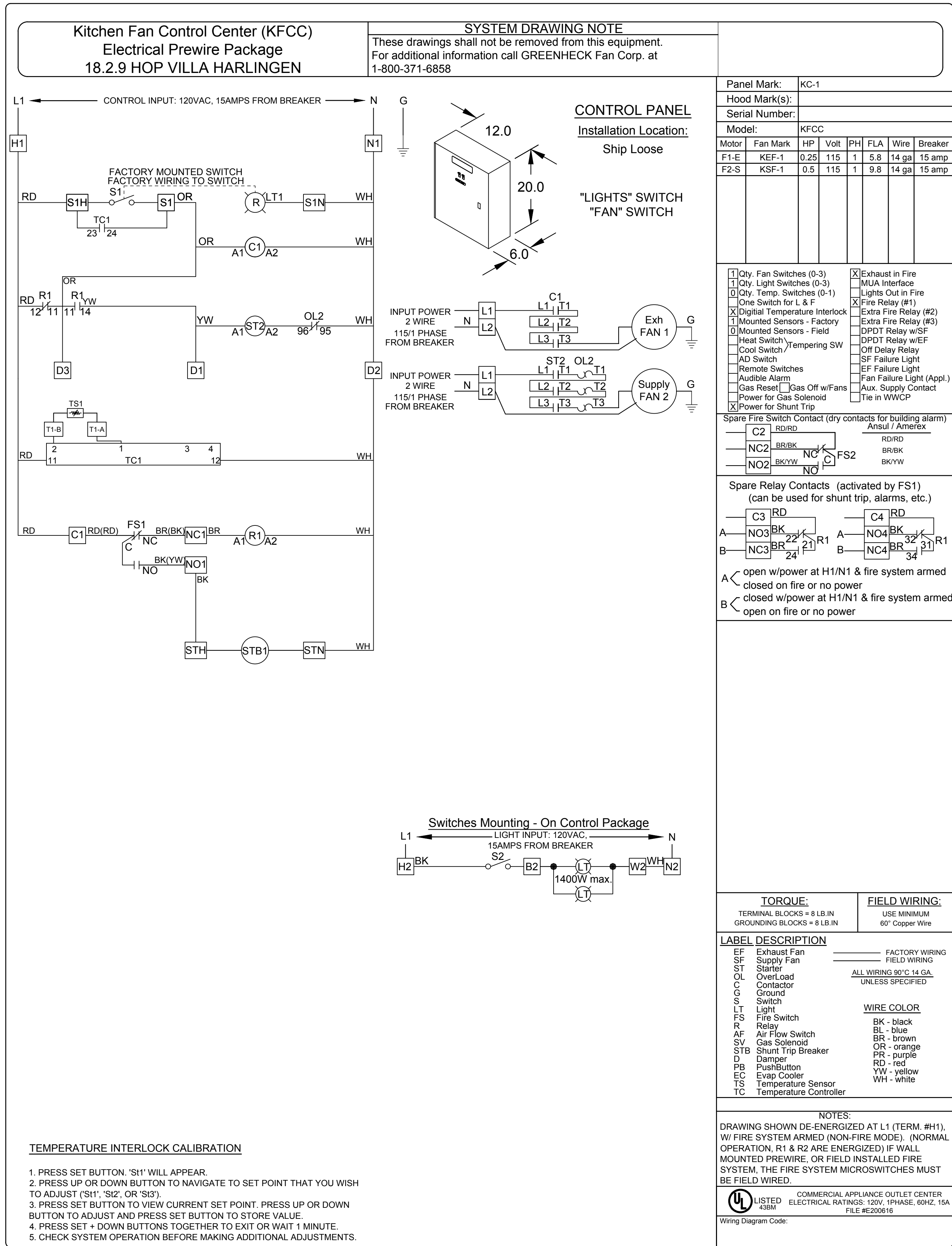
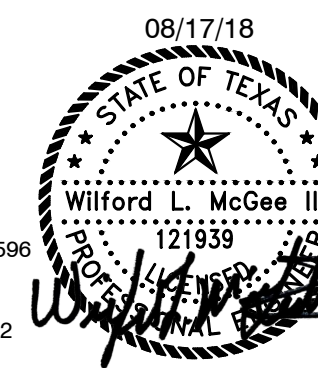
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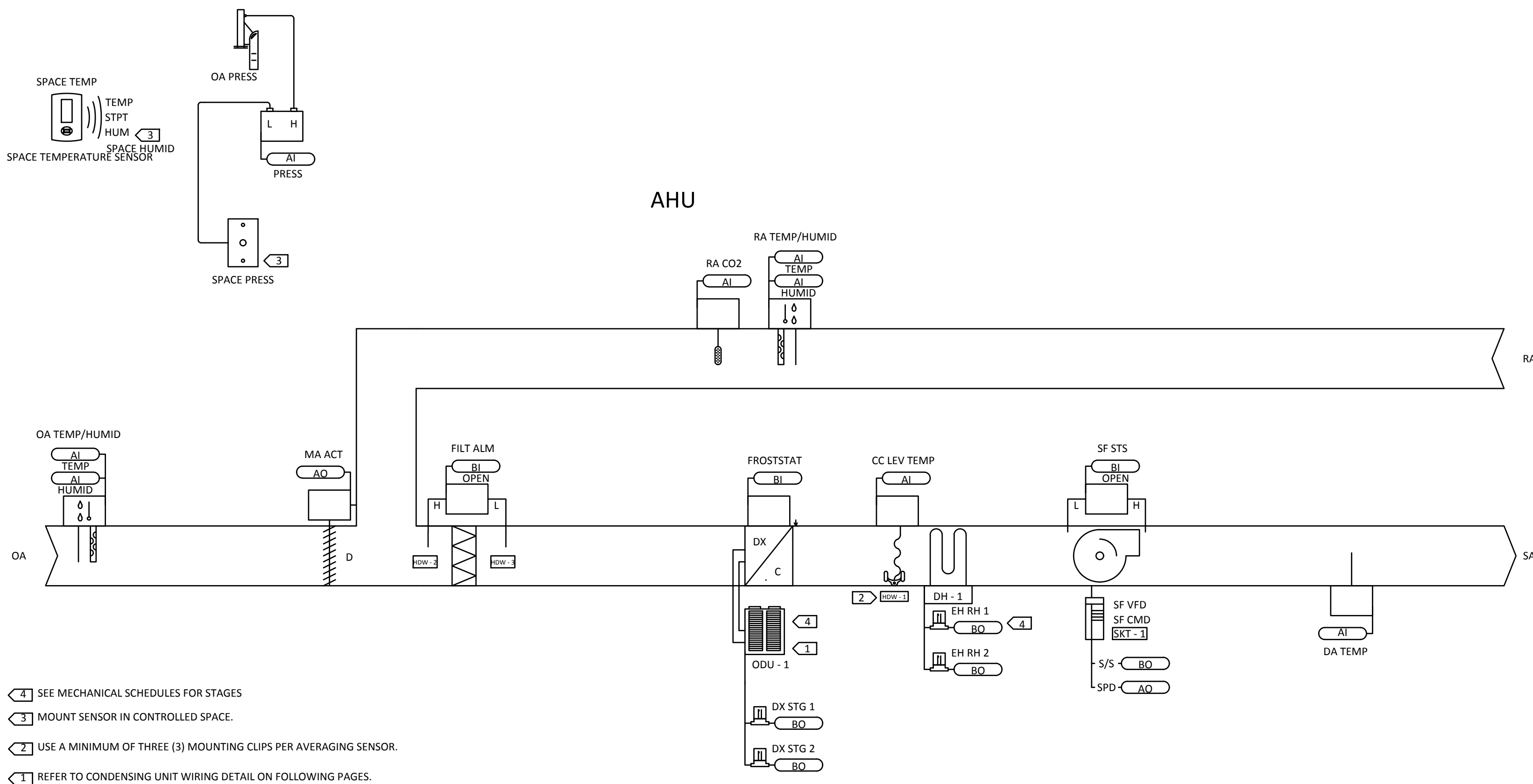
M4.1

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TYPICAL FOR 17
(AHU - A1 - C4)



Sequence of Operations
SZ VAV AHU – 1”8 Flow

Building Automation System Interface:

The Building Automation System (BAS) shall send the controller Occupied Bypass, Morning Warm-up/Pre-Cool, Occupied/Unoccupied and Heat/Cool modes. If a BAS is not present, or communication is lost with the BAS the controller shall operate using default modes and setpoints.

Occupied:

During occupied periods, the supply fan shall run continuously and the outside air damper shall open to maintain minimum ventilation requirements. The DX cooling and electric heat shall stage to maintain the discharge air temperature setpoint. If economizing is enabled the outside air damper shall modulate to maintain the discharge air temperature setpoint. The discharge air temperature setpoint shall be dynamically reset based on the deviation of actual space temperature from the active space temperature setpoint. If the discharge air temperature sensor fails the DX cooling and electric heat shall stage to maintain the active space temperature setpoint and an alarm shall be annunciated at the BAS. If the discharge air temperature sensor and the space temperature sensor fail the DX cooling and electric heat shall be disabled and an alarm shall be annunciated at the BAS.

Unoccupied:

When the space temperature is below the unoccupied heating setpoint of 60.0 deg. F (adj.) the supply fan shall start, the outside air damper shall remain closed and the electric heat shall be enabled. When the space temperature rises above the unoccupied heating setpoint of 60.0 deg. F (adj.) plus the unoccupied differential of 4.0 deg. F (adj.) the supply fan shall stop and the electric heat shall be disabled. When the space temperature is above the unoccupied cooling setpoint of 85.0 deg. F (adj.) the supply fan shall start, the outside air damper shall open if economizing is enabled and remain closed if economizing is disabled and the DX cooling shall be enabled. When the space temperature falls below the unoccupied cooling setpoint of 85.0 deg. F (adj.) minus the unoccupied differential of 4.0 deg. F (adj.) the supply fan shall stop, the DX cooling shall be disabled and the outside air damper shall close.

Optimal Start:

The BAS shall monitor the scheduled occupied time, occupied space setpoints and space temperature to calculate when the optimal start occurs.

Morning Warm-Up Mode:

During optimal start, if the space temperature is below the occupied heating setpoint a morning warm-up mode shall be activated. When morning warm-up is initiated the unit shall enable the heating and supply fan. The outside air damper shall remain closed. When the space temperature reaches the occupied heating setpoint (adj.), the unit shall transition to the occupied mode.

Pre-Cool Mode:

During optimal start, if the space temperature is above the occupied cooling setpoint, pre-cool mode shall be activated. When pre-cool is initiated the unit shall enable the fan and cooling or economizer. The outside air damper shall remain closed, unless economizing. When the space temperature reaches occupied cooling setpoint (adj.), the unit shall transition to the occupied mode.

Optimal Stop:

The BAS shall monitor the scheduled unoccupied time, occupied setpoints and space temperature to calculate when the optimal stop occurs. When the optimal stop mode is active the unit controller shall maintain the space temperature to the space temperature offset setpoint. Outside air damper shall remain enabled to provide minimum ventilation.

Occupied Bypass:

The BAS shall monitor the status of the "on" and "cancel" buttons of the space temperature sensor. When an occupied bypass request is received from a space sensor, the unit shall transition from its current occupancy mode to occupied bypass mode and the unit shall maintain the space temperature to the occupied setpoints (adj.).

Heat/Cool Mode:

When the space temperature rises above the occupied cooling setpoint the mode shall transition to cooling. When the space temperature falls below the occupied heating setpoint the mode shall transition to heating. When the space temperature is above the occupied cooling setpoint or below the occupied heating setpoint the mode shall remain in its last state. If the space temperature sensor fails the mode shall remain in its last state and an alarm shall be annunciated at the BAS. If the local and communicated setpoints fail the controller shall disable the supply fan and an alarm shall be annunciated at the BAS.

Supply Air Temperature Reset Control:

On a rise in space temperature (+2.0 deg. F adj. or greater) above the space cooling setpoint (74.0 deg. F adj.), the supply fan speed shall modulate from minimum (50% adj.) to maximum (or design) air flow to maintain space cooling temperature setpoint while keeping the discharge air temperature setpoint at minimum (55.0 deg. F adj.). As space temperature decreases below 75.0 deg. F (space cooling setpoint 74.0 deg. F + 2.0 deg. F), the fan speed shall be locked at minimum air flow and the discharge air temperature setpoint remains at minimum. When space temperature decreases to 75.0 deg. F (cooling setpoint of 74.0 deg. F adj. + 1.0 deg. F) or below for a period of time (default 1 min. adj.), the fan speed shall remain at minimum, the discharge air temperature setpoint remains at minimum, and control enters into discharge air temperature setpoint reset mode. As space temperature continues to drop below 75.0 deg. F (space temperature cooling setpoint + 1.0 deg. F), the fan speed shall remain at minimum and the discharge air temperature setpoint shall be reset from minimum (55.0 deg. F adj.) to maximum (65.0 deg. F adj.) as space temperature drops from 75.0 deg. F to 74.0 deg. F to maintain the space cooling temperature setpoint.

On a continued drop of space temperature below the space cooling temperature setpoint (74.0 deg. F adj.) through (71.0 deg. F adj.) the space temperature control shall be within its deadband; the fan speed remains at minimum and discharge air setpoint of (65.0 deg. F adj.) for cooling. As space temperature decreases to the heating setpoint (71.0 deg. F adj.) the control shall switch to the heating discharge air temperature reset. In the heating mode, the staged heat will be enabled; the supply fan shall remain at minimum air flow and the discharge air temperature setpoint shall be reset from 70.0 deg. F to 90.0 deg. F as the space temperature drops from 71.0 deg. F to 70.0 deg. F. As space temperature continues to decrease to heating setpoint (71.0 deg. F adj.) - 1.0 deg. F, the discharge air temperature setpoint shall remain at maximum (90.0 deg. F adj.), the fan shall be modulated from minimum to maximum air flow to maintain the space temperature heating setpoint. When the space temperature increases the reverse control shall be implemented.

Occupied Humidity Control:

If the space relative humidity is greater than 50% (adj.), the DX cooling shall stage to maintain space relative humidity setpoint of 50% (adj.) and the electric heat shall stage to maintain the discharge air temperature setpoint. Mode shall terminate when the space relative humidity falls below the relative humidity setpoint of 50% (adj.) minus 3% (adj.). If the space relative humidity sensor fails, the dehumidification sequence shall be terminated and an alarm shall be annunciated at the BAS.

Economizer:

The discharge air temperature sensor shall measure the dry bulb temperature of the air leaving the cooling coil while economizing. When economizing is enabled and the unit is operating in the cooling mode, the economizer damper shall be modulated between its minimum position and 100% to maintain the space temperature setpoint. The economizer damper shall modulate toward minimum position in the event the mixed air temperature falls below the low temperature limit setting.

Comparative Enthalpy

Outside air (OA) enthalpy shall be compared with Return air (RA) enthalpy point. The economizer shall enable when OA enthalpy is less than RA enthalpy - 2.0 BTU/LB. The economizer shall disable when OA enthalpy is greater than RA enthalpy.

Demand Control Ventilation

When the input CO2 Concentration setpoint (adj.) is reached, the economizer shall start to modulate open to bring in more fresh air to reduce the space CO2 level. The outside air damper shall modulate open in small increments until the space CO2 level is satisfied or the outside air damper reaches the full open position. If the input CO2 Concentration falls, the outside air damper shall modulate toward normal economizer operation. If the mixed air temperature drops below the mixed air low limit setpoint the space CO2 sensor input is overridden and modulates the outside air damper closed to maintain the mixed air temperature low limit setpoint. When the mixed air temperature rises above the mixed air low limit setpoint, CO2 operation is once again restored.

Supply Fan:

The supply fan shall be enabled while in the occupied mode and cycled on during the unoccupied mode. The unit controller shall vary the supply fan speed to optimize minimum fan speed in all cooling and heating modes. A differential pressure switch shall monitor the differential pressure across the fan. If the switch does not open within 30 seconds after a request for fan operation a fan failure alarm shall be annunciated, the unit shall stop, requiring a manual reset.

Space Pressure Control:

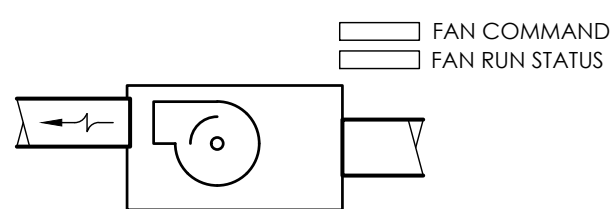
The exhaust fan shall be enabled when the supply fan is running and the space static is greater than the space static setpoint 0.08 inches of W.C. (adj.). When enabled the exhaust fan shall modulate between minimum speed (default of 25%) and maximum speed (100%) to maintain the space static setpoint, but limited to not exceed the supply fan speed. When the space pressure falls below setpoint by 0.03 inches of W.C. and the exhaust fan speed is at or below minimum speed, the fan shall be disabled. Upon space static pressure sensor failure, the exhaust fan shall be enabled based on outdoor air damper position greater than exhaust fan Outdoor Air Damper Enable Setpoint BAS of 25% (adj.). The exhaust fan speed shall track the outdoor air damper position, but not to exceed the supply fan speed.

Filter Status:

A differential pressure switch shall monitor the differential pressure across the filter when the fan is running. If the switch closes during normal operation a dirty filter alarm shall be annunciated at the BAS.

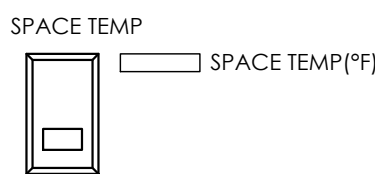
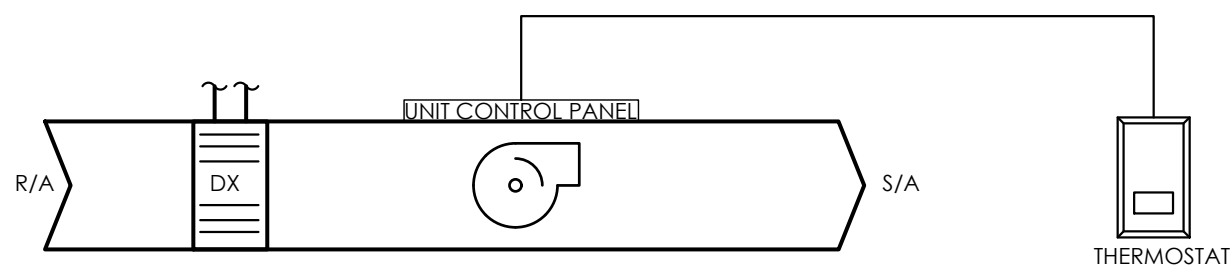
DUCTLESS MINISPLIT

EXHAUST FANS



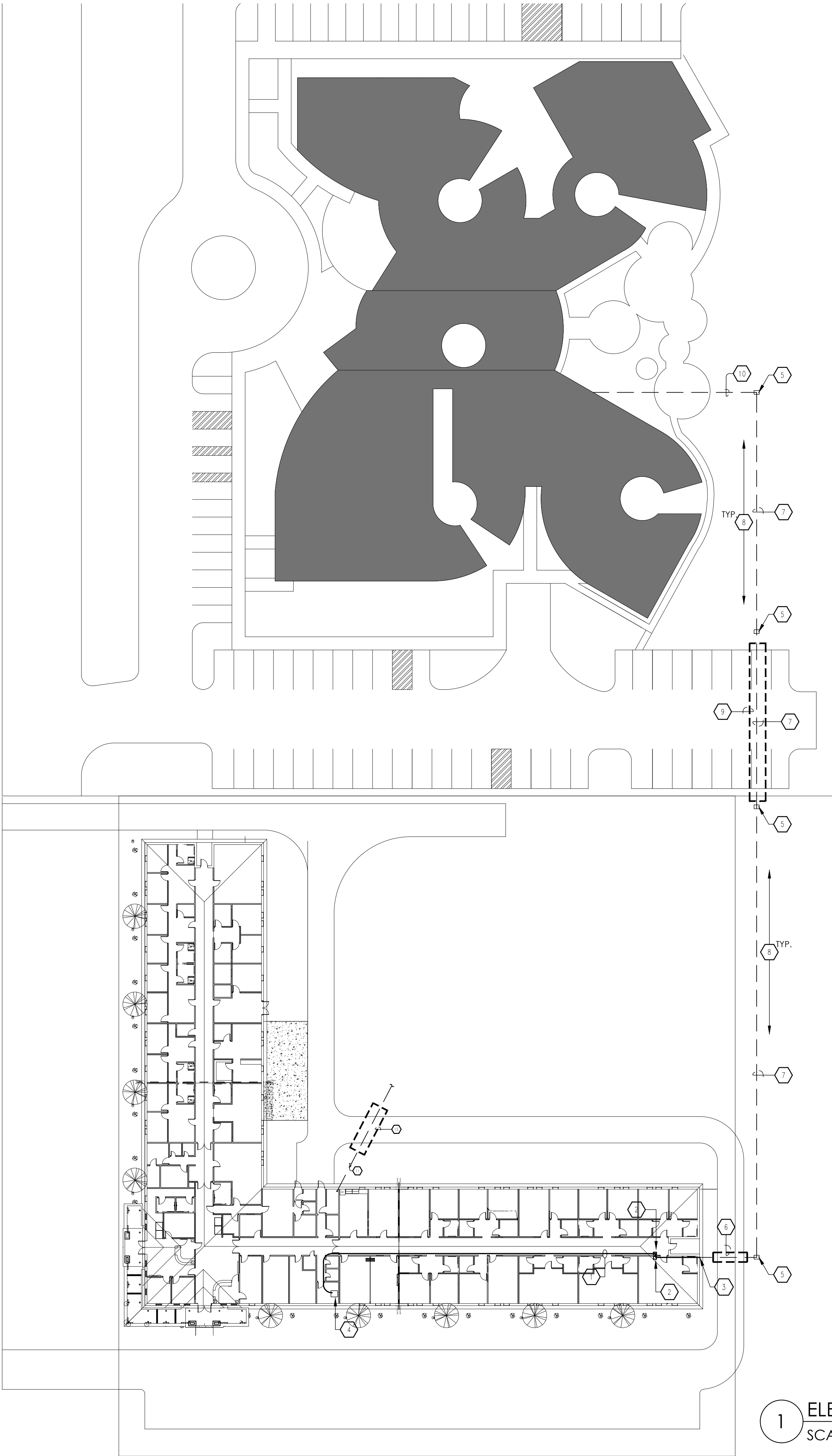
EXHAUST FAN CONTROLS:

- A. EXHAUST FAN OPERATION SHALL BE DICTATED BY THE BAS SYSTEM UNDER A TIME OF DAY SCHEDULE UNLESS INTERLOCKED WITH AN AIR HANDLER SYSTEM IN WHICH CASE THE AIR HANDLER OF OPERATION SHALL DICTATE OPERATION. THE FAN SHALL RUN ANYTIME THE UNIT IS COMMANDED TO RUN. AFTER THE DAMPER STATUS HAS PROVEN (IF APPLICABLE), UNLESS SHUTDOWN ON SAFETIES. THE BAS SHALL MONITOR THE FAN STATUS.
- B. ANY EXHAUST FAN CURRENTLY ON SWITCHES TO REMAIN, BUT NO TO BE DISABLED OUTSIDE OF OCCUPIED SCHEDULE.



SEQUENCE OF OPERATIONS: COMPUTER ROOM MONITORING

- A. SPACE TEMPERATURE MONITORING: THE BAS CONTROLLER SHALL MONITOR THE COMPUTER ROOM SPACE TEMPERATURE AND GENERATE ALARM IF THE SPACE TEMPERATURE GOES OUT ± 2°F FROM NORMAL OPERATING SET POINT INITIALLY AT 72° F (ADJ.) VIA BMS SYSTEM.



1 ELECTRICAL OVERALL SITE PLAN
SCALE: 1"=30'-0"

GENERAL ELECTRICAL NOTES (TO ALL SHEETS)

- A. CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATION, TRENCHING AND BACKFILLING. COORDINATE WITH ALL UTILITIES PRIOR TO EXCAVATION.
- B. ALL ELECTRICAL EQUIPMENT OUTDOORS SHALL BE RATED TYPE NEMA 3R UNLESS OTHERWISE NOTED.
- C. CONTRACTOR SHALL HAVE A WORKING KNOWLEDGE OF LOCAL CODES AND ORDINANCES. ALL WORK SHALL CONFORM TO NATIONAL ELECTRICAL CODES AND ALL OTHER AUTHORITY HAVING JURISDICTION. OBTAIN PERMITS AND PAY ALL FEES. PERFORM MODIFICATIONS TO MEET CODE AND ORDINANCE REQUIREMENTS AT NO ADDITIONAL COST TO OWNER. ARCHITECT OR ENGINEER, VERIFY PRIOR TO BID DATE.
- D. VERIFY AT JOB SITE THE EXACT LOCATIONS OF STRUCTURAL MEMBERS SUCH AS BEAMS, COLUMNS, ETC. TO LOCATE EQUIPMENT CONDUIT, PANELS AND DEVICES. IF DEVIATIONS FROM THE DRAWING ARE NECESSARY TO MEET STRUCTURAL CONDITIONS MAKE DEVIATIONS WITHOUT ADDITIONAL COST, TO OWNER, ARCHITECT, OR ENGINEER.
- E. IN COOPERATION WITH OTHER CONTRACTORS, DETERMINE THE EXACT LOCATION OF EQUIPMENT AND DEVICES AND CONNECTIONS THERETO BY REFERENCE TO THE SUBMITTALS AND ROUGH-IN DRAWINGS, AND BY MEASUREMENTS AT THE SITE. REFER TO ALL OTHER TRADES SUBMITTAL FOR ELECTRICAL INFORMATION.
- F. GROUND ENTIRE ELECTRICAL SYSTEM IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
- G. VERIFY AT JOB SITE GENERAL WORK TO BE DONE AS SPECIFIED, AS NOTED, OR AS REQUIRED FOR INSTALLATION ELECTRICAL SYSTEMS PRIOR TO SUBMISSION OF BIDS.
- H. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND EQUIPMENT TO BE REMOVED AND REPLACED BEFORE SUBMITTING HIS BID.
- I. ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND SMALL SCALE ONLY. THEY CONVEY THE INTENT OF THE WORK BUT DO NOT SHOW DETAIL SUCH AS JUNCTION AND PULL BOXES REQUIRED BY THE SPECIFICATIONS AND THE NATIONAL ELECTRICAL CODE(NEC). PROVIDE ALL MATERIALS AND METHODS CALLED FOR IN THE SPECIFICATIONS AND AS REQUIRED IN THE NEC TO PROVIDE A COMPLETE INSTALLATION OF ALL WORK.
- J. ALL SLEEVES, PENETRATIONS, ETC. SHALL BE SEALED SOLID NON-SHRINKING MATERIAL IMMEDIATELY UPON FILLING OF THE OPENING WITH PIPE OR CONDUIT.
- K. CONTRACTOR IS RESPONSIBLE TO VERIFY AND COORDINATE WITH EXISTING/NEW UNDERGROUND UTILITIES PRIOR TO ANY WORK.
- L. CONTRACTOR IS RESPONSIBLE CALL DIG-TESS: 1-800-DIG-TESS 2-BUSINESS DAYS IN ADVANCE.

KEYED NOTES: ELECTRICAL

- 1 1-4" WITH PULLSTRING. ABOVE THE CEILING. ANY ELBOWS SHALL BE LONG RADIUS TYPE. SUPPORT CONDUIT TO EXISTING STRUCTURE.
- 2 PROVIDE J-BOX. FIELD VERIFY EXACT LOCATION PRIOR TO ANY WORK.
- 3 STUB UP CONDUIT ALONG WALL. ROUTE CONDUIT UP TO ABOVE CEILING LEVEL. CORE DRILL EXISTING WALL FOR NEW CONDUIT. SEAL OPENING WITH WEATHER PROOF SEALANT.
- 4 PROPOSED NETWORK EQUIPMENT LOCATION.
- 5 PROVIDE IN-GRADE PULL BOX. REFER TO DETAIL.
- 6 BORE UNDER EXISTING CONCRETE SURFACE FOR NEW CONDUIT.
- 7 PROVIDE 1-4" PVC CONDUIT FOR COMMUNICATION SERVICES EQUIPPED WITH PULLSTRING.
- 8 CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY EXISTING UNDERGROUND UTILITIES PRIOR TO ANY WORK.
- 9 BORE UNDER EXISTING PARKING STATION SURFACE FOR NEW CONDUITS.
- 10 CONTRACTOR IS RESPONSIBLE TO FIELD IDENTIFY EXISTING COMMUNICATION CONDUIT PRIOR TO ANY WORK. ALL NEW CONDUIT ROUTE WILL BE ADJUSTED PER EXISTING CONDUIT CONDITIONS.
- 11 PROVIDE 2-2" WITH PULLSTRING FOR COMMUNICATION AND 2-1.5" WITH PULLSTRING FOR POWER.
- 12 CONTRACTOR SHALL PROVIDE BORE UNDER EXISTING CONCRETE SURFACE FOR NEW CONDUITS.

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HOP VILLA RENOVATIONS

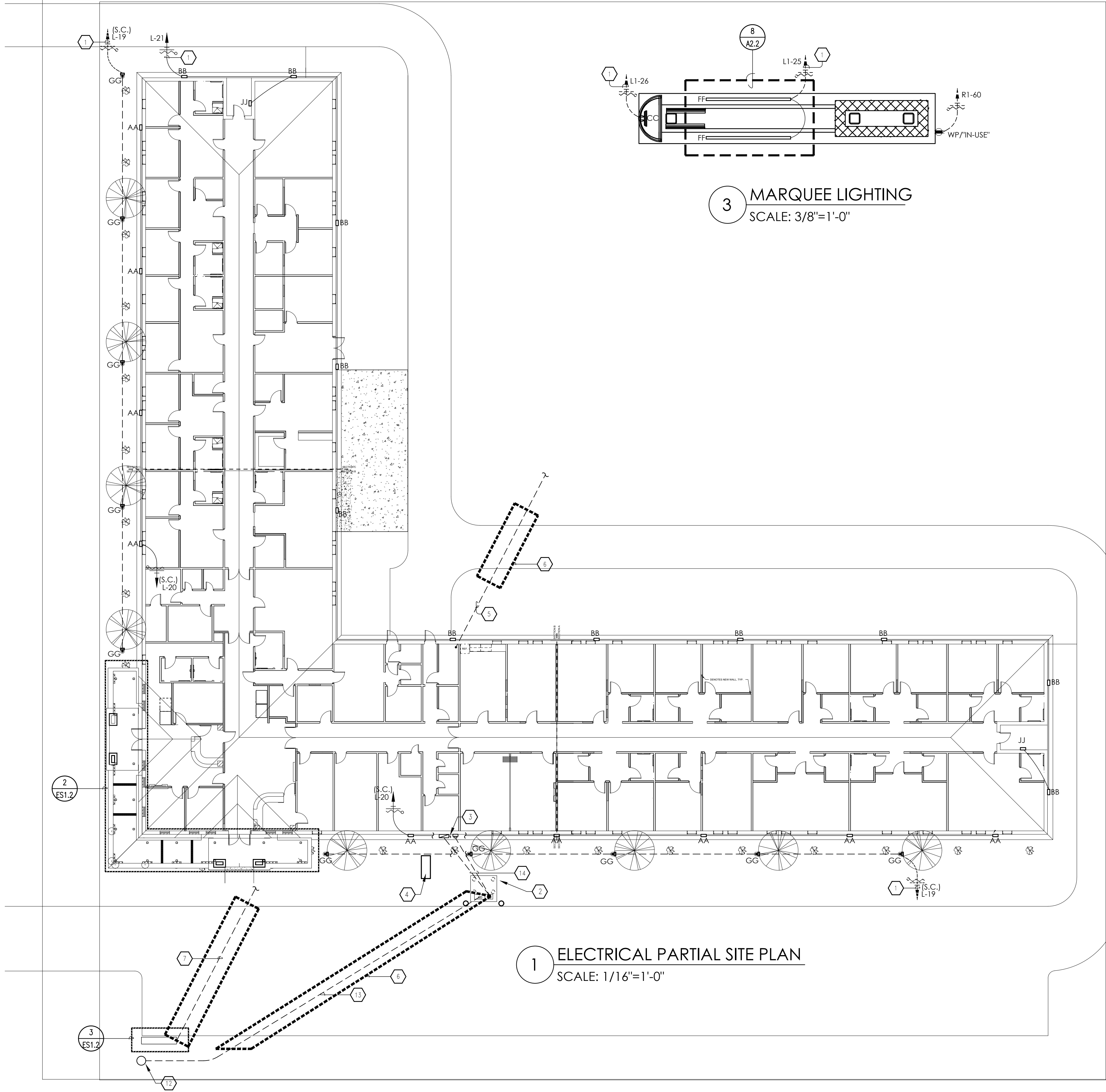
TROPICAL TEXAS BEHAVIORAL HEALTH
HARLINGEN, TX.

PROJECT NUMBER
217027

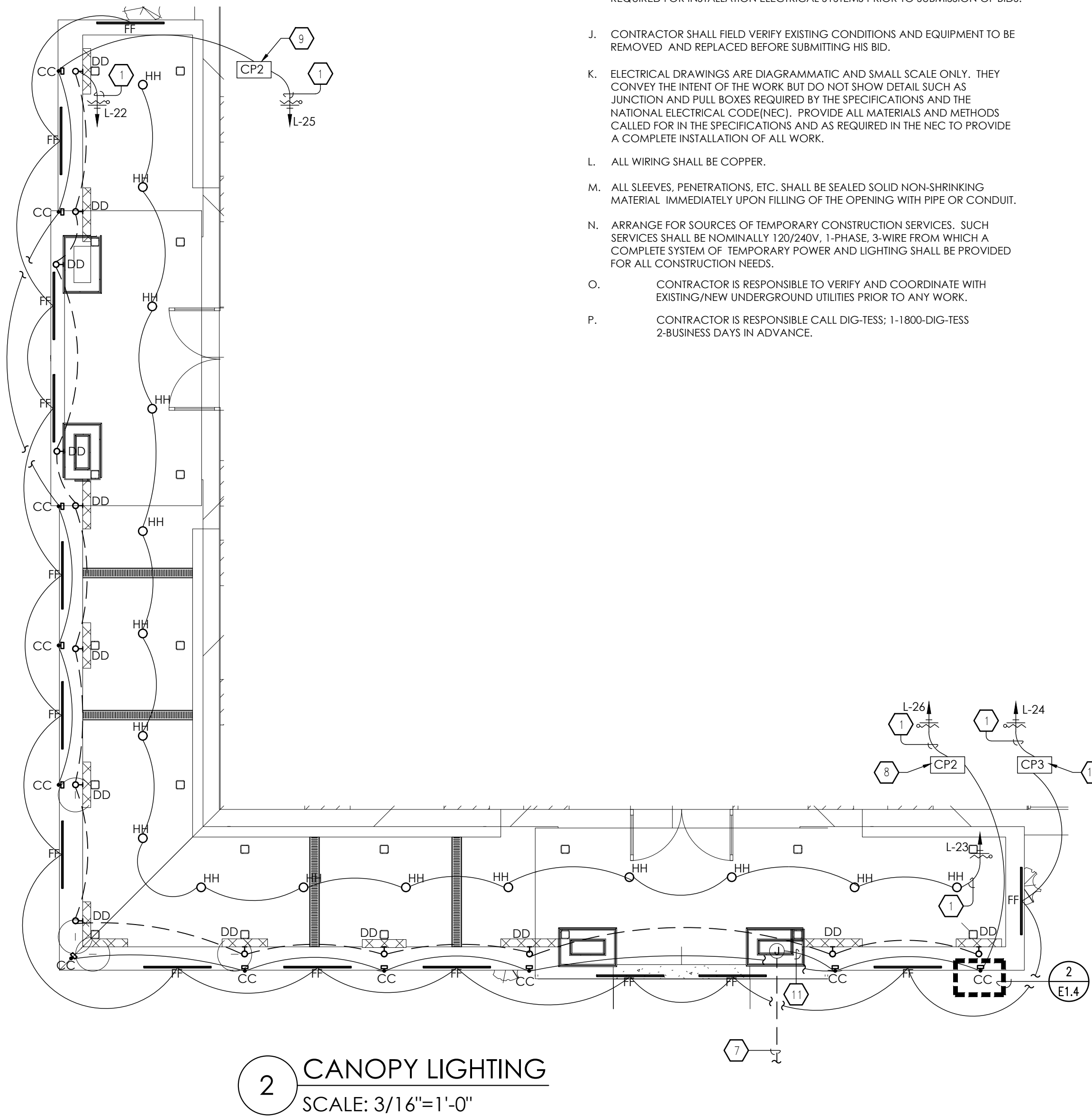
DATE
AUG 17, 2018

FINALS - 100%

SHEET NUMBER
ES1.1

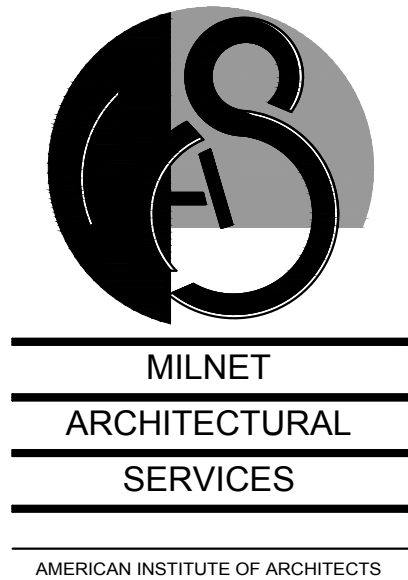


- KEYED NOTES: ELECTRICAL**
- 1 CONTROLLED VIA "LCP".
 - 2 NEW PAD MOUNTED TRANSFORMER AT NEW LOCATION. REFER TO ELECTRICAL RISER DIAGRAM.
 - 3 NEW ELECTRICAL SERVICE METER AND DISCONNECT LOCATION. FIELD VERIFY EXACT LOCATION PRIOR TO ANY WORK.
 - 4 EXISTING 17KW NATURAL GAS GENERATOR TO REMAIN. FIELD VERIFY EXACT LOCATION.
 - 5 PROVIDE 2-2"C WITH PULLSTRING FOR COMMUNICATION AND 2-1.5" WITH PULLSTRING FOR POWER.
 - 6 CONTRACTOR SHALL PROVIDE BORE UNDER EXISTING CONCRETE SURFACE FOR NEW CONDUITS.
 - 7 PROVIDE 1-1"C WITH UNDERGROUND RATED CABLE TO LIGHT FIXTURE TYPE "CC" LOCATED AT THE MARQUEE SIGN
 - 8 DATA ENABLER PRO BOX #1 CIRCUIT.
 - 9 DATA ENABLER PRO BOX #2 CIRCUIT
 - 10 PROVIDE J-BOXES ABOVE CEILING FOR POWER/DMX.
 - 11 PROVIDE 1" CONDUIT.
 - 12 NEW POWER COMPANY POWER POLE WITH RISER DIP POLE.
 - 13 CONTRACTOR TO PROVIDE AND INSTALL (1)-4" PVC CONDUIT FROM PROPOSED NEW UTILITY COMPANY POWER POLE WITH RISER DIP POLE TO NEW PAD MOUNT TRANSFORMER. ALL UNDERGROUND WORK SHALL BE ACCORDING TO POWER COMPANY STANDARDS. VERIFY ALL REQUIREMENTS WITH THE POWER COMPANY BEFORE ANY ROUGH-IN. COORDINATE LOCATION, COST, AND INSTALLATION WITH POWER COMPANY PRIOR TO BID.
 - 14 CONTRACTOR TO PROVIDE AND INSTALL PVC CONDUIT FROM NEW UTILITY TRANSFORMER TO NEW ELECTRICAL SERVICE EQUIPMENT PER POWER COMPANY STANDARDS. VERIFY ALL REQUIREMENTS PRIOR TO ANY ROUGH-IN. REFER TO ELECTRICAL RISER DIAGRAM.



GENERAL ELECTRICAL NOTES (TO ALL SHEETS)

- CONTRACTOR TO VERIFY ALL EXISTING MAIN POWER SERVICES AND COORDINATE WITH POWER COMPANY FOR ALL NEW REQUIREMENTS AND ALL COST ASSOCIATED. CONTRACTOR SHALL INCLUDE ANY COST FOR THE NEW TRANSFORMER AND OTHER ASSOCIATED FEES IN BID. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL FEES WITH POWER COMPANY AND TO INCLUDE IN BID. CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH POWER COMPANY AS SOON THE CONTRACT IS AWARDED TO ORDER TRANSFORMER AND THE RELATED ELECTRICAL SERVICE EQUIPMENT AS SOON AS POSSIBLE.
- CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATION, TRENCHING AND BACKFILLING. COORDINATE WITH ALL UTILITIES PRIOR TO EXCAVATION.
- CONTRACTOR TO VERIFY ALL EXISTING MAIN TELEPHONE SERVICES AND COORDINATE WITH TELEPHONE COMPANY FOR ALL REQUIREMENTS AND ALL COST ASSOCIATED. INCLUDE ALL COST IN BID. CONDUIT FROM MAIN TELEPHONE RISER SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
- ALL ELECTRICAL EQUIPMENT OUTDOORS SHALL BE RATED TYPE NEMA 3R UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL HAVE A WORKING KNOWLEDGE OF LOCAL CODES AND ORDINANCES. ALL WORK SHALL CONFORM TO NATIONAL ELECTRICAL CODES AND ALL OTHER AUTHORITY HAVING JURISDICTION. OBTAIN PERMITS AND PAY ALL FEES. PERFORM MODIFICATIONS TO MEET CODE AND ORDINANCE REQUIREMENTS AT NO ADDITIONAL COST TO OWNER. ARCHITECT OR ENGINEER. VERIFY PRIOR TO BID DATE.
- VERIFY AT JOB SITE THE EXACT LOCATIONS OF STRUCTURAL MEMBERS SUCH AS BEAMS, COLUMNS, ETC. TO LOCATE EQUIPMENT CONDUIT, PANELS AND DEVICES. IF DEVIATIONS FROM THE DRAWING ARE NECESSARY TO MEET STRUCTURAL CONDITIONS MAKE DEVIATIONS WITHOUT ADDITIONAL COST, TO OWNER, ARCHITECT, OR ENGINEER.
- IN COOPERATION WITH OTHER CONTRACTORS, DETERMINE THE EXACT LOCATION OF EQUIPMENT AND DEVICES AND CONNECTIONS THERETO BY REFERENCE TO THE SUBMITTALS AND ROUGH-IN DRAWINGS, AND BY MEASUREMENTS AT THE SITE. REFER TO ALL OTHER TRADES SUBMITTAL FOR ELECTRICAL INFORMATION.
- GROUND ENTIRE ELECTRICAL SYSTEM IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
- VERIFY AT JOB SITE GENERAL WORK TO BE DONE AS SPECIFIED, AS NOTED, OR AS REQUIRED FOR INSTALLATION ELECTRICAL SYSTEMS PRIOR TO SUBMISSION OF BIDS.
- CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND EQUIPMENT TO BE REMOVED AND REPLACED BEFORE SUBMITTING HIS BID.
- ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND SMALL SCALE ONLY. THEY CONVEY THE INTENT OF THE WORK BUT DO NOT SHOW DETAIL SUCH AS JUNCTION AND PULL BOXES REQUIRED BY THE SPECIFICATIONS AND THE NATIONAL ELECTRICAL CODE(NEC). PROVIDE ALL MATERIALS AND METHODS CALLED FOR IN THE SPECIFICATIONS AND AS REQUIRED IN THE NEC TO PROVIDE A COMPLETE INSTALLATION OF ALL WORK.
- ALL WIRING SHALL BE COPPER.
- ALL SLEEVES, PENETRATIONS, ETC. SHALL BE SEALED SOLID NON-SHRINKING MATERIAL IMMEDIATELY UPON FILLING OF THE OPENING WITH PIPE OR CONDUIT.
- ARRANGE FOR SOURCES OF TEMPORARY CONSTRUCTION SERVICES. SUCH SERVICES SHALL BE NOMINALLY 120/240V, 1-PHASE, 3-WIRE FROM WHICH A COMPLETE SYSTEM OF TEMPORARY POWER AND LIGHTING SHALL BE PROVIDED FOR ALL CONSTRUCTION NEEDS.
- CONTRACTOR IS RESPONSIBLE TO VERIFY AND COORDINATE WITH EXISTING/NEW UNDERGROUND UTILITIES PRIOR TO ANY WORK.
- CONTRACTOR IS RESPONSIBLE CALL DIG-TESS; 1-1800-DIG-TESS 2-BUSINESS DAYS IN ADVANCE.



HOP VILLA RENOVATIONS

TROPICAL TEXAS BEHAVIORAL HEALTH
HARLINGEN, TX.

PROJECT NUMBER
217027

DATE
AUG 17, 2018

FINALS - 100%

SHEET NUMBER

ES1.2



GENERAL DEMOLITION NOTES: (TO ALL SHEETS)

- A. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE ARCHITECTURAL DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE WILL BE REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
- B. PROVIDE ALL DEMOLITION WORK REQUIRED FOR THE REMOVAL AND/OR RELOCATION OF ELECTRICAL EQUIPMENT AND ASSOCIATED CONDUCTORS, CONDUIT, BOXES, ETC. TO PROVIDE A COMPLETE AND OPERABLE SYSTEM UPON COMPLETION OF THE PROJECT.
- C. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW THE ARCHITECTURAL DOCUMENTS IN ADDITION TO THE DIVISION 15 AND 16 DOCUMENTS TO DETERMINE THE COMPLETE SCOPE OF WORK.
- D. WHERE DEVICES OR EQUIPMENT ARE INDICATED OR REQUIRED TO BE REMOVED, THE ASSOCIATED BOXES, CONDUIT, AND CONDUCTORS SHALL BE REMOVED BACK TO THEIR SOURCE.
- E. WHERE DEVICES OR EQUIPMENT ARE INDICATED OR REQUIRED TO BE RELOCATED, THE ASSOCIATED BOXES, CONDUIT, AND CONDUCTORS SHALL BE REMOVED BACK TO A CONCEALED JUNCTION BOX AND NEW PRODUCTS SHALL BE USED TO EXTEND THE SERVICE TO THE NEW LOCATION.
- F. WHERE CONDUITS RUN ABOVE INACCESSIBLE CEILINGS OR IN WALLS WHICH ARE NOT PART OF DEMOLITION ARE TO REMAIN UNDISTURBED, CONDUCTORS SHALL BE REMOVED AND THE CONDUITS CAPPED AND ABANDONED.
- G. WHERE THE REMOVAL OF DEVICES OR EQUIPMENT RENDERS EQUIPMENT DOWNSTREAM INOPERABLE, SERVICE SHALL BE EXTENDED TO THE DOWNSTREAM DEVICE OR EQUIPMENT SO THAT THE DEVICE OR EQUIPMENT IS LEFT IN OPERATING CONDITION.
- H. COORDINATE DEMOLITION OF DIVISION 16 SYSTEMS AS REQUIRED WITH ALL OTHER TRADES.
- I. ALL EXISTING ELECTRICAL EQUIPMENT, CONDUIT AND WIRING REMOVED DURING CONSTRUCTION NO LONGER REQUIRED AS PART OF AN ACTIVE SYSTEM AND NOT TO BE REUSED SHALL BE REMOVED FROM THE JOB SITE AND PROPERLY RETURNED TO THE OWNER, IF DESIRED BY OWNER.
- J. WHERE EXISTING EQUIPMENT IS TO BE RELOCATED, EXTREME CARE SHALL BE TAKEN TO PREVENT DAMAGE DURING THE REMOVAL AND REINSTALLATION. WHERE DAMAGE OCCURS, THE EQUIPMENT SHALL BE REPLACED OR REPAIRED TO THE SATISFACTION AND APPROVAL OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
- K. EXISTING DEVICES AND/OR EQUIPMENT TO BE REUSED SHALL BE CLEANED AND REPAIRED AT THE DISCRETION OF THE ARCHITECT WHERE APPLICABLE.
- L. ALL DEVICES WITH AN "EX" SYMBOL ARE EXISTING TO REMAIN.
- M. ALL DEVICES ATTACHED TO WALLS OR CEILINGS SHALL BE REMOVED PER DEMOLITION NOTE A - L WHETHER SHOWN ON DRAWINGS OR NOT.

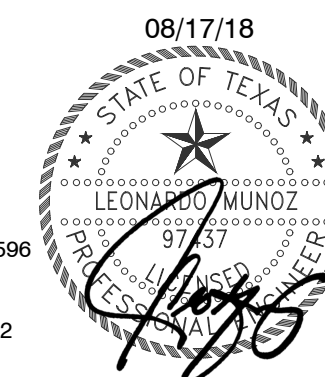
KEYED NOTES: DEMOLITION

- 1 ALL EXISTING LIGHTS, LOAD CENTERS, CONDUIT, WIRING, RECEPTACLES, WALL PLATES, DATA OUTLETS, FIRE ALARM, SWITCHES SHALL BE REMOVED. FIELD VERIFY EXISTING CONDITIONS PRIOR TO ANY WORK.
- 2 EXISTING COMMUNICATION DMARC TO REMAIN AND EQUIPMENT TO REMAIN IN PLACE. FIELD VERIFY EXISTING CONDITIONS PRIOR TO ANY WORK.
- 3 EXISTING 4 ELECTRICAL PANELS AND WIRE WAY TO BE REMOVED. WIREWAY CONDUITS TO TRANSFORMER TO REMAIN. FIELD VERIFY EXISTING CONDITIONS PRIOR TO ANY WORK.
- 4 EXISTING GENERATOR GENERAC EQUIPMENT TO REMAIN. FIELD VERIFY EXISTING CONDITIONS PRIOR TO ANY WORK.
- 5 EXISTING EXTERIOR ELECTRICAL, RECEPTACLES, DISCONNECTS, LIGHTING, CONDUIT, WIRING TO BE REMOVED. FIELD VERIFY EXISTING CONDITIONS PRIOR TO ANY WORK.

1 ELECTRICAL DEMOLITION PLAN
3/32 = 1'-0"

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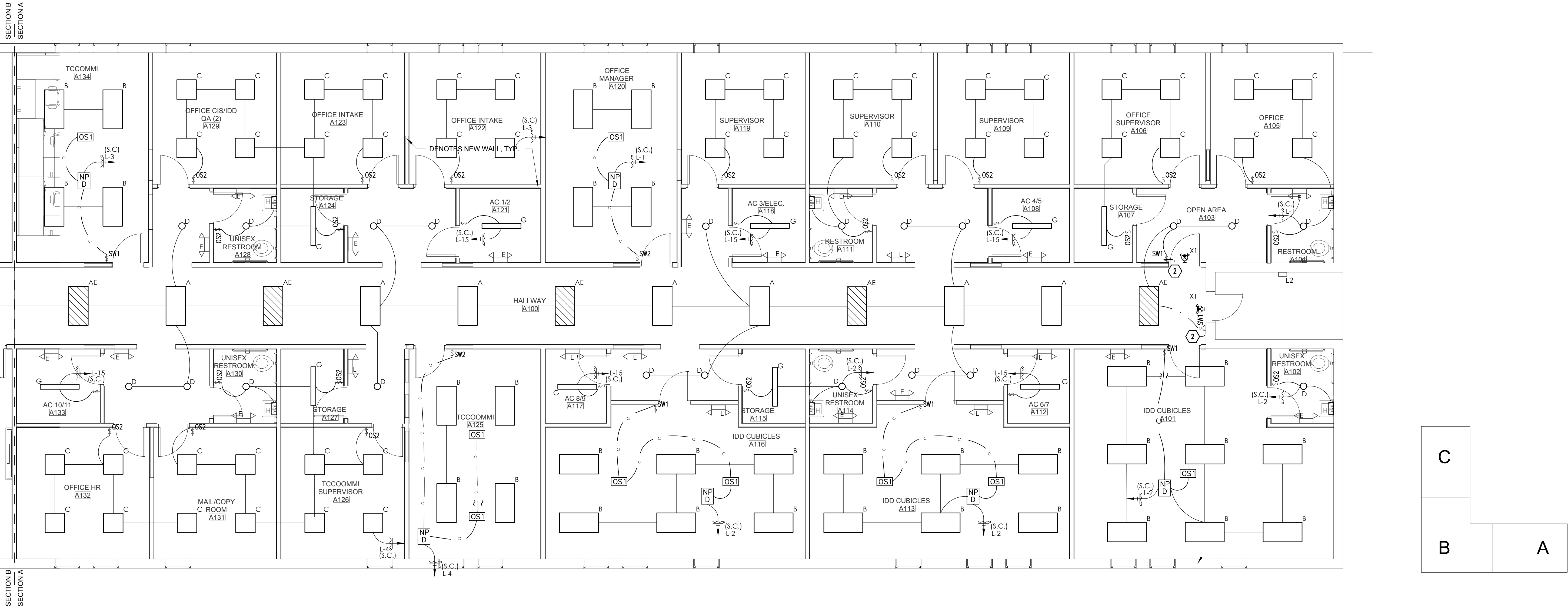


GENERAL NOTES: LIGHTING

- A. ALL EXIT FIXTURES TYPE "X1 & X2", EMERGENCY LIGHT FIXTURE TYPE "E" AND ALL EMERGENCY BALLAST SHALL BE ON CIRCUIT "L-17 & L-18". FIXTURE TYPE LABEL WITH AN "E" ARE LIGHT FIXTURES WITH EMERGENCY BALLAST. REFER TO LIGHT FIXTURE SCHEDULE.
- B. VERIFY CEILING TYPES AND COORDINATE WITH FIXTURE TYPE LIGHT FIXTURE SHALL BE COMPATIBLE WITH CEILING TYPE AS INDICATED ON THE ARCHITECTURAL DOCUMENTS. NOTIFY ENGINEER IF DISCREPANCIES EXIST PRIOR TO ORDERING FIXTURES.
- C. COORDINATE EXACT ROUTING OF ALL CONDUIT ABOVE CEILING IN BUILDING. TYPICAL FOR ALL BUILDING EXTERIOR LIGHTING.
- D. COORDINATE LOCATION OF LIGHTS WITH DIFFUSERS AND GRILLES.
- E. SWITCH LEGS ARE NOT SHOWN WHERE SWITCHING SCHEME IS OBVIOUS.
- F. ALL EXISTING WALLS TO REMAIN. PROVIDE BOXES FOR THE APPLICATION.
- G. RACEWAY IN EXISTING WALLS SHALL BE INSTALLED INSIDE WALL WITHOUT BREAKING THE GYPSUM WALL. INCLUDE ALL COST FOR A COMPLETE ELECTRICAL RACEWAY INSTALLATION.

KEYED NOTES: LIGHTING

- 1 CONTROLLED VIA LCP.
- 2 DIGITAL SWITCH TO BE INTERLOCKED WITH RELAY PANEL TO ALL HALLWAY LIGHTING.



1 LIGHTING FLOOR PLAN SECTION A
3/16 = 1'-0"

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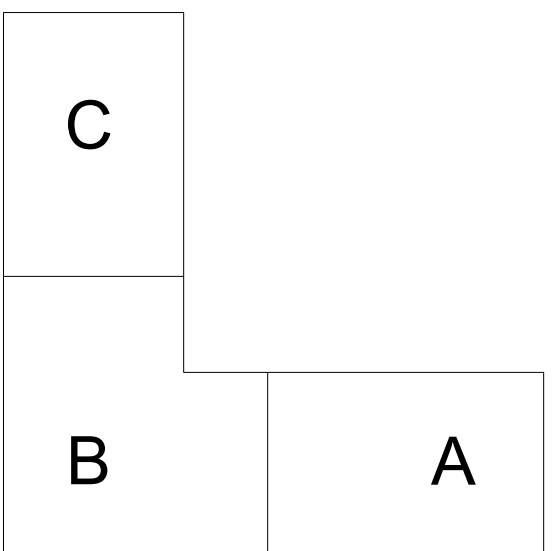




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HARLINGEN, TX.

FINALS - 100%

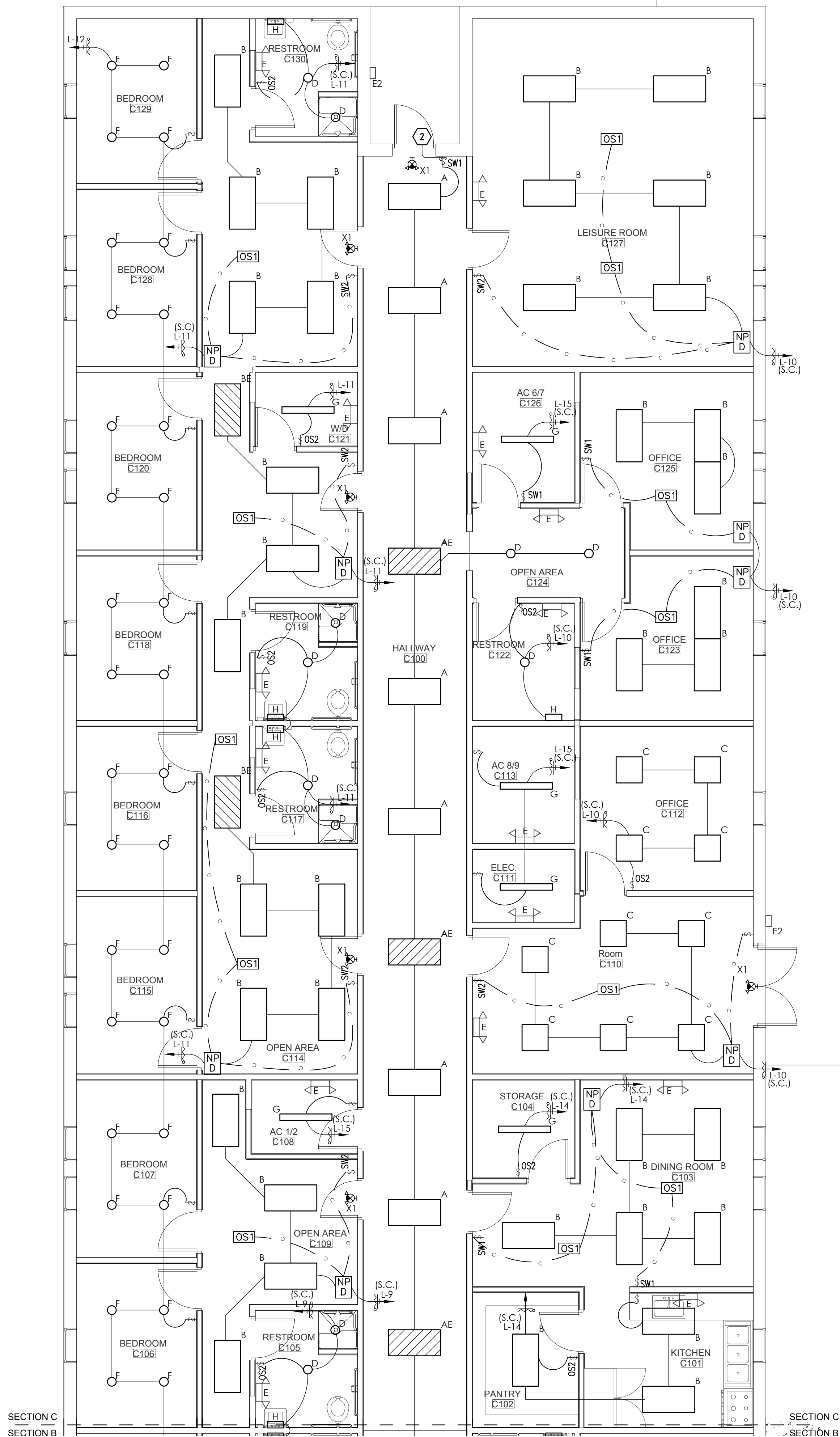
E1.2



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08/17/18



GENERAL NOTES: LIGHTING

- A. ALL EXIT FIXTURES TYPE "X1 & X2", EMERGENCY LIGHT FIXTURE TYPE "E" AND ALL EMERGENCY BALLAST SHALL BE ON CIRCUIT "L-17 & L-18". FIXTURE TYPE LABEL WITH AN "E" ARE LIGHT FIXTURES WITH EMERGENCY BALLAST. REFER TO LIGHT FIXTURE SCHEDULE.
- B. VERIFY CEILING TYPES AND COORDINATE WITH FIXTURE TYPE LIGHT FIXTURE SHALL BE COMPATIBLE WITH CEILING TYPE AS INDICATED ON THE ARCHITECTURAL DOCUMENTS. NOTIFY ENGINEER IF DISCREPANCIES EXIST PRIOR TO ORDERING FIXTURES.
- C. COORDINATE EXACT ROUTING OF ALL CONDUIT ABOVE CEILING IN BUILDING. TYPICAL FOR ALL BUILDING EXTERIOR LIGHTING.
- D. COORDINATE LOCATION OF LIGHTS WITH DIFFUSERS AND GRILLES.
- E. SWITCH LEGS ARE NOT SHOWN WHERE SWITCHING SCHEME IS OBVIOUS.
- F. ALL EXISTING WALLS TO REMAIN, PROVIDE BOXES FOR THE APPLICATION.
- G. RACEWAY IN EXISTING WALLS SHALL BE INSTALLED INSIDE WALL WITHOUT BREAKING THE GYPSUM WALL. INCLUDE ALL COST FOR A COMPLETE ELECTRICAL RACEWAY INSTALLATION.

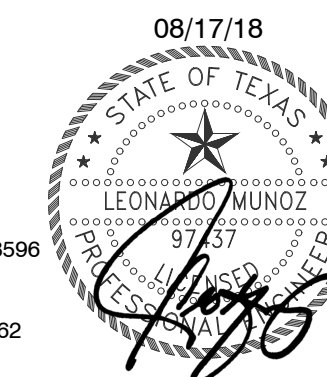
KEYED NOTES: LIGHTING

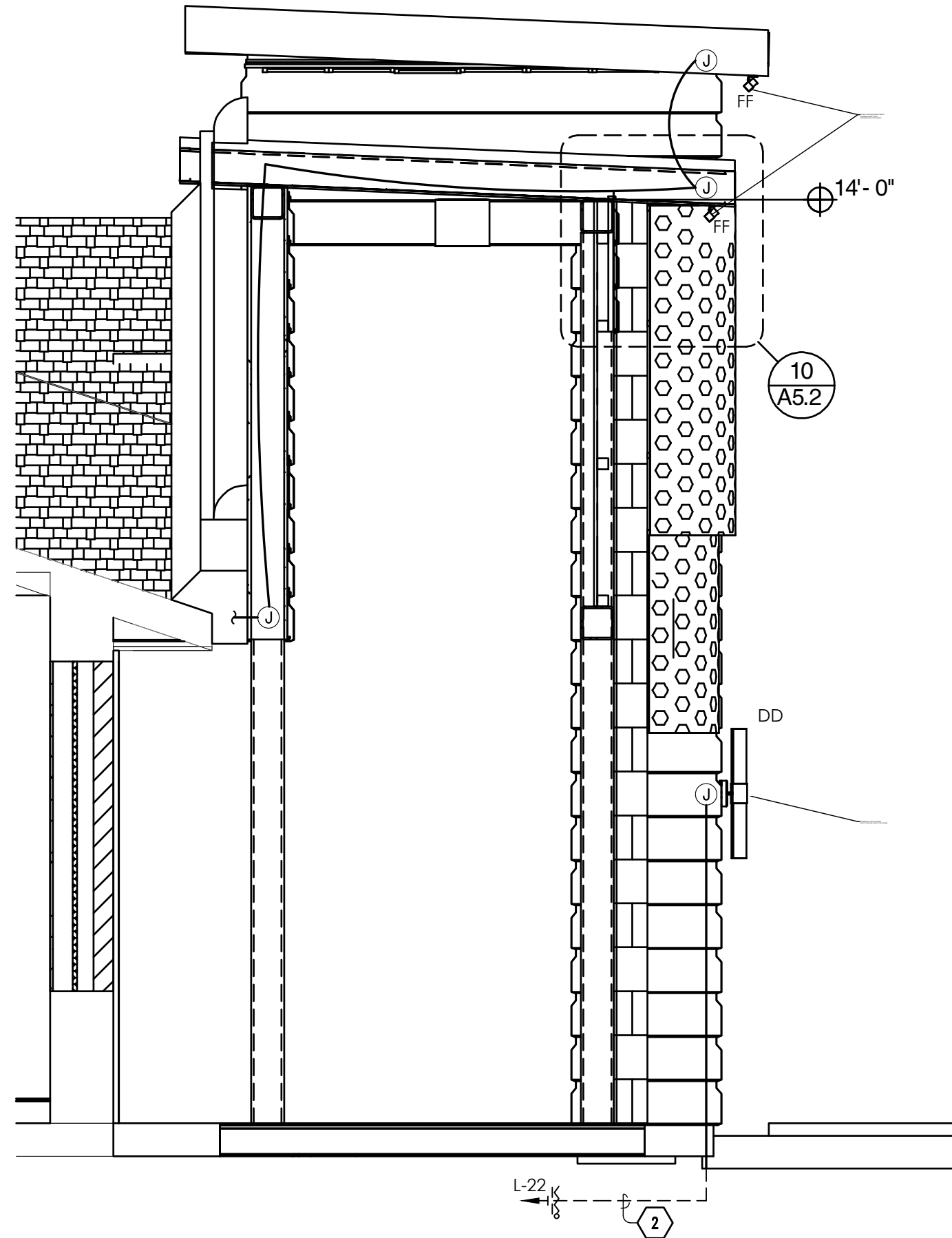
- ① CONTROLLED VIA LCP.
- ② DIGITAL SWITCH TO BE INTERLOCKED WITH RELAY PANEL TO ALL HALLWAY LIGHTING.

1 LIGHTING FLOOR PLAN SECTION C
3/16 = 1'-0"

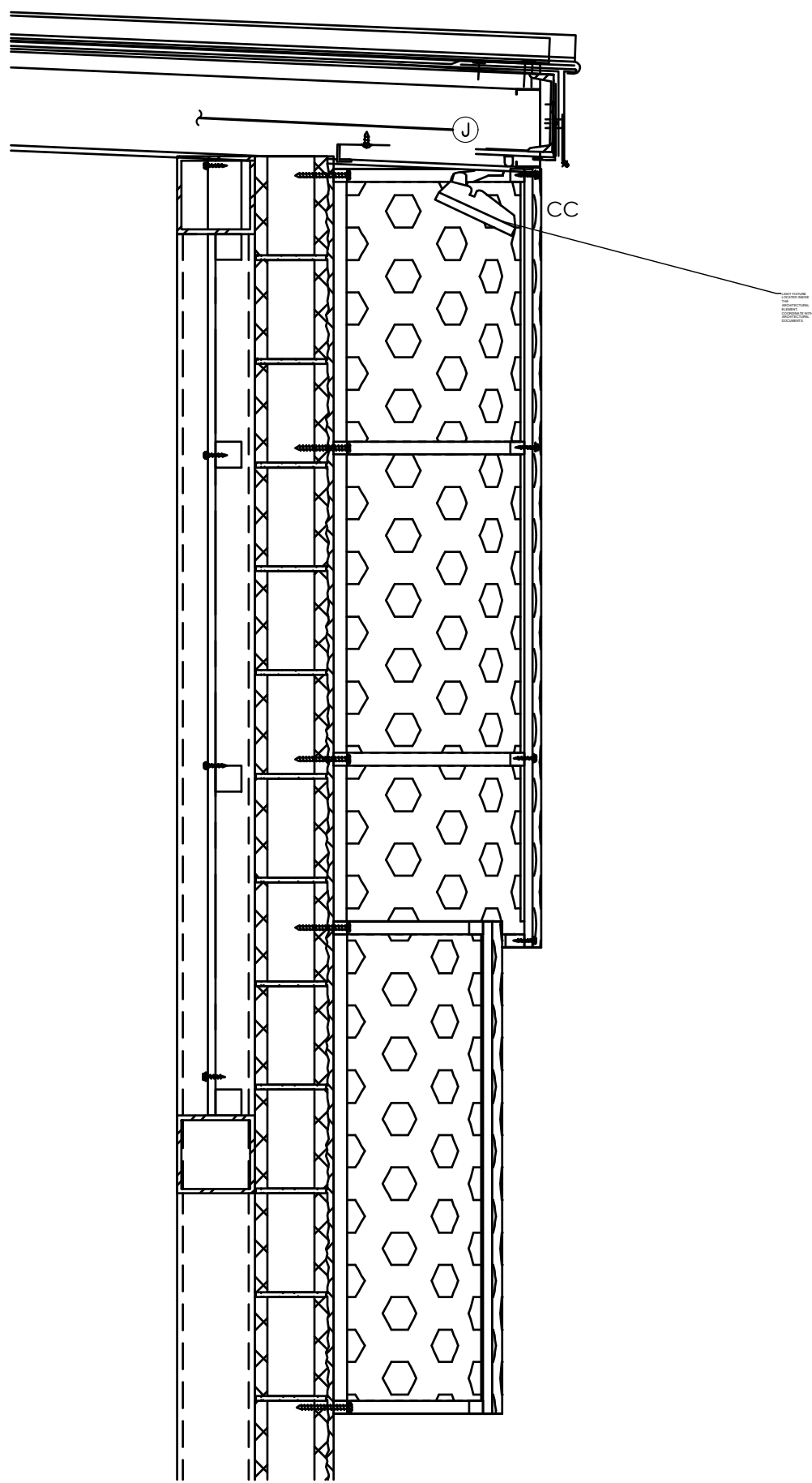
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Project number: 18.2.09

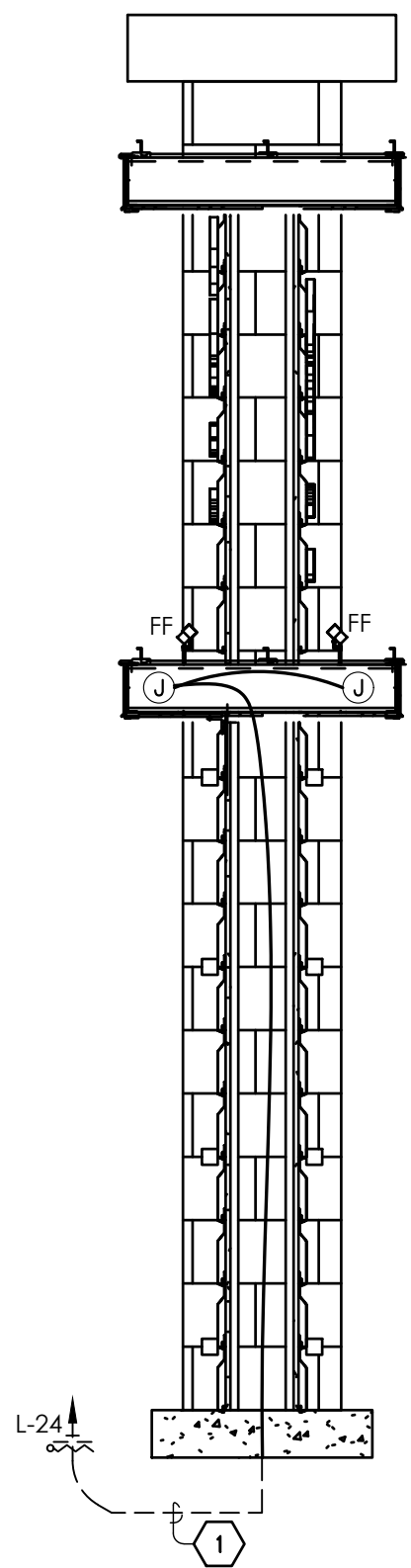




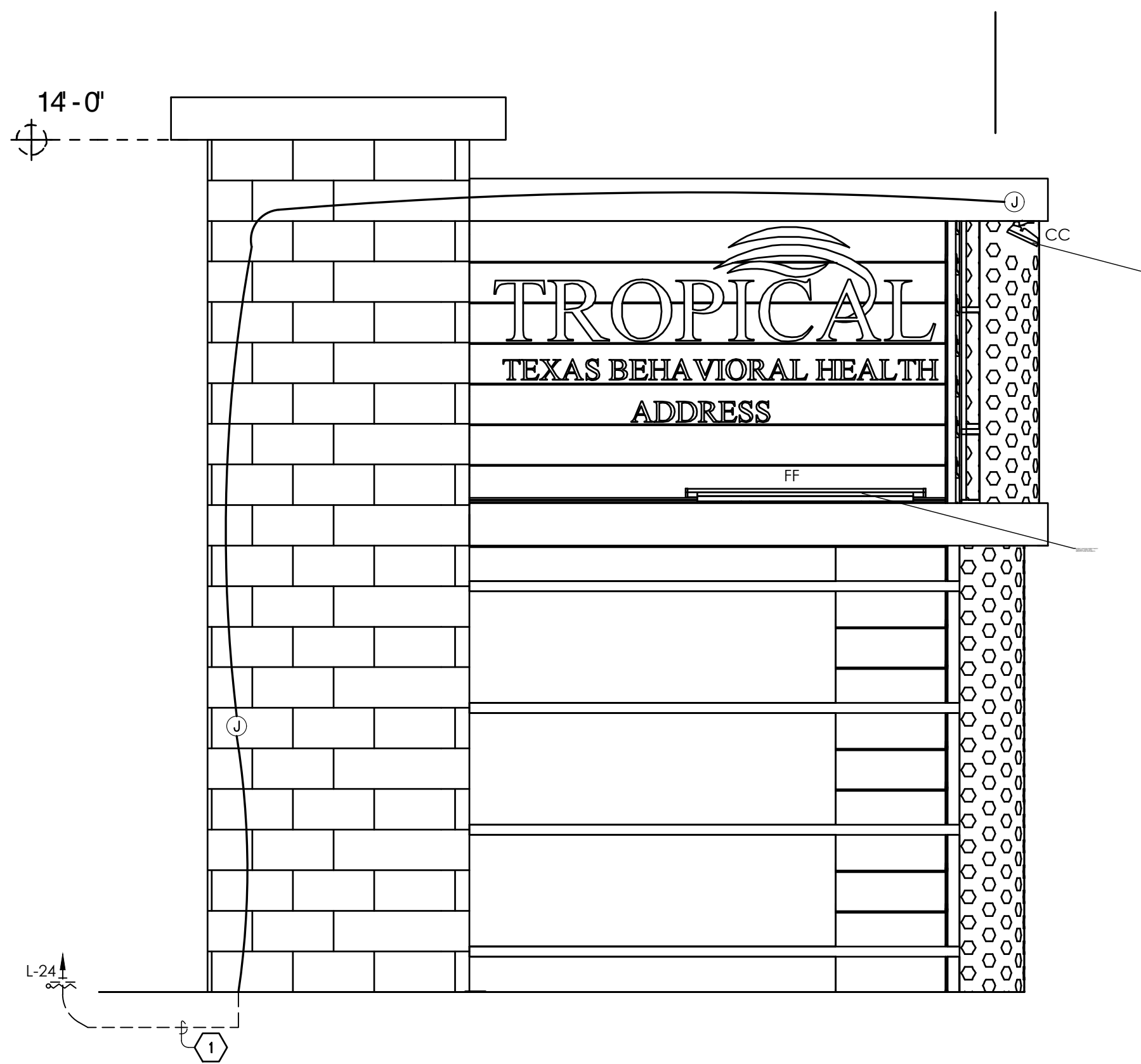
1 CANOPY WALL SECTION
1/2" = 1'-0"



2 CANOPY SECTION DETAIL
1" = 1'-0"



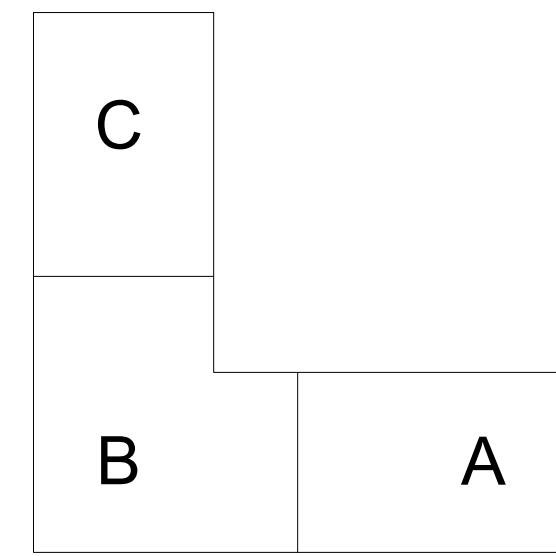
3 MARQUEE SECTION
1/2" = 1'-0"



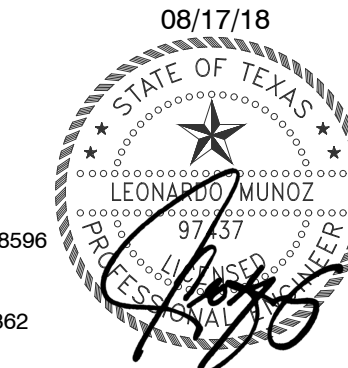
4 MARQUEE ELEVATION
1/2" = 1'-0"

KEYED NOTES: LIGHTING

- 1 PROVIDE 1" CONDUIT WITH UNDERGROUND RATED CONDUCTOR FOR INTERLOCK WITH FIXTURE "CC" LOCATED AT THE CANOPY AREA.
- 2 ROUTE TO PANEL OR THE OTHER "DD" FIXTURES.



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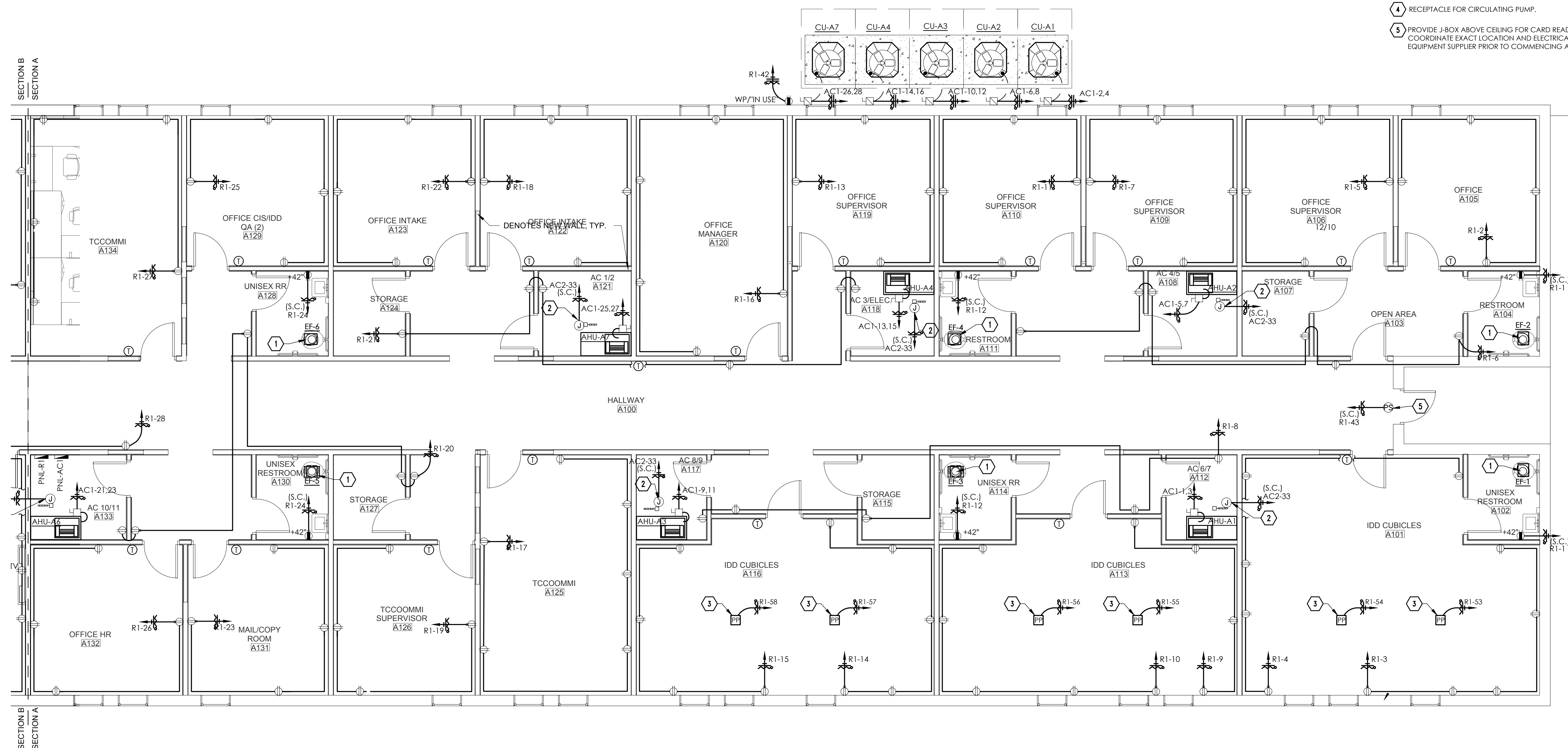


GENERAL NOTES: POWER

- A. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF ALL POWER SOURCE WIRING IN ACCORDANCE WITH ARCHITECTURAL MILLWORK.
- B. ELECTRICAL CONTRACTOR SHALL MAKE FINAL CONNECTION TO H.V.A.C EQUIPMENT, PLUMBING EQUIPMENT, REFER TO PANEL SCHEDULE FOR WIRE SIZE.
- C. ELECTRICAL CONTRACTOR SHALL PROVIDE STARTERS, RELAYS, CONTACTORS AND THE REQUIRED ELECTRICAL ACCESSORIES FOR MECHANICAL SYSTEM AS REQUIRED.
- D. COORDINATE EXACT LOCATION OF ALL MECHANICAL EQUIPMENT IN ACCORDANCE WITH MECHANICAL DRAWINGS TO MEET ELECTRICAL AND MECHANICAL REQUIRED CLEARANCE BY THE LATEST CODE.
- E. COORDINATE EXACT LOCATION OF ISOLATED OUTLETS FOR COMPUTERS WITH OWNER.
- F. ELECTRICAL CONTRACTOR SHALL PROVIDE J-BOX AND CONDUIT FOR H.V.A.C, CONTROLS AND THERMOSTATS, COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
- G. NEMA RATED OUTLETS, REFER TO BREAKER SIZE AND COORDINATE WITH EQUIPMENT REQUIREMENTS PRIOR TO BID.
- H. CONTRACTOR SHALL REFER TO EQUIPMENT SUBMITTAL FOR ALL ELECTRICAL REQUIREMENTS PRIOR TO COMMENCING ANY WORK.
- I. RACEWAY IN EXISTING WALLS SHALL BE INSTALLED INSIDE WALL WITHOUT BREAKING THE GYPSUM WALL. INCLUDE ALL COST FOR A COMPLETE ELECTRICAL RACEWAY INSTALLATION.

KEYED NOTES: POWER

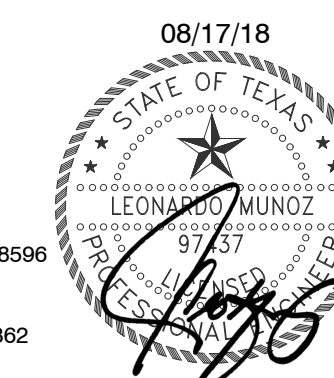
- 1 TIE INTO ROOMS LIGHTING CIRCUIT AND INTERLOCK FAN WITH ROOMS LIGHTS. WIRING SHALL BE 2#12, 1#12G, 3/4"C.
- 2 PROVIDE J-BOX FOR MOTORIZED HVAC DAMPER.
- 3 PROVIDE J-BOX AND POWER POLE. TOWER POLE SHALL BE A 2 TOW COMPARTMENT POLE FOR COMMUNICATION AND POWER MFR. WIREHOLED PANDUIT 41-2 WITH 2 DUPLEX AND 2 DATA OUTLETS. FIELD COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ANY WORK.
- 4 RECEPTACLE FOR CIRCULATING PUMP.
- 5 PROVIDE J-BOX ABOVE CEILING FOR CARD READER DOOR ACCESS CONTROLS. COORDINATE EXACT LOCATION AND ELECTRICAL REQUIREMENTS WITH OWNER AND EQUIPMENT SUPPLIER PRIOR TO COMMENCING ANY WORK.



1 POWER FLOOR PLAN SECTION A
3/16 = 1'-0"

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HOP VILLA RENOVATIONS

TROPICAL TEXAS BEHAVIORAL HEALTH
HARLINGEN, TX.

PROJECT NUMBER
217027

DATE
AUG 17, 2018

FINALS - 100%

SHEET NUMBER

E2.1

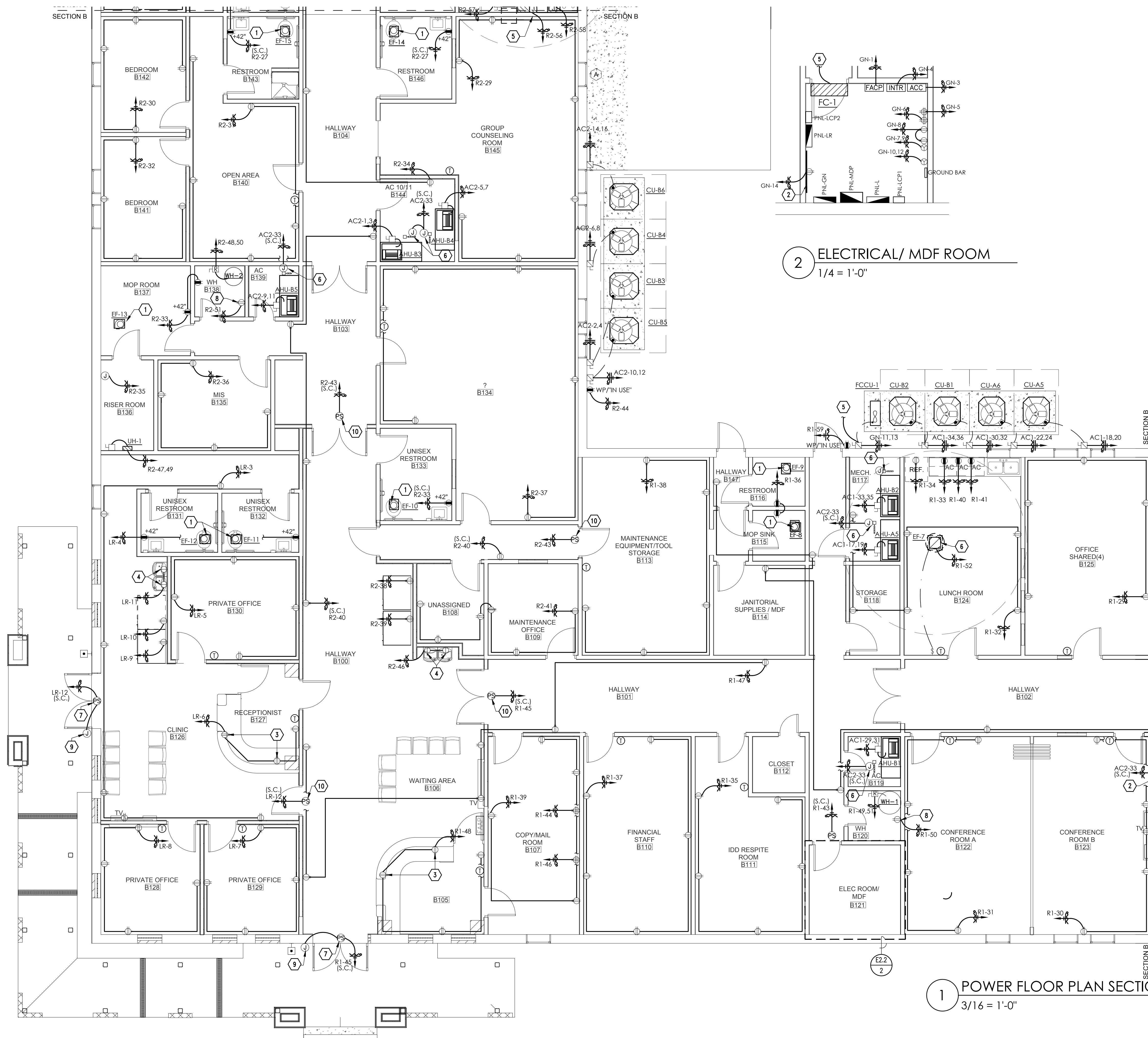
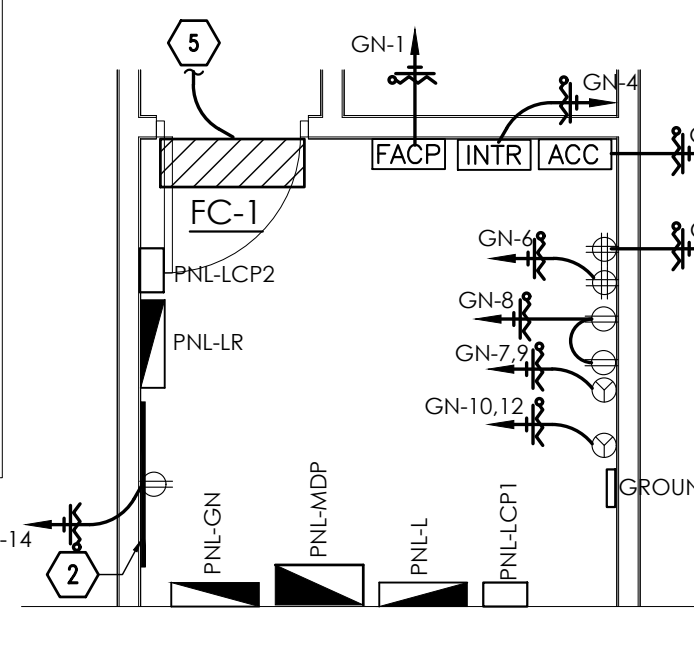
GENERAL NOTES: POWER

- COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF ALL POWER SOURCE WIRING IN ACCORDANCE WITH ARCHITECTURAL MILLWORK.
- ELECTRICAL CONTRACTOR SHALL MAKE FINAL CONNECTION TO H.V.A.C. EQUIPMENT, PLUMBING EQUIPMENT, REFER TO PANEL SCHEDULE FOR WIRE SIZE.
- ELECTRICAL CONTRACTOR SHALL PROVIDE STARTERS, RELAYS, CONTACTORS AND THE REQUIRED ELECTRICAL ACCESSORIES FOR MECHANICAL SYSTEM AS REQUIRED.
- COORDINATE EXACT LOCATION OF ALL MECHANICAL EQUIPMENT IN ACCORDANCE WITH MECHANICAL DRAWINGS TO MEET ELECTRICAL AND MECHANICAL REQUIRED CLEARANCE BY THE LATEST CODE.
- COORDINATE EXACT LOCATION OF ISOLATED OUTLETS FOR COMPUTERS WITH OWNER.
- ELECTRICAL CONTRACTOR SHALL PROVIDE J-BOX AND CONDUIT FOR H.V.A.C. CONTROLS AND THERMOSTATS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
- NEMA RATED OUTLETS. REFER TO BREAKER SIZE AND COORDINATE WITH EQUIPMENT REQUIREMENTS PRIOR TO BID.
- CONTRACTOR SHALL REFER TO EQUIPMENT SUBMITTAL FOR ALL ELECTRICAL REQUIREMENTS PRIOR TO COMMENCING ANY WORK.
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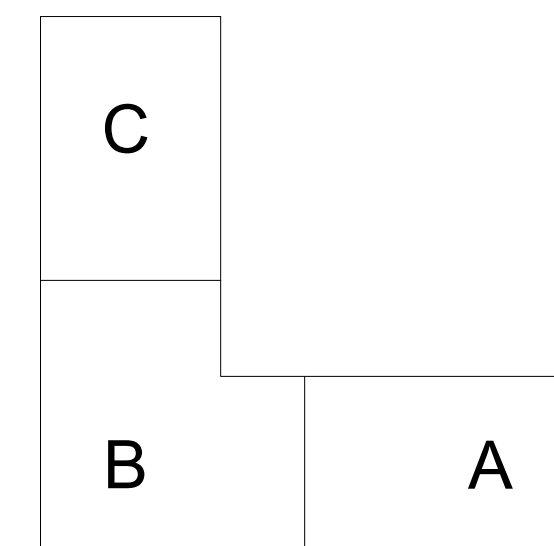
KEYED NOTES: POWER

- TIE INTO ROOMS LIGHTING CIRCUIT AND INTERLOCK FAN WITH ROOMS LIGHTS. WIRING SHALL BE 2#12, 1#12G, 2#C.
- 3/4"X8"HX4"W PLYWOOD TELEPHONE BOARD FINISHED ONE SIDE. PROVIDE GROUND BAR AND TIE INTO ELECTRICAL GROUNDING SYSTEM VIA WIRE #4.
- COORDINATE EXACT LOCATION WITH MILLWORK CONTRACTOR & OWNER PRIOR TO COMMENCING ANY ROUGH-INS.
- COORDINATE EXACT LOCATION WITH PLUMBER TO CONCEAL CORD BEHIND ELECTRIC DRINKING FOUNTAIN PRIOR TO ANY ROUGH-IN.
- INTERLOCK FCCU WITH FC-1 H.V.A.C. EQUIPMENT. WIRING SHALL BE 3#10, 1#10G, 3/4"C.
- PROVIDE J-BOX FOR MOTORIZED HVAC DAMPER.
- PROVIDE J-BOX ABOVE CEILING FOR ELECTRIC DOOR OPENER. COORDINATE EXACT LOCATION AND ELECTRICAL REQUIREMENTS WITH OWNER AND EQUIPMENT SUPPLIER PRIOR TO COMMENCING ANY WORK.
- RECEPTACLE FOR CIRCULATING PUMP.
- J-BOX FOR ELECTRIC DOOR ACCESS BUTTON. CONDUIT SHALL BE CONCEAL IN WALL, REFER TO ARCHITECTURAL FOR PARTIAL INTERIOR WALL TO BE ACCESSIBLE. LOCATION SHALL COMPLY WITH ADA REQUIREMENTS.
- PROVIDE J-BOX ABOVE CEILING FOR CARD READER DOOR ACCESS CONTROLS. COORDINATE EXACT LOCATION AND ELECTRICAL REQUIREMENTS WITH OWNER AND EQUIPMENT SUPPLIER PRIOR TO COMMENCING ANY WORK.
- PROVIDE A 120V, 20 AMP SPRING WOUND AUTO-OFF WALL TIMER SWITCH, EQUAL TO MFR. INTERMATIC # FF60MHC.

2 ELECTRICAL/ MDF ROOM 1/4 = 1'-0"

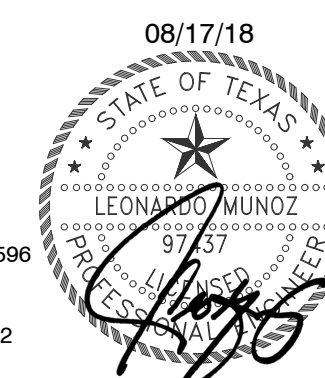


1 POWER FLOOR PLAN SECTION B 3/16 = 1'-0"



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HOP VILLA RENOVATIONS

TROPICAL TEXAS BEHAVIORAL HEALTH
HARLINGEN, TX.

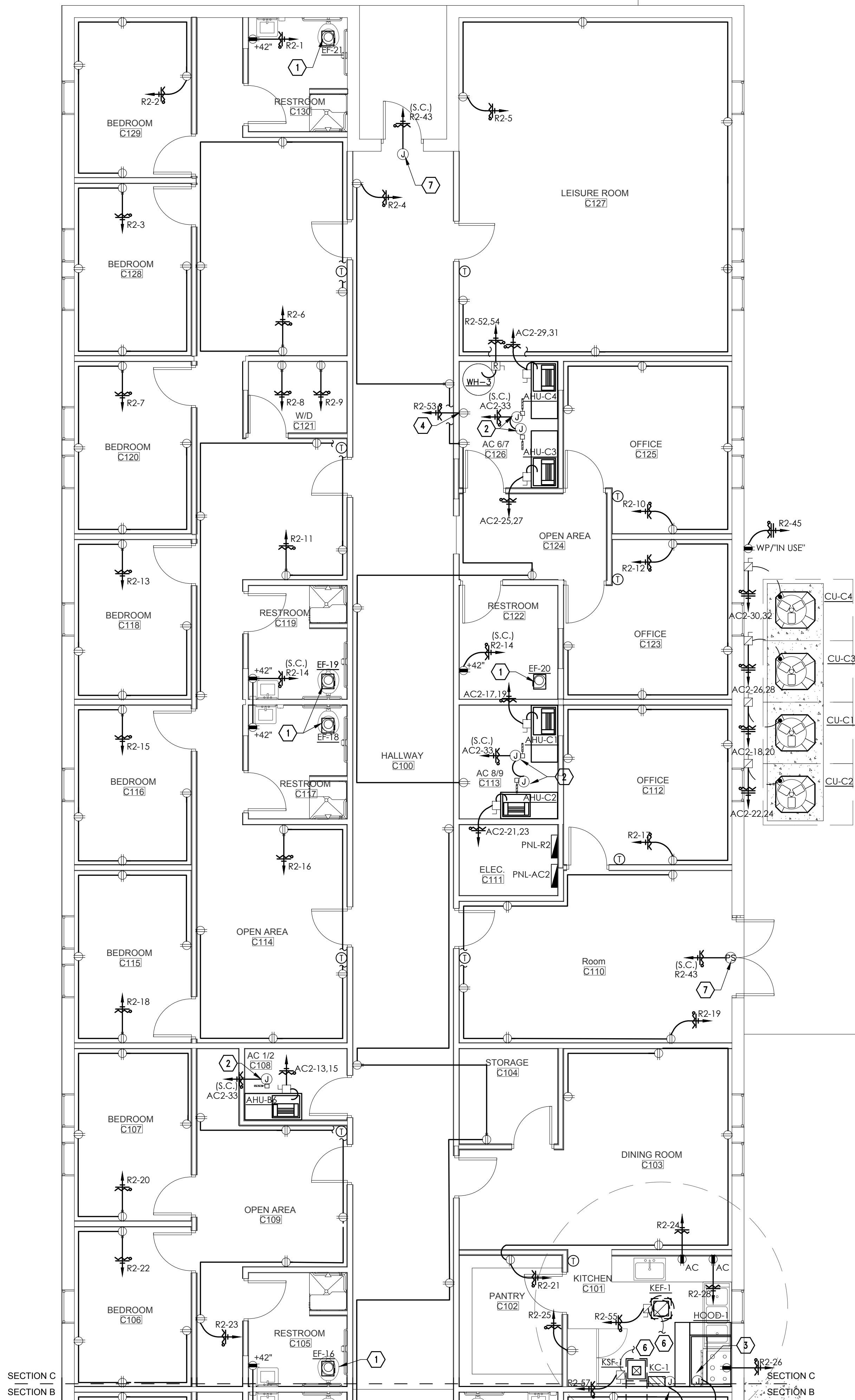
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FINALS - 100%

SHEET NUMBER

E2.2



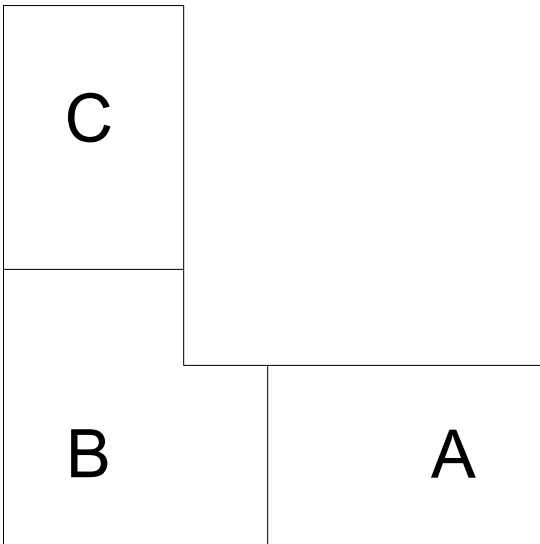
GENERAL NOTES: POWER

- A. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF ALL POWER SOURCE WIRING IN ACCORDANCE WITH ARCHITECTURAL MILLWORK.
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KEYED NOTES: POWER

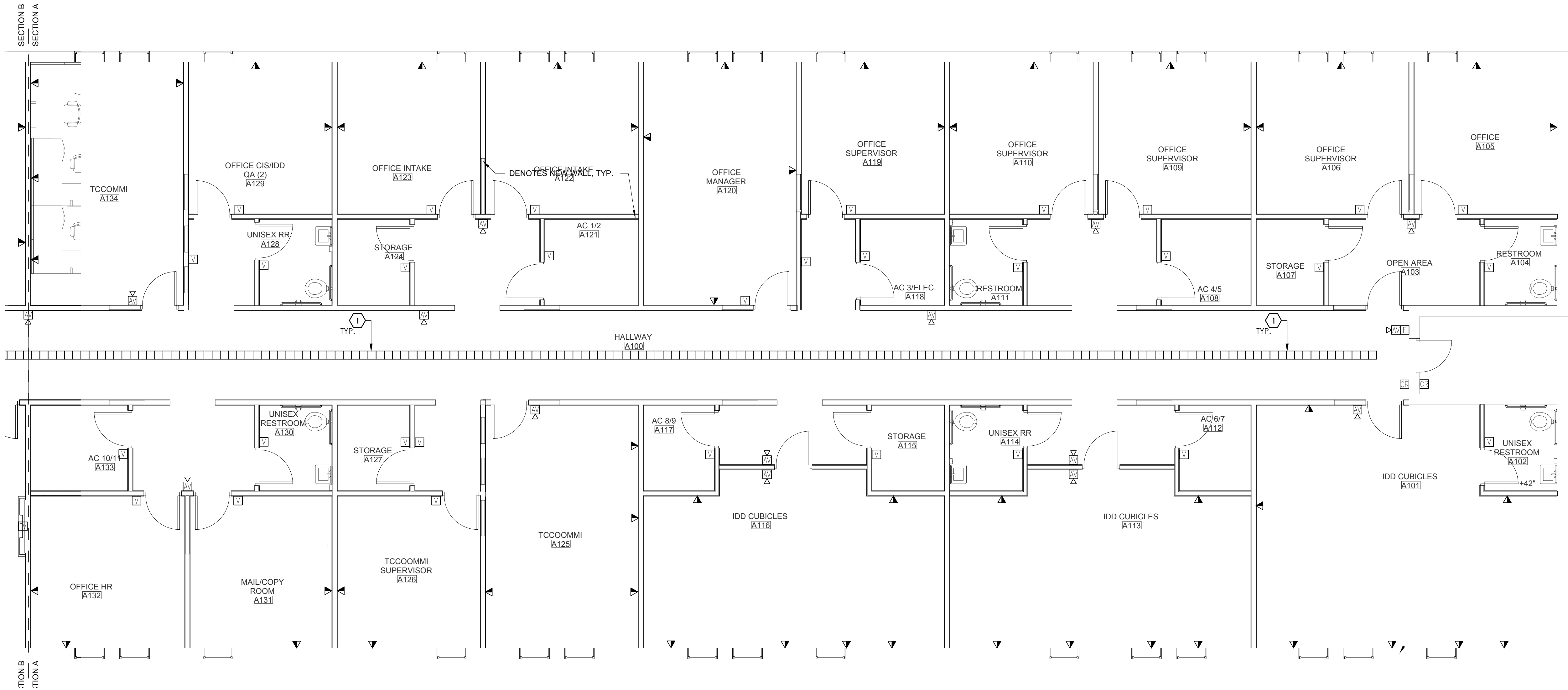
- 1 TIE INTO ROOMS LIGHTING CIRCUIT AND INTERLOCK FAN WITH ROOMS LIGHTS. WIRING SHALL BE 2#12, 1#12G, 1/2" C.
- 2 PROVIDE J-BOX FOR MOTORIZED HVAC DAMPER.
- 3 J-BOX FOR KITCHEN HOOD FIRE SUPPRESSION SYSTEM. COORDINATE EXACT LOCATION AND ALL REQUIRED ELECTRICAL CONNECTIONS, INTERLOCK WITH BUILDING FIRE ALARM SYSTEM.
- 4 RECEPTACLE FOR CIRCULATING PUMP.
- 5 PROVIDE J-BOX FOR KITCHEN VENTILATION CONTROL PANEL SYSTEM TO CONTROL LIGHTS AND EXHAUST FANS. REFER TO MANUFACTURERS INSTALLATION DOCUMENTS & COORDINATE W/MECHANICAL DOCUMENTS & CONTRACTOR.
- 6 ROUTE TO KITCHEN VENTILATION CONTROL PANEL SYSTEM. COORDINATE WITH EQUIPMENT SUPPLIER AND MECHANICAL DOCUMENTS PRIOR TO COMMENCING ANY WORK. REFER TO MECHANICAL DOCUMENTS FOR WIRING DIAGRAMS AND DETAILS.
- 7 PROVIDE J-BOX ABOVE CEILING FOR CARD READER DOOR ACCESS CONTROLS. COORDINATE EXACT LOCATION AND ELECTRICAL REQUIREMENTS WITH OWNER AND EQUIPMENT SUPPLIER PRIOR TO COMMENCING ANY WORK.

1 POWER FLOOR PLAN SECTION C
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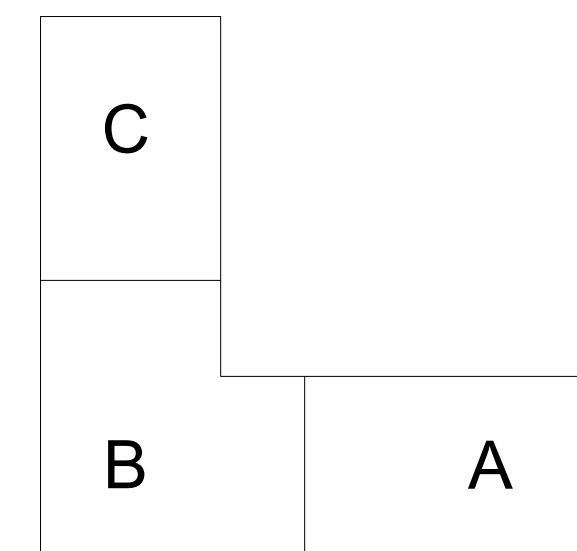


GENERAL NOTES: SPECIAL SYSTEMS

- COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF ALL POWER SOURCE WIRING IN ACCORDANCE WITH ARCHITECTURAL MILLWORK.
- PROVIDE CLEAR VANDAL COVER WITH STOPPER II OPTION FOR ALL FIRE ALARM PULL STATIONS.
- EQUIPMENT AS FURNISHED OF A SINGLE MANUFACTURER.
- COORDINATE EXACT LOCATION OF ALL MECHANICAL EQUIPMENT IN ACCORDANCE MECHANICAL DRAWINGS.
- ALL CONDUITS SHALL REAMED AND COMPLETED WITH CONNECTORS AND INSULATED BUSHINGS AT BOTH ENDS.
- ALL DEVICES SHOWN ON DRAWINGS ARE SYMBOLIC ONLY. THE ENTIRE FIRE ALARM SYSTEM, SHALL BE IN FULL COMPLIANCE AND MEET ALL CODES AND REQUIREMENTS OF THE LOCAL ADMINISTRATIVE AUTHORITY. ANY MODIFICATIONS REQUIRED TO PROVIDE COMPLIANCE SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER OR ARCHITECT/ ENGINEER.
- ALL SPECIAL SYSTEM CONDUITS SHALL BE STUBBED UP ABOVE THE CEILING LEVEL. IF CABLE TRAY IS PRESENT, STUBBED CONDUITS TO CABLE TRAY.
- CABLE TRAY SHALL BE USED ONLY FOR DATA WIRING, FIRE ALARM, INTRUSION, ACCESS CONTROL AND OTHER LOW VOLTAGE SYSTEMS TO USE J-HOOKS AT EVERY 10'. ALL LINE VOLTAGE WIRING SHALL BE ON CONDUIT AS INDICATED ON SPECIFICATIONS.

KEYED NOTES: SPECIAL SYSTEMS

- 1 PROVIDE CABLE TRAY AS SHOWN ABOVE THE CEILING. REFER TO SPECIFICATION. SUPPORT FROM STRUCTURE.



1 SPECIAL SYSTEMS FLOOR PLAN SECTION A
3/16 = 1'-0"

GENERAL NOTES: SPECIAL SYSTEMS

- A. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF ALL POWER SOURCE WIRING IN ACCORDANCE WITH ARCHITECTURAL MILLWORK.
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KEYED NOTES: SPECIAL SYSTEMS

- 1 PROVIDE CABLE TRAY AS SHOWN ABOVE THE CEILING. REFER TO SPECIFICATION, SUPPORT FROM STRUCTURE.
- 2 COORDINATE EXACT LOCATION WITH MILLWORK CONTRACTOR & OWNER PRIOR TO COMMENCING ANY ROUGH-INS.

HOP VILLA RENOVATIONS

TROPICAL TEXAS BEHAVIORAL HEALTH HARLINGEN, TX.

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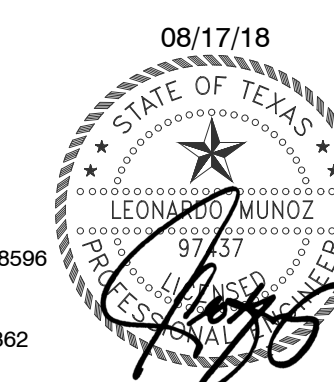
FINALS - 100%

SHEET NUMBER

E3.2

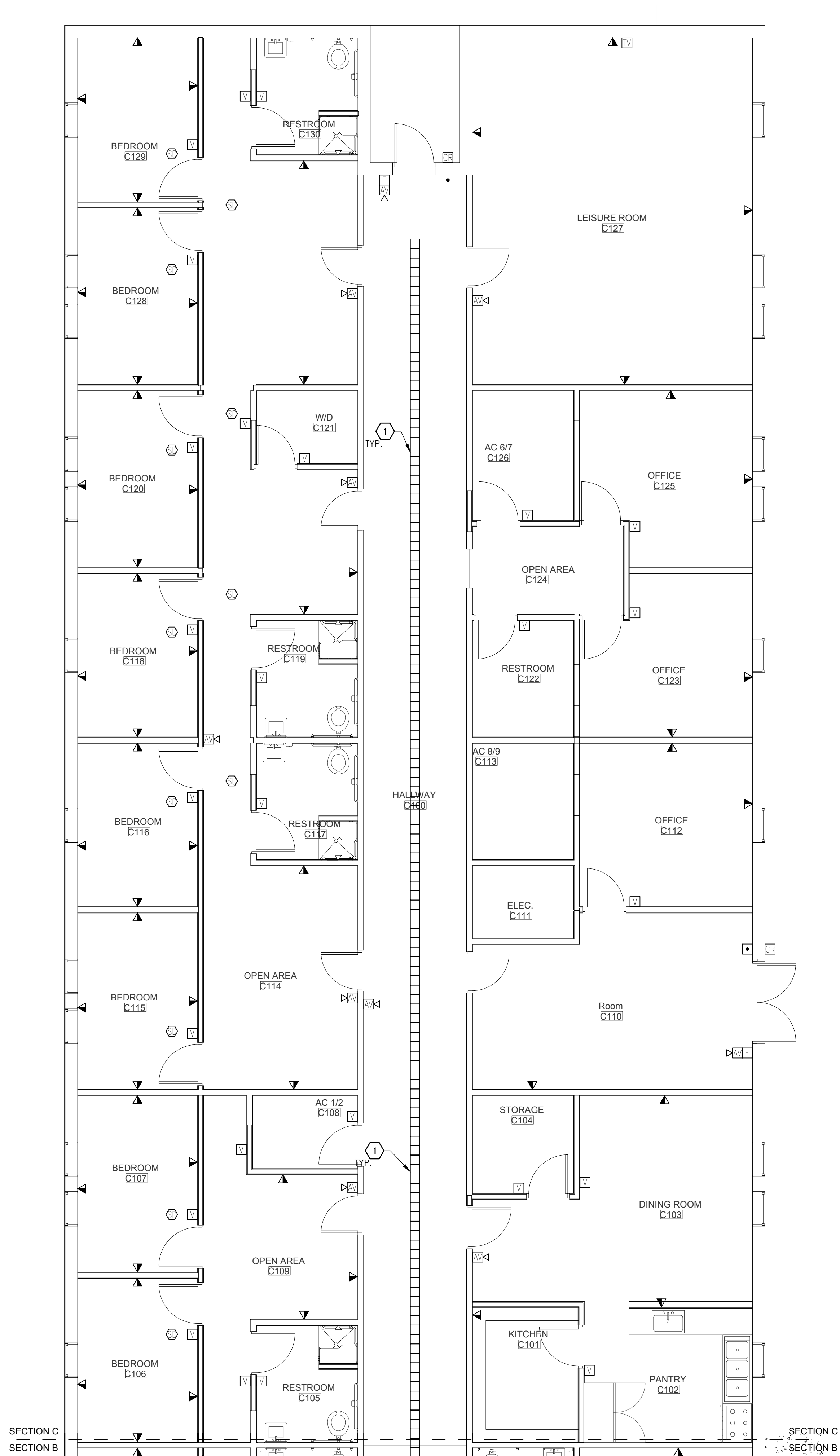
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1 SPECIAL SYSTEMS FLOOR PLAN SECTION B
3/16 = 1'-0"





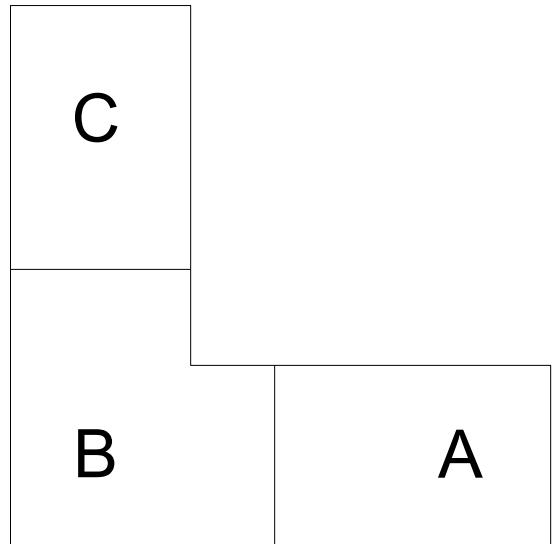
GENERAL NOTES: SPECIAL SYSTEMS

- A. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF ALL POWER SOURCE WIRING IN ACCORDANCE WITH ARCHITECTURAL MILLWORK.
- B. PROVIDE CLEAR VANDAL COVER WITH STOPPER II OPTION FOR ALL FIRE ALARM PULL STATIONS.
- C. EQUIPMENT AS FURNISHED OF A SINGLE MANUFACTURER.
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- E. ALL CONDUITS SHALL REAMED AND COMPLETED WITH CONNECTORS AND INSULATED BUSHINGS AT BOTH ENDS.
- F. ALL DEVICES SHOWN ON DRAWINGS ARE SYMBOLIC ONLY. THE ENTIRE FIRE ALARM SYSTEM SHALL BE IN FULL COMPLIANCE AND MEET ALL CODES AND REQUIREMENTS OF THE LOCAL ADMINISTRATIVE AUTHORITY. ANY MODIFICATIONS REQUIRED TO PROVIDE COMPLIANCE SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER OR ARCHITECT/ ENGINEER.
- G. ALL SPECIAL SYSTEM CONDUITS SHALL BE STUBBED UP ABOVE THE CEILING LEVEL. IF CABLE TRAY IS PRESENT, STUBBED CONDUITS TO CABLE TRAY.
- H. CABLE TRAY SHALL BE USED ONLY FOR DATA WIRING, FIRE ALARM, INTRUSION, ACCESS CONTROL AND OTHER LOW VOLTAGE SYSTEMS TO USE J-HOOKS AT EVERY 10'. ALL LINE VOLTAGE WIRING SHALL BE ON CONDUIT AS INDICATED ON SPECIFICATIONS.

KEYED NOTES: SPECIAL SYSTEMS

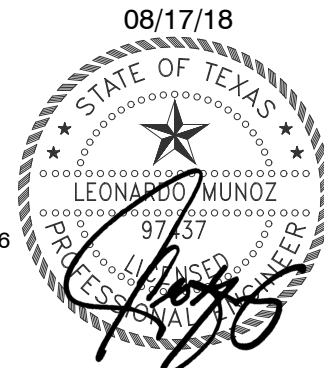
PROVIDE CABLE TRAY AS SHOWN ABOVE THE CEILING. REFER TO SPECIFICATION. SUPPORT FROM STRUCTURE.

1 SPECIAL SYSTEMS FLOOR PLAN SECTION C
3/16 = 1'-0"



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SHEET NUMBER

E3.3

ELECTRICAL LEGEND-LIGHTING

---ALL SYMBOLS SHOWN MAY NOT APPEAR IN ALL DRAWINGS.
SYMBOLS ARE SHOWN SCHEMATIC AND MAY NOT BE TO SCALE.

SYMBOL	DESCRIPTION
	2'x4' LIGHT FIXTURE, REFER TO LUMINAIRE SCHEDULE
	2'x4' LIGHT FIXTURE W/EMERGENCY BATTERY PACK, REFER TO LUMINAIRE SCHEDULE
	2'x2' LIGHT FIXTURE, REFER TO LUMINAIRE SCHEDULE
	2'x2' LIGHT FIXTURE W/EMERGENCY BATTERY PACK, REFER TO LUMINAIRE SCHEDULE
	1'x4' LIGHT FIXTURE, REFER TO LUMINAIRE SCHEDULE
	TRACK LIGHT WITH HEADS AS INDICATED
	INCANDESCENT, LED, FLUORESCENT, OR HID WALL WASHER LIGHT FIXTURE CEILING MTD, REFER TO LUMINAIRE SCHEDULE
	INCANDESCENT, LED, FLUORESCENT, OR HID FIXTURE CLG. OR WALL MTD, REFER TO LUMINAIRE SCHEDULE
	LED, FLUORESCENT, OR HID FIXTURE WITH EMERGENCY BATTERY PACK, CLG. OR WALL MTD, REFER TO LUMINAIRE SCHEDULE
	EXIT LIGHT, CEILING OR WALL MOUNTED - SHADING INDICATING SINGLE OR DOUBLE FACE; DIRECTIONAL ARROWS AS INDICATED REFER TO LUMINAIRE SCHEDULE
	EXIT LIGHT SAME AS ABOVE, EXCEPT WITH AN EMERGENCY UNIT AS A COMBO, REFER TO LUMINAIRE SCHEDULE
	CEILING FAN
	STRIP UTILITY LIGHT FIXTURE, REFER TO LUMINAIRE SCHEDULE
	STRIP UTILITY STRIP LIGHT WITH EMERGENCY BATTERY PACK, REFER TO LUMINAIRE SCHEDULE
	WALL SWITCH SPST, 20A, 120/277V
	DOUBLE POLE TOGGLE SWITCH, 20A/120/277V
	3-WAY WALL SWITCH, 20A, 120/277V
	4-WAY WALL SWITCH, 20A, 120/277V
	WALL DIMMER SWITCH
	WALL SWITCH SPST, 20A, 120/277V - PILOT LIGHT SWITCH
	WALL SWITCH SPST, 20A, 120/277V - KEYED SWITCH, X = 3 OR 4 WAY

ELECTRICAL LEGEND-SPECIAL SYSTEMS

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SYMBOL	DESCRIPTION
	WALL MOUNTED TELEPHONE/DATA OUTLET, FURNISH AND INSTALL 1.25" C., WITH PULLSTRING AND INSULATED BUSHING, STUBBED ABOVE CEILING, *24" UNLESS OTHERWISE NOTE. BOX TO BE MINIMUM 2 1/8" DEEP.
	WALL MOUNTED TELEPHONE OUTLET, FURNISH AND INSTALL 1" C., WITH PULLSTRING AND INSULATED BUSHING, STUBBED ABOVE CEILING, *24" UNLESS OTHERWISE NOTE. BOX TO BE MINIMUM 2 1/8" DEEP.
	WALL MOUNTED DATA OUTLET, FURNISH AND INSTALL 1.25" C., WITH PULLSTRING AND INSULATED BUSHING, STUBBED ABOVE CEILING, *24" UNLESS OTHERWISE NOTE. BOX TO BE MINIMUM 2 1/8" DEEP.
	PUBLIC TELEPHONE OUTLET.: J-BOX & 1" C.
	TELEVISION OUTLET, CLG. OR WALL MOUNTED - STUB 1" C. ABOVE CEILING FROM OUTLET BOX
	PUSHBUTTON WALL MOUNTED.
	AUDIO VIDEO DROP, REFER TO DETAIL
	INTERCOM - CALL SWITCH- JBOX WITH 3/4" C
	INTERCOM/PAGING LAY-IN SPEAKER
	PA EXTERIOR SPEAKER 10'-6" AFF
	SECURITY DOOR CONTACT SENSOR - STUB 1/2" C ABOVE CEILING FROM OUTLET BOX
	SECURITY MOTION DETECTOR SENSOR - STUB 1/2" C ABOVE CEILING FROM OUTLET BOX
	SECURITY GLASS BREAK SENSOR - STUB 1/2" C ABOVE CEILING FROM OUTLET BOX
	SECURITY KEY PAD - STUB 3/4" C ABOVE CEILING FROM OUTLET BOX
	SECURITY PANEL JUNCTION BOX 54"
	ACCESS CONTROL PANEL JUNCTION BOX - BY OTHERS 54"
	CARD READER BOX - STUB 3/4" C ABOVE CEILING LEVEL FROM OUTLET BOX SYSTEM BY OTHERS
	MAGNETIC LOCK BOX - STUB 3/4" C ABOVE CEILING LEVEL FROM OUTLET BOX SYSTEM BY OTHERS
	INTRUSION EXTERIOR SPEAKER 10'-6" AFF
	SINGLE SIDED CLOCK, J-BOX W/3/4" C 96" AFF MIN.
	DOUBLE SIDED CLOCK, J-BOX W/3/4" C 96" AFF MIN.
	CAMERA J-BOX W/ 3/4" CONDUIT
	TELEPHONE BOARD- 3/4"x8" FIRE RATED
	J-BOX FOR ACCESS CONTROL POWER SUPPLY POWER SUPPLY BY ACCESS CONTROL CONTRACTORL

ELECTRICAL LEGEND-FIRE ALARM

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SYMBOL	DESCRIPTION
	FIRE ALARM PULL STATION: STUB 3/4" C ABOVE CEILING FROM J-BOX
	FIRE ALARM AUDIBLE/VISUAL SIGNAL: STUB 3/4" C ABOVE CEILING FROM J-BOX
	FIRE ALARM VISUAL SIGNAL: STUB 3/4" C ABOVE CEILING FROM J-BOX
	FIRE ALARM CEILING MOUNT SPEAKER STROBE, UL LISTED, : J-BOX WITH 3/4" C
	FIRE ALARM CEILING WALL MOUNT OUTDOOR SPEAKER STROBE, UL LISTED, : J-BOX WITH 3/4" C
	FIRE ALARM SMOKE DETECTOR CEILING OR WALL MOUNTED: STUB 3/4" C ABOVE CEILING FROM J-BOX
	HEAT DETECTOR CEILING OR WALL MOUNTED: STUB 3/4" C ABOVE CEILING FROM J-BOX
	DUCT SMOKE DETECTOR: STUB 3/4" C ABOVE CEILING FROM J-BOX
	SMOKE DETECTOR WITH AN AUDIBLE BASE: STUB 3/4" C ABOVE CEILING FROM J-BOX
	FIRE ALARM CONTROL PANEL, ADDRESSABLE, SURFACE MTD UNO, INCLUDE A FIRE DOCUMENT BOX EQUAL TO MFR. SPACE AGE ELECTRONICS #FDB-ACE-11.
	FIRE ALARM CONTROL PANEL WITH EMERGENCY VOICE SYSTEM, ADDRESSABLE, FLUSH MTD UNO, INCLUDE A FIRE DOCUMENT BOX EQUAL TO MFR. SPACE AGE ELECTRONICS #FDB-ACE-11.
	FIRE ALARM EMERGENCY VOICE EVACUATION SYSTEM, FLUSH OR SURFACE.
	FIRE ALARM REMOTE ANNUNCIATOR PANEL, FLUSH MOUNTED UNO
	POWER SUPPLY, DEDICATED 110V
	DOOR HOLDER DEVICE: STUB 3/4" C ABOVE CEILING FROM J-BOX
	TAMPER SWITCH: STUB 3/4" C ABOVE CEILING FROM J-BOX
	FLOW SWITCH: STUB 3/4" C ABOVE CEILING FROM J-BOX
	FIRE ALARM OUTDOOR SPEAKER, WEATHER PROOF: STUB 3/4" C ABOVE CEILING FROM J-BOX

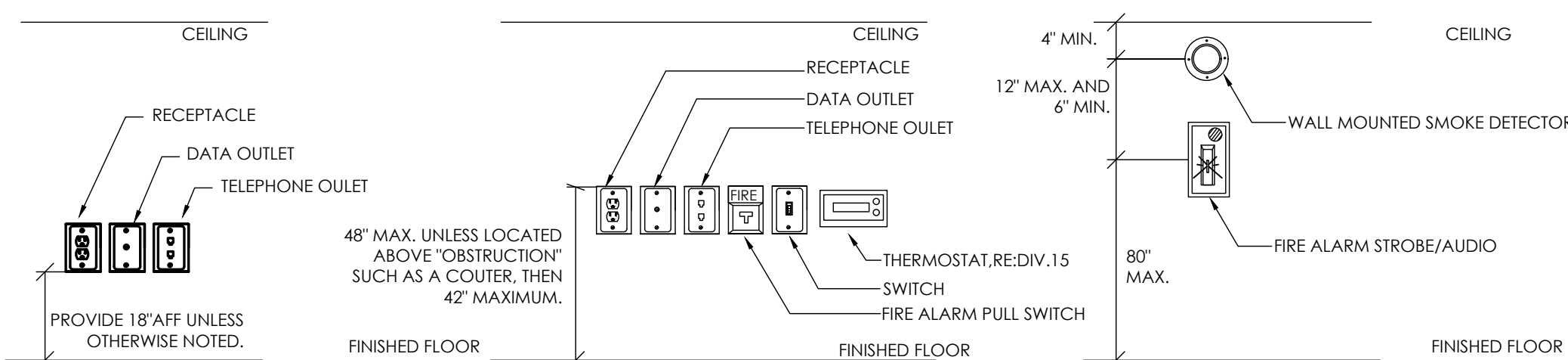
ELECTRICAL LEGEND-GENERAL

---ALL SYMBOLS SHOWN MAY NOT APPEAR IN ALL DRAWINGS.
SYMBOLS ARE SHOWN SCHEMATIC AND MAY NOT BE TO SCALE.

SYMBOL	DESCRIPTION
	HEAVY DUTY DISCONNECT SWITCH FUSED
	HEAVY DUTY DISCONNECT SWITCH NONFUSED
	HEAVY DUTY COMBINATION DISCONNECT/MOTOR STARTER
	HEAVY DUTY MOTOR STARTER
	ENCLOSED BREAKER, RE: TO SCH. FOR MORE INFO.
	ROTARY TYPE DISCONNECT SWITCH
	120/277-208/480V, 20AMP, MOTOR RATED SWITCH, NEMA-1 (INTERIOR) ENCLOSURE, NEMA-3R (EXTERIOR) ENCLOSURE, VOLTAGE TO BE SELECTED PER EQUIPMENT CIRCUIT REQUIREMENTS.
	PANELBOARD, CLEARANCE AS PER LATEST NEC
	SWITCH LEG
	ELECTRICAL CONDUIT
	UNDERGROUND ELECTRICAL CONDUIT
	COMMUNICATION CONDUIT AND WIRING
	MULTI-POLE DEVICE CIRCUIT NUMBERS
	THREE SINGLE POLE DEVICE CIRCUIT NUMBERS
	CONDUIT AND WIRE HOMERUN TO PANEL, SHORT HATCH INDICATES NEUTRAL CONDUCTOR, LONG HATCHES INDICATE PHASE CONDUCTORS, AND LONG HATCH WITH CIRCLE INDICATES ISOLATES OR INSULATED GROUND, ALPHANUMERIC DESCRIPTION INDICATES PANEL AND BREAKER.
	UNDERGROUND CONDUIT AND WIRE HOMERUN TO PANEL, SHORT HATCH INDICATES NEUTRAL CONDUCTOR, LONG HATCHES INDICATE PHASE CONDUCTORS, AND LONG HATCH WITH CIRCLE INDICATES ISOLATED OR INSULATED GROUND, ALPHANUMERIC DESCRIPTION INDICATES PANEL AND BREAKER.
	DETAIL NUMBER
	SHEET NUMBER
	THERMOSTAT WALL MOUNTED - STUB 1 1/2" C ABOVE CEILING FROM OUTLET BOX, COORDINATE EXACT LOCATION AND HEIGHT WITH MECHANICAL DIVISION.
	JUNCTION BOX - SIZE & MOUNTING AS REQUIRED MINIMUM OF 4" SQUARE
	PHOTO CELL (MFR. INTERMATIC #K4136M)
	LIGHTING CONTACTOR, NEMA-1, W/H.O.A. SWITCH
	TIME CLOCK (MFR. TORK #72022)
	CIRCULATING PUMP
	ELECTRICAL DEVICE AS SHOWN ON PLANS SURFACE MOUNT RACEWAY, SURFACE MOUNT RACEWAY SHALL BE WIREMOLD #V700 SERIES, PROVIDE ALL RELATED #V700 SERIES ACCESSORIES FOR AN OPERABLE SYSTEM.

MOUNTING HEIGHT DETAIL

NOTE: VERIFY WITH ARCHITECTURAL FOR ADA REQUIREMENTS.



ELECTRICAL ABBREVIATIONS:











ABBV:	DESCRIPTION	ABBV:	DESCRIPTION
AFF	ABOVE FINISHED FLOOR	MFR.	MANUFACTURER
BFC	BELOW FINISHED CEILING	(S.C.)	SHARE CIRCUIT
C	CONDUIT	QRCPT(S)	QUAD RECEPTACLE(S)
CB	CIRCUIT BREAKER	RCPT(S)	DUPLEX RECEPTACLE(S)
EC	EMPTY CONDUIT	CRCP(T)(S)	I.G. RECEPTACLE(S)
EX	EXISTING	QCRCPT(S)	QUAD I.G. RECEPTACLE(S)
F	FUSE	PNL	PANEL
G	GROUND (EQUIPMENT)	SO (S.O.)	SPACE ONLY
GFI	GROUND FAULT INTERRUPTER	SP	SPARE
MTD	MOUNT OR MOUNTED	ST (S.T.)	SHUNT TRIP
NF	NONFUSED	SW	SWITCH
NIC	NOT IN CONTRACT	UF	UNDERFLOOR
H.D	HEAVY DUTY	UG	UNDERGROUND
NL	NIGHT LIGHT	UNO(U.N.O.)	UNLESS NOTED OTHERWISE
AC	ABOVE COUNTER	WG	WIRE GUARD
HT.	HEIGHT	WP	WEATHERPROOF
MTD.	MOUNTING	XFMR	TRANSFORMER
FDR.	FEEDER	MB	MAIN BREAKER
CKT.	CIRCUIT		
LTG.	LIGHTING	MLO	MAIN LUGS ONLY
LC	LIGHTING CONTACTOR	RMC	RIGID METAL CONDUIT
IG	ISOLATED GROUND	RNC	RIGID NONMETALLIC CONDUIT
EA.	EACH	EMT	ELECTRICAL METALLIC TUBING CONDUIT
N1	NEMA-1		
NSR	NEMA-3R	S/N	SOLID NEUTRAL
N4X	NEMA-4X	AC	ABOVE COUNTER
SS	STAINLESS STEEL	AHJ	AUTHORITY HAVING JURISDICTION
		T	TAMPER PROOF

NOTES:

- 1.) 48" AFF INDICATES TO TOP OF DEVICE;
- 15" AFF INDICATES TO BOTTOM OF DEVICE;
- ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.
- AC INDICATES 6" ABOVE COUNTER TO BOTTOM OF DEVICE.

ELECTRICAL LEGEND - WIRING DEVICES

---ALL SYMBOLS SHOWN MAY NOT APPEAR IN ALL DRAWINGS.
SYMBOLS ARE SHOWN SCHEMATIC AND MAY NOT BE TO SCALE.

	SINGLE RECEPTACLE - 20A/125V/2P/3W/G NEMA 5-20R
	DUPLEX RECEPTACLE - 20A/125V/2P/3W/G NEMA 5-20R
	DUPLEX RECEPTACLE TAMPER RESISTANT - 20A/125V/2P/3W/G NEMA 5-20R
	HOSPITAL GRADE DUPLEX RECEPTACLE/GFI - 20A/125V/2P/3W/G NEMA 5-20R
	DUPLEX RCPT, GFI - 20A/125V/2P/3W/G NEMA 5-20R
	DUPLEX RCPT, WEATHER RESISTANT "WR", GFI, INSTALLED IN A "IN-USE" WEATHER PROOF STEEL ENCLOSURE - 20A/125V/2P/3W/G NEMA 5-20R WP/IN-USE SHALL BE EQUAL TO MFR. CARLON, METALLIC SERIES SINGLE GANG, VERTICAL MOUNT #ME9UVMG DOUBLE GANG, VERTICAL MOUNT #ME9U2VMG
	QUADRAPLEX RECEPTACLE
	ISOLATED GROUND QUADAPLEX RECEPTACLE
	ISOLATED GROUND DUPLEX RECEPTACLE - 20A/125V NEMA 5-20R
	208V RECEPTACLE, VERIFY NEMA NO. WITH EQUIPMENT SUPPLIER
	SPECIAL PURPOSE RECEPTACLE (NEMA NO. AS INDICATED)
	J-BOX - AIR HAND DRYER; (RECESSED HAND DRYERS TO BE PROVIDED BY DIVISION 16, ELECTRICAL) #8-750 AUTOMATIC HANDCRAFT AS MANUFACTURER BY BOBRICK, (COLOR WHITE) QUANTITY: REFER TO DRAWINGS (MIN. ONE PER LAV, COMPLETE W/ E.L. CONNECTIONS TYP.)
	4-GANG FLOOR MOUNTED BOX, 2-DUPLEX RECEPTACLE(INCLUDE RECEPTACLE WITH COVER PLATE)/2-GANG FOR DATA - FLUSH MOUNTED UNO FLOOR BOX = MFR.-HUBBELL MODEL#CFB4G30CR-24GCVRNK(COVER)-(2)FBMPDUP-FBMP6KS -CFBHB2(MULTISERVICE STEEL RECESSED FLOOR BOX-VERIFY FLOOR FINISH PRIOR TO ORDER SAME BOX FOR DATA OUTLETS,
	6-GANG FLOOR MOUNTED BOX, 2-DUPLEX RECEPTACLE(INCLUDE RECEPTACLE WITH COVER PLATE)/2-GANG FOR DATA - FLUSH MOUNTED UNO FLOOR BOX = MFR.-HUBBELL MODEL#CFB6G30CR-CFB81RBCVRLU(COVER)-(3)FBMPDUP-FBMP6KS -CFBHB2(MULTISERVICE STEEL RECESSED FLOOR BOX-VERIFY FLOOR FINISH PRIOR TO ORDER SAME BOX FOR DATA OUTLETS,
	

GENERAL ELECTRICAL NOTES

1. ALL SYMBOLS AND ABBREVIATIONS SHOWN ON THIS LEGEND MAY NOT APPEAR ON THIS SET OF DRAWINGS.
2. USE DIRECTIONAL ARROW ON EXIT SIGNS AS REQUIRED.
3. IEEE STANDARD C37.2-1991, ELECTRICAL POWER SYSTEM DEVICE FUNCTION NUMBERS.
4. CONTRACTOR SHALL NOT INSTALL MORE THAN THREE CURRENT CARRYING CONDUCTORS IN A COMMON RACEWAY. IF CONTRACTOR IS PLANNING ON GROUPING MULTIPLE CIRCUITS IN A SINGLE RACEWAY, THE CONTRACTOR MUST SUBMIT ALL DERATING CALCULATIONS FOR THE PROPOSED INSTALLATION IN ACCORDANCE WITH NEC ARTICLE 310.15 (B) (2) FOR APPROVAL PRIOR TO INSTALLATION. NON APPROVED INSTALLATIONS WILL BE REMOVED AND REINSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE NEC AT NO ADDITIONAL COST TO THE OWNER.
5. THERE SHALL NOT BE MORE THAN THE EQUIVALENT OF THREE 90° BENDS (270 DEGREES TOTAL) BETWEEN PULL POINTS. WHERE THERE ARE MORE THAN THREE QUARTER BENDS, CONTRACTOR SHALL PROVIDE PULL BOXES AS SPECIFIED AND SIZED IN ACCORDANCE WITH NEC.
6. COMPLY WITH NEC REQUIREMENTS FOR ELECTRICAL INSTALLATIONS. ALL ELECTRICAL EQUIPMENT AND MATERIAL TO BE APPROVED, LISTED, LABELED, IDENTIFIED AND INSTALLED PER RECOGNIZED ELECTRICAL TESTING LABORATORY.
7. ALL RECEPTACLES, SWITCHES AND JUNCTION BOXES SERVED BY EMERGENCY BRANCH CIRCUITS SHALL BE "RED" IN COLOR, COVERPLATES SHALL BE LABELED IN ACCORDANCE WITH SPECIFICATIONS TO INDICATE PANELBOARD AND CIRCUIT NO. (IE:ETLA-3).

ELECTRICAL- LIGHTING FUNCTIONAL TESTING / COMMISSIONING PLAN:

CONTRACTOR SHALL PERFORM THE TASK BELOW TO COMMISSION THE LIGHTING CONTROL SYSTEM. CONTRACTOR SHALL SUBMIT A DOCUMENTATION DETAILING THE LIGHTING CONTROL SYSTEM, SETTING/CONDITION, ACTIONS PERFORMED AND FINAL SETTING CONDITION. SUBMIT DOCUMENTATION AT OR BEFORE SUBSTANTIAL COMPLETION TO FACILITATE OBTAINING THE CERTIFICATE OF OCCUPANCY.

A. ENSURE ALL LIGHTING FIXTURES HAVE LAMPS INSTALLED AND ARE FUNCTIONAL.
B. TEST ALL EXIT SIGNS, EMERGENCY LIGHTING FIXTURES, AND EMERGENCY BALLASTS FURNISHED INTEGRAL TO FIXTURES.
C. ENSURE ALL OCCUPANCY SENSORS HAVE BEEN INSTALLED AND ARE OPERATIONAL.
D. VERIFY ALL WALLBOX AND SCENE CONTROLLERS ARE INSTALLED AND OPERATIONAL.
E. TEST EACH INDIVIDUAL DEVICE FOR OCCUPANCY SENSOR TYPES OS1, OS2 AND TEST THE LIGHTING CONTROL RELAY PANEL SYSTEM.
F. TEST 10% OF ALL THE DEVICES FOR OCCUPANCY SENSOR TYPE: WSX-PDT-SA.
G. VERIFY THE FOLLOWING:
1. ALL SENSORS ARE LOCATED AND AIMED PER THE MANUFACTURER'S RECOMMENDATIONS.
2. STATUS INDICATORS ON DEVICES ARE OPERATIONAL AND CORRECT.
3. DEVICES CONTROL LIGHTING FIXTURES AS INDICATED ON DRAWINGS.
4. TIME DELAYS HAVE BEEN SET AS PER CODE AND PER OWNERS DIRECTIONS.
5. MOVEMENT IN ADJACENT AREAS AND CYCLING OF HVAC SYSTEMS DOES NOT FALSE TRIGGER SENSORS.
6. PHOTOCELL LOCATION AND AIMED PER MANUFACTURERS RECOMMENDATIONS.
7. PROGRAM INTERIOR RELAYS WITH A TIME FUNCTION ACCEPTABLE TO OWNER.
8. PROGRAM INTERIOR OVERRIDE SWITCH WITH A TIME FUNCTIONAL ACCEPTABLE BY OWNER.

LUMINAIRE SCHEDULE

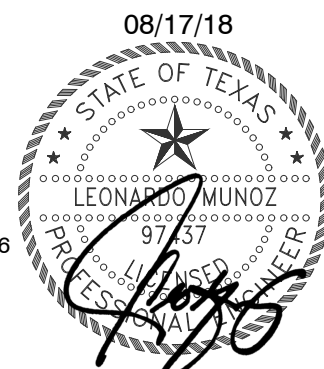
MARK	VOLTAGE	LAMP	MOUNTING	DESCRIPTION	MODEL NO.
A	120V	LED 4000 LM 3500K 30W	LAY-IN	2'X4' LED TROFFER FIXTURE, UL LISTED, LENS, HIGH EFFICIENCY 0-10V DRIVER	LITHONIA 2GTL4-40L-...-MVOLT-EZ1-LP835
AE	SAME AS TYPE 'A' EXCEPT WITH 1400 LUMEN EMERGENCY BATTERY PACK				
B	120V	LED 5200LM 3500K 50W	SURFACE	2'X4' LED LOW PROFILE FIXTURE, DLC CERTIFIED, HIGH EFFICIENCY 0-10V DRIVER	SOLAS RAY LIGHTING FP24-050-35-AC-U-D
BE	SAME AS TYPE 'B' EXCEPT WITH 1400 LUMEN EMERGENCY BATTERY PACK				
C	120V	LED 4200LM 3500K 40W	SURFACE	2'X2' LED LOW PROFILE FIXTURE, DLC CERTIFIED, HIGH EFFICIENCY 0-10V DRIVER	SOLAS RAY LIGHTING FP22-040-35-AC-U-D
D	120V	LED 2000 LM 3500K 23W	RECESSED	6'LED RETROFIT, OPEN DOWN- LUMINAIRE, SEMI-SPECULAR REFLECTOR, WITH 0-10V DRIVER	LITHONIA LDN6-35/20-L06-AR-LSS-MVOLT-EZ10
E	120V	INCLUDED	SURFACE	EMERGENCY LIGHTING UNIT W/ SELF-DIAGNOSTICS	LITHONIA ELM2 LED SD
F	120V	LED 1500LM 3500K 20W	RECESSED	6'LED RETROFIT OPEN DOWN- LUMINAIRE, SEMI-SPECULAR REFLECTOR, WITH 0-10V DRIVER	LITHONIA LDN6-35/15-LR-6-AR-LSS-MVOLT-EZ10
G	120V	LED 3000 LM 3500K 34W	SURFACE	4' LED STRIP LIGHT FIXTURE, 0-10V DRIVER, UL LISTED, WITH WIREGUARD	LITHONIA ZL1N-L48-L/LENS-MVOLT-35K-80CRI-WH-WGZ48
H	120V	LED 2671 LM 3500K 33W	SURFACE	2' LED VANITY LIGHT FIXTURE DRIVER, UL LISTED,	LITHONIA FMV1SL-24IN-MVOLT-35K-90CRI-BN
X1	120V	LED	SURFACE	LED THERMOPLASTIC EXIT/EMERGENCY UNIT WITH SELF-DIAGNOSTICS	LITHONIA LHQM LED _R SD
X2	120V	LED	SURFACE	LED THERMOPLASTIC EXIT UNIT WITH SELF-DIAGNOSTICS WITH DIRECTIONAL CHEVRON	LITHONIA LQM-P-W-R-120/277-ELN-SD
AA	120V	LED 2500LM 4000K 39W	SURFACE	LED WALL LUMINAIRE, WET LOCATION RATED, UL LISTED	LITHONIA TWH LED-10C-1000-40K-13M-MVOLT-DNAXD
BB	120V	LED 4800W 4000K 72W	SURFACE	LED WALL LUMINAIRE, WET LOCATION RATED, UL LISTED	LITHONIA TWH LED-20C-1000-40K-13M-MVOLT-DNAXD
CC	120V	LED 50W	SURFACE	LED WALL WASH COLOR CHANGING FIXTURE, RATED FOR WET LOCATIONS, INCLUDE CONTROL BOXES, KEYPADS AND ALL REQUIRED CABLING	PHILIPS BCP472 36XLED-HB/RGB 100-240V 36 BK DATA ENABLER PRO
DD	120V	LED 1000 LM 4000K 15W	SURFACE	LED WALL LUMINAIRE, 0-10V DRIVER, ETL WET LOCATIONS LISTED	VISA LIGHTING OW2302 135K MVOLT AG7038
FF	120V	LED (1.3W/FT)	SURFACE	LED LINEAR COLOR CHANGING FIXTURE, PROVIDE ALL DMX CONTROL BOXES, SOFTWARE FOR A PROPER INSTALLATION	PHILIPS BCP421 120 RGB L1 200 CE
GG	120V	LED 4889LM 4000K 42W	SURFACE	LED FLOOD FIXTURE, FLOOD DISTRIBUTION, WET LOCATION RATED, UL LISTED	LITHONIA DSXF1 P2 40K FL MVOLT IS DDBXD
HH	120V	LED 2000LM 4000K 22.6W	SURFACE	LED SURFACE MOUNT FIXTURE, WET LOCATION LISTED	GOTHAM EVO CYL 40/20 6AR _ WD LSS MVOLT G210 FCM DNA
JJ	120V	LED 533LM 4000K 9.1W	SURFACE @7'-0" AFF	LED WALL MOUNTED FIXTURE, WET LOCATION LISTED	LITHONIA OLLWLED P1 40K MVOLT DDB

NOTE:

- 1.) EQUAL MANUFACTURER SHALL BE ACCEPTABLE WITH EQUAL PERFORMANCE OF SPECIFIED EQUIPMENT AND APPROVED BY ENGINEER.
- 2.) SUBMIT EQUAL MANUFACTURERS TO ENGINEER 10 DAYS PRIOR TO BID DATE.
- 3.) SUBMIT LIGHT FIXTURES CUTSHEETS TO OWNER FOR APPROVAL PRIOR TO ORDER.
- 4.) CONTRACTOR SHALL VERIFY THAT ANY IRRIGATION SPRINKLER HEAD IS AWAY FROM ANY LIGHT POLE A MINIMUM OF 75' TO AVOID CONSISTENT WATER TO LIGHT POLE. COORDINATE WITH IRRIGATION CONTRACTOR PRIOR TO ANY WORK.
- 5.) CONTRACTOR SHALL VERIFY THAT ANY LIGHT POLES ON COMMON AREAS AND SIDE WALKS, THAT THE LOCATION OF THE POLE TO MEET THE REQUIREMENTS OF THE CITY OF HOUSTON.
- 6.) CONTRACTOR SHALL FIELD VERIFY FOR EXISTING/NEW UNDERGROUND UTILITIES PRIOR TO ANY WORK.

TRINITY MEP ENGINEERING

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Texas Registered Engineering Firm - F10382
Project number: 18.2.09



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HOP VILLA RENOVATIONS

TROPICAL TEXAS BEHAVIORAL HEALTH
HARLINGEN, TX.

PROJECT NUMBER

217027

DATE
AUG 17, 2018

FINALS - 100%

SHEET NUMBER

E4.1

LIGHTING CONTROL SENSORS LEGEND

SYMBOL	ACUITY MODEL NUMBER	CONDUIT	COMMENTS
	NCM-PDT-10	3/4"	PROVIDE POWER PACK POSITIONED AS DIRECTED BY MANUFACTURER. REFER TO PLANS FOR TYPE OF POWER PACK. REFER TO PLANS AND SCHEDULES FOR SWITCHING TYPES.
	WSX-PDT-SA	3/4"	
	nPP16	3/4"	POWER PACK, 120,240,277, VAC, 16AMPS/POLE, PLENUM RATED, RELAY CONTACT PROTECTION, RJ-45 PORT
	nPP16 D	3/4"	POWER PACK, 120,240,277, VAC, 16AMPS/POLE, 0-10VDC DIMMING, PLENUM RATED, RELAY CONTACT PROTECTION, RJ-45 PORT
	BLUE BOX LT	RE: PLANS	LIGHTING CONTROL RELAY PANEL, REFER TO RELAY PANEL SCHEDULE.
	nPODM-_-_-WH	3/4"	WALL MOUNT SWITCH WITH ON/OFF WITH STAINLESS STEEL PLATE
	nPODM-_-DX_-WH	3/4"	WALL MOUNT SWITCH WITH ON/OFF WITH RAISE /LOWER FUNCTION AND WITH STAINLESS STEEL PLATE

- GENERAL NOTES:
A. CONTRACTOR SHALL REFER TO MANUFACTURERS INSTRUCTIONS AND WIRING DIAGRAMS PRIOR TO BID DATE.
B. CONTRACTOR SHALL INCLUDE ALL COST IN BID FOR AN OPERABLE LIGHTING SYSTEM.
NOTES:
1. All sensor locations are approximate, refer to manufacturers installation instructions prior to installation.
2. Ultrasonic ceiling mount sensors should be located a minimum of six feet from HVAC supply/return vents.
3. Contractor is responsible for: proper sensitivity & time delay settings (for non-adaptive products) recommended placement, and field verification of circuits with in respect to power placement.
4. Contractor is responsible for field verification of required number of power packs:
· One power pack is required for each circuit to be controlled.
· One power pack is required for every three sensors in the zone.
· If multiple circuits are to be controlled by a sensor, an auxiliary relay can be used in conjunction with the power pack.
· The maximum number of sensors that can be put on a power pack is to be reduced by one for each slave pack used.
5. Sensors mounted over the door must be placed one foot inside the threshold.
6. Contractor is responsible for ensuring that the sensor bill of materials complies with the sensor design and layout specifications.
7. Contractor is responsible for installing equipment in compliance with local code.
8. Refer to manufacturers wiring diagrams.

DISCONNECT SCHEDULE	
LABEL	DESCRIPTION
AHU-A1-A7, AHU-B1-B6, AHU-C1-4	30AMP, 1Ø, 3W, N1,240V, S/N, N.F., H.D. DISCONNECT
CU-A1-A7, CU-B1-B4, CU-B6, CU-C1-C4	30AMP, 1Ø, 3W, N3R,240V, S/N, H.D. FUSED DISCONNECT
CU-B5	30AMP, 1Ø, 3W, N3R,240V, S/N, H.D. FUSED DISCONNECT
FCCU-1	30AMP, 1Ø, 3W, N3R,240V, S/N, H.D. FUSED DISCONNECT

- NOTE: 1. REFER TO BREAKER SIZE FOR FUSE SIZE.
2. REFER TO PANELBOARD FOR DISCONNECT PHASES AND VOLTAGE.

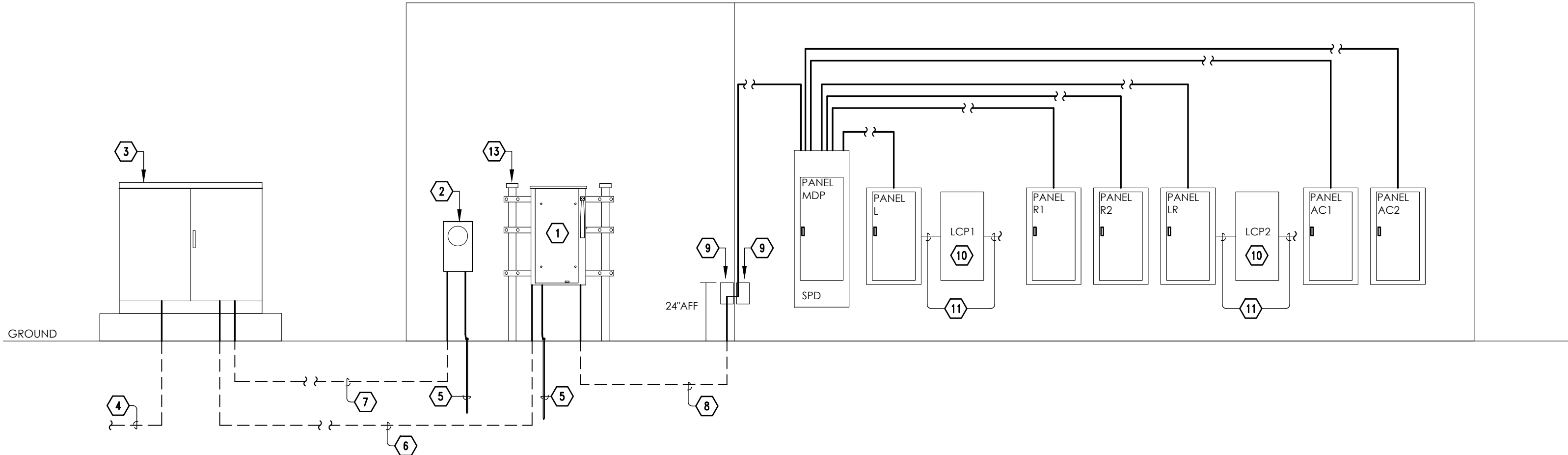
GENERAL NOTES:

- A. PROVIDE GROUND /BONDING AS INDICATED ON THE NATIONAL ELECTRICAL CODE.
B. NAME PLATES SHALL BE PROVIDED FOR ALL ELECTRICAL SWITCH GEAR, PANEL BOARDS, LIGHTING CONTACTORS, LIGHTING CONTROL PANELS, ETC., BY ELECTRICAL CONTRACTOR.
C. NEW ELECTRICAL METERING AND SERVICE EQUIPMENT SHALL BE PROVIDED AND INSTALLED ACCORDINGS TO THE LOCAL POWER UTILITY CO. AND CITY REQUIREMENTS. VERIFY AND COORDINATE WITH POWER UTILITY CO. AND AHJ BEFORE BID AND INSTALLATION.
D. COMPLY WITH NFPA 70E SAFETY REQUIREMENTS.
E. PANELBOARDS WITH MORE THAN 42 CIRCUITS SHALL BE IN ONE CABINET ENCLOSURE, UNLESS OTHERWISE NOTED.
F. PROVIDE 4" CONCRETE PAD FOR ALL DRY-TYPE TRANSFORMERS.
G. ALL TWO SECTION PANELBOARDS SHALL BE FEED THRU LUGS.
H. CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY OF ELECTRICAL SERVICE TO THE NEW BUILDING WITHIN PROJECT SCHEDULE. COORDINATE ALL COST FOR LABOR AND MATERIALS WITH LOCAL ELECTRICAL UTILITY COMPANY PRIOR TO BID. ALL COST ASSOCIATED WITH THE DELIVERY OF ELECTRICAL SERVICE INCLUDING ALL MATERIALS SHALL BE INCLUDED IN BID. TRANSITION OF NEW ELECTRICAL SERVICE SHALL PROCEED IN WEEKENDS OR HOLIDAYS, INCLUDE ALL COST IN BID FOR OVERTIME FROM ELECTRIC UTILITY COMPANY. NO ADDITIONAL PAYMENT WILL BE MADE FOR SERVICE DELIVERY COSTS AFTER CONTRACT HAS BEEN AWARDED.
I. THE CONTRACTOR SHALL FURNISH SHORT-CIRCUIT AND PROTECTION DEVICE COORDINATE STUDIES WHICH SHALL BE PREPARED BY THE EQUIPMENT GEAR MANUFACTURER.
J. THE CONTRACTOR SHALL FURNISH AN ARC FLASH HAZARD ANALYSIS STUDY PER NFPA 70E- STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE, REFERENCE ARTICLE 130.3 AND ANEX D.

ELECTRICAL RISER
DIAGRAM KEYED NOTES:

- 1 PROVIDE NEW 800AMPS, 208V, 3Ø, 4W, S/N, N3R, HEAVY DUTY FUSED SERVICE ENTRANCE DISCONNECT, FUSED@800AMPS.
2 NEW ELECTRICAL SERVICE METER 120/208V, 3Ø, 4W. CONTRACTOR SHALL PROVIDE METER BASE. VERIFY WITH POWER FOR METER BASE REQUIREMENTS PRIOR TO BID DATE. INCLUDE ALL COST IN BID. COORDINATE ALLOCATION OF METER SOCKET AND WIRING WITH POWER COMPANY.
3 NEW POWER COMPANY PAD MOUNT TRANSFORMER 120/208V, 3Ø, 4W, PROVIDE CONCRETE PAD AS PER POWER COMPANY REQUIREMENTS.
4 FURNISH AND INSTALL 1-4" C FOR UTILITY PRIMARY RACEWAY TO POWER SOURCE AS DIRECTED BY UTILITY COMPANY. PROVIDE WARNING RIBBONS 12" ABOVE CONDUIT.
5 1#3/ØG IN 1"C, 3/4"X10" COPPER CLAD RODS. PROVIDE GROUNDING AS PER NEC REQUIREMENTS.
6 PROVIDE 2-RUNS EACH OF 4#600KCMIL, 4"C.
7 PROVIDE 1-2"C WITH PULLSTRING.
8 PROVIDE 2-RUNS EACH OF 4#600KCMIL, 1#3/ØG, 4"C.
9 PROVIDE NEMA-3R JUNCTION BOX, SIZE AS REQUIRED BY NEC.
10 LIGHTING RELAY PANEL, REFER TO RELAY PANEL SCHEDULE.
11 LIGHTING CIRCUITS TO BE CONTROL BY RELAY PANEL, REFER TO LIGHTING CIRCUIT WIRE SIZE AND CONDUIT REQUIREMENTS.
12 3"GALVANIZED PIPE WITH UNISTRUT STAND FOR ELECTRICAL SERVICE EQUIPMENT. COORDINATE WITH UTILITY COMPANY PRIOR TO ANY WORK.

208/120V, 3Ø, 4W ELECTRICAL LOAD ANALYSIS			
DESCRIPTION	CONNECTED KVA	DEMAND	TOTAL KVA
LIGHTING	23	125%	28.75
GENERAL POWER	104	NEC 220.40	57
HVAC	127	100%	127
WATER HEATER	23	100%	23
TOTAL WATTS:		235.75 KVA	
TOTAL AMPS:		654.8 AMPS	
WIRE SIZE AMPS:		800 AMPS	



1 ELECTRICAL SCHEMATIC DIAGRAM
SCALE: NTS



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Project number: 18.2.09



PANEL - MDP LOCATION:-	AMP 800	LUGS MLO	NEMA 1	V(LL) 208		(P) 3	(W) 4		V(LN) 120	MNT SUR	KAIC 50	FDR: 2-RUNS EACH. 4#600KCMIL, 1#1/0G, 4"C		
LOAD SERVED	CKT #	LOAD KVA	BKR SIZE	POLE	FEEDER/BRANCH CIRCUIT SIZE	A	B	C	FEEDER/BRANCH CIRCUIT SIZE	POLE	BKR SIZE	LOAD KVA	CKT #	LOAD SERVED
PANEL-R1	1	32	225	2	3#4/0, 1#4G, 3"C	*			3#600KCMIL, 1#3G, 4"C	2	400	36	2	PANEL-R2
-	3	24			-	*	*		-			33	4	-
PANEL-L	5	14	200	2	3#3/0, 1#6G, 2"C		*		3#2, 1#8G, 1 1/2"C	2	100	5	6	PANEL-LR
-	7	11			-	*			-			6	8	-
PANEL-AC1	9	37	400	2	3#600KCMIL, 1#3G, 4"C	*	*		3#600KCMIL, 1#3G, 4"C	2	400	26	10	PANEL-AC2
-	11	36			-	*	*		-			25	12	-
SPACE	13				-	*			-			14		SPACE
SPACE	15				-	*			-			16		SPACE
SPACE	17				-	*	*		-			18		SPACE
SPACE	19				-	*			-			20		SPACE
SPACE	21				-	*	*		-			22		SPACE
SPACE	23				-	*	*		-			24		SPACE
SPACE	25				-	*			-			26		SPACE
SPACE	27				-	*	*		-			28		SPACE
SPACE	29				-	*	*		-			30		SPACE
SPACE	31				-	*			-			32		SPACE
SPACE	33				-	*	*		-			34		SPACE
SPACE	35				-	*	*		-			36		SPACE
SPD	37		60	2	4#6, 1#10G, 1"C	*	*		-			38		SPACE
-	39				-	*	*		-			40		SPACE
-	41				-	*	*		-			42		SPACE
LOADS	-	(KVA)				85	119	80	(KVA)	-	DESCRIPTIVE LOADS			
CONNECTED LOAD	-	284				KVA/PHASE					0	-	LIGHTING	
RESERVE	-	0									0	-	RECEPTACLES	
TOTAL LOAD	-	284									0	-	COOLING	
											0	-	HEATING	
TOTAL AMPS	-	788									284	-	OTHER	

NOTES:
1) PROVIDE INTEGRAL SURGE PROTECTION DEVICE, 160KA WITH INTEGRAL DISCONNECT
2)
3)

-PANEL R1 SEC1	AMP 225	LUGS MLO	NEMA 1	V(LL) 208		(P) 1	(W) 3		V(LN) 120	MNT S	KAIC 10	FDR 1-RUN 3#4/0, 1#4G, 2 1/2"C	
LOAD SERVED	CKT #	LOAD KVA	BKR SIZE	POLE	FEEDER/BRANCH CIRCUIT SIZE	A	B	FEEDER/BRANCH CIRCUIT SIZE	POLE	BKR SIZE	LOAD KVA	CKT #	LOAD SERVED
2 RCPTS	1	0.8	20	1	2#8, 1#10G, 3/4"C	*		2#8, 1#10G, 3/4"C	1	20	0.8	2	4 RCPTS
5 RCPTS	3	1	20	1	2#8, 1#10G, 3/4"C	*	*	2#8, 1#10G, 3/4"C	1	20	1	4	5 RCPTS
4 RCPTS	5	0.8	20	1	2#8, 1#10G, 3/4"C	*	*	2#8, 1#10G, 3/4"C	1	20	1.2	6	6 RCPTS
4 RCPTS	7	0.8	20	1	2#8, 1#10G, 3/4"C	*	*	2#8, 1#10G, 3/4"C	1	20	1	8	5 RCPTS
4 RCPTS	9	0.8	20	1	2#8, 1#10G, 3/4"C	*	*	2#8, 1#10G, 3/4"C	1	20	1	10	5 RCPTS
4 RCPTS	11	0.8	20	1	2#8, 1#10G, 3/4"C	*	*	2#8, 1#10G, 3/4"C	1	20	0.8	12	2 RCPTS
4 RCPTS	13	0.8	20	1	2#8, 1#10G, 3/4"C	*	*	2#8, 1#10G, 3/4"C	1	20	1	14	5 RCPTS
4 RCPTS	15	0.8	20	1	2#10, 1#10G, 3/4"C	*	*	2#10, 1#10G, 3/4"C	1	20	1	16	5 RCPTS
6 RCPTS	17	1.2	20	1	2#10, 1#10G, 3/4"C	*	*	2#10, 1#10G, 3/4"C	1	20	0.8	18	4 RCPTS
4 RCPTS	19	0.8	20	1	2#10, 1#10G, 3/4"C	*	*	2#10, 1#10G, 3/4"C	1	20	1	20	5 RCPTS
6 RCPTS	21	1.2	20	1	2#10, 1#10G, 3/4"C	*	*	2#10, 1#10G, 3/4"C	1	20	0.8	22	4 RCPTS
4 RCPTS	23	0.8	20	1	2#12, 1#12G, 1/2"C	*	*	2#10, 1#10G, 3/4"C	1	20	0.8	24	2 RCPTS
4 RCPTS	25	0.8	20	1	2#10, 1#10G, 3/4"C	*	*	2#12, 1#12G, 1/2"C	1	20	0.8	26	4 RCPTS
5 RCPTS	27	1	20	1	2#12, 1#12G, 1/2"C	*	*	2#12, 1#12G, 1/2"C	1	20	1.2	28	6 RCPTS
5 RCPTS	29	1	20	1	2#12, 1#12G, 1/2"C	*	*	2#12, 1#12G, 1/2"C	1	20	1	30	5 RCPTS
4 RCPTS	31	0.8	20	1	2#12, 1#12G, 1/2"C	*	*	2#12, 1#12G, 1/2"C	1	20	1.2	32	6 RCPTS
MICRO	33	1.2	20	1	2#12, 1#12G, 1/2"C	*	*	2#12, 1#12G, 1/2"C	1	20	1.2	34	REFRIGERATOR
5 RCPTS	35	1	20	1	2#12, 1#12G, 1/2"C	*	*	2#12, 1#12G, 1/2"C	1	20	0.8	36	2 RCPTS
5 RCPTS	37	1	20	1	2#12, 1#12G, 1/2"C	*	*	2#12, 1#12G, 1/2"C	1	20	1	38	5 RCPTS
4 RCPTS	39	0.8	20	1	2#12, 1#12G, 1/2"C	*	*	2#12, 1#12G, 1/2"C	1	20	1.2	40	1 RCPT
1 RCPT	41	1.2	20	1	2#12, 1#12G, 1/2"C	*	*	2#12, 1#12G, 1/2"C	1	20	1.5	42	1 RCPT
ACCESS CONTROLS	43	1.2	20	1	2#12, 1#12G, 1/2"C	*	*	2#12, 1#12G, 1/2"C	1	20	0.6	44	QUAD
ACCESS CONTROLS	45	1.2	20	1	2#12, 1#12G, 1/2"C	*	*	2#12, 1#12G, 1/2"C	1	20	0.6	46	QUAD
6 RCPTS	47	1.2	20	1	2#12, 1#12G, 1/2"C	*	*	2#12, 1#12G, 1/2"C	1	20	0.8	48	4 RCPTS
WH-1	49	1.5	20	2	2#10, 1#10G, 3/4"C	*	*	2#12, 1#12G, 1/2"C	1	20	0.2	50	CP-1
-	51	1.5			-	*	*	2#12, 1#12G, 1/2"C	1	20	0.6	52	EF-7
POWER POLE	53	0.4	20	1	2#10, 1#10G, 3/4"C	*	*	2#10, 1#10G, 3/4"C	1	20	0.4	54	POWER POLE
POWER POLE	55	0.4	20	1	2#10, 1#10G, 3/4"C	*	*	2#10, 1#10G, 3/4"C	1	20	0.4	56	POWER POLE
POWER POLE	57	0.4	20	1	2#10, 1#10G, 3/4"C	*	*	2#10, 1#10G, 3/4"C	1	20	0.4	58	POWER POLE
1 RCPT	59	1.5	20	1	2#12, 1#12G, 1/2"C	*	*	2#8, 1#10G, 3/4"C	1	20	1.5	60	1 RCPT
SPACE	61				-	*	*	-				62	SPACE
SPACE	63				-	*	*	-				64	SPACE
LOADS	-	(KVA)				32	24				(KVA)	-	DESCRIPTIVE LOADS
CONNECTED LOAD	-	52				KVA/PHASE					0	-	LIGHTING
RESERVE	-	0									49	-	RECEPTACLES
TOTAL LOAD	-	52									0	-	COOLING
											0	-	HEATING
TOTAL AMPS	-	218									3	-	OTHER

NOTES:
1) CIRCUIT INDEX SHALL INCLUDE ROOM#S
2)
3)

PANEL-AC1 LOCATION:-	AMP 400	LUGS MLO	NEMA 1	V(LL) 208		(P) 1	(W) 3		V(LN) 120	MNT S	KAIC 10	FDR 1-RUN 3#600KCMIL, 1#3G, 3 1/2"		
LOAD SERVED	CKT #	LOAD KVA	BKR SIZE	POLE	FEEDER/BRANCH CIRCUIT SIZE	A	B		FEEDER/BRANCH CIRCUIT SIZE	POLE	BKR SIZE	LOAD KVA	CKT #	LOAD SERVED
AHU-A1	1	1.08	20	2	3#10, 1#10G, 3/4"	*			3#8, 1#10G, 3/4"	2	45	3.36	2	CU-A1
	3	1.08			-	*	*		-			3.36	4	-
AHU-A2	5	0.6	20	2	3#10, 1#10G, 3/4"	*			3#10, 1#10G, 3/4"	2	35	2.52	6	CU-A2
	7	0.6			-	*	*		-			2.52	8	-
AHU-A3	9	1.08	20	2	3#10, 1#10G, 3/4"	*			3#8, 1#10G, 3/4"	2	45	3.36	10	CU-A3
	11	1.08			-	*	*		-			3.36	12	-
AHU-A4	13	0.6	20	2	3#10, 1#10G, 3/4"	*			3#10, 1#10G, 3/4"	2	35	2.52	14	CU-A4
	15	0.6			-	*	*		-			2.52	16	-
AHU-A5	17	1.08	20	2	3#10, 1#10G, 3/4"	*			3#8, 1#10G, 3/4"	2	45	3.36	18	CU-A5
	19	1.08			-	*	*		-			3.36	20	-
AHU-A6	21	1.8	20	2	3#10, 1#10G, 3/4"	*			3#8, 1#10G, 3/4"	2	45	3.36	22	CU-A6
	23	1.08			-	*	*		-			3.36	24	-
AHU-A7	25	0.6	20	2	3#10, 1#10G, 3/4"	*			3#10, 1#10G, 3/4"	2	35	2.52	26	CU-A7
	27	0.6			-	*	*		-			2.52	28	-
AHU-B1	29	1.2	20	2	3#10, 1#10G, 3/4"	*			3#6, 1#10G, 1"	2	60	4.44	30	CU-B1
	31	1.2			-	*	*		-			4.44	32	-
AHU-B2	33	0.6	20	2	3#10, 1#10G, 3/4"	*			3#10, 1#10G, 3/4"	2	35	2.52	34	CU-B2
	35	0.6			-	*	*		-			2.52	36	-
SPACE	37				-	*	*		-			38		SPACE
SPACE	39				-	*	*		-			40		SPACE
SPACE	41				-	*	*		-			42		SPACE
LOADS	-	(KVA)				37	36		(KVA)	-	DESCRIPTIVE LOADS			
CONNECTED LOAD	-	72				KVA/PHASE					0	-	LIGHTING	
RESERVE	-	18									0	-	RECEPTACLES	
TOTAL LOAD	-	91									56	-	COOLING	
											17	-	HEATING	
TOTAL AMPS	-	378									0	-	OTHER	

NOTES:
1) CIRCUIT INDEX SHALL INCLUDE ROOM#S
2)
3)

PANEL-AC2 LOCATION:	AMP 400	LUGS MLO	NEMA 1	V(LL) 208		(P) 1	(W) 3		V(LN) 120	MNT S	KAIC 10	FDR 1-RUN 3#600KCMIL, 1#3G, 4"C	
LOAD SERVED	CKT #	LOAD KVA	BKR SIZE	POLE	FEEDER/BRANCH CIRCUIT SIZE	A	B	FEEDER/BRANCH CIRCUIT SIZE	POLE	BKR SIZE	LOAD KVA	CKT #	LOAD SERVED
AHU-B3	1	0.6	20	2	3#10, 1#10G, 3/4"C	*		3#8, 1#10G, 3/4"C	2	45	2.52	2	CU-B3
	3	0.6			-	*	*	-			2.52	4	-
AHU-B4	5	0.6	20	2	3#10, 1#10G, 3/4"C	*		3#10, 1#10G, 3/4"C	2	35	2.52	6	CU-B4
	7	0.6			-	*	*	-			2.52	8	-
AHU-B5	9	0.5	20	2	3#10, 1#10G, 3/4"C	*		3#12, 1#12G, 1/2"C	2	20	1.08	10	CU-B5
	11	0.5			-	*	*	-			1.08	12	-
AHU-B6	13	0.6	20	2	3#10, 1#10G, 3/4"C	*		3#10, 1#10G, 3/4"C	2	35	2.52	14	CU-B6
	15	0.6			-	*	*	-			2.52	16	-
AHU-C1	17	1.08	20	2	3#10, 1#10G, 3/4"C	*		3#10, 1#10G, 3/4"C	2	35	2.52	18	CU-C1
	19	1.08			-	*	*	-			2.52	20	-
AHU-C2	21	0.6	20	2	3#10, 1#10G, 3/4"C	*		3#10, 1#10G, 3/4"C	2	35	2.52	22	CU-C2
	23	0.6			-	*	*	-			2.52	24	-
AHU-C3	25	0.6	20	2	3#10, 1#10G, 3/4"C	*		3#10, 1#10G, 3/4"C	2	35	2.52	26	CU-C3
	27	0.6			-	*	*	-			2.52	28	-
AHU-C4	29	1.08	20	2	3#10, 1#10G, 3/4"C	*		3#8, 1#10G, 3/4"C	2	45	3.36	30	CU-C4
	31	1.08			-	*	*	-			3.36	32	-
MOTORISED DAMPERS	33	1.2	20	1	2#12, 1#12G, 1/2"C	*		-				34	SPACE
SPACE	35				-	*	*	-				36	SPACE
SPACE	37				-	*	*	-				38	SPACE
SPACE	39				-	*	*	-				40	SPACE
SPACE	41				-	*	*	-				42	SPACE
LOADS	-	(KVA)				26	25				(KVA)	-	<u>DESCRIPTIVE LOADS</u>
CONNECTED LOAD	-	50				KVA/PHASE					0	-	LIGHTING
RESERVE	25	13									0	-	RECEPTACLES
TOTAL LOAD	-	63									39	-	COOLING
											11	-	HEATING
TOTAL AMPS	-	263									0	-	OTHER

NOTES:
1) CIRCUIT INDEX SHALL INCLUDE ROOM#S
2)
3)

EXISTING														
PANEL-GN	AMP	LUGS	NEMA	V(LL)		(P)	(W)		V(LN)	MNT	KA/C	FDR		
-	100	MLO	1	208		3	4		120	SUR.	10	1-RUN 4#2, 1#8G, 2"C		
LOAD SERVED	CKT #	LOAD KVA	BKR SIZE	POLE	FEEDER/BRANCH CIRCUIT SIZE	A	B	C	FEEDER/BRANCH CIRCUIT SIZE	POLE	BKR SIZE	LOAD KVA	CKT #	LOAD SERVED
FACP	1	0.6	20	1	2#12, 1#12G, 1/2"C	*			-			2		SPACE
INTRUSION	3	0.6	20	1	2#12, 1#12G, 1/2"C		*		2#12, 1#12G, 1/2"C	1	20	0.6	4	ACC
QUAD	5	0.8	20	1	2#12, 1#12G, 1/2"C			*	2#12, 1#12G, 1/2"C	1	20	0.8	6	QUAD
SPECIAL RCPT	7	2	30	2	3#10, 1#10G, 3/4"C	*			2#12, 1#12G, 1/2"C	1	20	0.8	8	2 RCPTS
"	9	2			-		*		2#12, 1#12G, 1/2"C	1	20	2	10	SPECIAL RCPT
FCCU-1	11	1	20	2	3#12, 1#12G, 1/2"C			*	-			2	12	-
"	13	1			-	*			2#12, 1#12G, 1/2"C	1	20	0.6	14	1 RCPT
SPACE	15				-				-			16		SPACE
LOADS	-	(KVA)				5	5	5	(KVA)	-		DESCRIPTIVE LOADS		
CONNECTED LOAD	-	14							KVA/PHASE	0	-	LIGHTING		
RESERVE	0	0								13	-	RECEPTACLES		
TOTAL LOAD	-	14								1	-	COOLING		
										0	-	HEATING		
TOTAL AMPS	-	39								0	-	OTHER		
NOTES: 1) 2) 3)														

-PANEL-L	AMP	LUGS	NEMA	V(LL)		(P)	(W)		V(LN)	MNT	KA/C	FDR		
-	200	MLO	1	208		1	3		120	S	10	1-RUN 3#3/0, 1#6G, 2"C		
LOAD SERVED	CKT #	LOAD KVA	BKR SIZE	POLE	FEEDER/BRANCH CIRCUIT SIZE	A	B		FEEDER/BRANCH CIRCUIT SIZE	POLE	BKR SIZE	LOAD KVA	CKT #	LOAD SERVED
LIGHTING	1	1.2	20	1	2#12, 1#12G, 1/2"C	*			2#12, 1#12G, 1/2"C	1	20	1.2	2	LIGHTING
LIGHTING	3	1.2	20	1	2#12, 1#12G, 1/2"C		*		2#12, 1#12G, 1/2"C	1	20	1.2	4	LIGHTING
LIGHTING	5	1.1	20	1	2#12, 1#12G, 1/2"C	*			2#12, 1#12G, 1/2"C	1	20	1.1	6	LIGHTING
LIGHTING	7	1	20	1	2#12, 1#12G, 1/2"C		*		2#12, 1#12G, 1/2"C	1	20	0.9	8	LIGHTING
LIGHTING	9	1.1	20	1	2#12, 1#12G, 1/2"C	*			2#12, 1#12G, 1/2"C	1	20	1.1	10	LIGHTING
LIGHTING	11	1	20	1	2#12, 1#12G, 1/2"C		*		2#12, 1#12G, 1/2"C	1	20	0.9	12	LIGHTING
LIGHTING	13	1	20	1	2#12, 1#12G, 1/2"C	*			2#12, 1#12G, 1/2"C	1	20	0.4	14	LIGHTING
LIGHTING	15	0.6	20	1	2#12, 1#12G, 1/2"C		*		-			16		SPACE
EMERGENCY/EXITS	17	1.5	20	1	2#10, 1#10G, 3/4"C	*			2#12, 1#12G, 1/2"C	1	20	1.5	18	EMERGENCY/EXITS
EXTERIOR LIGHTING	19	0.5	20	1	2#10, 1#10G, 3/4"C		*		2#10, 1#10G, 3/4"C	1	20	0.8	20	EXTERIOR LIGHTING
EXTERIOR LIGHTING	21	0.8	20	1	2#10, 1#10G, 3/4"C	*			2#10, 1#10G, 3/4"C	1	20	0.8	22	EXTERIOR LIGHTING
EXTERIOR LIGHTING	23	0.2	20	1	2#10, 1#10G, 3/4"C		*		2#10, 1#10G, 3/4"C	1	20	0.2	24	EXTERIOR LIGHTING
EXTERIOR LIGHTING	25	0.6	20	1	2#8, 1#10G, 3/4"C	*			2#10, 1#10G, 3/4"C	1	20	0.4	26	EXTERIOR LIGHTING
DATA ENABLER #1	27	1.2	20	1	2#10, 1#10G, 3/4"C	*			2#10, 1#10G, 3/4"C	1	20	1.2	28	DATA ENABLER #2
SPACE	29				-	*			-			30		SPACE
SPACE	31				-	*			-			32		SPACE
SPACE	33				-	*			-			34		SPACE
SPARE	35	20	1		-		*		-			36		SPACE
SPARE	37	20	1		-		*		-			38		SPACE
SPARE	39	20	1		-		*		-			40		SPACE
SPARE	41	20	1		-		*		-			42		SPACE
LOADS	-	(KVA)				14	11		(KVA)	-		DESCRIPTIVE LOADS		
CONNECTED LOAD	-	25							KVA/PHASE	22	-	LIGHTING		
RESERVE	25	6.25								2	-	RECEPTACLES		
TOTAL LOAD	-	31.25								0	-	COOLING		
										0	-	HEATING		
TOTAL AMPS	-	150								0	-	OTHER		
NOTES: 1) 2) 3)														

RELAY LIGHTING CONTROL PANEL

Master CABINET CIRCUIT SCHEDULE

120/240VAC, 1 PHASE

PANEL NAME: LCP

RELAY

A

PNL CIRCUIT

VAC

LOAD W/V/A

CIRCUIT DESCRIPTION

NO.

TYPE

1

1

20

L-6

120V 1500

LIGHTING

3

1

20

L-13

120V 1500

LIGHTING

5

1

20

L-20

120V 1500

EXTERIOR LIGHTING

7

1

20

L-22

120V 1500

EXTERIOR LIGHTING

9

1

20

L-24

120V 1500

EXTERIOR LIGHTING

11

1

20

L-26

120V 1500

EXTERIOR LIGHTING

13

1

20

1500

SPACE

15

1

20

1500

SPACE

LEGEND:

1 = RELAY-1-POLE, 20A, UP TO 277VAC

2 = RELAY-2-POLE, 2-POLE, 20A, UP TO 480VAC

A=AMPS

NOTES:

1. INCLUDE EXTERIOR PHOTO CELL SOFTWARE PROGRAMMING, COMMUNICATION CARD AND GRAPHICAL CONTROLS.

2. VERIFY WITH OWNER FOR ALL PROGRAMMING SEQUENCE.

3. REFER TO SPECIFICATION 16S15.

4. PROVIDE DEDICATED 20AMP 120V FROM NEAREST 120/208V PANEL.

PANEL LOCATION:

PANEL DESCRIPTION: NETWORKING 16 Relay Cabinet:

CATALOG NUMBER: XXX

PANEL FEED: PNL-L

PANEL ID:

MOUNTING: Master Surface

RELAY

A

PNL CIRCUIT

VAC

LOAD W/V/A

CIRCUIT DESCRIPTION

NO.

TYPE

2

1

20

L-7

120V 1500

LIGHTING

4

1

20

L-19

120V 1500

EXTERIOR LIGHTING

6

1

20

L-21

120V 1500

EXTERIOR LIGHTING

8

1

20

L-23

120V 1500

EXTERIOR LIGHTING

10

1

20

L-25

120V 1500

EXTERIOR LIGHTING

12

1

20

120V 1500

SPACE

14

1

20

120V 1500

SPACE

16

1

20

120V 1500

SPACE

5. INCLUDE ALL TRAINING FOR PROGRAMMING AND STARTUP IN CONTRACT. REFER TO SPECIFICATIONS.

6. INCLUDE REMOTE CONTROL OPTION. OWNER TO PROVIDE DATA INPUT.

7. INCLUDE ASTRONOMICAL TIME CLOCK.

RELAY LIGHTING CONTROL PANEL

Master CABINET CIRCUIT SCHEDULE

120/240VAC, 1 PHASE

PANEL NAME: LCP2

PANEL LOCATION:

PANEL DESCRIPTION: NETWORKING 4 Relay Cabinet:

CATALOG NUMBER: XXX

PANEL FEED: PNL-LR

PANEL ID: Master

MOUNTING: Surface

RELAY	A	PNL CIRCUIT	LOAD		
NO.	TYPE		VAC	LOAD W/V/A	CIRCUIT DESCRIPTION
1	1	20	LR-1	120V 1500	LIGHTING
3	1	20		120V 1500	SPACE

LEGEND:

1 = RELAY-1-POLE, 20A, UP TO 277VAC

2 = RELAY-2-POLE, 2-POLE, 20A, UP TO 480VAC

A=AMPS

NOTES:

1. INCLUDE EXTERIOR PHOTO CELL SOFTWARE PROGRAMMING, COMMUNICATION CARD AND GRAPHICAL CONTROLS.

2. VERIFY WITH OWNER FOR ALL PROGRAMMING SEQUENCE.

3. REFER TO SPECIFICATION 16S15.

4. PROVIDE DEDICATED 20AMP 120V FROM NEAREST 120/208V PANEL.

RELAY	A	PNL CIRCUIT	LOAD		
NO.	TYPE		VAC	LOAD W/V/A	CIRCUIT DESCRIPTION
2	1	20		120V 1500	SPACE
4	1	20		120V 1500	SPACE

5. INCLUDE ALL TRAINING FOR PROGRAMMING AND STARTUP IN CONTRACT. REFER TO SPECIFICATIONS.

6. INCLUDE REMOTE CONTROL OPTION. OWNER TO PROVIDE DATA INPUT.

7. INCLUDE ASTRONOMICAL TIME CLOCK.

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PROJECT NUMBER
217027

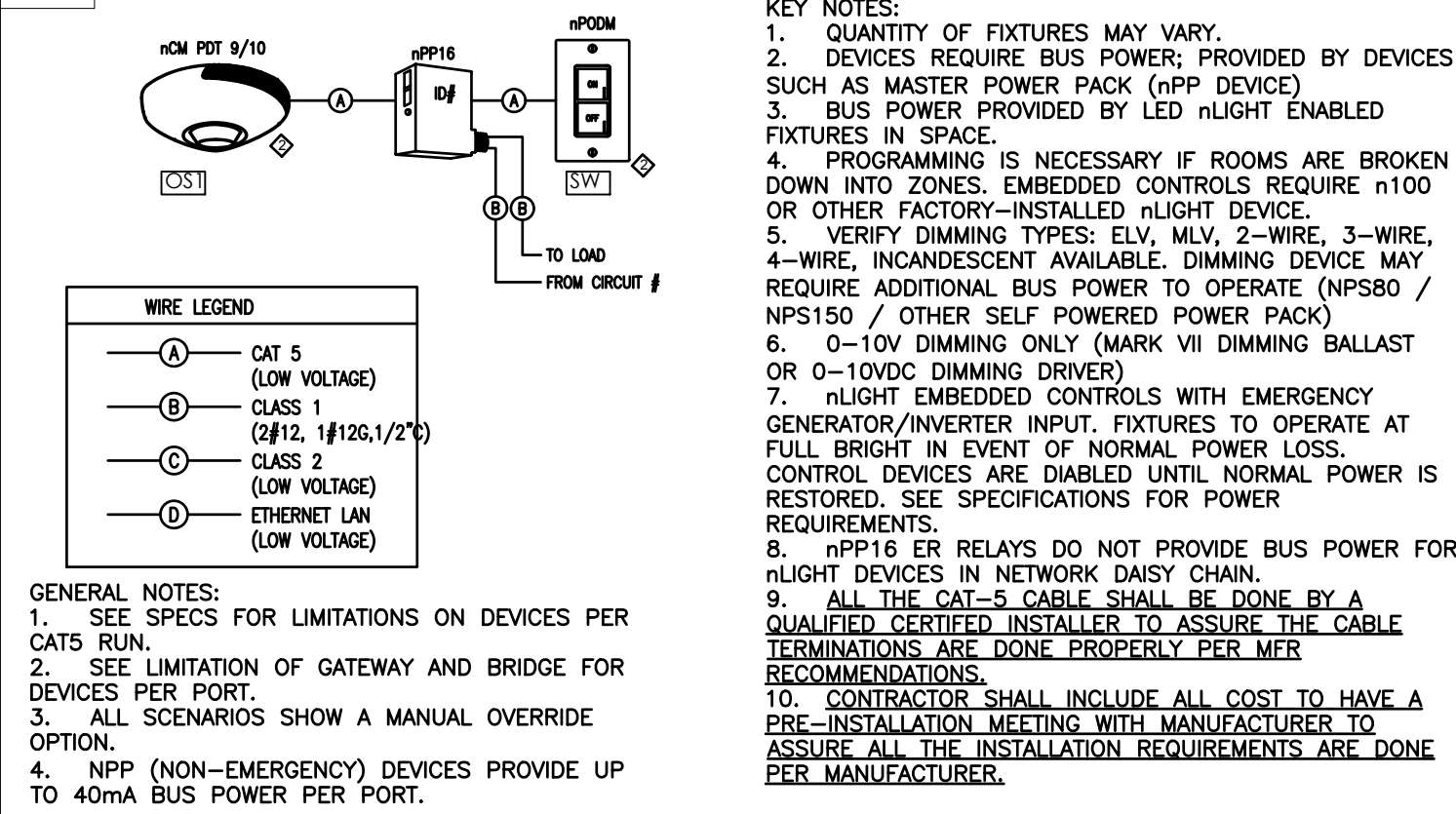
DATE
AUG 17, 2018

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SHEET NUMBER

E6.2

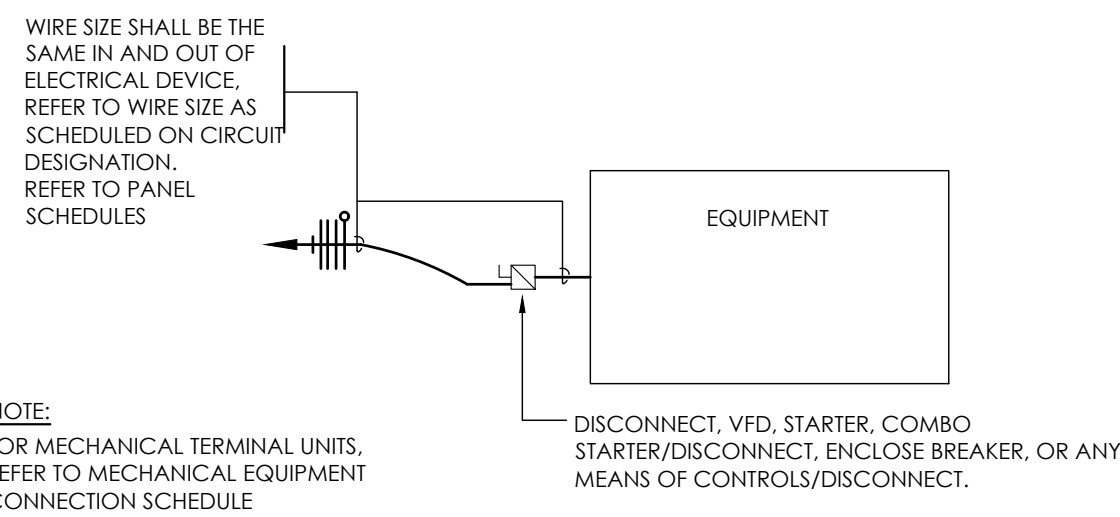
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OCCUPANCY SENSOR SCHEMATIC

NO SCALE

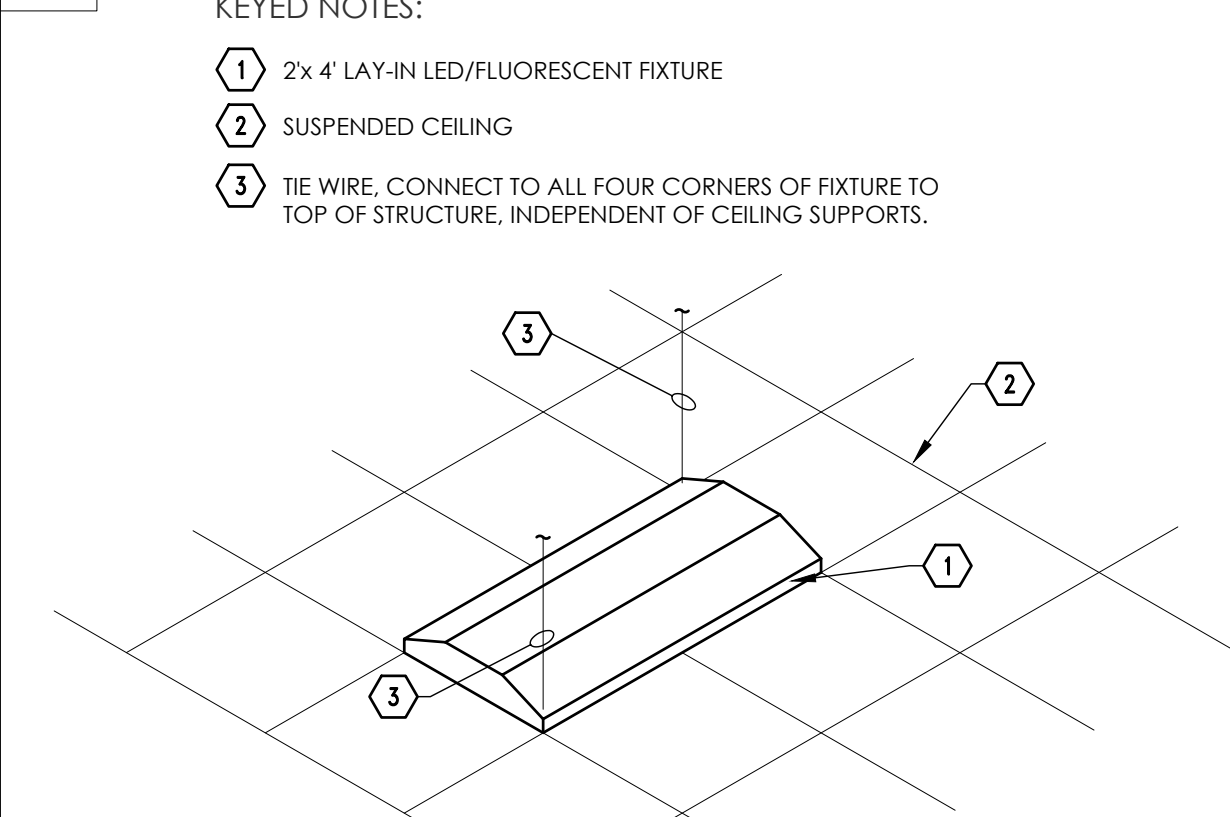
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EQUIPMENT CIRCUIT DETAIL

NO SCALE

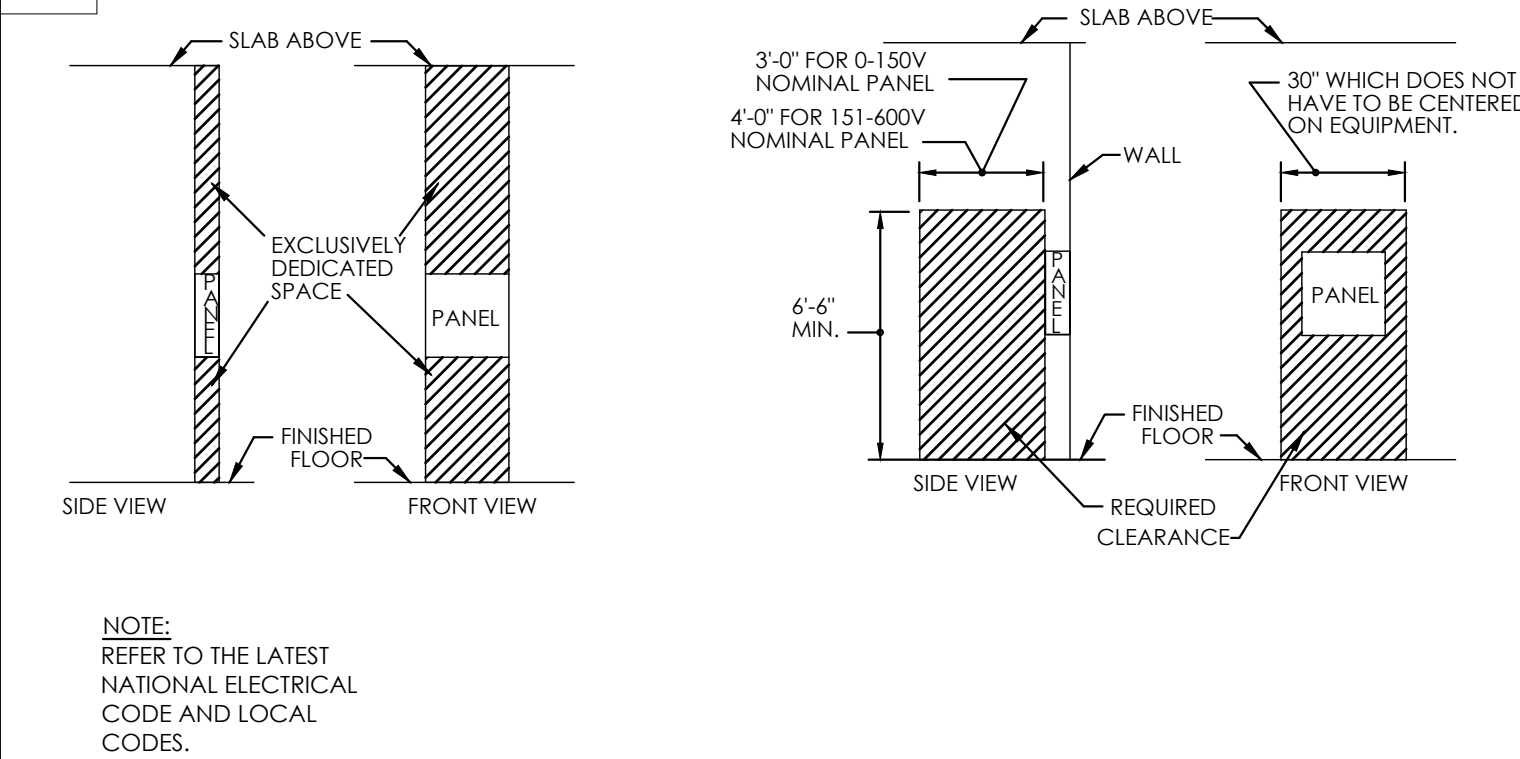
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TYPICAL LAY-IN FIXTURE SUPPORT

NO SCALE

10

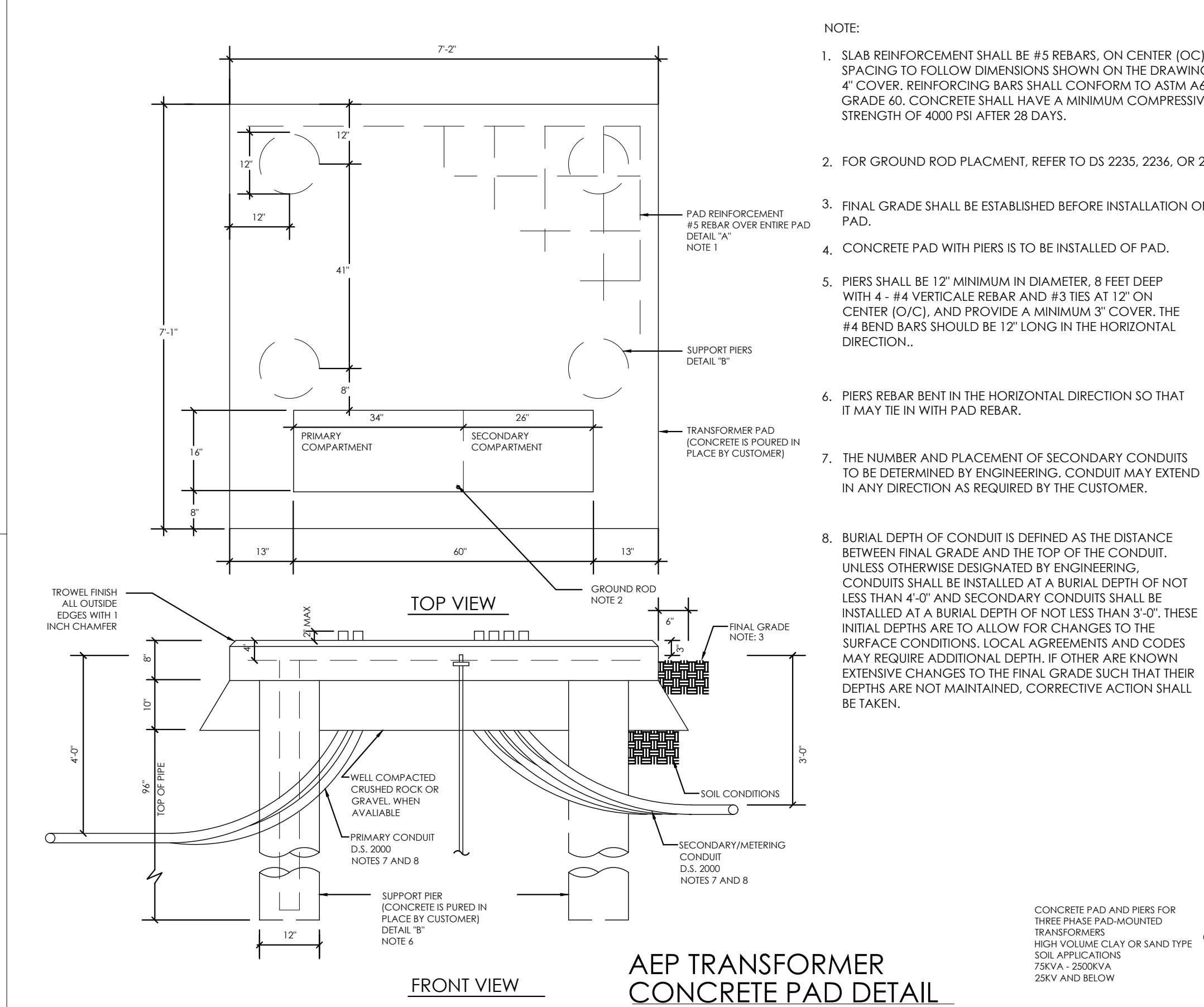


TYPICAL PANEL BOARD REQUIRED CLEARANCE

NO SCALE

02

CONCRETE PAD & PIERS FOR THREE PHASE PAD-MOUNTED TRANSFORMER

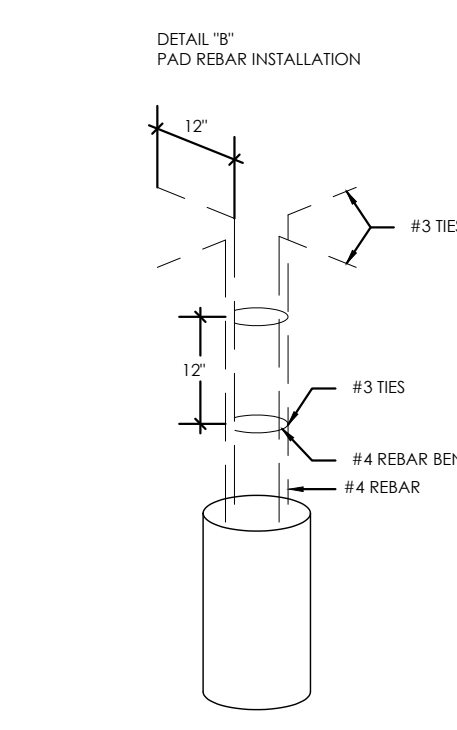


AMERICAN ELECTRIC POWER COMPANY DISTRIBUTION STANDARDS

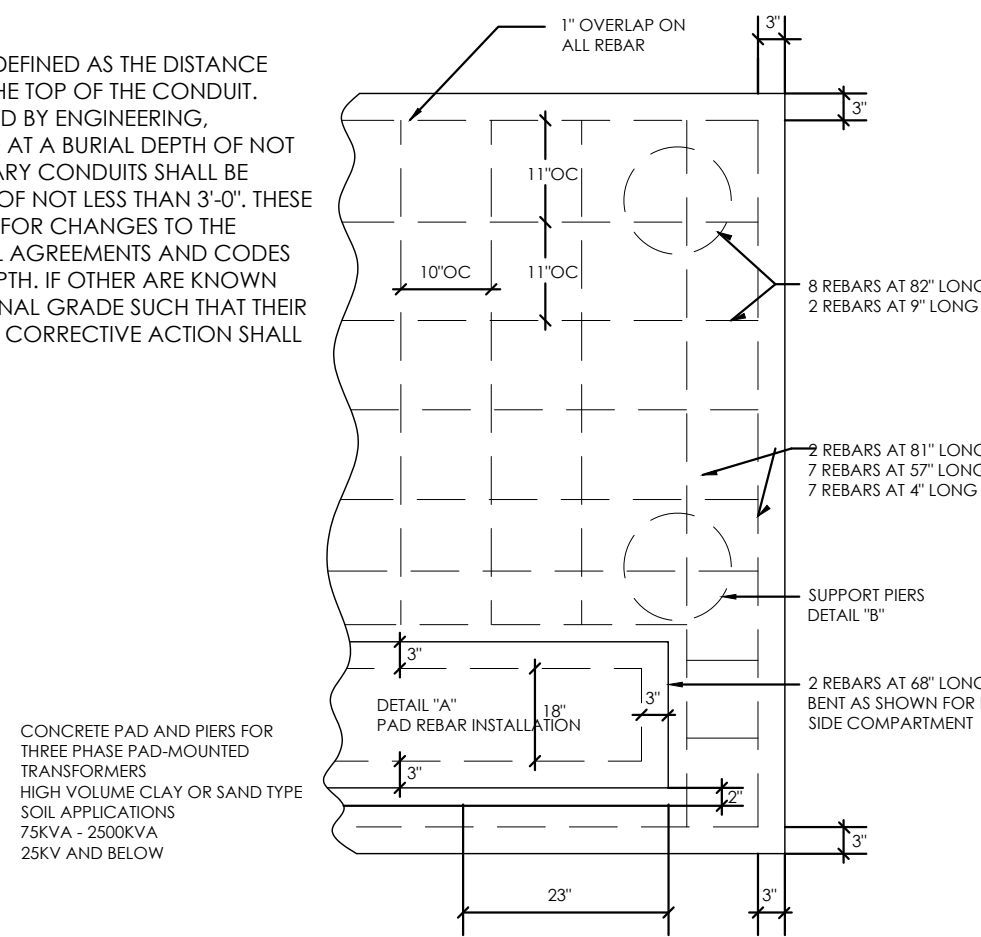
NOTE:

- SLAB REINFORCEMENT SHALL BE #5 REBARS, ON CENTER (OC) SPACING TO FOLLOW DIMENSIONS SHOWN ON THE DRAWING WITH 4" COVER. REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AFTER 28 DAYS.
- FOR GROUND ROD PLACEMENT, REFER TO DS 2235, 2236, OR 2237.
- FINAL GRADE SHALL BE ESTABLISHED BEFORE INSTALLATION OF PAD.
- CONCRETE PAD WITH PIERS IS TO BE INSTALLED OF PAD.
- PIERS SHALL BE 12" MINIMUM IN DIAMETER, 8 FEET DEEP WITH 4 - #4 VERTICAL REBAR AND #3 TIES AT 12" ON CENTER (O.C.), AND PROVIDE A MINIMUM 3" COVER. THE #4 BEND BARS SHOULD BE 12" LONG IN THE HORIZONTAL DIRECTION..
- PIERS REBAR BENT IN THE HORIZONTAL DIRECTION SO THAT IT MAY TIE IN WITH PAD REBAR.
- THE NUMBER AND PLACEMENT OF SECONDARY CONDUITS TO BE DETERMINED BY ENGINEERING. CONDUIT MAY EXTEND IN ANY DIRECTION AS REQUIRED BY THE CUSTOMER.
- BURIAL DEPTH OF CONDUIT IS DEFINED AS THE DISTANCE BETWEEN FINAL GRADE AND THE TOP OF THE CONDUIT. UNLESS OTHERWISE DESIGNATED BY ENGINEERING, CONDUITS SHALL BE INSTALLED AT A BURIAL DEPTH OF NOT LESS THAN 4'-0" AND SECONDARY CONDUITS SHALL BE INSTALLED AT A BURIAL DEPTH OF NOT LESS THAN 3'-0". THESE INITIAL DEPTHS ARE TO ALLOW FOR CHANGES TO THE SURFACE CONDITIONS. LOCAL AGREEMENTS AND CODES MAY REQUIRE ADDITIONAL DEPTH. IF OTHER ARE KNOWN EXTENSIVE CHANGES TO THE FINAL GRADE SUCH THAT THEIR DEPTHS ARE NOT MAINTAINED, CORRECTIVE ACTION SHALL BE TAKEN.

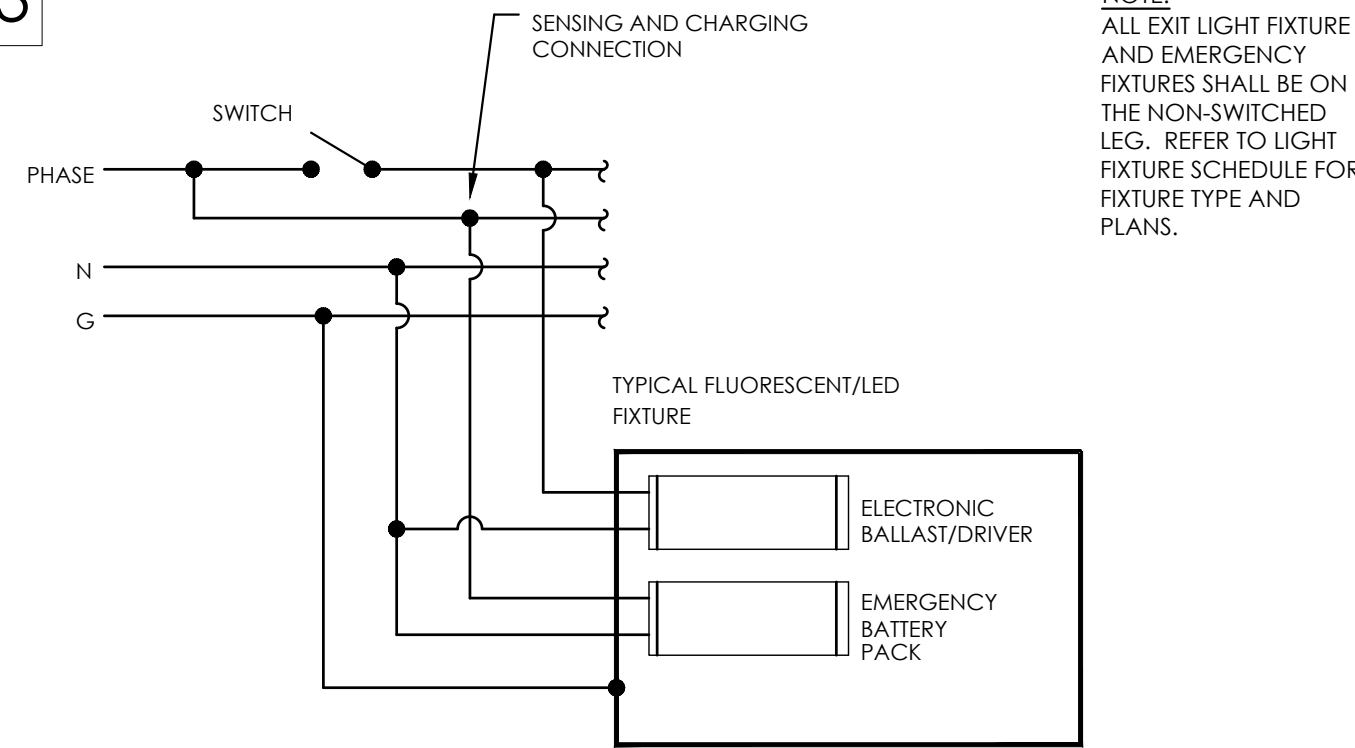
DETAIL - "B" - PIER REBAR INSTALLATION



DETAIL - "A" - PAD INSTALLATION TOP VIEW



03

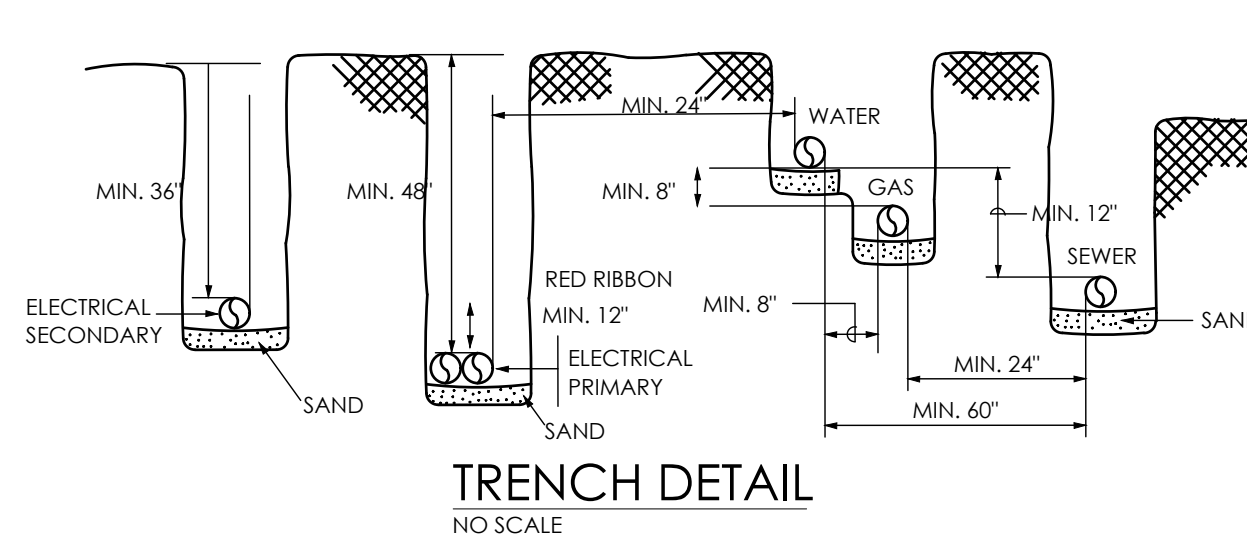


TYPICAL EMERGENCY LIGHT FIXTURE SCHEMATIC

NO SCALE

05

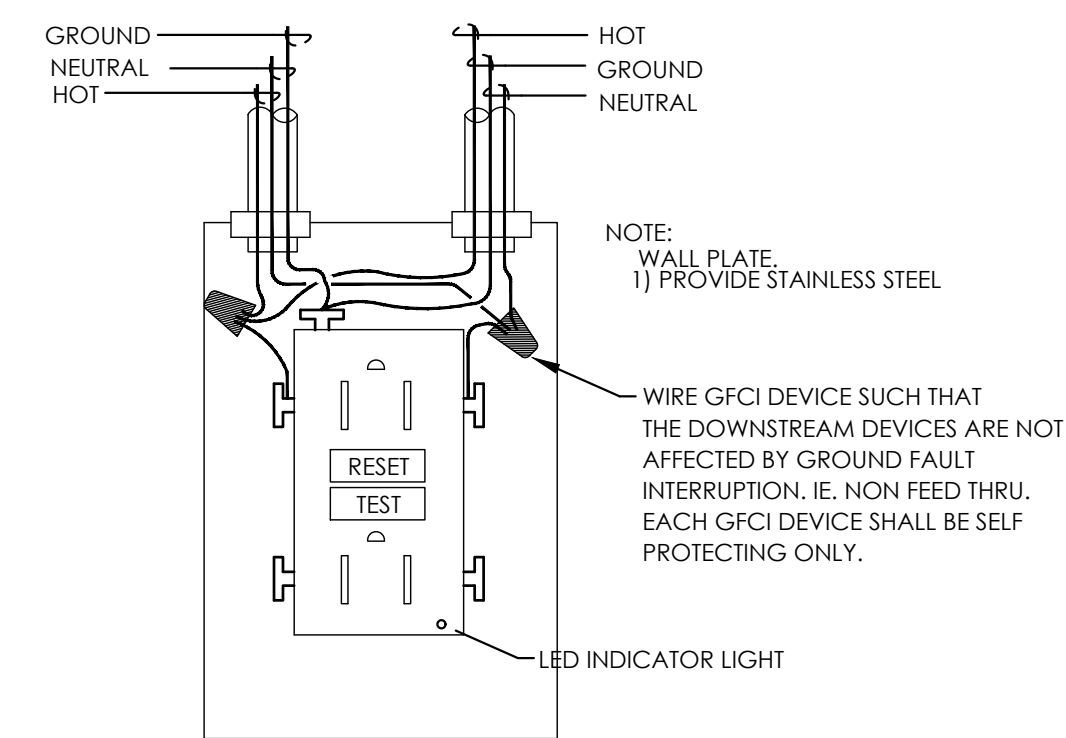
- CLEAR TRENCH OF ALL ROCKS AND DEBRIS BEFORE ADDING SAND CUSHION.
- COMPACT TRENCH FILL TO 95% PROCTOR DENSITY.
- MAINTAIN A MINIMUM OF 60 INCHES UNDISTURBED EARTH BETWEEN PARALLEL WATER AND SEWER LINES OR SUPPORT WATER LINE ON SEPARATE SHELF A MINIMUM OF 12" ABOVE SEWER LINE.
- MAINTAIN A MINIMUM OF 24" HORIZONTALLY BETWEEN ELECTRICAL PRIMARY AND SEWER. MAINTAIN A MINIMUM OF 12" VERTICALLY OR 24" HORIZONTALLY BETWEEN ELECTRICAL PRIMARY AND WATER LINES, GAS LINES, TELEPHONE RACEWAYS AND CABLE RACEWAYS.



TRENCH DETAIL

NO SCALE

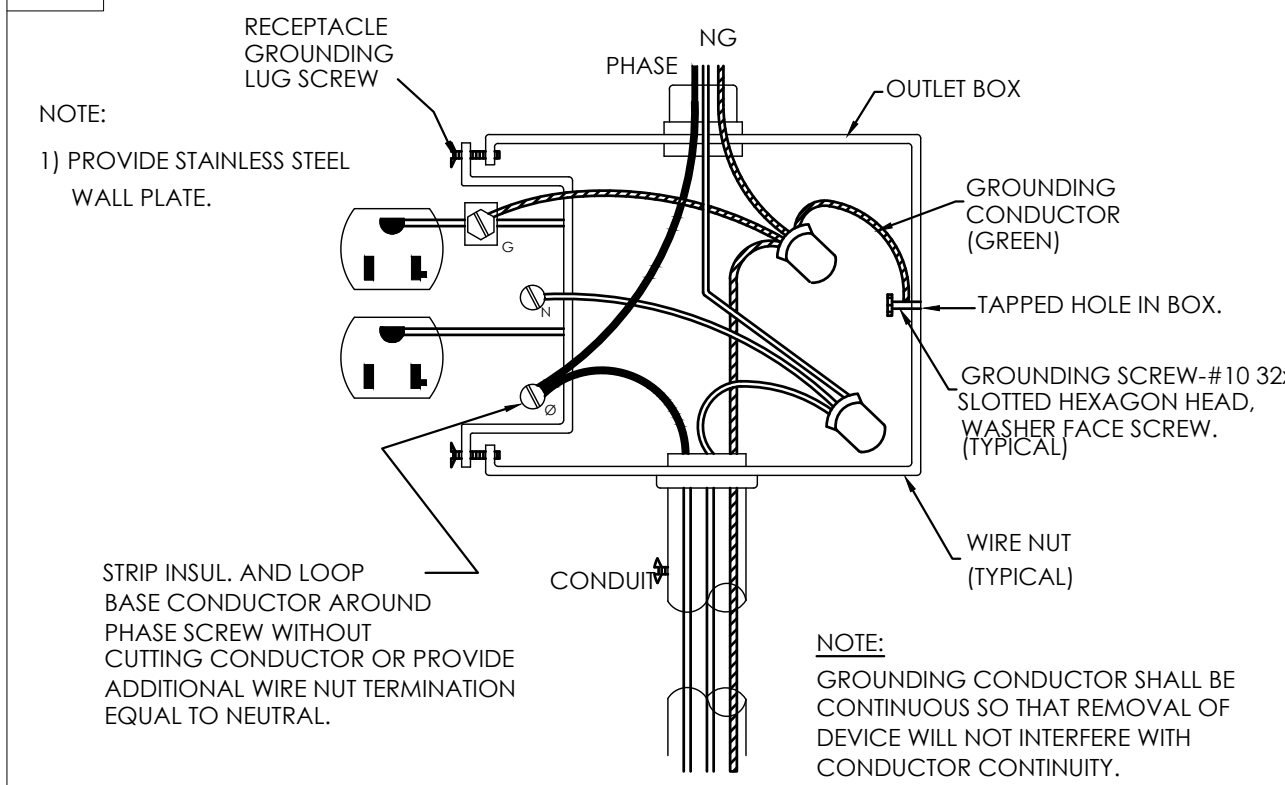
09



GFI RECEPTACLE- WIRING DIAGRAM

NO SCALE

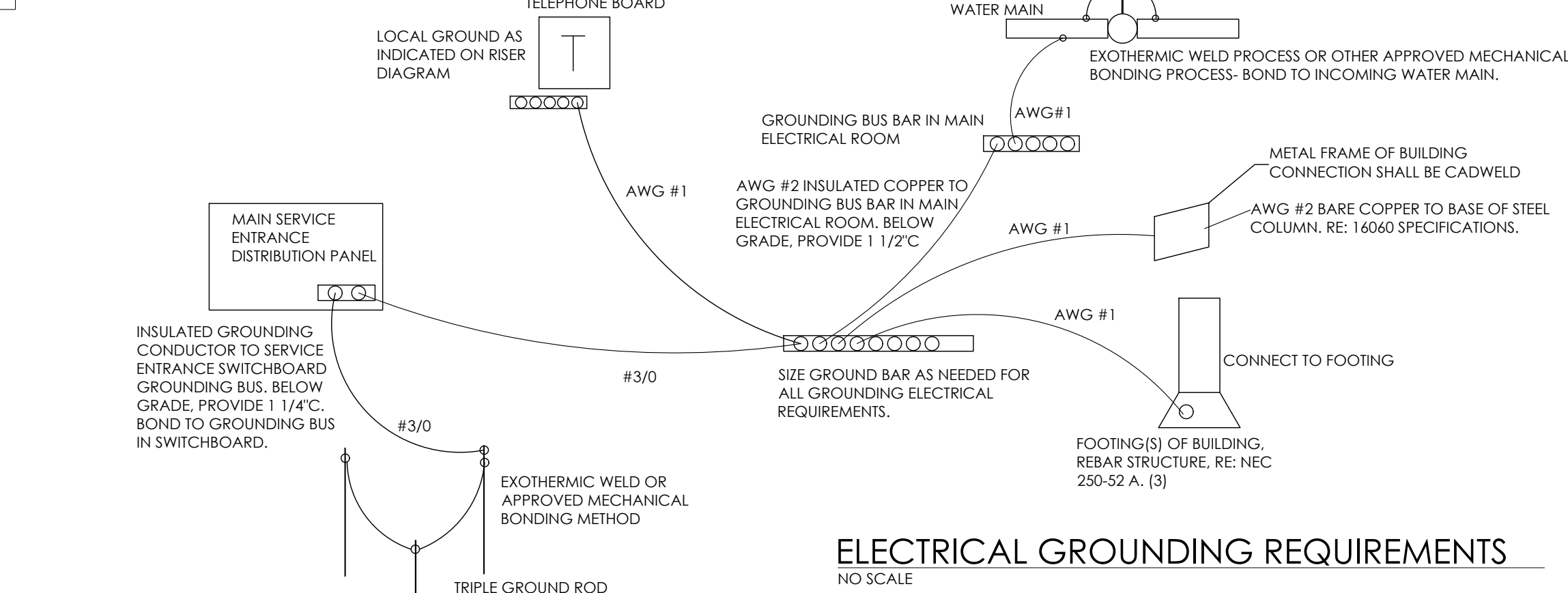
08



TYPICAL RECEPTACLE GROUNDING DETAIL

NO SCALE

11



ELECTRICAL GROUNDING REQUIREMENTS

NO SCALE



MILNET
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SERVICES
AMERICAN INSTITUTE OF ARCHITECTS

HOP VILLA RENOVATIONS

TROPICAL TEXAS BEHAVIORAL HEALTH
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217027DATE
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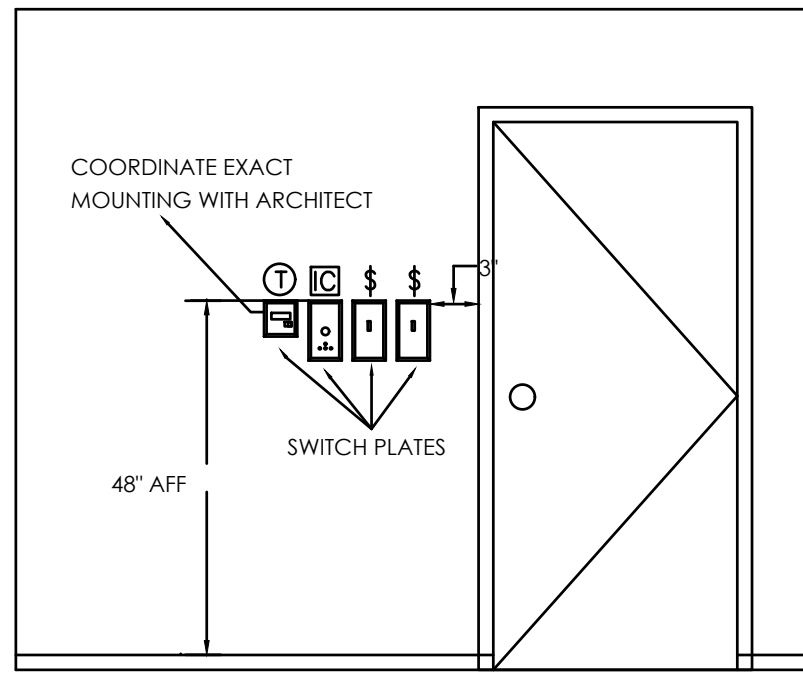
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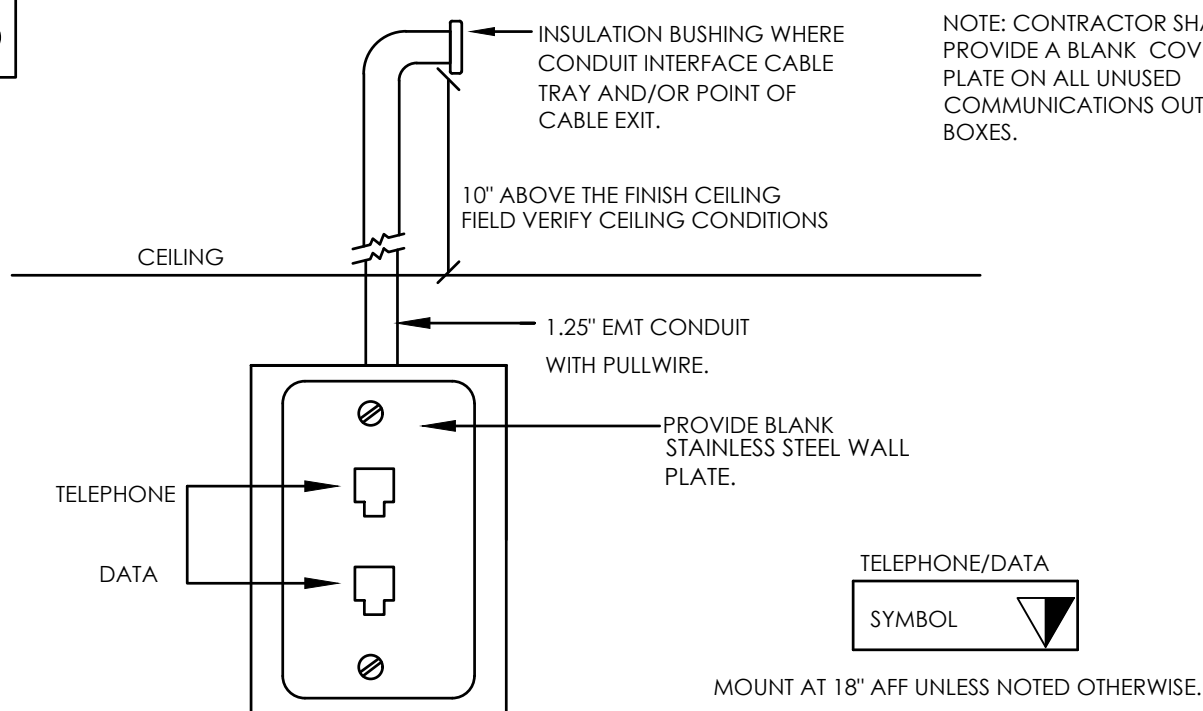
01

NOTE:
VERIFY WITH
DIVISION-15 FOR
THERMOSTAT LOCATION
AND HEIGHT.



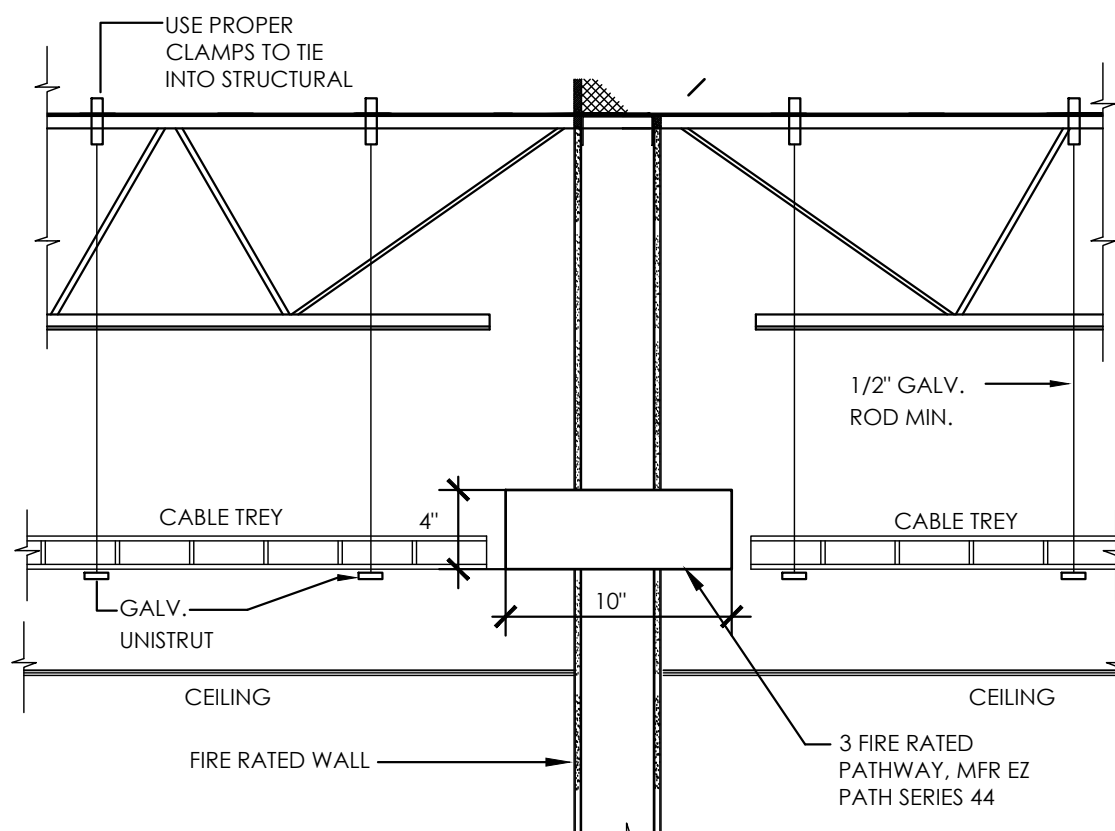
SWITCH PLATE LOCATION DETAIL
NO SCALE

05



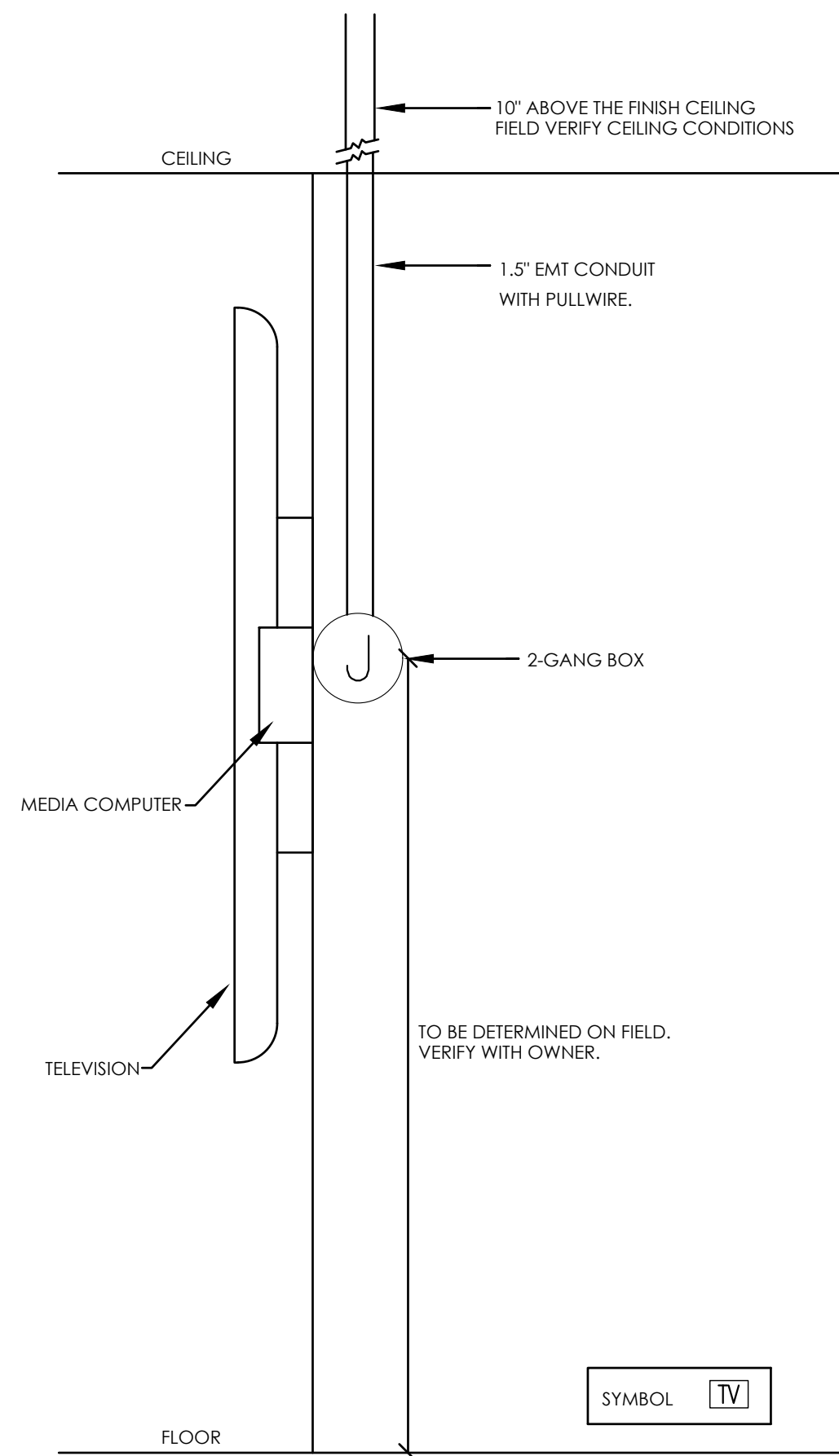
TELEPHONE/ DATA DETAIL
NO SCALE

08



FIRE WALL PENETRATION
CABLE TRAY DETAIL
NO SCALE

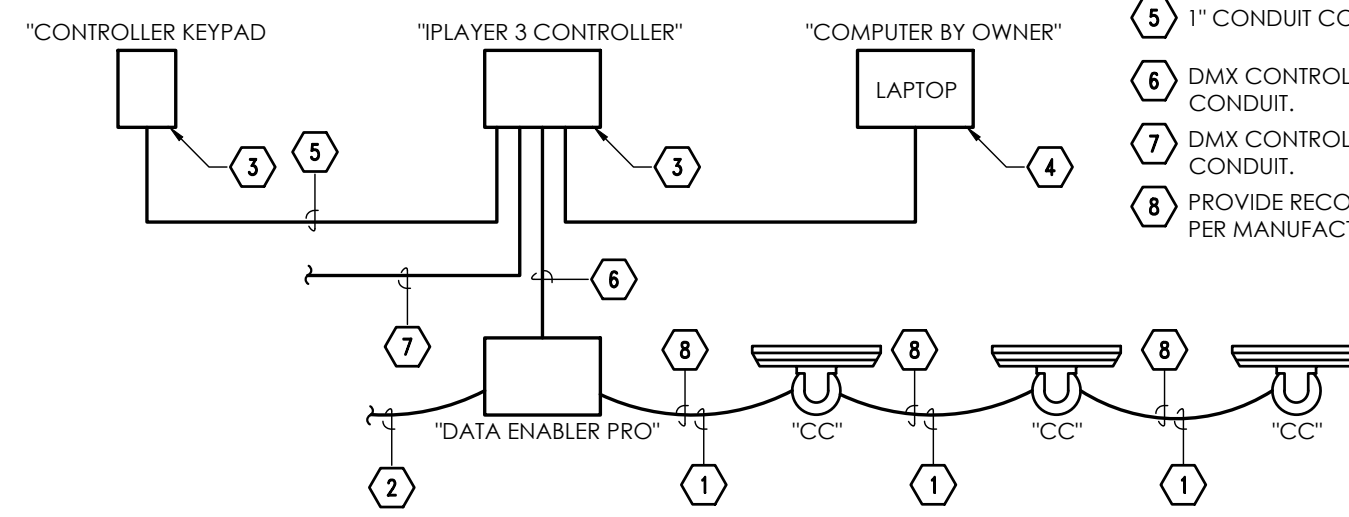
02



MEDIA TV DETAIL
NO SCALE

09

NOTE:
1.] ALL CABLE/ CONDUIT TO BE
CONCEALED. FIELD COORDINATE.

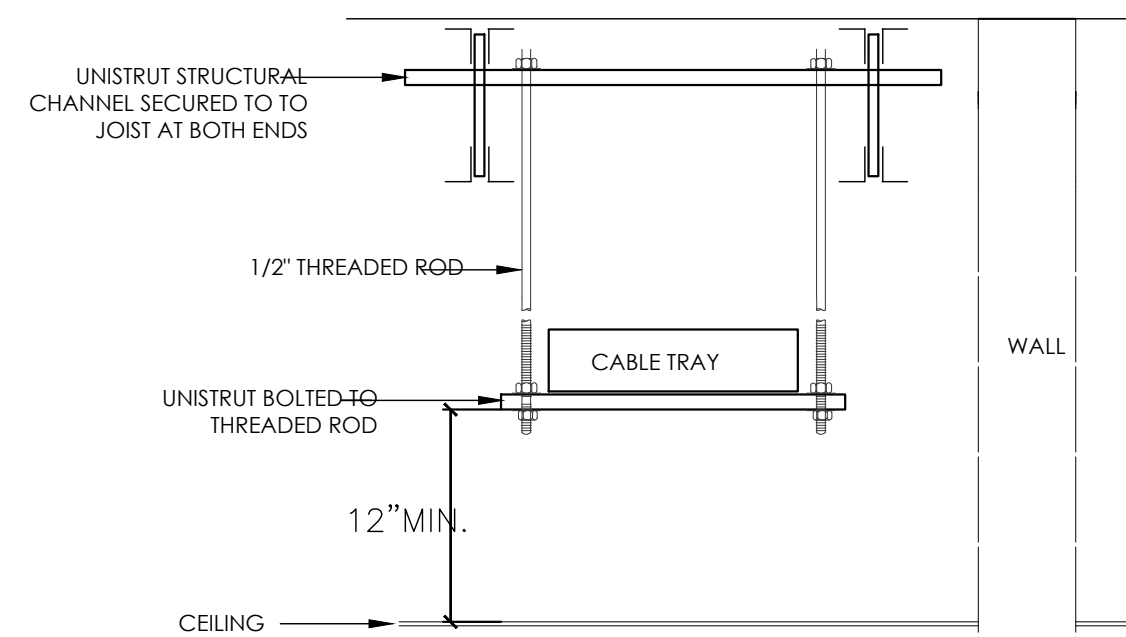


LIGHT FIXTURE TYPE "CC" SCHEMATIC DIAGRAM
NO SCALE

KEYED NOTES:

- 1] FIXTURE CABLE IN 1" CONDUIT.
- 2] ROUTE TO PANEL, ELECTRICAL CIRCUIT.
- 3] TO BE MOUNTED IN #B105. VERIFY EXACT LOCATION WITH ARCHITECT/ OWNER.
- 4] INCLUDE "COLORPLAY 3" SOFTWARE.
- 5] 1" CONDUIT CONCEAL IN RACEWAY.
- 6] DMX CONTROL 1 TO FIXTURES IN 1" CONDUIT.
- 7] DMX CONTROL 2 TO FIXTURES IN 1" CONDUIT.
- 8] PROVIDE RECOMMENDED CONDUCTOR PER MANUFACTURE 4 CONDUCTOR #16

03

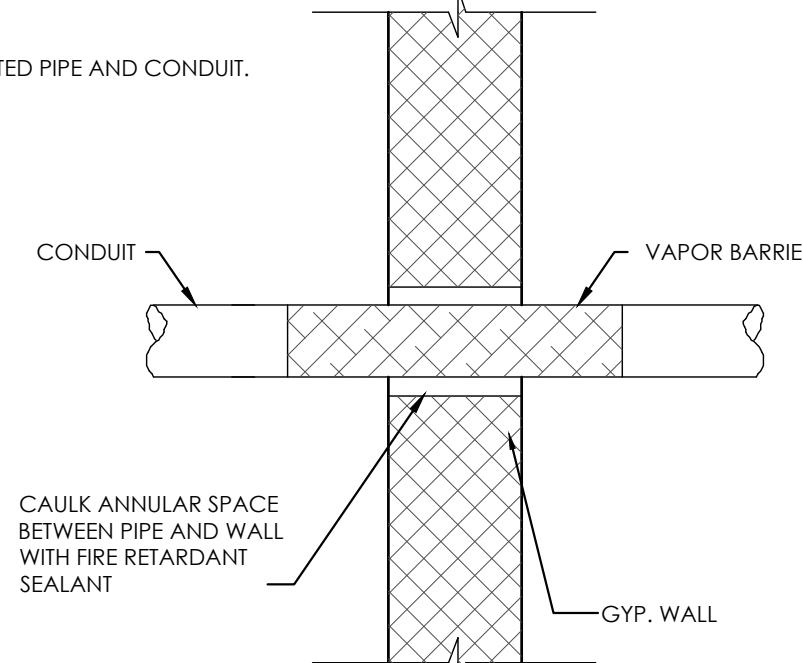


CABLE TRAY MOUNTING DETAIL
NO SCALE

06

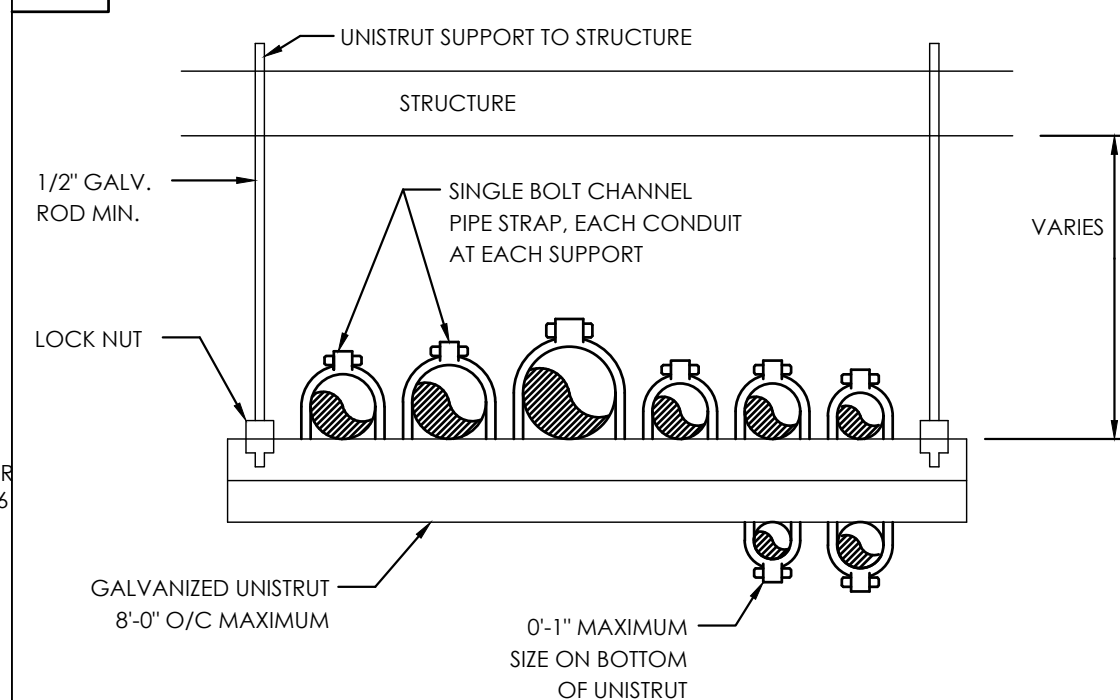
NOTE:
WHERE PIPING IS EXPOSED AT FINISHED WALLS, PROVIDE FLUSH
MOUNTED SLEEVE AND ESCUTCHEON PLATES. (CONTRACTOR
MAY USE FIELD FABRICATED S.S. PLATE).

NOTE:
SIMILAR FOR UNINSULATED PIPE AND CONDUIT.



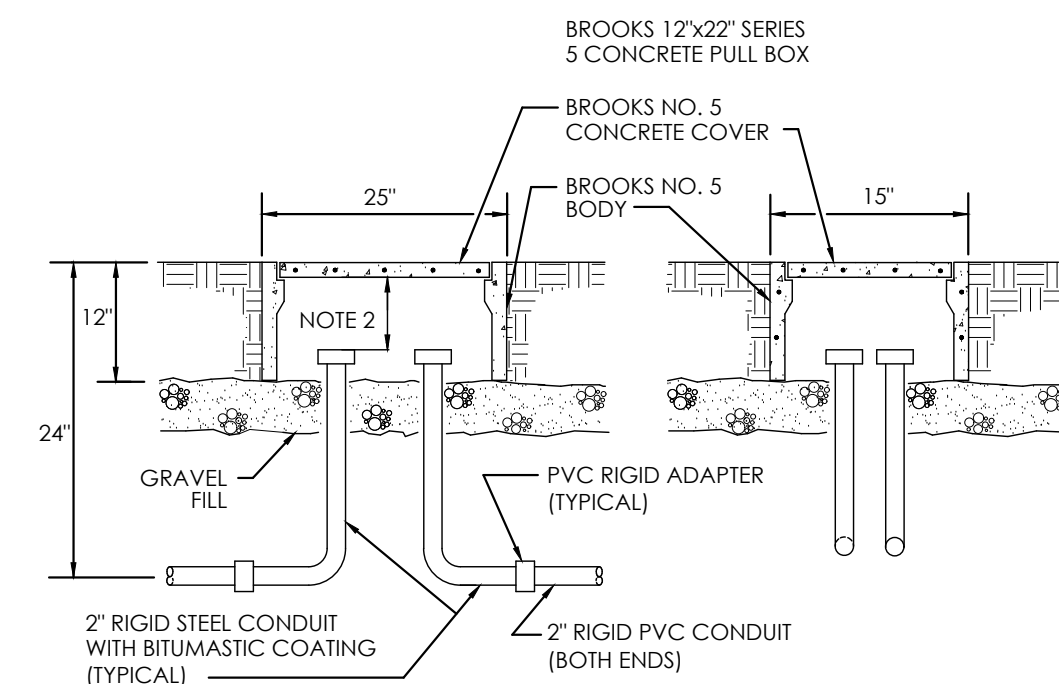
CONDUIT THROUGH FIRE RATED WALL
NO SCALE

10



SUPPORT DETAIL FOR MULTIPLE
CONDUIT HORIZONTAL RUNS
NO SCALE

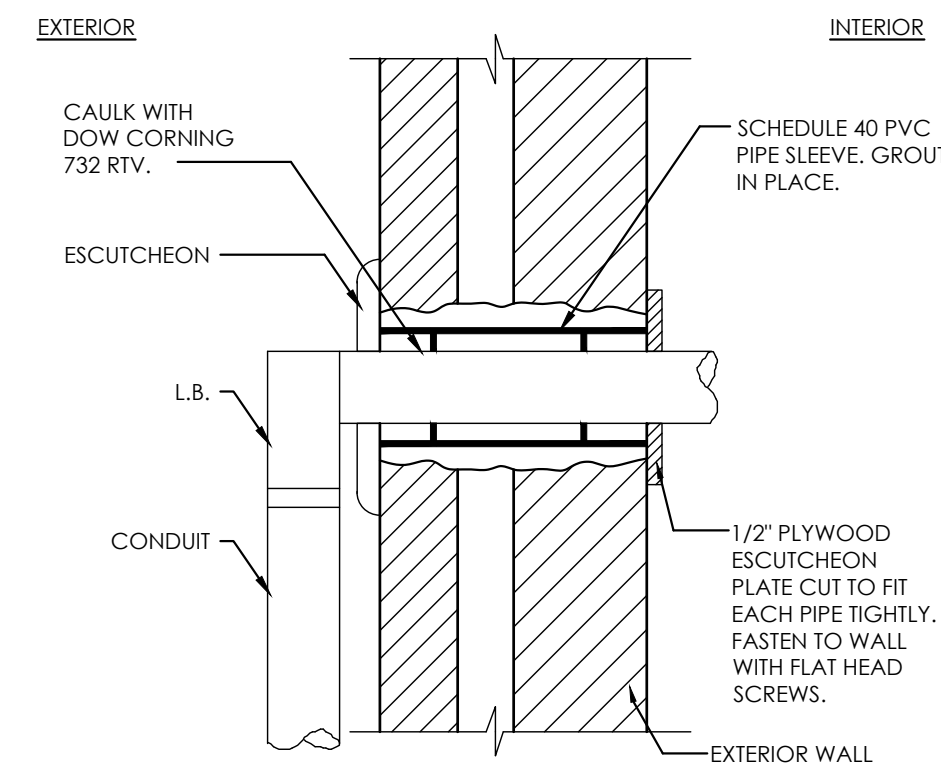
04



NOTES:
1. SEE PLAN FOR CONDUIT ORIENTATION
2. VARIES - MIN. 6", MAX-9"

TYPICAL PULLBOX DETAIL
NO SCALE

07



CONDUIT ENTRY THROUGH EXTERIOR
NO SCALE

HOP VILLA RENOVATIONS

TROPICAL TEXAS BEHAVIORAL HEALTH
HARLINGEN, TX.

PROJECT NUMBER
217027

DATE
AUG 17, 2018

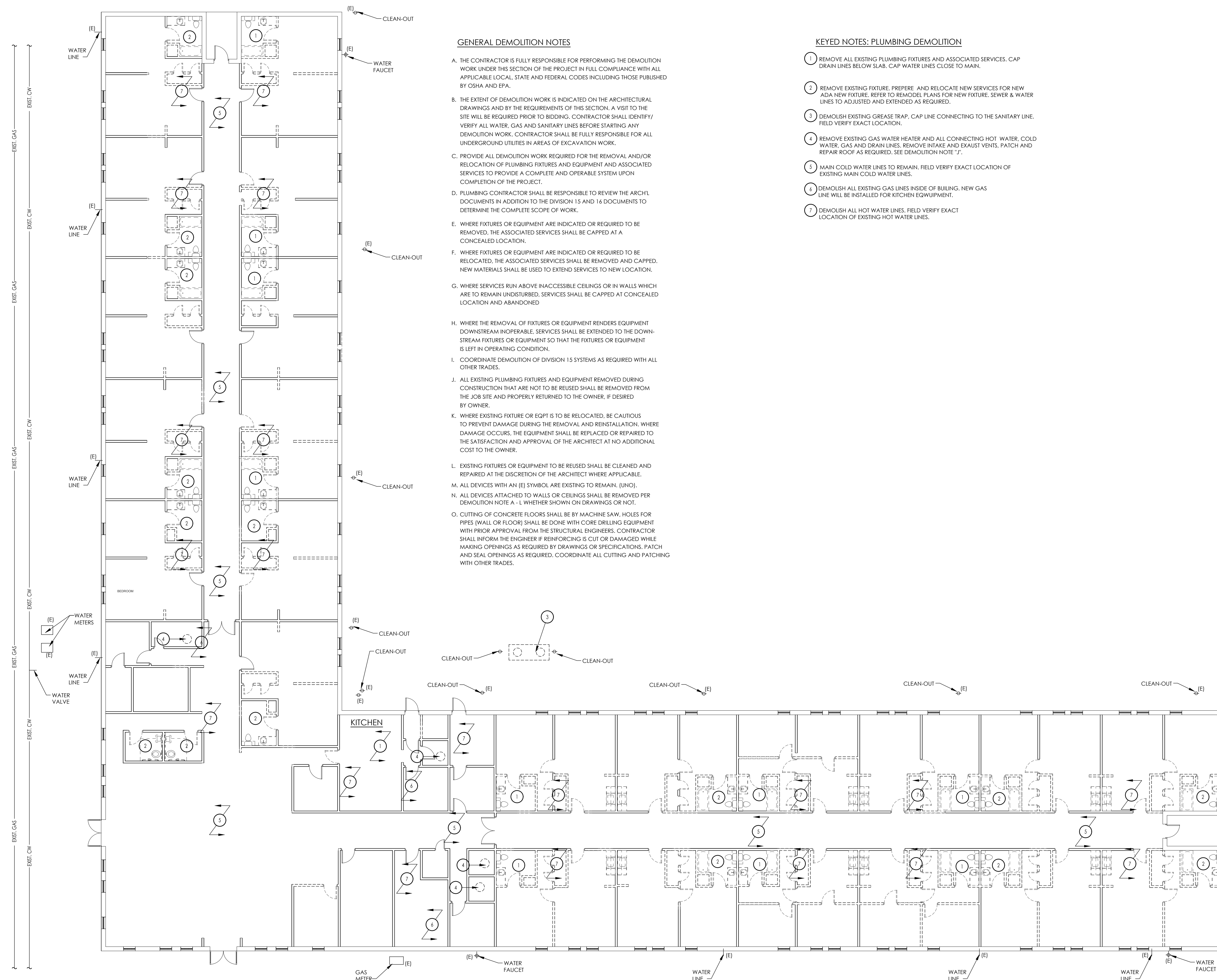
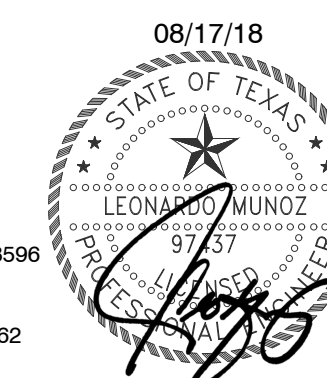
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GENERAL DEMOLITION NOTES

- THE CONTRACTOR IS FULLY RESPONSIBLE FOR PERFORMING THE DEMOLITION WORK UNDER THIS SECTION OF THE PROJECT IN FULL COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL CODES INCLUDING THOSE PUBLISHED BY OSHA AND EPA.
- THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE ARCHITECTURAL DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE WILL BE REQUIRED PRIOR TO BIDDING. CONTRACTOR SHALL IDENTIFY/VERIFY ALL WATER, GAS AND SANITARY LINES BEFORE STARTING ANY DEMOLITION WORK. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ALL UNDERGROUND UTILITIES IN AREAS OF EXCAVATION WORK.
- PROVIDE ALL DEMOLITION WORK REQUIRED FOR THE REMOVAL AND/OR RELOCATION OF PLUMBING FIXTURES AND EQUIPMENT AND ASSOCIATED SERVICES TO PROVIDE A COMPLETE AND OPERABLE SYSTEM UPON COMPLETION OF THE PROJECT.
- PLUMBING CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW THE ARCH'L DOCUMENTS IN ADDITION TO THE DIVISION 15 AND 16 DOCUMENTS TO DETERMINE THE COMPLETE SCOPE OF WORK.
- WHERE FIXTURES OR EQUIPMENT ARE INDICATED OR REQUIRED TO BE REMOVED, THE ASSOCIATED SERVICES SHALL BE CAPPED AT A CONCEALED LOCATION.
- WHERE FIXTURES OR EQUIPMENT ARE INDICATED OR REQUIRED TO BE RELOCATED, THE ASSOCIATED SERVICES SHALL BE REMOVED AND CAPPED. NEW MATERIALS SHALL BE USED TO EXTEND SERVICES TO NEW LOCATION.
- WHERE SERVICES RUN ABOVE INACCESSIBLE CEILINGS OR IN WALLS WHICH ARE TO REMAIN UNDISTURBED, SERVICES SHALL BE CAPPED AT CONCEALED LOCATION AND ABANDONED
- WHERE THE REMOVAL OF FIXTURES OR EQUIPMENT RENDERS EQUIPMENT DOWNSTREAM INOPERABLE, SERVICES SHALL BE EXTENDED TO THE DOWN-STREAM FIXTURES OR EQUIPMENT SO THAT THE FIXTURES OR EQUIPMENT IS LEFT IN OPERATING CONDITION.
- COORDINATE DEMOLITION OF DIVISION 15 SYSTEMS AS REQUIRED WITH ALL OTHER TRADES.
- ALL EXISTING PLUMBING FIXTURES AND EQUIPMENT REMOVED DURING CONSTRUCTION THAT ARE NOT TO BE REUSED SHALL BE REMOVED FROM THE JOB SITE AND PROPERLY RETURNED TO THE OWNER, IF DESIRED BY OWNER.
- WHERE EXISTING FIXTURE OR EQPT IS TO BE RELOCATED, BE CAUTIOUS TO PREVENT DAMAGE DURING THE REMOVAL AND REINSTALLATION. WHERE DAMAGE OCCURS, THE EQUIPMENT SHALL BE REPLACED OR REPAIRED TO THE SATISFACTION AND APPROVAL OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
- EXISTING FIXTURES OR EQUIPMENT TO BE REUSED SHALL BE CLEANED AND REPAIRED AT THE DISCRETION OF THE ARCHITECT WHERE APPLICABLE.
- ALL DEVICES WITH AN (E) SYMBOL ARE EXISTING TO REMAIN. (UNO).
- ALL DEVICES ATTACHED TO WALLS OR CEILINGS SHALL BE REMOVED PER DEMOLITION NOTE A - L WHETHER SHOWN ON DRAWINGS OR NOT.
- CUTTING OF CONCRETE FLOORS SHALL BE BY MACHINE SAW. HOLES FOR PIPES (WALL OR FLOOR) SHALL BE DONE WITH CORE DRILLING EQUIPMENT WITH PRIOR APPROVAL FROM THE STRUCTURAL ENGINEERS. CONTRACTOR SHALL INFORM THE ENGINEER IF REINFORCING IS CUT OR DAMAGED WHILE MAKING OPENINGS AS REQUIRED BY DRAWINGS OR SPECIFICATIONS. PATCH AND SEAL OPENINGS AS REQUIRED. COORDINATE ALL CUTTING AND PATCHING WITH OTHER TRADES.

KEYED NOTES: PLUMBING DEMOLITION

- REMOVE ALL EXISTING PLUMBING FIXTURES AND ASSOCIATED SERVICES. CAP DRAIN LINES BELOW SLAB. CAP WATER LINES CLOSE TO MAIN.
- REMOVE EXISTING FIXTURE, PREPARE AND RELOCATE NEW SERVICES FOR NEW ADA NEW FIXTURE. REFER TO REMODEL PLANS FOR NEW FIXTURE, SEWER & WATER LINES TO ADJUSTED AND EXTENDED AS REQUIRED.
- DEMOLISH EXISTING GREASE TRAP, CAP LINE CONNECTING TO THE SANITARY LINE. FIELD VERIFY EXACT LOCATION.
- REMOVE EXISTING GAS WATER HEATER AND ALL CONNECTING HOT WATER, COLD WATER, GAS AND DRAIN LINES. REMOVE INTAKE AND EXHAUST VENTS. PATCH AND REPAIR ROOF AS REQUIRED. SEE DEMOLITION NOTE "J".
- MAIN COLD WATER LINES TO REMAIN. FIELD VERIFY EXACT LOCATION OF EXISTING MAIN COLD WATER LINES.
- DEMOLISH ALL EXISTING GAS LINES INSIDE OF BUILDING. NEW GAS LINE WILL BE INSTALLED FOR KITCHEN EQUIPMENT.
- DEMOLISH ALL HOT WATER LINES. FIELD VERIFY EXACT LOCATION OF EXISTING HOT WATER LINES.

1 PLUMBING DEMOLITION FLOOR PLAN
3/32 = 1'-0"



KEYED NOTES: PLUMBING

- 1 INSTALL MAIN WATER CLOSET CONNECT TO EXISTING SEWER, AND VENT LINES. SEWER AND VENT LINES TO BE ADJUSTED AND EXTENDED AS REQUIRED FOR NEW FUTURE.
- 2 INSTALL NEW LAVATORY CONNECT TO EXISTING SEWER AND VENT LINES. SEWER AND VENT LINES TO BE ADJUSTED AND EXTENDED AS REQUIRED FOR NEW FUTURE.
- 3 3" HD DRAIN FOR CONDENSATE FROM AHJ's. COORDINATE LOCATION WITH HVAC CONTRACTOR. RAISE HD AT LEAST 18" FROM GRADE. HD DRAINS SHALL BE PRIMED WITH 1/2" COPPER WATER LINE AND ROUTE 1/2" PRIMER LINE THROUGH PRIMER VALVE CROSS COE APPROVED FOR WASTE/WATER CROSS CONNECTION. VALVE SHALL BE ACCESSIBLE.
- 4 CONNECT TO EXISTING SEWER AND VENT LINES. FIELD VERIFY EXACT LOCATION OF EXISTING SEWER AND VENT LINES.
- 5 RUN WASTE LINE INSIDE WALL ABOVE FF PROVIDE 1/4" SLOPE.



HOP VILLA RENOVATIONS

TROPICAL TEXAS BEHAVIORAL HEALTH
HARLINGEN, TX.

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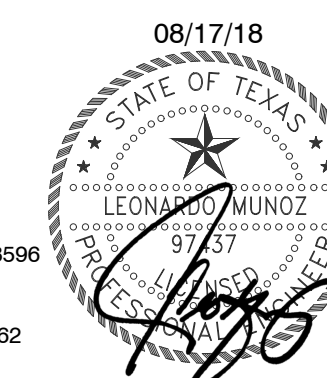
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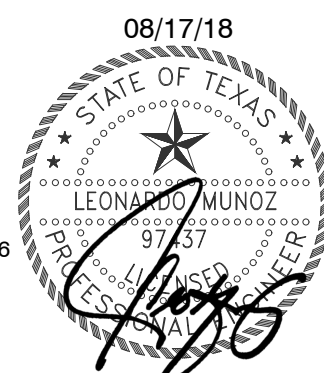




P1.2

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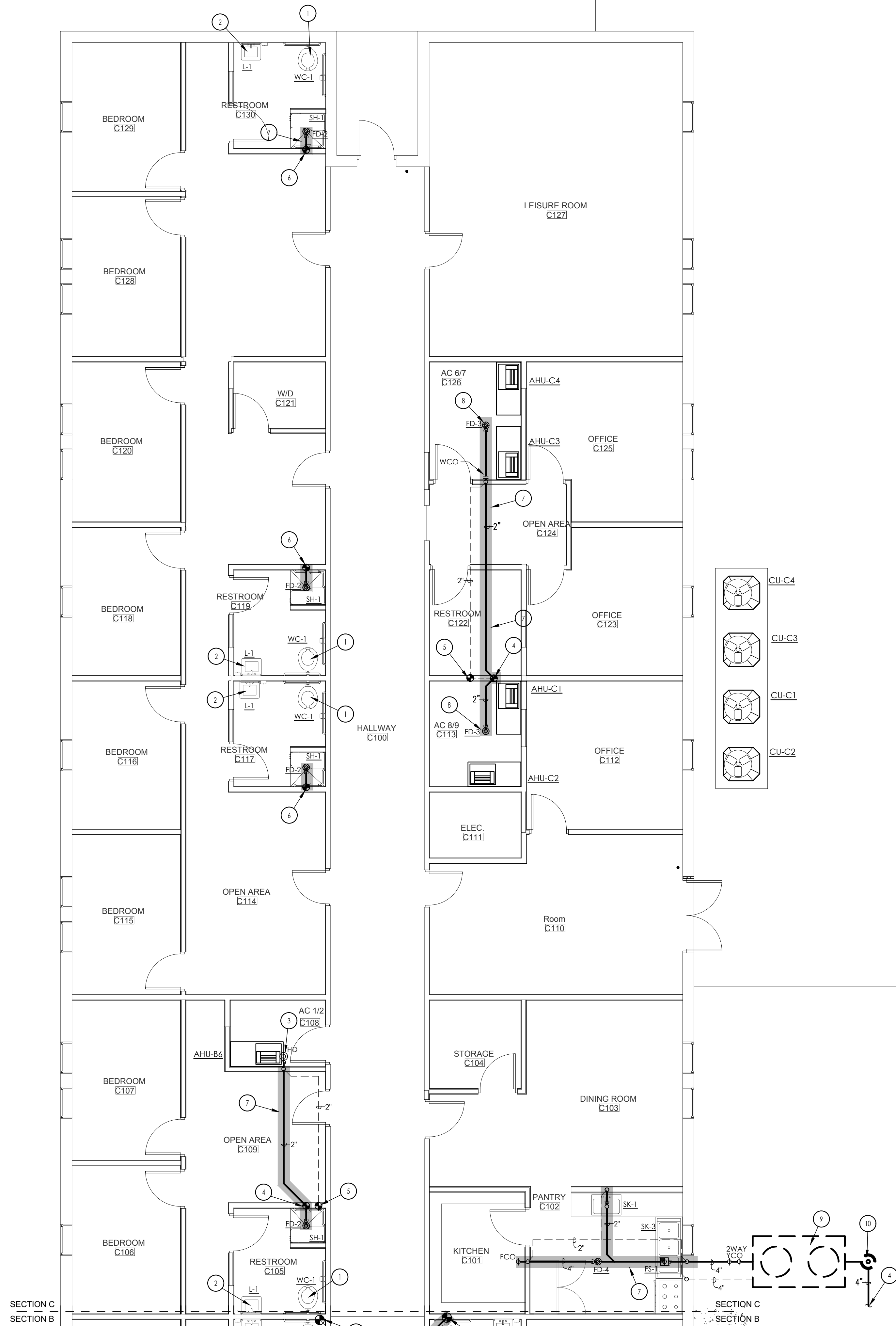
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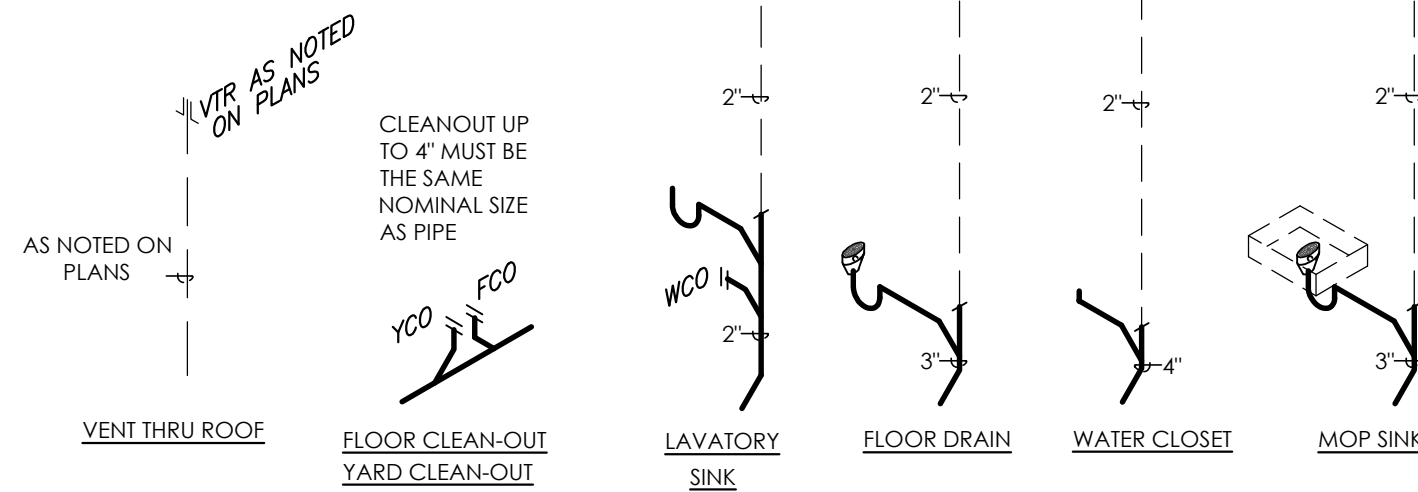
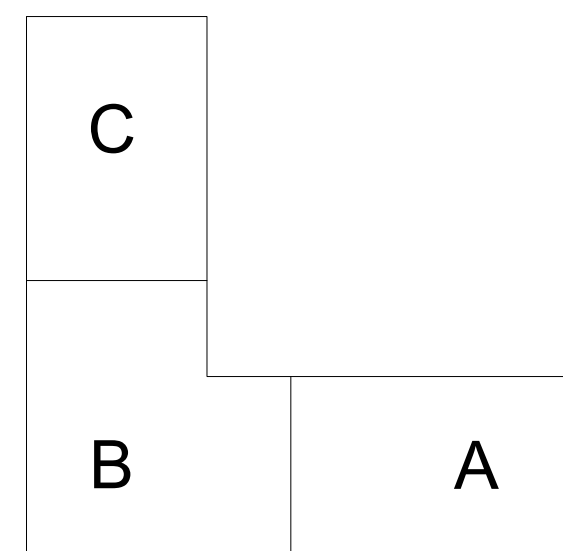
NOTE:
DRAWING IS DIAGRAMMATIC ONLY. CONTRACTOR SHALL COORDINATE
EXACT LOCATIONS OF PIPING, DEVICES AND EQUIPMENT WITH BUILDING
ELEMENTS AND THE WORK OF OTHER TRADES.

KEYED NOTES: PLUMBING

1. INSTALL NEW WATER CLOSET CONNECT TO EXISTING SEWER AND VENT LINES. SEWER AND VENT LINES TO BE ADJUSTED AND EXTENDED AS REQUIRED FOR NEW FIXTURE.
2. INSTALL NEW LAVATORY CONNECT TO EXISTING SEWER AND VENT LINES. SEWER AND VENT LINES TO BE ADJUSTED AND EXTENDED AS REQUIRED FOR NEW FIXTURE.
3. 3" HUB DRAIN FOR CONDENSATE FROM AHUs. COORDINATE LOCATION WITH HVAC CONTRACTOR. RAISE HUB AT LEAST 18" FROM GRADE. HUB DRAIN SHALL BE PRIMED WITH 1/2" COPPER WATER LINE AND ROUTE 1/2" PRIMER LINE THROUGH PRIMER VALVE CODE APPROVED FOR WASTE/WATER CROSS CONNECTION. VALVE SHALL BE ACCESSIBLE.
4. CONNECT TO EXISTING 4" SANITARY SEWER. FIELD VERIFY EXACT LOCATION, SIZE, AND INVERT ELEVATIONS OF EXISTING SANITARY SEWER PRIOR TO ANY ROUGH-INS.
5. CONNECT TO EXISTING SEWER VENT. FIELD VERIFY EXACT LOCATION OF EXISTING VENT PRIOR TO ANY ROUGH-INS.
6. INSTALL NEW SHOWER CONNECT TO EXISTING SEWER AND VENT LINES. SEWER AND VENT LINES TO BE ADJUSTED AND EXTENDED AS REQUIRED FOR NEW FIXTURE.
7. SAW-CUT THRU CONCRETE TO INSTALL UNDERGROUND PLUMBING.
8. FLOOR DRAIN FOR CONDENSATE FROM AHUs. COORDINATE LOCATION WITH HVAC CONTRACTOR. FLOOR DRAIN SHALL BE PRIMED WITH 1/2" COPPER WATER LINE AND ROUTE 1/2" PRIMER LINE THROUGH PRIMER VALVE CODE APPROVED FOR WASTE/WATER CROSS CONNECTION. VALVE SHALL BE ACCESSIBLE.
9. GREASE TRAP EQUAL TO PARK GTS00. REFER TO DETAIL 01/P4.2 COORDINATE LOCATION WITH EXISTING UTILITIES IN THE AREA.
10. SAMPLE WELL EQUAL TO PARK SWB-154. REFER FOR DETAIL 02/P4.2.



1 SEWER & VENT
PLUMBING FLOOR PLAN SECTION C
3/16 = 1'-0"

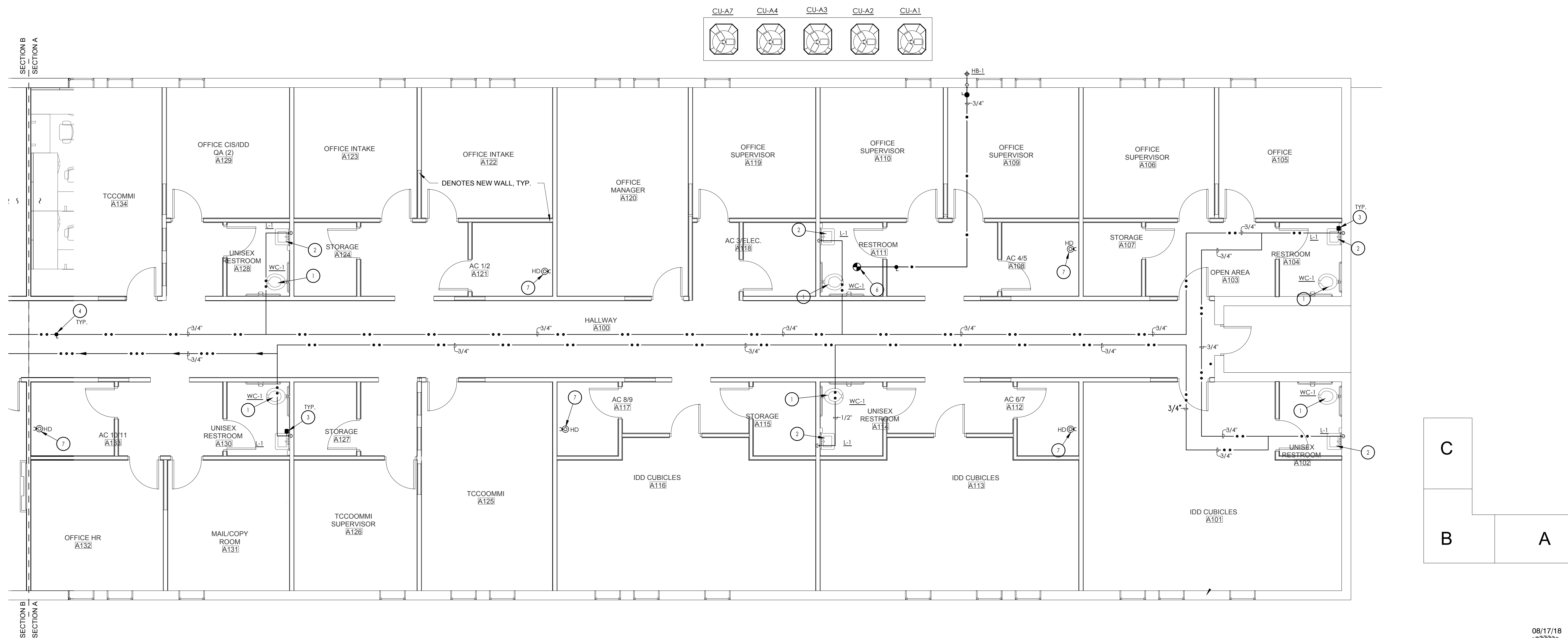


02 SEWER & VENT
TYPICAL RISER SCHEMATICS
SCALE: NTS

NOTE:
DRAWING IS DIAGRAMMATIC ONLY. CONTRACTOR SHALL COORDINATE
EXACT LOCATIONS OF PIPING, DEVICES AND EQUIPMENT WITH BUILDING
ELEMENTS AND THE WORK OF OTHER TRADES.

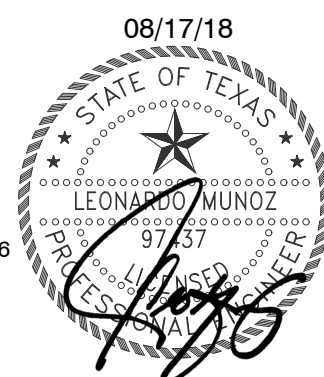
KEYED NOTES: PLUMBING

1. INSTALL NEW WATER CLOSET CONNECT TO EXISTING COLD WATER LINE. WATER LINES TO BE ADJUSTED AND EXTENDED AS REQUIRED FOR NEW FIXTURE.
2. INSTALL NEW LAVATORY CONNECT TO EXISTING COLD WATER LINE. WATER LINES TO BE ADJUSTED AND EXTENDED AS REQUIRED FOR NEW FIXTURE.
3. WATER HAMMER ARRESTOR ABOVE CEILING. PROVIDE ACCESS PANEL WHERE LOCATED IN AN INACCESSIBLE CEILING. PANEL SHALL BE 12'X12' PAINTED TO MATCH CEILING.
4. BRONZE CUT-OFF VALVE ABOVE CEILING. PROVIDE ACCESS PANEL WHERE LOCATED IN AN INACCESSIBLE CEILING. PANEL SHALL BE 12'X12' PAINTED TO MATCH CEILING.
5. CIRCULATING PUMP.
6. CONNECT NEW CW TO EXISTING CW OF EQUAL OR GREATER SIZE. VERIFY SIZE AND LOCATION OF EXISTING CW PRIOR TO CONSTRUCTION.
7. HUB DRAIN SHALL BE PRIMED WITH 1/2" COPPER WATER LINE AND ROUTE 1/2" PRIMER LINE THROUGH PRIMER VALVE CODE APPROVED FOR WASTE/WATER CROSS CONNECTION. VALVE SHALL BE ACCESSIBLE.



DOMESTIC WATER
PLUMBING FLOOR PLAN SECTION A
1
3/16 = 1'-0"

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Texas Registered Engineering Firm - F10362
Project number: 18.2.09



HOP VILLA RENOVATIONS

TROPICAL TEXAS BEHAVIORAL HEALTH
HARLINGEN, TX.

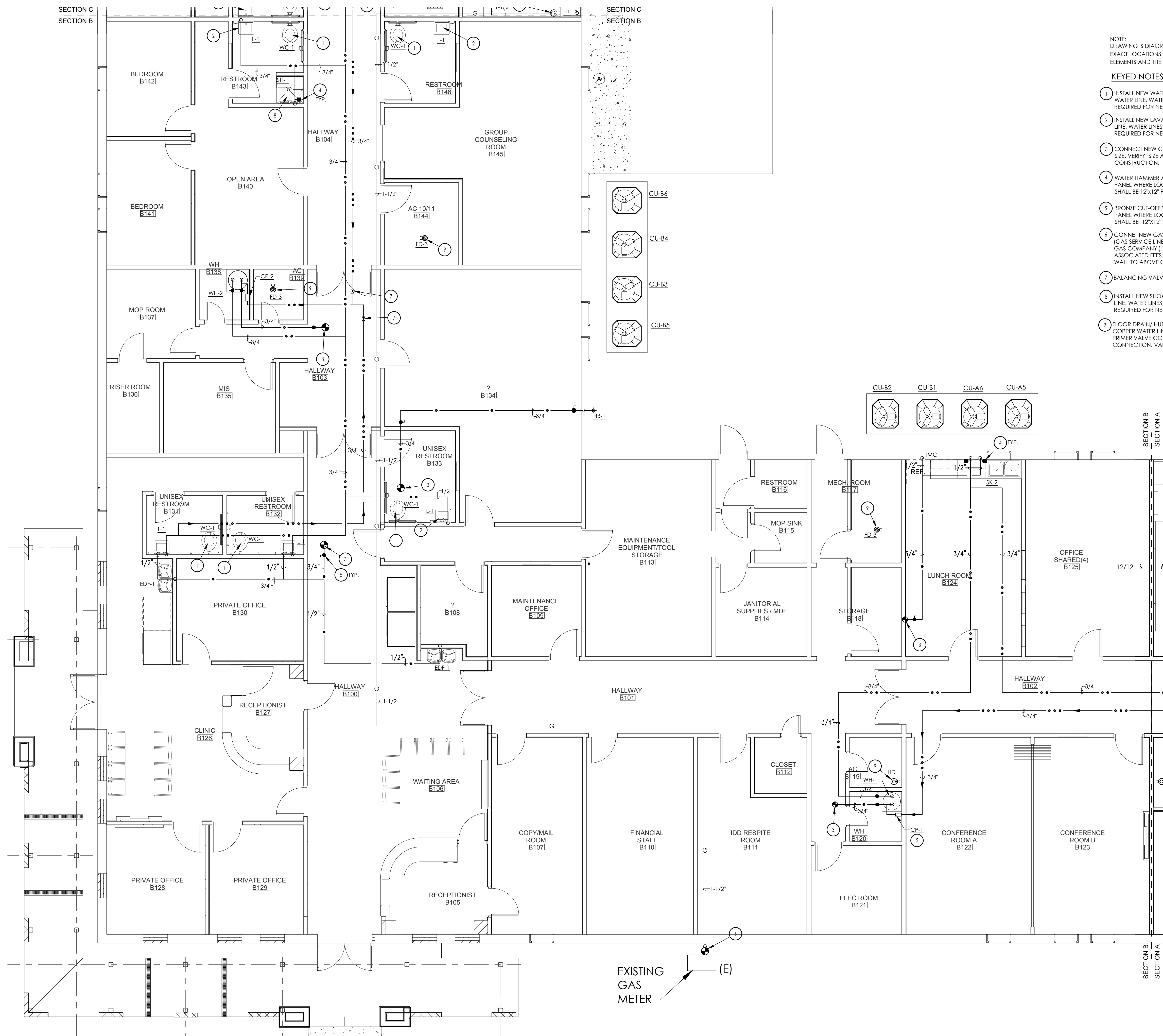
PROJECT NUMBER
217027

DATE
AUG 17, 2018

FINALS - 100%

SHEET NUMBER

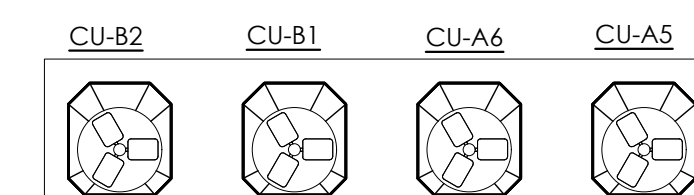
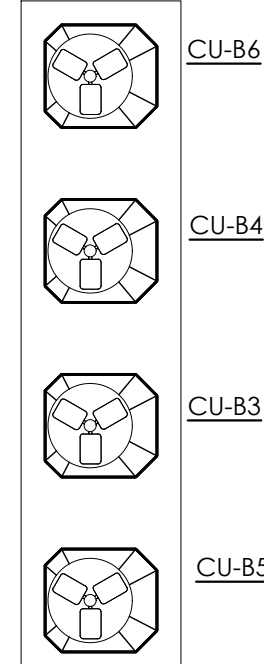
P2.1



NOTE:
DRAWING IS DIAGRAMMATIC ONLY. CONTRACTOR SHALL COORDINATE
EXACT LOCATIONS OF PIPING, DEVICES AND EQUIPMENT WITH BUILDING
ELEMENTS AND THE WORK OF OTHER TRADES.

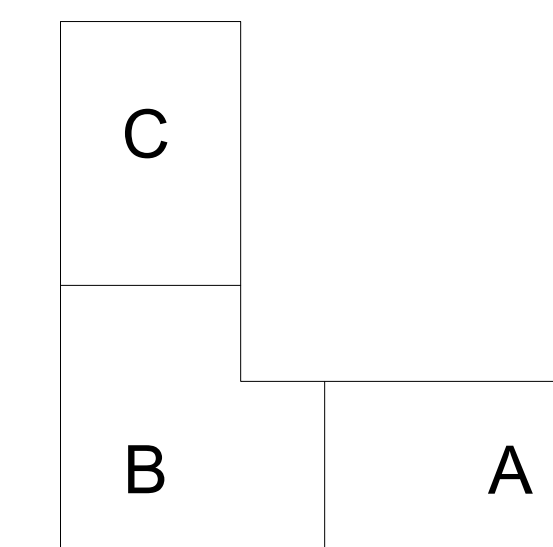
KEYED NOTES: PLUMBING

1. INSTALL NEW WATER CLOSET CONNECT TO EXISTING COLD WATER LINE. WATER LINES TO BE ADJUSTED AND EXTENDED AS REQUIRED FOR NEW FIXTURE.
2. INSTALL NEW LAVATORY CONNECT TO EXISTING COLD WATER LINE. WATER LINES TO BE ADJUSTED AND EXTENDED AS REQUIRED FOR NEW FIXTURE.
3. CONNECT NEW CW TO EXISTING CW OF EQUAL OR GREATER SIZE. VERIFY SIZE AND LOCATION OF EXISTING CW PRIOR TO CONSTRUCTION.
4. WATER HAMMER ARRESTOR ABOVE CEILING. PROVIDE ACCESS PANEL WHERE LOCATED IN AN INACCESSIBLE CEILING. PANEL SHALL BE 12"X12" PAINTED TO MATCH CEILING.
5. BRONZE CUT-OFF VALVE ABOVE CEILING. PROVIDE ACCESS PANEL WHERE LOCATED IN AN INACCESSIBLE CEILING. PANEL SHALL BE 12"X12" PAINTED TO MATCH CEILING.
6. CONNET NEW GAS PIPE TO EXISTING NATURAL GAS METER, (GAS SERVICE LINE, AND GAS SERVICE REGULATOR BY LOCAL GAS COMPANY.) COORDINATE INSTALLATION AND PAY ALL ASSOCIATED FEES. EXTEND 2" LOW PRESSURE GAS UP EXTERIOR WALL TO ABOVE CEILING, AND INTO BUILDING.
7. BALANCING VALVES.
8. INSTALL NEW SHOWER CONNECT TO EXISTING COLD WATER LINE. WATER LINES TO BE ADJUSTED AND EXTENDED AS REQUIRED FOR NEW FIXTURE.
9. FLOOR DRAIN/ HUB DRAIN SHALL BE PRIMED WITH 1/2" COPPER WATER LINE AND ROUTE 1/2" PRIMER LINE THROUGH PRIMER VALVE CODE APPROVED FOR WASTE/WATER CROSS CONNECTION. VALVE SHALL BE ACCESSIBLE.

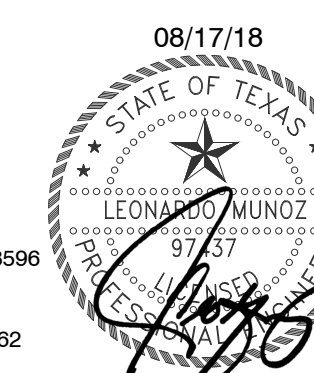


EXISTING
GAS
METER (E)

1 DOMESTIC WATER
PLUMBING FLOOR PLAN SECTION B
3/16 = 1'-0"



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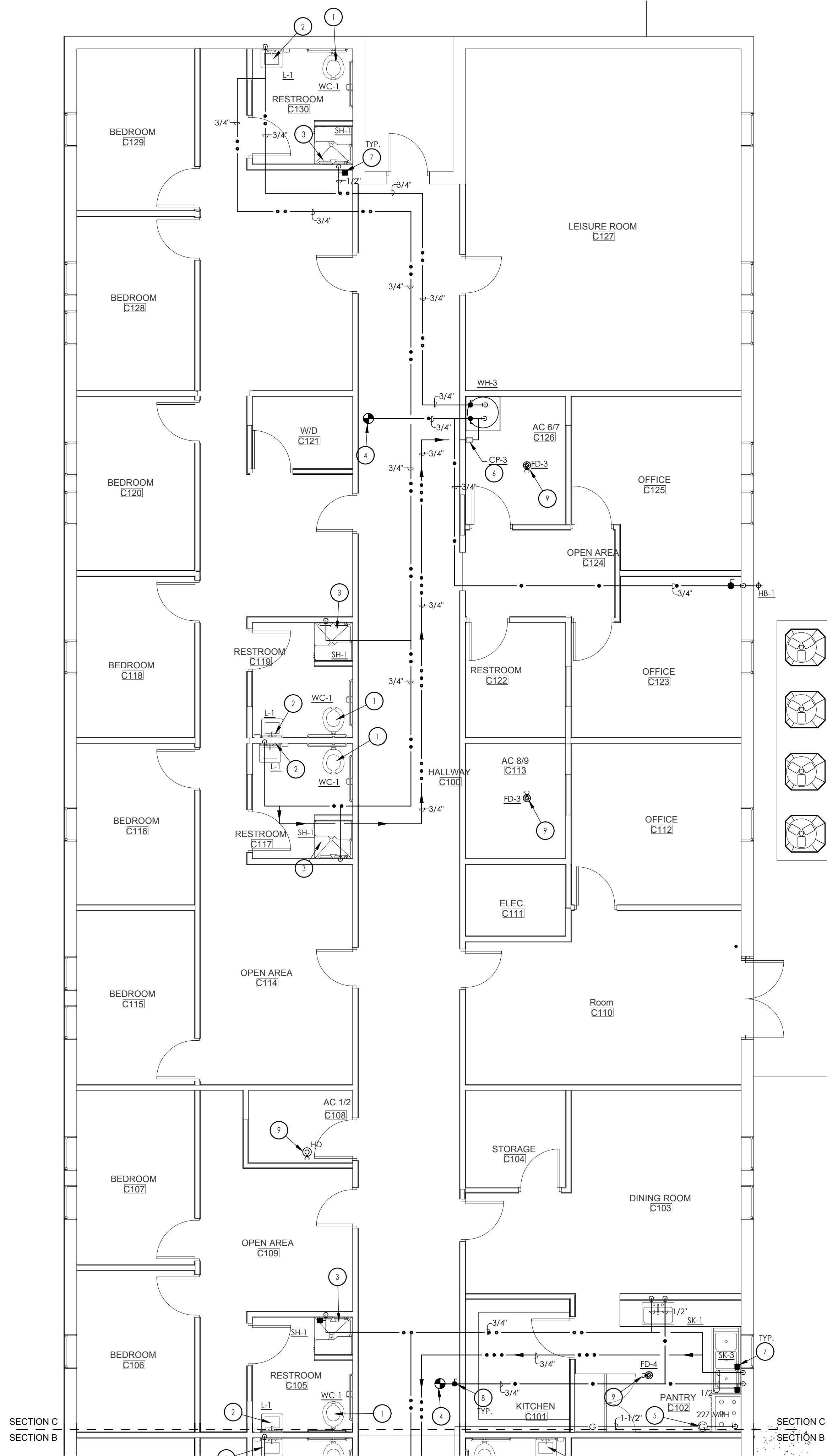
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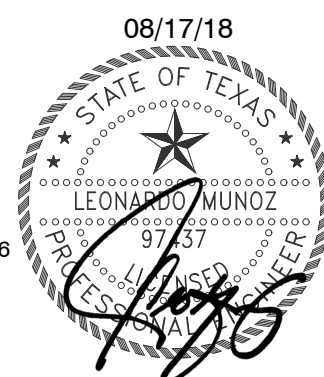
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4. CONNECT NEW CW TO EXISTING CW OF EQUAL OR GREATER SIZE. VERIFY SIZE AND LOCATION OF EXISTING CW PRIOR TO CONSTRUCTION.
5. AUTOMATIC GAS VALVE EXPOSED 6" BELOW CEILING HEIGHT. PROVIDED BY OWNER INSTALLED BY CONTRACTOR. INTERLOCK WITH HOOD SUPPRESSION SYSTEM. PROVIDE UNION ON INLET AND OUTLET.
6. CIRCULATING PUMP.
7. WATER HAMMER ARRESTOR ABOVE CEILING. PROVIDE ACCESS PANEL WHERE LOCATED IN AN INACCESSIBLE CEILING. PANEL SHALL BE 12"x12" PAINTED TO MATCH CEILING.
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1 PLUMBING FLOOR PLAN SECTION C
3/16 = 1'-0"

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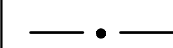

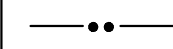

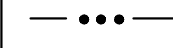
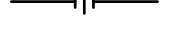
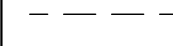


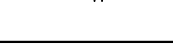
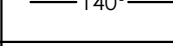
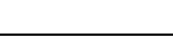
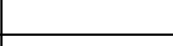
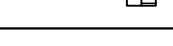
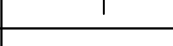
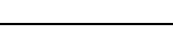
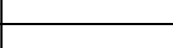
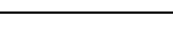
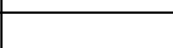


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PLUMBING SYMBOL LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	BALL VALVE		DOMESTIC COLD WATER
	CHECK VALVE		DOMESTIC HOT WATER
	GATE VALVE		DOMESTIC HOT WATER RETURN
	UNION		SANITARY SEWER VENT
	DIRECTION OF FLOW		SANITARY WASTE LINE
	WALL CLEANOUT		140° HOT WATER
	FLOOR CLEANOUT YARD CLEANOUT		SANITARY DIRECTION OF FLOW
	FLOOR SINK		BRANCH - TOP CONNECTION
	FLOOR DRAIN		PIPE RISER
	WALL HYDRANT OR HOSE BIBB		PIPE DROP
	FILTERED WATER		POINT OF CONNECTION (APPROXIMATED FIELD VERIFY EXACT POINT OF CONNECTION)
NOTE: 1. NOT ALL SYMBOLS USED ON THIS PROJECT 2. INSTALL WATER CLOSET FLUSH VALVE HANDLE TOWARDS WIDER SIDE OF WATER CLOSET OR DOOR OPENING. 3. INSTALL ADA APPROVED FLUSH VALVE HANDLE FOR ADA PLUMBING FIXTURES.			

PLUMBING PIPING MATERIAL:

- SANITARY DRAIN & VENT INSIDE BUILDING BELOW GRADE:
SCHEDULE 40 PVC
- SANITARY DRAIN OUTSIDE BUILDING:
SCHEDULE 40 PVC
- SANITARY DRAIN & VENT INSIDE BUILDING ABOVE GRADE:
SCHEDULE 40 PVC
- SANITARY DRAIN & VENT IN PLENUM CEILING:
NO-HUB CAST IRON

ELECTRIC WATER HEATER SCHEDULE							
DESIG.	STORAGE GALLONS	RECOVERY G.P.H.	DEGREE RISE °F	WATER TEMP. LEAVING	WATER INLET	WATER OUTLET	REMARKS
WH-1	40	23	80°	120°	3/4"	3/4"	RHEEM MODEL NO. ELD40, 3 KW, 240V/11Ø, ELECTRIC TANK TYPE. PROVIDE 5 GAL EXPANSION TANK.
WH-2	80	51	80°	120°	3/4"	3/4"	RHEEM MODEL NO. ELD80, 10KW, 240V/11Ø, ELECTRIC TANK TYPE. PROVIDE 10 GAL EXPANSION TANK.
WH-3	120	51	80°	120°	3/4"	3/4"	RHEEM MODEL NO. ELD120, 10KW, 240V/11Ø, ELECTRIC TANK TYPE. PROVIDE 10 GAL EXPANSION TANK.

RECIRCULATING PUMP SCHEDULE						
MARK	GPM	FEET HEAD	H.P.	RPM	VOLTS/PHASE	REMARKS
CP-1 CP-2 CP-3	0-20	0-11	1/25	3250	115 volts/Ø	EQUAL TO TACO MODEL 007-BFS CARTRIDGE CIRCULATOR, MAINTENANCE FREE, WET-ROTOR, IN-LINE, SINGLE STAGE CIRCULATOR. PROVIDE TACO CLOCK TIMER AND TEMPERATURE AQUASTAT MODEL NO. 00 TIMERS/AQUASTAT

ABBREV. DESCRIPTION

AC	ABOVE CEILING
AFF	ABOVE FINISHED FLOOR
ASA	AMERICAN STANDARDS ASSOCIATION
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS
AW	ACID WASTE
AWWA	AMERICAN WATER WORKS ASSOCIATION
AV	ACID VENT
BTUH	BRITISH THERMAL UNIT PER HOUR
CA	COMPRESSED AIR
CI	CAST IRON
CO	CLEANOUT
CU	COPPER
DN	DOWN
EQ	EQUAL
FCO	FLOOR CLEANOUT
FF	FINISH FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
GAL	GALLON(S)
GALV	GALVANIZED
GW	GREASE WASTE
HB	HOSE BIBB
HP	HORESPOWER
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER
RD	ROOF DRAIN(S)
RE-4/P6	REFER TO DETAIL 4 DRAWING P-6
RO	REVERSE OSMOSIS
SD	STORM DRAIN
SPEC	SPECIFICATION
TYP	TYPICAL
UG	UNDERGROUND
UL	UNDERWRITERS LABORATORIES
VTR	VENT THRU ROOF
V	VACUUM
W/	WITH
WCO	WALL CLEAN OUT
YCO	YARD CLEAN OUT

PLUMBING FIXTURE SCHEDULE						
MARK	FIXTURE TYPE	CONNECTION SIZE				DESCRIPTION
		San. Sewer	Vent	Cold Water	Hot Water	
WC-1	WATER CLOSET ADA	4"	2"	1/2"	-	AMERICAN STANDARD MODEL NO 2467.016, FLUSH TANK PRESSURE ASSISTED WATER CLOSET, 16-1/2" RIM HEIGHT, TWO-PIECE VITREOUS CHINA, ELONGATED RIM, 1/2" ROUGH-IN, 1.6 GPF, COMPLETE, WITH TANK FITTINGS AND BOLT CAPS, OPEN FRONT SEAT "BEMIS" MODEL NO 19555SSC, FLUSH LEVER MOUNTED ON APPROACH SIDE OF THE FIXTURE.
L-1	LAVATORY WALL HUNG STANDARD AND ADA REFER TO ARCH'L DRAWING FOR MOUNTING HEIGHTS	2"	2"	1/2"	1/2"	AMERICAN STANDARD "LUCERNE" MODEL NO. 0356.421 (20x18) WALL HUNG LAVATORY, WITH ANTI-SPLASH RIM AND HIGH BACK, CONCEALED FRONT OVERFLOW, INCLUDES WALL HANGER, VITREOUS CHINA, WITH ONE HOLE CENTER SET, PROVIDE FAUCET EQUAL TO MOEN MODEL 8413, SINGLE HANDLE, VANDAL RESISTANT, ADA APPROVED, PROVIDE PROTECTIVE COVER ON P-TRAP AND STOPS.
SK-1	STAINLESS STEEL SINK ADA	2"	2"	1/2"	1/2"	SINGLE COMPARTMENT STAINLESS STEEL SINK BY ELKAY MODEL NO. LRAD1720-40 SELF RIMMING, TOP MOUNT WITH STAINLESS STEEL MOUNTING CHANNELS, 18 GAUGE TYPE 302 CENTERED REAR DRAIN, COMPLETE WITH ELKAY MODEL LK535AT10L2 FAUCET ADA, HOLE DRILLING 1, PROVIDE LKAD05 CHROME PLATED BRASS OFFSET TAILPIECE FOR WHEELCHAIR USE.
SK-2	TWO-COMPARTMENT KITCHEN SINK ADA COMPLIANT	2"	2"	1/2"	1/2"	DOUBLE COMPARTMENT STAINLESS STEEL SINK BY ELKAY MODEL GECR 3321 MOUNT WITH STAINLESS STEEL MOUNTING CHANNELS, 18 GAUGE, TYPE 302, CENTERED REAR DRAIN, COMPLETE WITH MOEN TWO-HANDLE KITCHEN FAUCET MODEL NO. 8799, WITH WRIST BLADE HANDLES, COORDINATE KNEE SPACE WITH SINK DRAIN LOCATION FOR ADA COMPLIANCE, PROVIDE PROTECTIVE COVER ON P-TRAP AND STOPS, PROVIDE LKAD05 CHROME PLATED BRASS OFFSET TAILPIECE FOR WHEELCHAIR USE.
SK-3	3-COMP SINK	2"	2"	1/2"	1/2"	PROVIDED AND INSTALLED BY PLUMBING CONTRACTOR PROVIDED \$3500.00 ALLOWANCE
SH-1	SHOWER HANDICAPPED REFER TO PLAN FOR LEFT OR RIGHT HAND CONFIGURATION	2"	2"	1/2"	1/2"	PROVIDE AND INSTALL BRADLEY HN300/TMV BARRIER-FREE SHOWER SYSTEM TO ALL BUILT-IN ADA SHOWER ROOMS, SYSTEM INCLUDES STANDARD FIXED DIRECTION ADJUSTABLE SPRAYHEAD, DIVERTER VALVE FOR EASY TRANSFER OF WATER FLOW BETWEEN FIXED AND HANDHELD SHOWER SPRAY, 60" STAINLESS STEEL FLEX HOSE HAND HELD SHOWER, L-SHAPED GRAB BAR, BARRIER FREE SEAT, SHOWER CURTAIN & 24" SLIDE BAR.
EDF-1	ELECTRIC WATER COOLER W/ Water Refilling Station REFER TO ARCH'L DRAWING FOR MOUNTING HEIGHTS	2"	2"	1/2"	-	8-LEVEL ELECTRIC WATER COOLER SHALL BE "ELKAY" MODEL NO. LZSTLBWSVRSK, WITH Elkay EZH2O Water Refilling Station, CAPACITY OF 8.0 GALLONS, STAINLESS STEEL BASIN WITH INTEGRAL DRAIN GRID AND EMBOSSED BUBBLER PAD, LEAD FREE ADA COMPLIANT, WITH ZURN CARRIER MODEL NO. Z-1225, WITH APRON MODEL NO. LKAPR-EZL TO COMPLY WITH TAS AND ADA.
IMC	ICE MAKER CONNECTION BOX	-	-	1/2"	-	CONNECTION BOX EQUAL TO GUY GRAY NO. BIM875 PREFABRICATED RECESSED BOX WITH COMPRESSION ANGLE VALVE.
HB-1	HOSE BIB EXTERIOR GENERAL USE	-	-	3/4"	-	MILD TEMPERATURE WALL HYDRANT SHALL BE WOODFORD MODEL 865 3/4" INLET WITH BRONZE CASING, BRONZE FACE AND STRAIGHT INLET CONNECTION WITH INTEGRAL BACKFLOW PREVENTER.
FS-1	FLOOR SINK	3"	2"	-	-	EQUAL TO ZURN PART # FD2375-NH3-T, 12" SQUARE TOP, WITH 4 DEEP DUMP CAST IRON BODY W/ ACID RESISTANT INTERIOR COATING, 3/4" GRATE, ANTI-SPLASH DOME STRAINER.
FD-1	RESTROOM FLOOR DRAIN	AS NOTED ON PLANS				EQUAL TO JOSAM PART # 30003-6A-Y-50, CAST IRON BODY WITH CLAMP RING, FLANGE, ADJUSTABLE NIKALOY STRAINER, HUB OUTLET WITH GASKET AND 1/2" PRIMER TAP.
FD-2	SHOWER FLOOR DRAIN	AS NOTED ON PLANS				EQUAL TO JOSAM PART # 30002-6A-Y-50, CAST IRON BODY WITH CLAMP RING, FLANGE, ADJUSTABLE NIKALOY STRAINER, HUB OUTLET WITH GASKET AND 1/2" PRIMER TAP.
FD-3	FLOOR DRAIN	AS NOTED ON PLANS				EQUAL TO JOSAM PART # 30003-7E2-Y, COATED CAST IRON BODY WITH CLAMP RING, TWO PIECE BODY WITH DOUBLE DRAINAGE FLANGE, ADJUSTABLE NIKALOY FUNNEL STRAINER.
FD-4	TRACTOR GRATE FLOOR DRAIN	AS NOTED ON PLANS				EQUAL TO JOSAM PART # 30003-7E-Y-50, COATED CAST IRON BODY WITH CLAMP RING, TWO PIECE BODY WITH DOUBLE DRAINAGE FLANGE, WITH 7" TRACTOR GRATE STRAINER AND 1/2" PRIMER TAP, HUB OUTLET WITH GASKET.

NOTES:

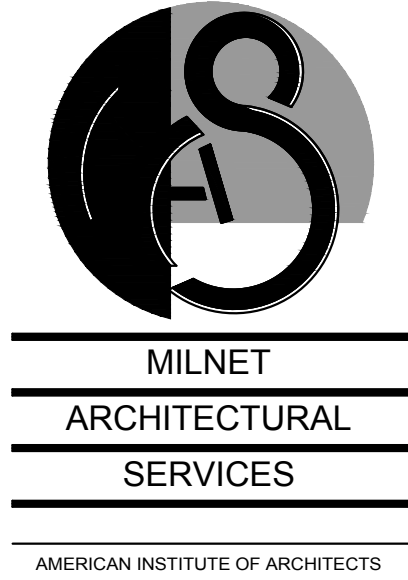
- ALL VITREOUS CHINA FIXTURES SHALL BE WHITE.
- PROVIDE SINGLE FIXTURE WATER HAMMER ARRESTORS EQUAL TO MINI-RESTER/HYDRA-RESTER SIOUX CHIEF, FOR ALL PLUMBING FIXTURES IN THE WATER SUPPLY SYSTEM.
- INSULATE ALL WATER AND WASTE PIPING UNDER LAVATORIES WITH HANDY-SHIELD JACKET BY PLUMBEREX.

PLUMBING GENERAL NOTES: (ALL SHEETS)

- ALL WORK AND MATERIAL SHALL BE IN COMPLIANCE WITH ALL APPLICABLE CODES AS ADAPTED AND AMENDED BY THE INSPECTING AUTHORITIES.
 - ALL PLUMBING WORK SHALL BE INSTALLED SO AS TO AVOID CONFLICT WITH ALL ELECTRICAL WORK, MECHANICAL WORK AND STRUCTURAL MEMBERS. COORDINATE WITH MECHANICAL, ELEC. AND STRUCTURAL FOR PROPER CLEARANCES. CONTRACTOR SHALL COORDINATE AND ESTABLISH A SEQUENCE OF INSTALLATION WITH OTHER TRADES WORKING ON THE PROJECT.
 - REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR PHASING AND SEQUENCE OF CONSTRUCTION OF WORK.
 - SLEEVE ALL OUTSIDE WALL, FLOOR SLAB, AND GRADE BEAM PENETRATIONS PER DETAILS AND PER CODE.
 - LOCATE ALL PLUMBING VENTS TO ROOF (VTR) SO THAT THEY TERMINATE A MINIMUM OF 1'-0" AWAY FROM ANY VERTICAL SURFACE AND 10'-0" AWAY FROM ANY OUTSIDE AIR INTAKES.
 - RECORD INVERT ELEVATIONS OF ALL YCO'S ON "AS-BUILT" DRAWINGS.
 - ALL SANITARY SEWER PIPING 4" AND LARGER SHALL BE INSTALLED AT 1/8" PER FT. MINIMUM. ALL SANITARY SEWER PIPING 3" AND SMALLER SHALL BE INSTALLED AT 1/4" PER FT. MINIMUM.
 - PLUMBING CONTRACTOR SHALL PAY FOR ALL UTILITY CONNECTIONS FEES, PERMITS, TESTS AND INSPECTIONS, FURNISH 3 COPIES OF INSPECTION CERTIFICATE BEFORE REQUESTING FINAL PAYMENT. PLUMBING CONTRACTOR TO BE RESPONSIBLE FOR COORDINATION, VERIFICATION AND CONNECTION OF ALL UTILITIES TO SITE UTILITY SUB-OUTS. REFERENCE ASSOCIATED ARCHITECTURAL, ELECTRICAL, MECHANICAL, STRUCTURAL, KITCHEN AND CIVIL DRAWINGS FOR RELATED INFORMATION.
 - PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING AND REPAIRING ALL AREAS WHICH ARE DAMAGED BY HIS OPERATIONS.
 - CUTTING OF CONCRETE FLOORS SHALL BE BY MACHINE SAW, HOLES FOR PIPES (WALL OR FLOOR) SHALL BE DONE WITH CORE DRILLING EQUIPMENT WITH PRIOR APPROVAL FROM THE STRUCTURAL ENGINEERS.
 - PRESSURE TEST ALL INSTALLATIONS PRIOR TO CONNECTING EQUIPMENTS.
 - LABEL ALL PIPING PER ANSI STANDARD.
 - INSULATE ALL PIPING AS STATED IN SPECIFICATIONS.
 - INSTALL SHUT-OFF VALVES (STOPS) AND PIPING UNIONS AT EACH PIECE OF EQUIPMENT, PLUMBING FIXTURES, AND BRANCHES TO FIXTURE GROUPS. VALVES SHALL BE LOCATED IN AN ACCESSIBLE LOCATION, OR ACCESS PANELS PROVIDED AS NECESSARY.
 - PROVIDE ANY BACK FLOW PREVENTION DEVICE REQUIRED BY CODE OR GOVERNING AUTHORITIES. CONTRACTOR SHALL VERIFY THIS WITH CITY OR LOCAL AGENCIES AND INCLUDE COST OF SAME IN BID. CONTRACTOR TO HAVE BACK FLOWS CERTIFIED.
 - PROVIDE WATER HAMMER ARRESTORS AS INDICATED ON THE DRAWINGS. AIR CHAMBERS NOT AN APPROVED SUBSTITUTE.
 - ALL EXPOSED PIPING FOR DESIGNATED DISABLED ACCESS FIXTURES SHALL BE COVERED OR OTHERWISE WRAPPED IN ACCORDANCE WITH A.D.A. REQUIREMENTS AND LOCAL AUTHORITY.
 - ALTERNATE MATERIALS NOT IDENTIFIED IN SPECIFICATIONS/DRAWINGS BUT APPROVED BY LOCAL AUTHORITY SHALL BE SUBMITTED TO ARCHITECT AND PLUMBING ENGINEER FOR REVIEW PRIOR TO INSTALLATION.
 - ISOMETRIC DIAGRAMS ARE FOR SIZING PURPOSES ONLY AND SHALL NOT BE USED FOR MATERIAL TAKE-OFFS, OR BE CONSTRUED TO INDICATE ACTUAL SITE INSTALLATION.
 - DRAWING IS SCHEMATIC IN NATURE AND SHOW THE GENERAL LAYOUT OF THE PLUMBING SYSTEM. CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF PIPING, DEVICES AND EQUIPMENT WITH BUILDING ELEMENTS AND THE WORK OF OTHER TRADES.
 - EVERY FLOOR DRAIN, FLOOR SINK OR HUB DRAIN SHALL BE SERVED BY AN AUTOMATIC TRAP PRIMER.
 - REFER TO KITCHEN EQUIPMENT PLAN AND SPECIFICATIONS. INFORMATION SHOWS EXACT LOCATIONS AND NECESSARY PLUMBING REQUIREMENTS FOR THE KITCHEN EQUIPMENT. COORDINATE WITH KITCHEN EQUIPMENT SUPPLIER.
 - ALL PLUMBING FIXTURES IDENTIFIED SHALL BE PROVIDED AND INSTALLED BY THE PLUMBING CONTRACTOR UNLESS NOTED OTHERWISE.
 - INSTALL VACUUM BREAKERS AT ALL THREADED HOSE CONNECTIONS AND AT ALL CONNECTIONS WHERE CROSS-CONTAMINATION COULD OCCUR.
 - PIPING SHALL NOT BE INSTALLED OVER ELECTRICAL EQUIPMENT.
 - CONTACT ARCHITECT BEFORE PENETRATING STRUCTURAL ELEMENTS WITH PIPING, EQUIPMENT, ETC.
 - VERIFY EXACT LOCATIONS OF "HVAC" EQUIPMENT WITH MECHANICAL DRAWINGS. VERIFY PRIOR TO ANY INSTALLATION THAT THERE IS SUFFICIENT SPACE IN WALLS, CHASES AND CEILING CAVITIES FOR PLUMBING SYSTEM PIPING, VENTS, EQUIPMENT, ETC.
 - PROVIDE ACOUST-O-PLUMB PIPE CLAMPS ON ALL DOMESTIC WATER PIPES 1" AND SMALLER IN SIZE. REFER TO FLOOR PLANS AND RISER DIAGRAMS.
 - FIRESTOP ALL PENETRATIONS THRU FIRE-RATED ASSEMBLIES. REFER TO SPECIFICATIONS AND ARCHITECTURAL DRAWINGS.
 - CAULK AROUND ALL PLUMBING FIXTURES. CAULK COLOR TO MATCH FIXTURE COLOR.
 - SEAL ALL EXTERIOR WALL AND ROOF PENETRATIONS WATER TIGHT.
 - PLASTIC PIPE SHOULD ALWAYS BE BURIED IN STRICT ACCORDANCE WITH THE ASTM STANDARD RELEVANT TO THE TYPE OF PLASTIC PIPING SYSTEM BEING INSTALLED. THOSE STANDARDS ARE:

ASTM D2321 STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS.

ASTM D2774 STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PRESSURE PIPING.
- NOTE: IN ADDITION TO THESE STANDARDS, PIPE SHOULD ALWAYS BE INSTALLED IN ACCORDANCE WITH ALL LOCAL CODE REQUIREMENTS.



HOP VILLA RENOVATIONS

TROPICAL TEXAS BEHAVIORAL HEALTH
HARLINGEN, TX.

PROJECT NUMBER
217027

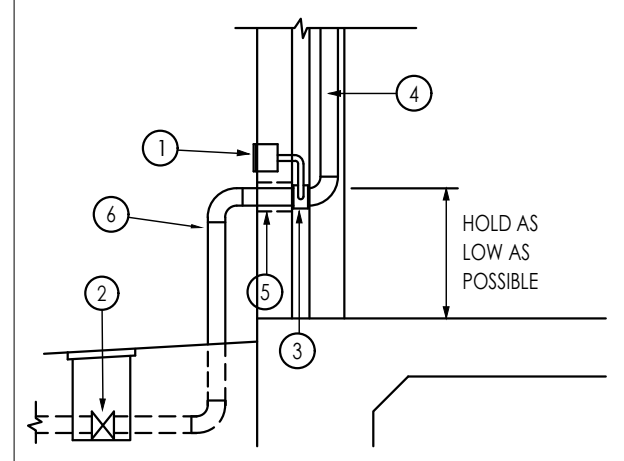
DATE
AUG 17, 2018

FINALS - 100%

SHEET NUMBER

P3.1

01

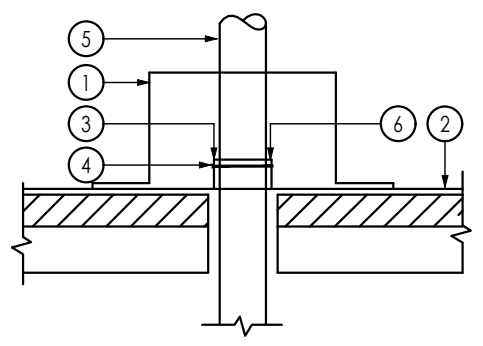


- 1 WALL HYDRANT - INSTALL LOW ENOUGH TO DRAIN RISER
- 2 SHUT-OFF VALVE IN CAST IRON BOX FLUSH WITH FINISHED GRADE
- 3 TEE
- 4 TYPE 1" COPPER
- 5 SLEEVE
- 6 PROVIDE 1" ARMAFLEX INSULATION W/ METAL JACKET ON EXPOSED PIPING.

WATER SERVICE ENTRANCE DETAIL

NO SCALE

05

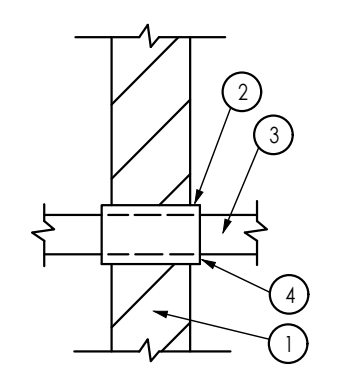


- 1 PREFABRICATED ROOF CURB, FURNISHED & INSTALLED BY ROOFING CONTR. (COORDINATE)
- 2 METAL ROOFING
- 3 STAINLESS STEEL CLAMP
- 4 SLEEVE PIPE BY ROOFING CONTR.
- 5 NTR
- 6 PROVIDE CAULKING GROOVE
- 7 LOCATE MIN. 10'-0" FROM A/C AIR INTAKES

VENT THRU ROOF DETAIL

NO SCALE

09

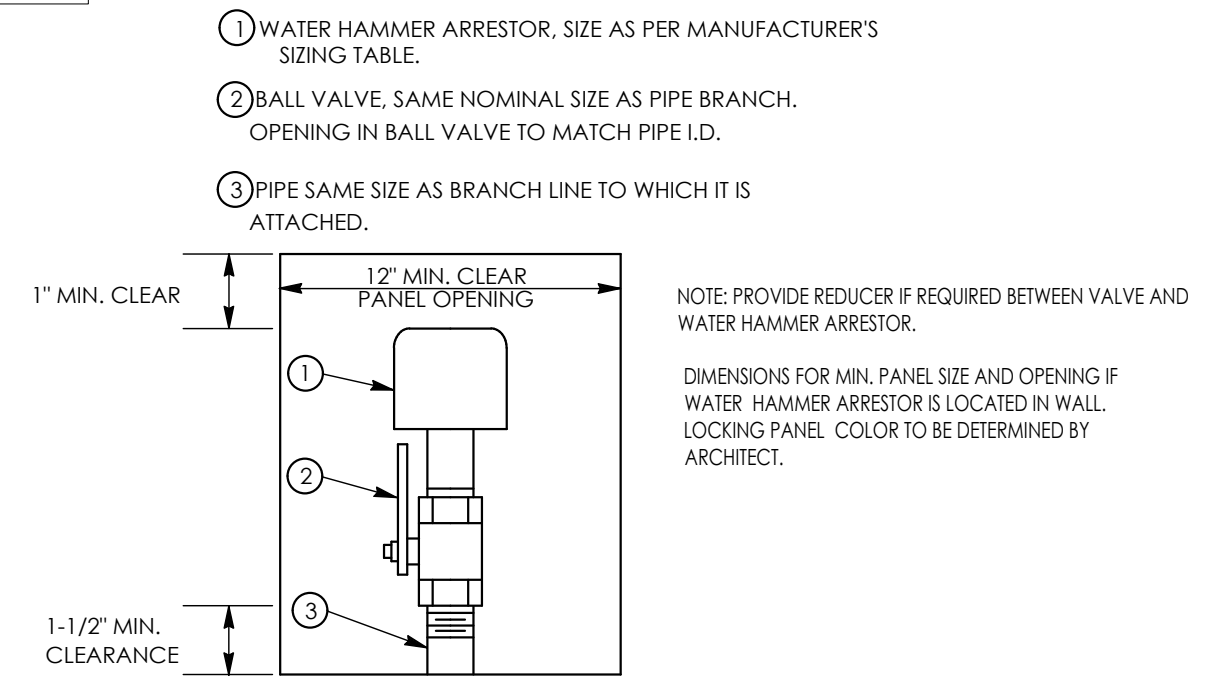


- 1 MASONRY WALL
- 2 GALVANIZED SCHEDULE 40 STEEL OR COPPER SLEEVE, SIZE TO BE MINIMUM 3/8" LARGER IN DIAMETER THAN PIPE AND INSULATION
- 3 PLUMBING PIPE (RELIER LINES, DOMESTIC WATER, AIR, AND GAS PIPING)
- 4 FILL VOID WITH MINERAL WOOL AND CAULK VERMIN TIGHT.

WALL SLEEVE DETAIL

NO SCALE

13



- 1 WATER HAMMER ARRESTOR, SIZE AS PER MANUFACTURER'S SIZING TABLE.
- 2 BALL VALVE, SAME NOMINAL SIZE AS PIPE BRANCH. OPENING IN BALL VALVE TO MATCH PIPE I.D.
- 3 PIPE SAME SIZE AS BRANCH LINE TO WHICH IT IS ATTACHED.

NOTE: PROVIDE REDUCER IF REQUIRED BETWEEN VALVE AND WATER HAMMER ARRESTOR.

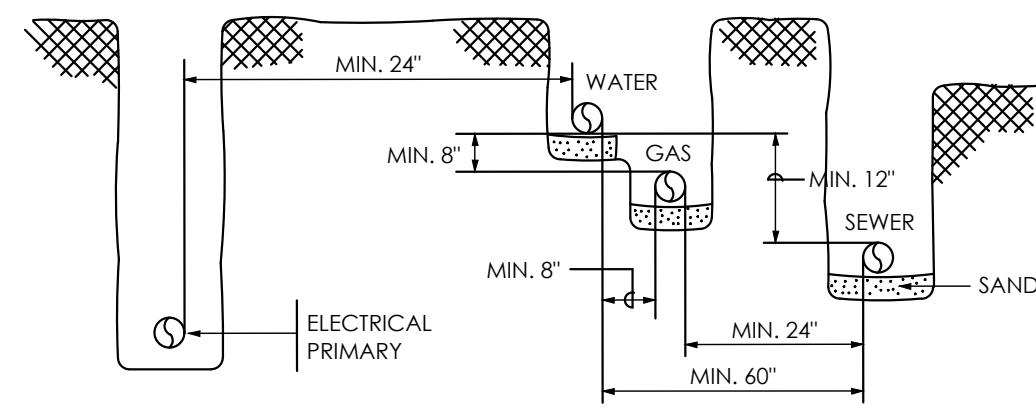
DIMENSIONS FOR MIN. PANEL SIZE AND OPENING IF WATER HAMMER ARRESTOR IS LOCATED IN WALL. LOCKING PANEL COLOR TO BE DETERMINED BY ARCHITECT.

WATER HAMMER ARRESTOR DETAIL

NO SCALE

02

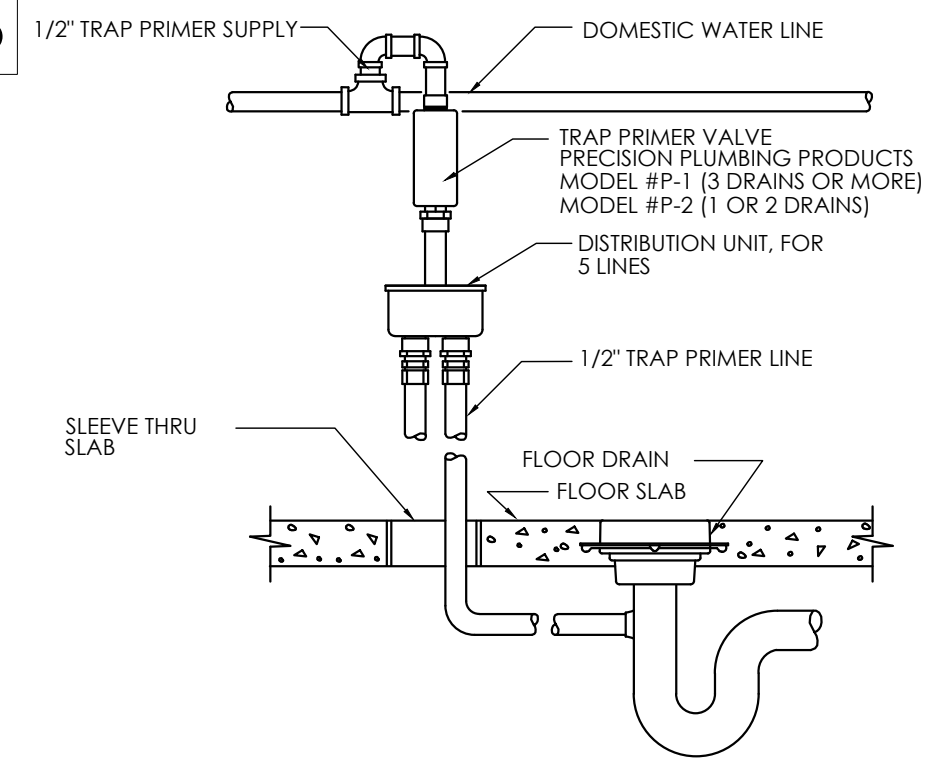
CLEAR TRENCH OF ALL ROCKS AND DEBRIS BEFORE ADDING SAND CUSHION. COMPACT TRENCH FILL TO 95% PROCTOR DENSITY. MAINTAIN A MINIMUM OF 60 INCHES UNDISTURBED EARTH BETWEEN PARALLEL WATER AND SEWER LINES OR SUPPORT WATER LINE ON SEPARATE SHELVE A MINIMUM OF 12" ABOVE SEWER LINE. MAINTAIN A MINIMUM OF 24" HORIZONTALLY BETWEEN ELECTRICAL PRIMARY AND SEWER. MAINTAIN A MINIM OF 12" VERTICALLY OR 24" HORIZONTALLY BETWEEN ELECTRICAL PRIMARY AND WATER LINES, GAS LINES, TELEPHONE RACEWAYS AND CABLE RACEWAYS.



TRENCHING DETAIL

NO SCALE

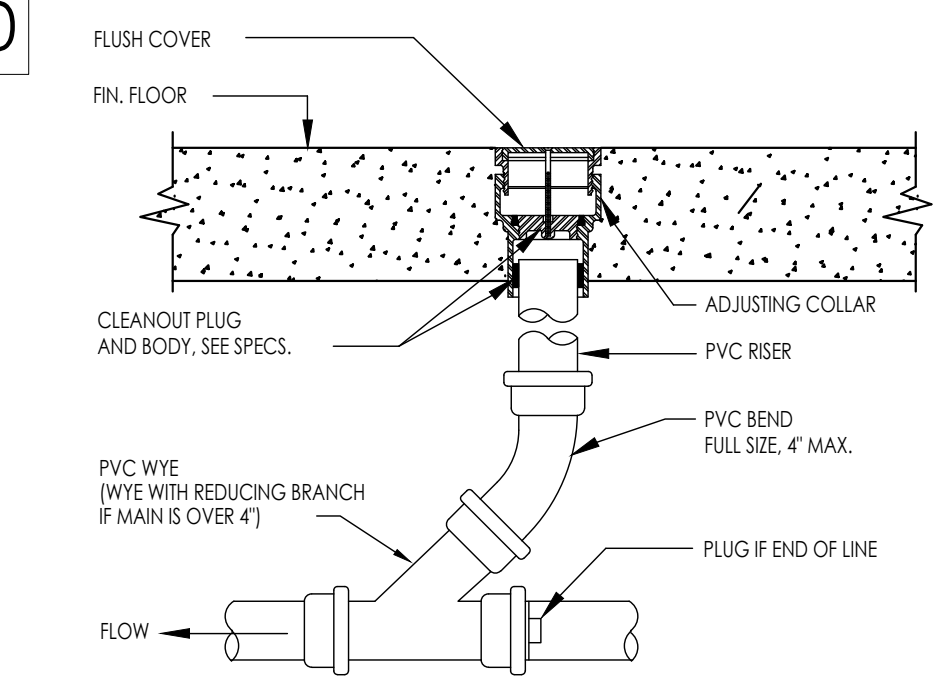
06



TRAP SEAL PRIMER DETAIL

NO SCALE

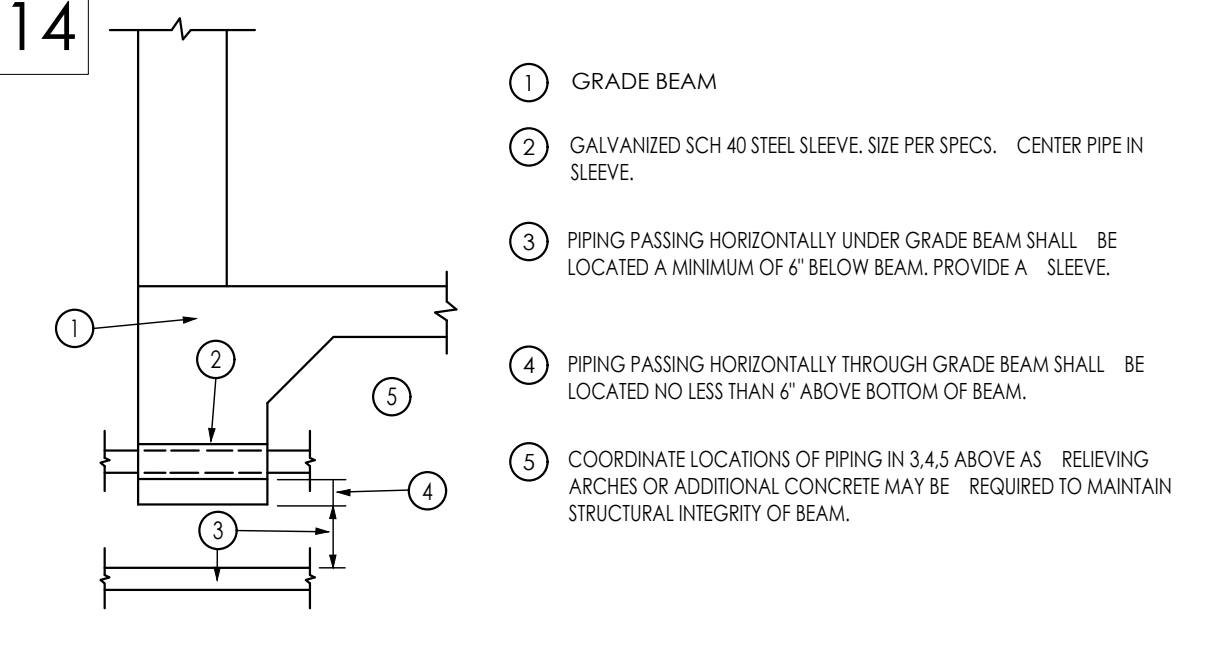
10



FLOOR CLEANOUT DETAIL

NO SCALE

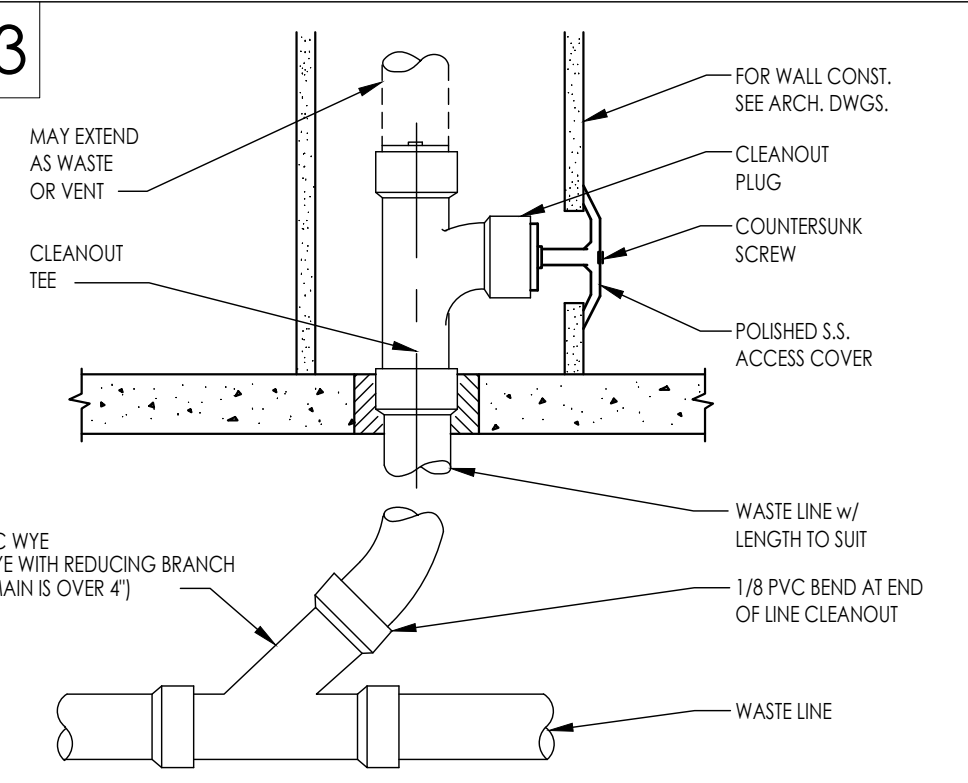
14



GRADE BEAM SLEEVE DETAIL

NO SCALE

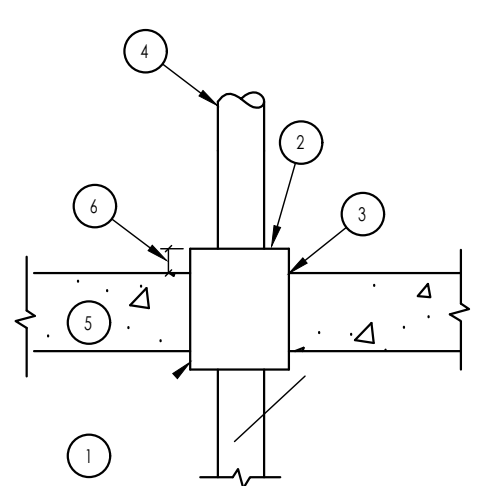
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WALL CLEANOUT DETAIL

NO SCALE

07

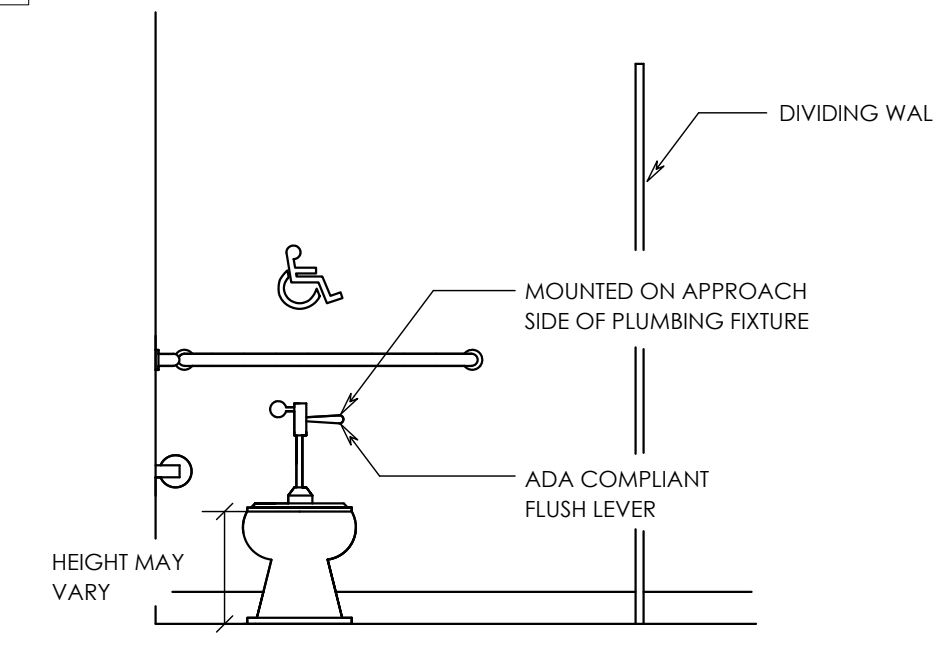


- 1 METAL SLEEVE TWO SIZES LARGER THAN PIPE
- 2 FILL VOID WITH NON-SHRINKING WATERPROOF, VERMIN PROOF MATERIAL
- 3 ALL PLUMBING PIPE PENETRATIONS THROUGH GROUND FLOOR, AND GRADE BEAMS SHALL BE SLEEVED
- 4 PIPE
- 5 CONCRETE SLAB
- 6 MINIMUM 2"

FLOOR PENETRATION DETAIL

NO SCALE

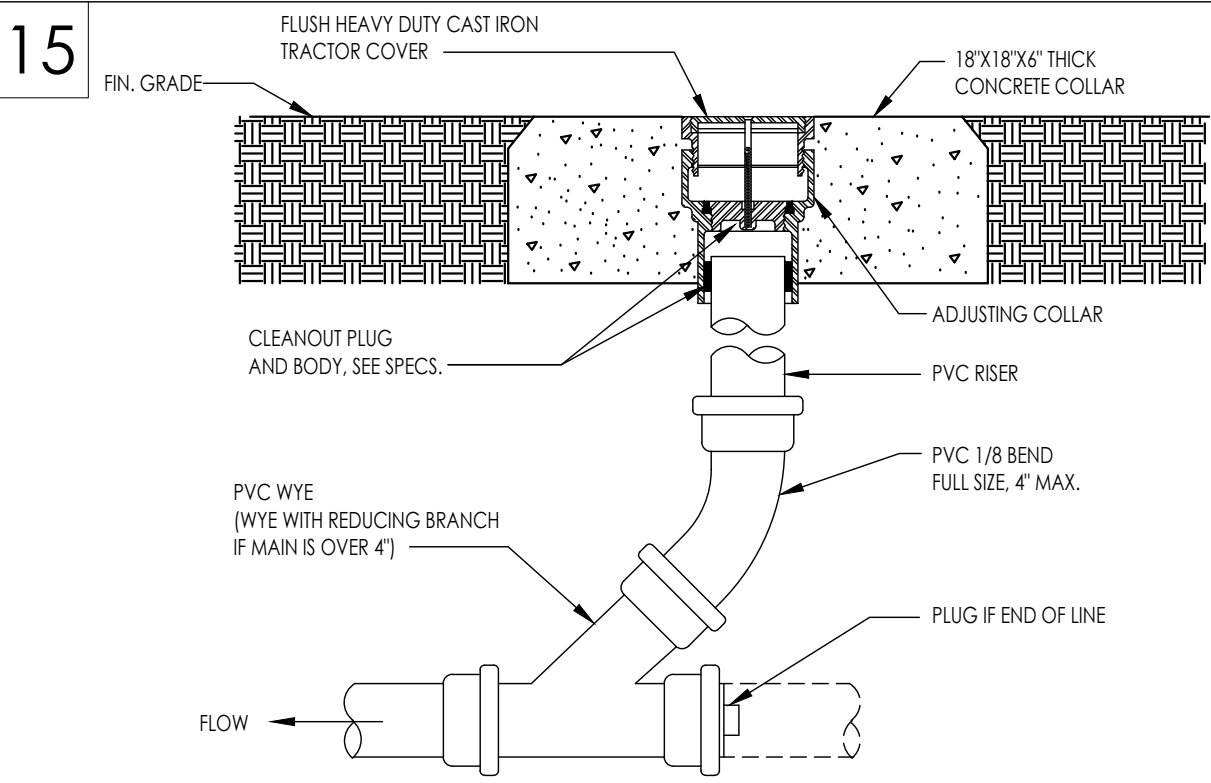
11



ADA WATER CLOSET DETAIL

NO SCALE

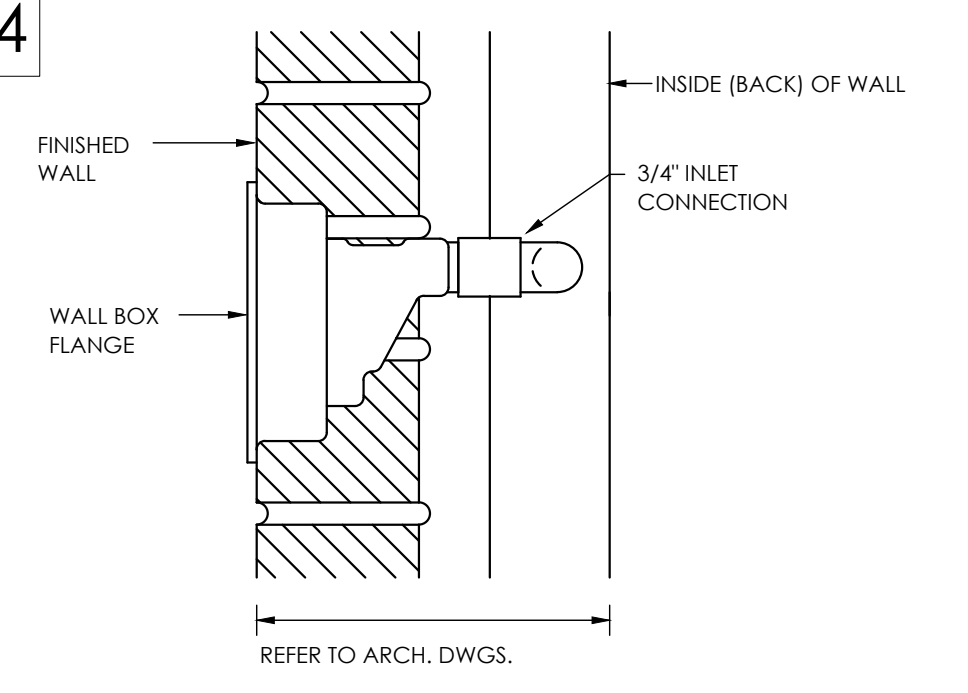
15



YARD CLEANOUT DETAIL

NO SCALE

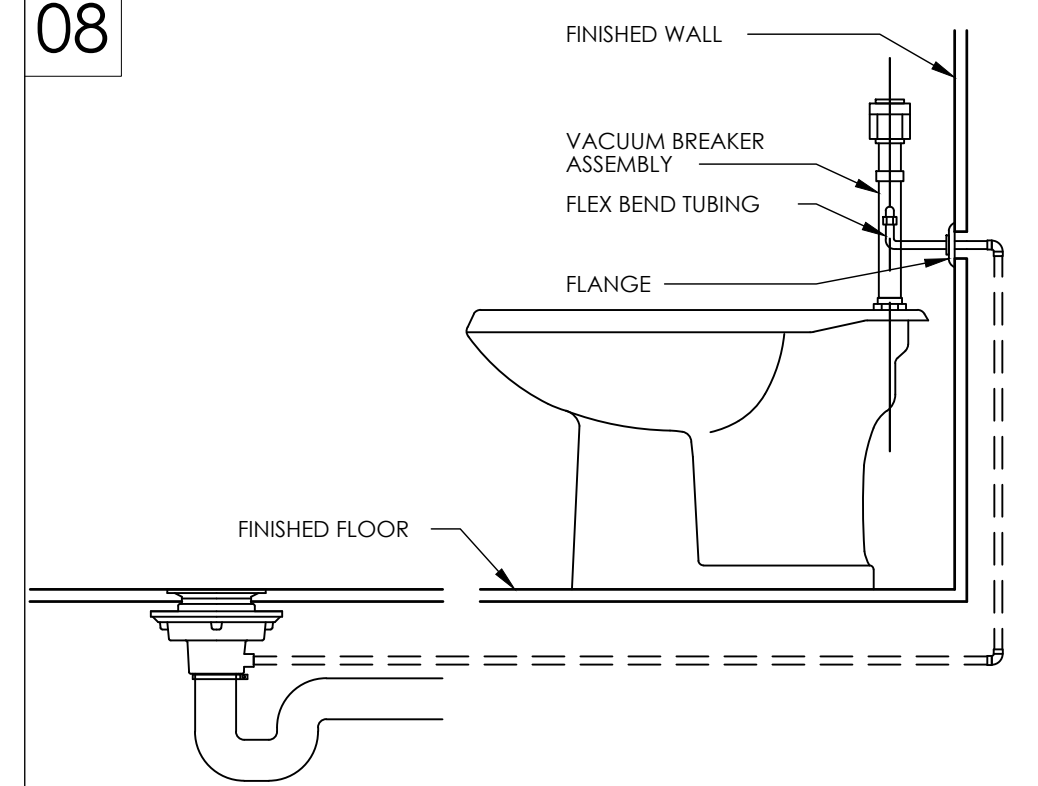
04



WALL HYDRANT DETAIL

NO SCALE

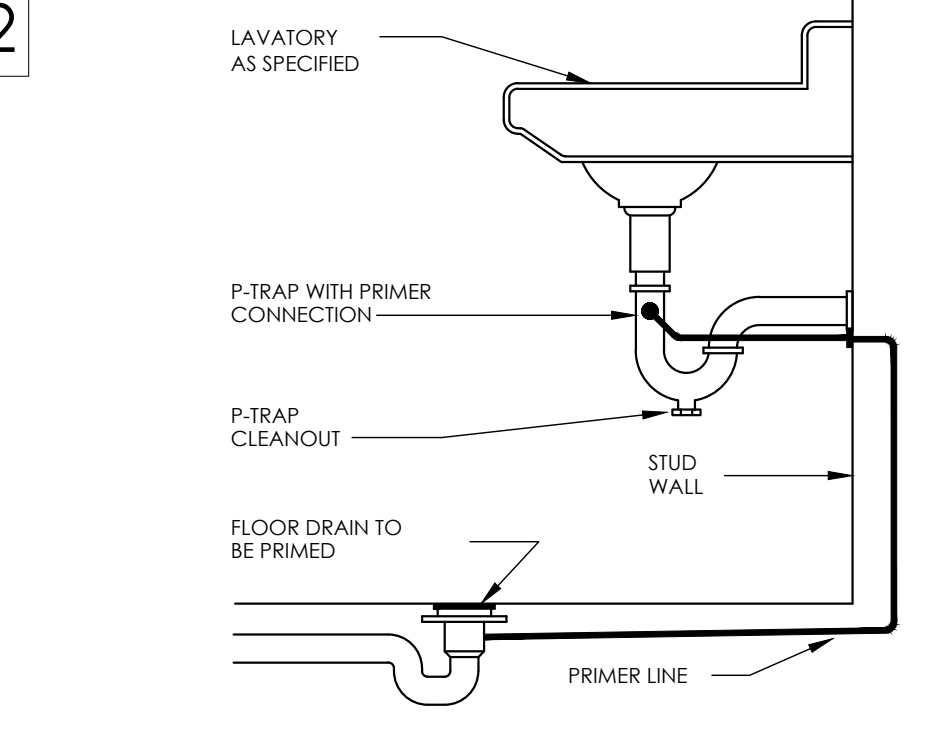
08



FLUSH VALVE TRAP SEAL PRIMER

NO SCALE

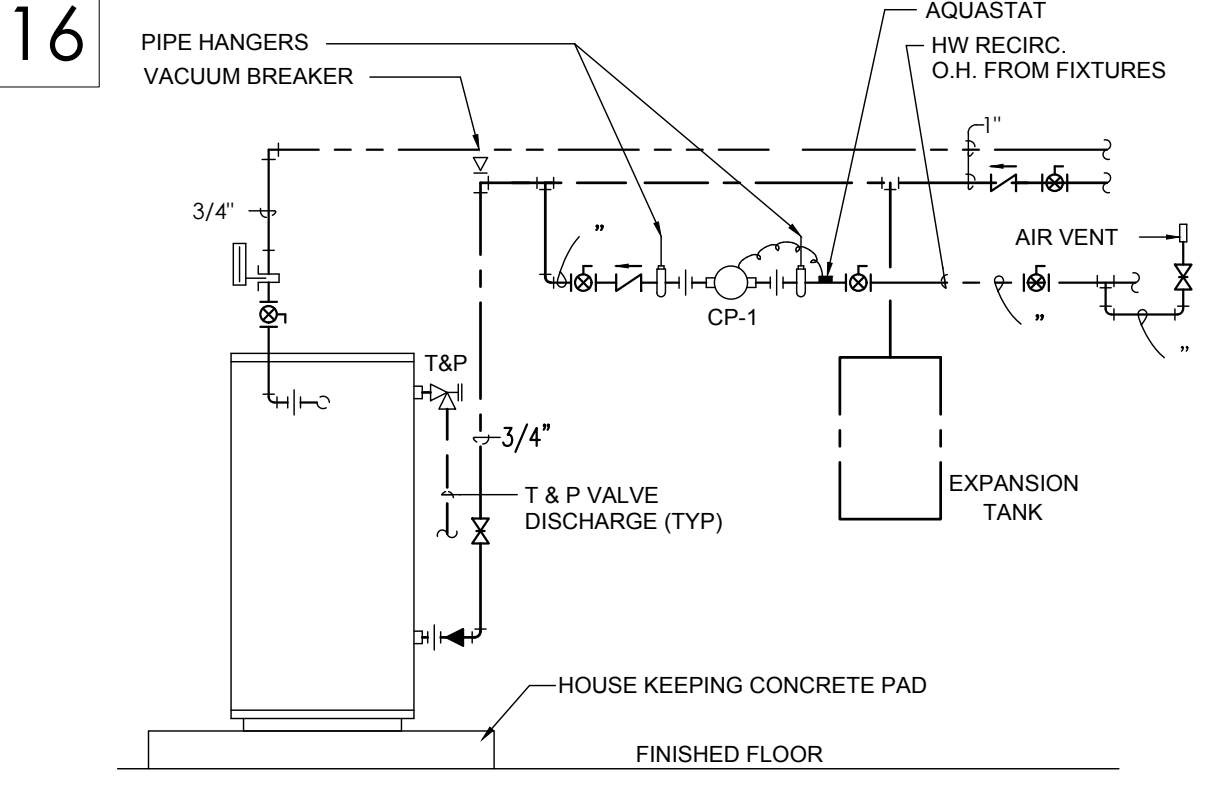
12



TRAP SEAL PRIMER INSTALLATION DETAIL

NO SCALE

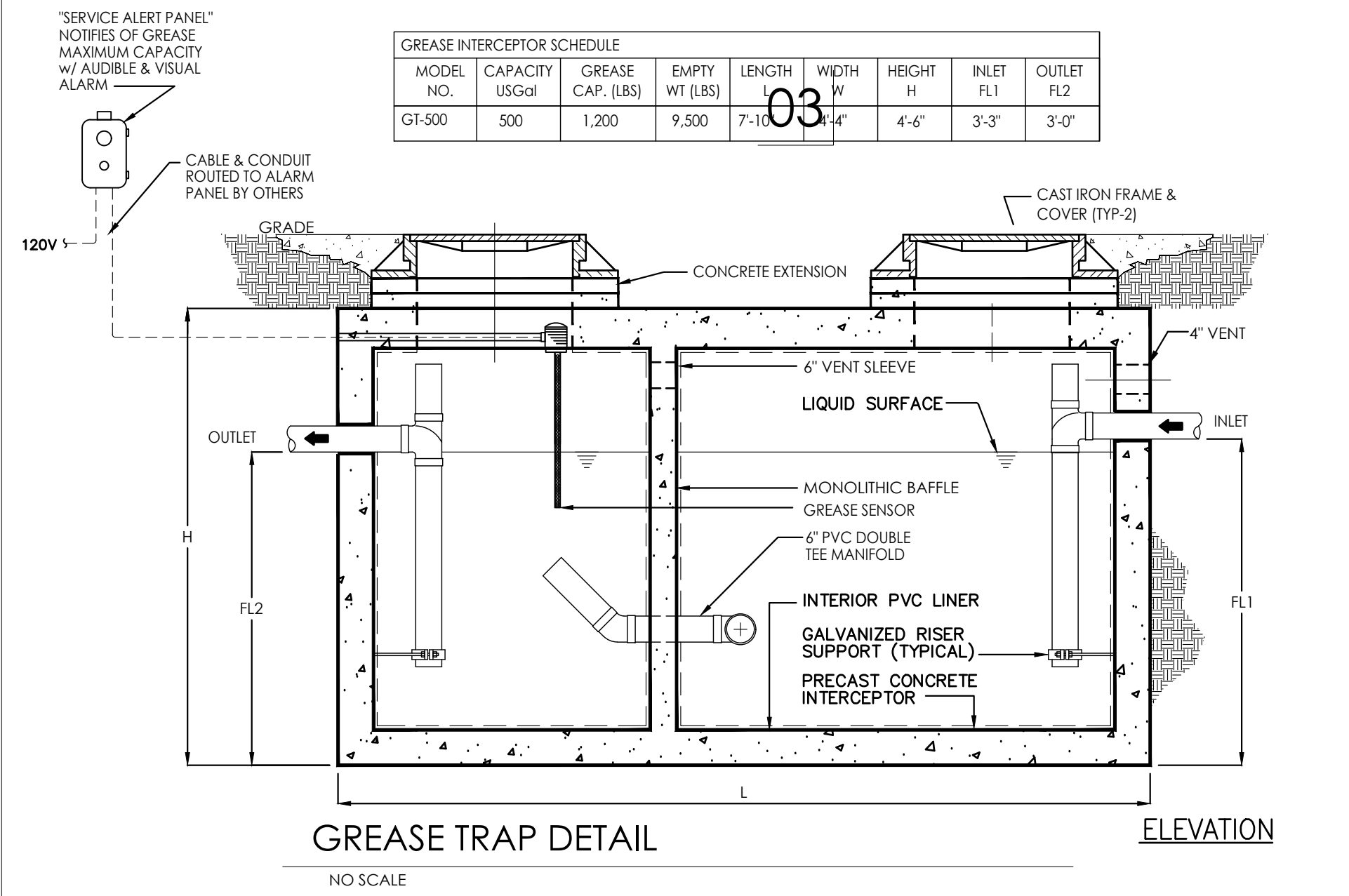
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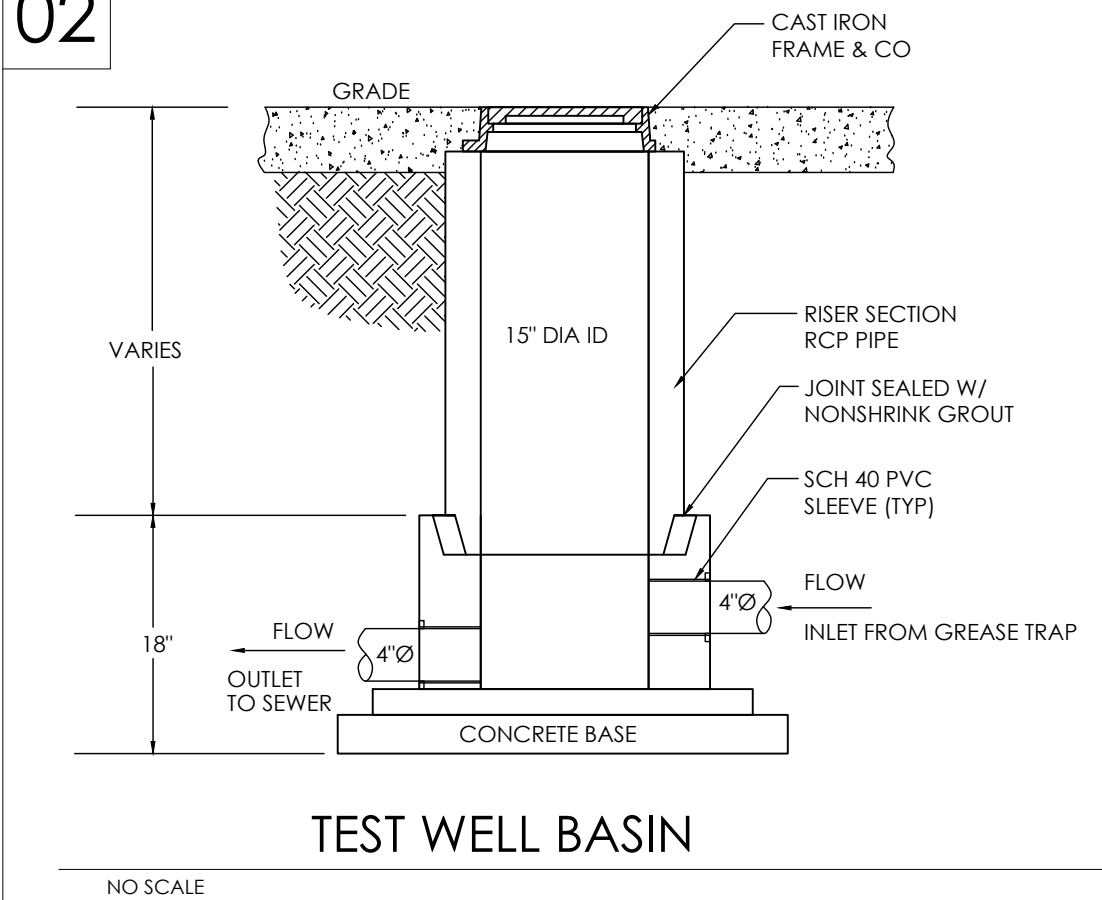
ELECTRIC WATER HEATER SYSTEM

NO SCALE

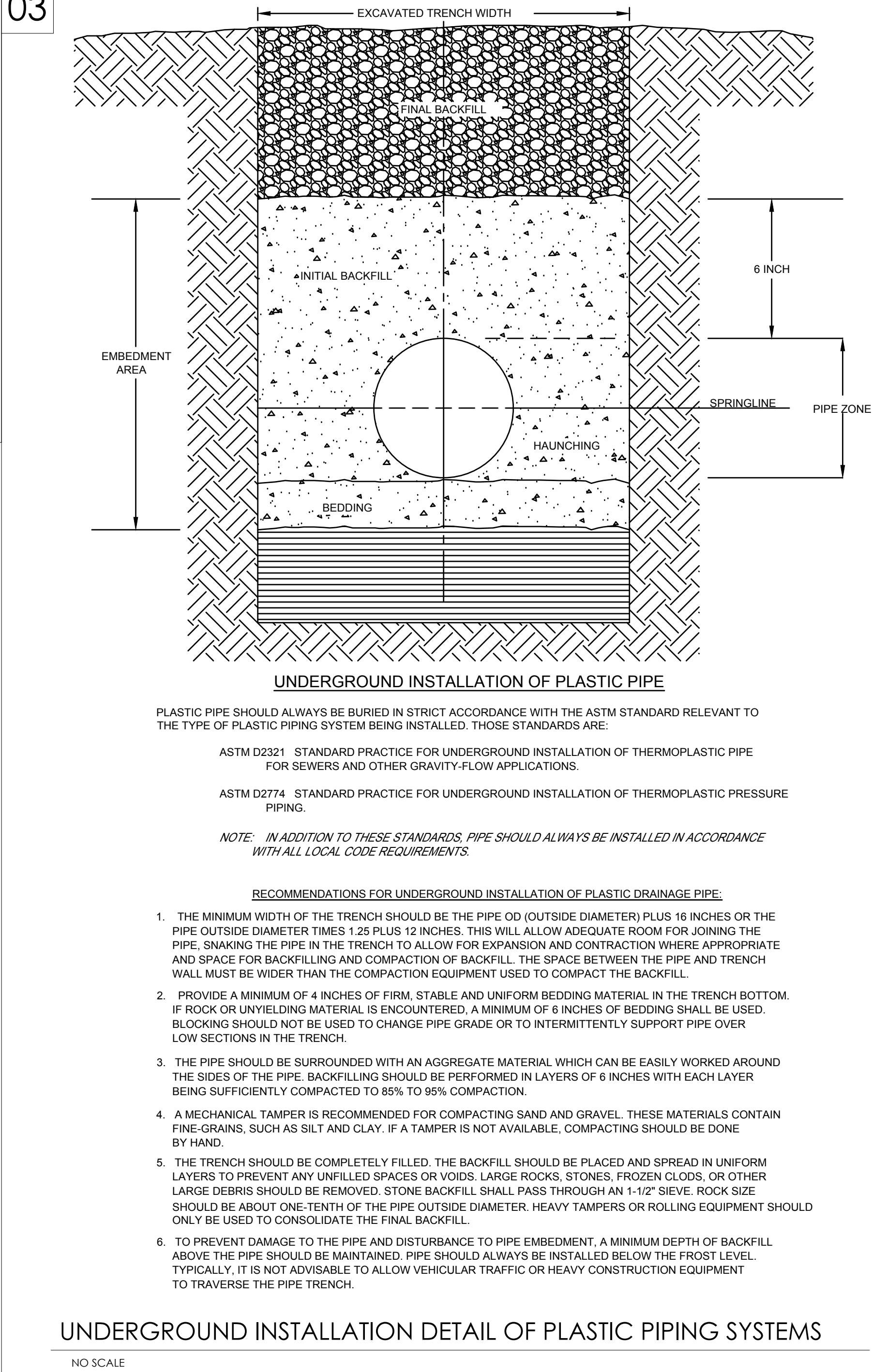
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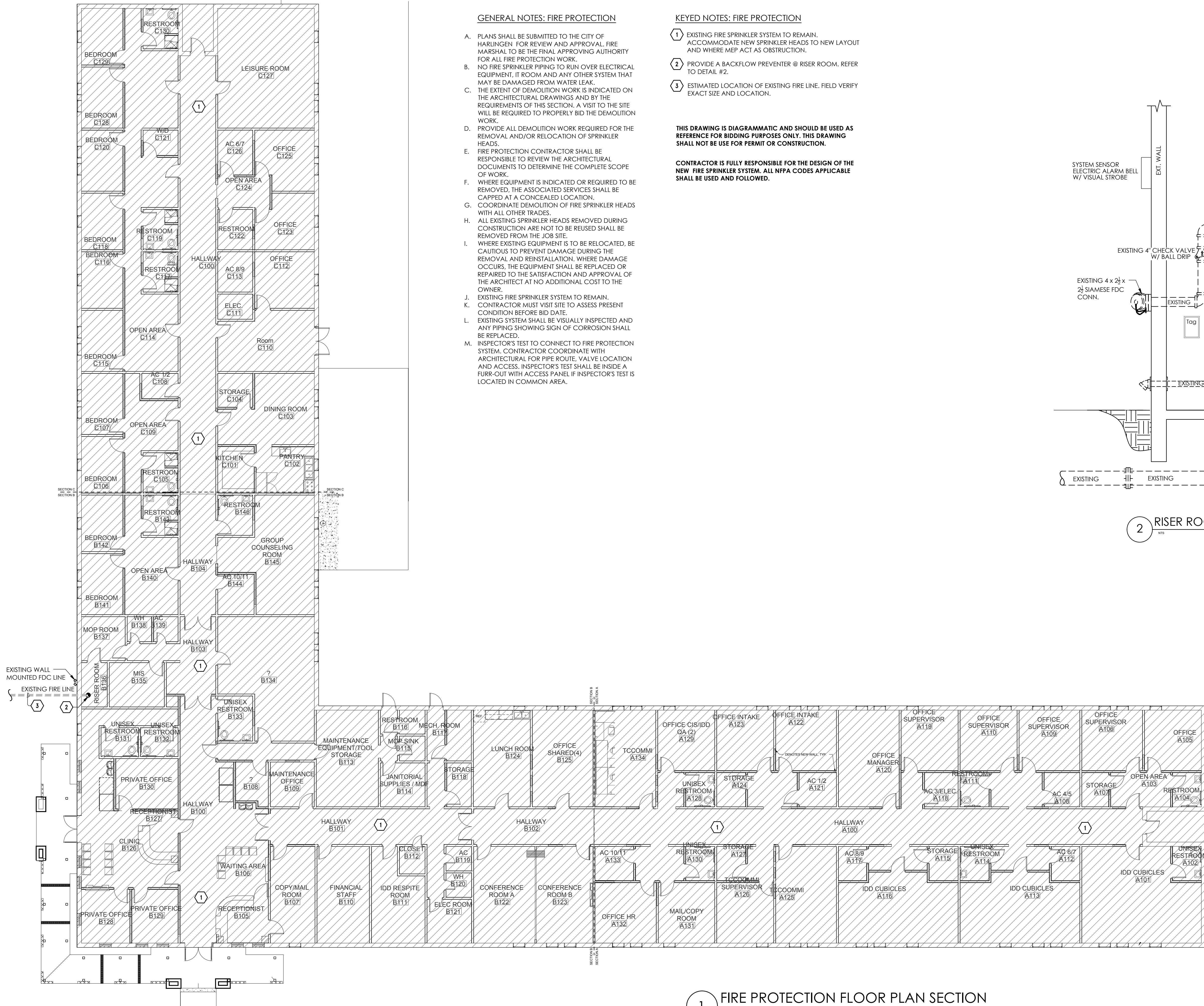


02



03





GENERAL NOTES: FIRE PROTECTION

- PLANS SHALL BE SUBMITTED TO THE CITY OF HARLINGEN FOR REVIEW AND APPROVAL. FIRE MARSHAL TO BE THE FINAL APPROVING AUTHORITY FOR ALL FIRE PROTECTION WORK.
- NO FIRE SPRINKLER PIPING TO RUN OVER ELECTRICAL EQUIPMENT, IT ROOM AND ANY OTHER SYSTEM THAT MAY BE DAMAGED FROM WATER LEAK.
- THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE ARCHITECTURAL DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE WILL BE REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
- PROVIDE ALL DEMOLITION WORK REQUIRED FOR THE REMOVAL AND/OR RELOCATION OF SPRINKLER HEADS.
- FIRE PROTECTION CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW THE ARCHITECTURAL DOCUMENTS TO DETERMINE THE COMPLETE SCOPE OF WORK.
- WHERE EQUIPMENT IS INDICATED OR REQUIRED TO BE REMOVED, THE ASSOCIATED SERVICES SHALL BE CAPPED AT A CONCEALED LOCATION.
- COORDINATE DEMOLITION OF FIRE SPRINKLER HEADS WITH ALL OTHER TRADES.
- ALL EXISTING SPRINKLER HEADS REMOVED DURING CONSTRUCTION ARE NOT TO BE REUSED SHALL BE REMOVED FROM THE JOB SITE.
- WHERE EXISTING EQUIPMENT IS TO BE RELOCATED, BE CAUTIOUS TO PREVENT DAMAGE DURING THE REMOVAL AND REINSTALLATION. WHERE DAMAGE OCCURS, THE EQUIPMENT SHALL BE REPLACED OR REPAIRED TO THE SATISFACTION AND APPROVAL OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
- EXISTING FIRE SPRINKLER SYSTEM TO REMAIN.
- CONTRACTOR MUST VISIT SITE TO ASSESS PRESENT CONDITION BEFORE BID DATE.
- EXISTING SYSTEM SHALL BE VISUALLY INSPECTED AND ANY PIPING SHOWING SIGN OF CORROSION SHALL BE REPLACED.
- INSPECTOR'S TEST TO CONNECT TO FIRE PROTECTION SYSTEM. CONTRACTOR COORDINATE WITH ARCHITECTURAL FOR PIPE ROUTE, VALVE LOCATION AND ACCESS. INSPECTOR'S TEST SHALL BE INSIDE A FURR-OUT WITH ACCESS PANEL IF INSPECTOR'S TEST IS LOCATED IN COMMON AREA.

KEYED NOTES: FIRE PROTECTION

- EXISTING FIRE SPRINKLER SYSTEM TO REMAIN. ACCOMMODATE NEW SPRINKLER HEADS TO NEW LAYOUT AND WHERE MEP ACT AS OBSTRUCTION.
- PROVIDE A BACKFLOW PREVENTER @ RISER ROOM. REFER TO DETAIL #2.
- ESTIMATED LOCATION OF EXISTING FIRE LINE. FIELD VERIFY EXACT SIZE AND LOCATION.

THIS DRAWING IS DIAGRAMMATIC AND SHOULD BE USED AS REFERENCE FOR BIDDING PURPOSES ONLY. THIS DRAWING SHALL NOT BE USED FOR PERMIT OR CONSTRUCTION.

CONTRACTOR IS FULLY RESPONSIBLE FOR THE DESIGN OF THE NEW FIRE SPRINKLER SYSTEM. ALL NFPA CODES APPLICABLE SHALL BE USED AND FOLLOWED.

2 RISER ROOM DETAIL

1 FIRE PROTECTION FLOOR PLAN SECTION
3/32" = 1'-0"

TRINITY
MEP ENGINEERING

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