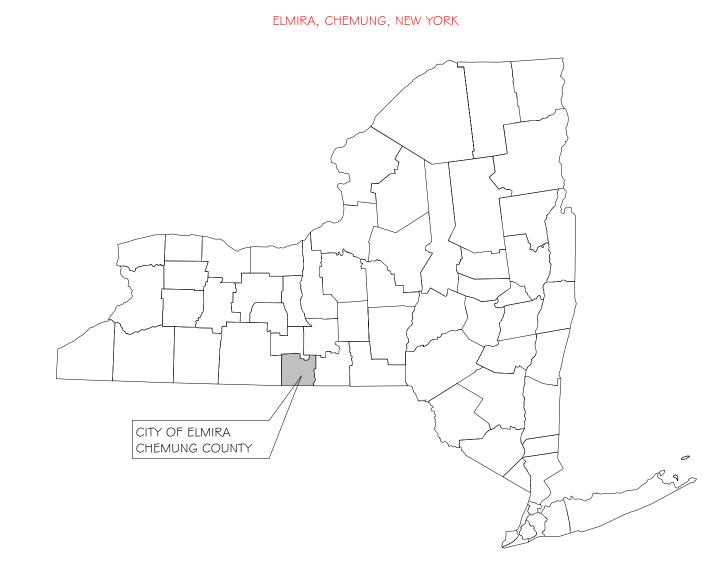
# ELMIRA CIVIL WAR VISITOR CENTER PHASEI

ELMIRA, NEW YORK



### PROJECT LOCATION MAPS

### STATE/COUNTY



### **LOCATION MAP**

637-639 WINSOR AVE, ELMIRA, NY 14901



### **BASE BID**

- CONCRETE FOUNDATION AND SLAB - FRONT \$ REAR SIDEWALK SLAB AND ENTRY COVERING
- ALL EXTERIOR WALLS AND ROOF - INTERIOR WALLS @ BATHROOMS/ HALLWAY
- STAIRS TO LOFT SPACE
- LOFT ABOVE BATHROOMS AND HALLWAY - UNDERSLAB PIPING WITH STUB UP TO ALL FIXTURES
- POWER TO EXTERIOR WALL OUTLETS
- INTERIOR LIGHTING IN MAIN SPACE - EXTERIOR LIGHTING AT ENTRANCES

# PROJECT ALTERNATIVES

ADD ALTERNATE #1 - PROVIDE RESTROOMS, STAIRS, AND JANITOR CLOSET ON FIRST FLOOR WITH ELECTRICAL AND MECHANICAL LOFT SPACE ABOVE. INCLUDE ASSOCIATED ELECTRICAL, MECHANICAL, AND PLUMBING.

ADD ALTERNATE #2 - PROVIDE BUSINESS OFFICE AND EXECUTIVE OFFICE ON FIRST FLOOR AND EXTEND ELECTRICAL AND MECHANICAL LOFT SPACE ABOVE. INCLUDE ASSOCIATED ELECTRICAL AND MECHANICAL.

FUTURE AREA (NOT IN CURRENT SCOPE/ PHASE TWO) - PROVIDE RECEPTION, GIFT SHOP, GALLERY, ARCHIVE, WORKSPACE, AND CLASSROOM. INCLUDE ASSOCIATED ELECTRICAL AND MECHANICAL.

#### CONTRACT NOTES

# DRAWING INDEX

- CS COVER SHEET SYMBOLS AND ABBREVIATIONS
- C-I.I CODE REVIEW, LIFE SAFETY, AND SPECIFICATIONS
- C-1.2 ADA COMPLIANCE DETAILS
- C-1.3 ARCHITECTURAL SPECIFICATIONS

### STRUCTURAL SPECIFICATIONS

- FOUNDATION PLAN

#### FIRST FLOOR AND LOFT CONSTRUCTION PLANS

- FIRST FLOOR REFLECTED CEILING PLAN

- A-5. I ENLARGED CONSTRUCTION PLANS( ADD ALTERNATE # I)
- A-5.3 ENLARGED CONSTRUCTION PLANS (ADD ALTERNATE #2) A-7. I DOOR AND WINDOW SCHEDULES AND DETAILS

### MECHANICAL

- M-1.0 MECHANICAL NOTES, LEGENDS \$ SCHEDULES MECHANICAL FIRST FLOOR PLAN
- M-1.2 MECHANICAL SECOND FLOOR PLAN
- M-2.1 MECHANICAL DETAILS

#### PLUMBING PLUMBING SPECIFICATIONS, SCHEDULES, \$ NOTES

- FIRST FLOOR DOMESTIC SUPPLY PIPING PLAN
- P-1.2 SECOND FLOOR DOMESTIC SUPPLY PIPING
- P-2. I FIRST FLOOR SANITARY & VENTING PIPING PLAN P-3.1 PLUMBING DETAILS

### ELECTRICAL

- E-1.0 ELECTRICAL SPECIFICATIONS
- E-1.1 FIRST FLOOR POWER PLAN
- E-1.2 SECOND FLOOR POWER PLAN E-2.1 FIRST FLOOR LIGHTING PLAN
- E-2.2 SECOND FLOOR LIGHTING PLAN E-3.1 ELECTRICAL SCHEDULES AND LEGENDS

PRELIMINARY
NOT FOR CONSTRUCTION 2. NOT APPROVED

> HIS PLAN HAS NOT RECEIVED FINAL APPRO OF ALL REVIEWING AGENCIES. THIS PLAN IS SUBJECT TO REVISIONS UNTIL ALL APPROVALS ARE OBTAINED AND SHOULD NOT BE USED FOR CONSTRUCTION PURPOSES.

10.28.2025

AS NOTED

SITEWORK	PLUMBING	HVAC		ELECTRICAL 8	TECHNOLOGY			ARCHIT	ECTURAL	FIRE & LII	FE SAFETY
SYMBOL DESCRIPTION	SYMBOL DESCRIPTION	SYMBOL DESCRIPTION	SYMBOL DESCRIPTION	DN MFC./NO. \$ REMARKS	SYMBOL DESCRIPTION	MFC./NO. \$ REMARKS	SYMBOL	DESCRIPTION	SYMBOL DESCRIPTION	SYMBOL DESCRIPTION	
CONTROL POINT	VOLUME DAMPER	DUCT W/ MANUAL VOLUME DAMPER		DUNT SPEAKER INTERIOR: BOSCH LBC3086/4 I	MULTI COMPARTMENT SURFACE RACEWAY			ROOM NAME, #, \$ APPROXIMATE AREA	EARTH / COMPACT FILL	HARD WIRED SMOKE DETECTOR	NI-CAD W/ SELF DIAGNOSTICS  NI-CAD W/ SELF DIAGNOSTICS  NI-CAD W/ SELF DIAGNOSTICS
/ UTILITY POLE W ANCHOR	NATURAL GAS PIPING	SUPPLY AIR DIFFUSER	WALL MOUN	EXTERIOR: POLY PLANER MA4056-6"  NT SPEAKER	WALL MOUNT STYLE CAT. 6		# # # A3.J A3.J		POROUS FILL / GRAVEL	CARBON MONOXIDE	NI-CAD W/ SELF DIAGNOSTICS
SIGN	BELOW SLAB SANITARY	GRILLE OR REG.	CEILING MO	OUNTED	TELEPHONE OUTLET  CATEGORY 6 TELEPHONE			WALL SECTION /	CONCRETE / STRUCTURAL	DETECTOR  HEAT DETECTOR	NI-CAD W/ SELF DIAGNOSTICS
O O O SIGN EXG. WATER VALVE	PIPING  ABOVE SLAB SANITARY	FIRE DAMPER	OS OCCUPANC  SINGLE POL	CY SENSOR	OUTLET # = QTY. OF OUTLET IF GREATER THAN ONE	TS	# (A4. )	DETAIL SECTION  INTERIOR ELEVATION	CONCRETE  SAND / ARCHITECTURAL	RECESSED SPRINKLER HEAD	
	PIPING  BELOW SLAB STORM	THERMOSTAT	3 WAY SWI		∏ #### IP TELEPHONE LOCATION		4(A5.1) 2	CALLOUT	PRECAST CONCRETE  BRICK / BRICK PAVERS	SEMI-RECESSED	
	(ROOF DRAINAGE) PIPING  ABOVE SLAB STORM	THERMOSTAT W/ GUARD	3		#### = PHONE TYPE  HORN TYPE SPEAKER		3	EXTERIOR ELEVATION	CONCRETE MASONRY	SPRINKLER HEAD  AUDIO ALARM DEVICE	
UTILITY POLE W/ LIGHT	(ROOF DRAINAGE) PIPING	GENCOR	\$ 4 WAY SWI		SPEAKER VOLUME CONTROL		# 2	CALLOUT  DETAIL / TITLE NUMB		LUZION (IGUAL DEL IIOF	
STREET LIGHT	CONDENSATE DRAIN	MITERED EL BOW W/ TURNING	SWITCH OCCUPANC			-	# A5.J	COLUMN GRID LINE	TITUTE FINISH WOODWORK	FIRE ALARM PULL BOX	SIMPLEX 4099-900 I
EXG. FIRE HYDRANT	CD —(CD) PIPING	VANES	S <sub>LV</sub> LOW VOLTA	AGE SWITCH DUAL TECHNOLOGY			A — —	-		STATION	31WII LLX 4099-9001
NEW FIRE HYDRANT	EXISTING PIPING TO REMAIN	FIRST # IS DUCT WIDTH SIZE	DUPLEX REC	CEPTACLE PASS \$ SEYMOUR PS53G2 20A RATING	© CLOCK			CUT LINE	NOMINAL CUT LUMBER, CONTINUOUR BLOCKING	FACP FIRE ALARM CONTROL PANEL	
CATCH BASIN / DRYWELL	EXISTING PIPING & EQUIP. TO BE REMOVED	POINT OF CONNECTION	GFI RECEPT	FACLE PASS \$ SEYMOUR PS2095 20A RATING, I 20V	TELEVISION OUTLET			MATCH LINE	BLOCKING, SHIM	# EGRESS CAPACITY	
⊗ CURB BOX VALVE	CHECK VALVE	DUCT DOWN	WEATHERPR	ROOF RECEPTACLE PASS \$ SEYMOUR PS2094 20A RATING, INSTALLED W/ WATER TIGHT	PROJECTOR		Q	CENTERLINE -	PLYWOOD / PARTICLEBOARD	ACCESSIBLE ENTRANCE	
EXISTING DECIDUOUS TREE	FLOOR PENETRATION	DUCT UP		HOUSING	INTERACTIVE BOARD		FIN. IST FLOOR	ELEVATION INDICATO	PLASTIC / SOLID SURFACE	EXIT SIGN W/DOOR HEAD EMERGENCY LIGHTS	
EXISTING CONIFEROUS TREE	ACID WASTE	DUCT PENETRATION THRU FLOOR OR ROOF ABOVE	QUADPLEX	PASS ≰ SEYMOUR PS5262	AUDIO / VIDEO CONNECTION TO PROJECTOR	15	REF	ER TO CASEWORK	- BATT INSULATION	WALL MOUNTED EXIT SIGN. ARROW INDICATING DIRECTIO	NO
X 941.5 EXG. ELEVATION	ACID VENT	SUPPLY	SPECIAL PU RECEPTACL		# SECURITY CAMERA # = CAM NUMBER		N SC	HEDULE	RIGID INSULATION	DUAL HEAD EMERGENCY LIGH	IT I
+ 941.5 NEW ELEVATION	HOT WATER SUPPLY PIPING	DUCT PENETRATION THRU FLOOR OR ROOF ABOVE	FUSED DISC		INTERCOM		IOO-A WIN	DOW NUMBER	FIREPROOFING	EXTERIOR REMOTE HEAD EMERGENCY LIGHT	
EXISTING MANHOLE	HOT WATER RETURN PIPING	EXHAUST OR RETURN	J JUNCTION E	BOX	LIGHTING ARRESTOR		(100-1) DO	OR NUMBER	GLAZING	WALL MOUNTED PORTABLE FIRE EXTINGUISHER W/SIGNAGE	GE
NEW MANHOLE	C CONDENSATE DRAIN	AAD D AUTOMATIC DAMPER	MOTOR	SEE ELECTRICAL EQUIPMENT SCHEDULE	COMMUNICATIONS  RACEWAY DEVICE LOCATION		IA —	WALL PARTITION TYP	E LATH AND PLASTER	I HR RATED FIRE WAI	
EDGE OF STREAM OR	RS — REFRIGERANT SUCTION	D-I DIFFUSER NUMBER CFM	DATATELEP	PHONE NETWORK PROVIDE BOX \$ 3/4" CONDUIT TO 6"	COMMUNICATIONS BACKBOX LOCATION			MOLITION KEYNOTE	CARPET	2 HR RATED FIRE WAI	LL
SWALE SHRUBBERY, WOODS	REFRIGERANT LIQUID PIPING	GRILLE NUMBER CFM	JACK  # DATA	ABOVE FIN. CEILING/ CONCEALED SPACE  CATEGORY 6 DATA OUTLET	EMERGENCY LIGHTING	SEE LIGHTING FIXTURE SCHEDULE	DR.	AWING KEYNOTE	TERRAZZO	3 HR RATED FIRE WAI	LL
EXISTING CULVERT	EXG. PIPING \$ EQUIPMENT	REGISTER NUMBER CFM	7	TY DATA DROPS  ACCESS POINT PROVIDE 3/4" SLEEVE AND BACK BOX IN	HIGH BAY PENDANT	SEE LIGHTING FIXTURE SCHEDULE		RKERBOARD AND	CERAMIC TILE - SECTION	EGRESS PATH	
NEW CULVERTS WITH END	TO REMAIN  (OR) SHUT-OFF VALVE	300	<u> </u>	WALL.  (IMITY READER MOUNT AT 4'-6" AFF. PROVIDE CONDUIT \$	MOUNT  2x2 FLAT PANEL	SEE LIGHTING FIXTURE SCHEDULE	TO	LET ACCESSORY	GYPSUM WALL BOARD	ALTERNATE FORESS	
SECTION TEST PIT	TOP PIPE CONNECT		CR DOOR CON	BACK BOX.	RECESSED MOUNT  WALL PACK LIGHT FIXTURE	SEE LIGHTING FIXTURE SCHEDULE	TAC	;  E EXTINGUISHER	GENERAL SYMBOL ANNOTATIONS:	PATH PATH FUTURE AREA NOT IN PROJECT	CT
TP-*	BOTTOM PIPE CONNECT			SPECIFICATIONS	OVER DOOR WALL PACK	SEE LIGHTING FIXTURE SCHEDULE		BINET ————————————————————————————————————	"E" = EXISTING TO REMAIN "R" = EXISTING TO BE REPLACED	FACE FIRE ALARM CONTROL PANEL	SIEMENS CERBERUS PRO FC922 (OR
TEST HOLE	BALANCING VALVE/ AUTO.		ES ELECTRIC S		MOUNT  EXIT SIGN LED W/ DUAL	SEE LIGHTING FIXTURE SCHEDULE	CO CO	ORDINATE POINT  OF DRAIN	"RE" = EXISTING TO BE RELOCATED  "WG" = PROVIDE WIRE GUARD  "W-MT" = WALL MOUNT	TACI	EQUAL)
RIP RAP	FLOW CONTROL FITTING/ SPRINKLER UPRIGHT		REX	O EXIT DEVICE	HEADLIGHTS	SEE LIGHTING FIXTURE SCHEDULE	RD RO				
COORDINATE POINT LOCATION	DOMESTIC COLD			ABLE TV OUTLET PROVIDE BOX \$ 3/4" CONDUIT TO 6" ABOVE FIN. CEILING/ CONCEALED SPACE			$\longrightarrow$				
5/8" REBAR W/ SURVEY CAP SET	DOMESTIC COLD WATER PIPING		3 BUTTON	DOOR OPENER	INDUSTRIAL LIGHT FIXTURE	SEE LIGHTING FIXTURE SCHEDULE	V	IT PIPE			
*LINES SHOWN AS SCREENED (GRAY) DENOTE EXISTING	PIPING		360° CAME MOUNT	ERA DOME CEILING PROVIDE 3/4" SLEEVE & BACK BOX AT EXTERIOR WALL LOCATIONS	FLOOD LIGHT FIXTURE	SEE LIGHTING FIXTURE SCHEDULE	EXH	AUST HOOD			
NEW CONTOUR*	DOMESTIC RECIRCULATING WATER PIPING		POLE MOUN CAMERA	NTED EXTERIOR PROVIDE 3/4" SLEEVE & BACK BOX AT EXTERIOR WALL LOCATIONS	SCONCE LIGHT FIXTURE	SEE LIGHTING FIXTURE SCHEDULE		EXISTING WALL / CONSTR. TO REMAIN	1		
EXISTING ELECTRIC*	POINT OF CONNECTION		FA AUDIO-V CEILING MC	VISUAL DEVICE SIMPLEX 4906-9   0   DUNTED							
WATER LINE*			FA VIDEO A	AUDIO DEVICE SIMPLEX 4906-9   27, # IS DECIBEL LEVEL				NEW MASONRY WAL			
SANITARY LINE*				PLY AIR DIFFUSER	-			NEW STUD WALL CONSTRUCTION			
TELEPHONE LINE*			2' x 2' RETU	JRN AIR DIFFUSER	-						
stSTORM SEWER*			I'-O'' x I'-O' DIFFUSER	" SUPPLY AIR	-						
OVERHEAD  FIRSTIC*			DITTOSEK	" EXHAUST GRILL	-						
ELECTIC*  UNDERGROUND	_		CLG MOUN		-						
ELECTRIC*  ROAD CENTER			CABLE TRAY	90 MINUTE BATTERY BACKUP	_						
LINE*  GAS LINE			FIBER OPTION	CAL CABLING							
GGORIGINAL LOT LIN	E		— FO —	MPARTMENT POWER	_						
DEED LINE			POLE FLOOR BOX		_						
			[ B]		_						
PROPERTY LINE			PB PULL BOX								
EXISTING FENCE											
NEW FENCE											
OOOOO GUARD RAIL											
EASEMENT LINE											
CONCRETE MONUMENT	1										

EXISTING IRON ROD

EXISTING IRON PIPE

UTILITY POLE

PRELIMINARY

10.28.2025

PROJECT NO.

25-086

NOT APPROVED THIS PLAN HAS NOT RECEIVED FINAL APPROVAL OF ALL REVIEWING AGENCIES. THIS PLAN IS SUBJECT TO REVISIONS UNTIL ALL APPROVALS ARE OBTAINED AND SHOULD NOT BE USED FOR CONSTRUCTION PURPOSES. FRIENDS OF ELMIRA CIVIL WAR PRISON CAMP

BBREVIATIONS	CLG CEILING CLO CLOSET	FAI FAS	FRESH AIR INTAKE FASTENER	INFO INS	INFORMATION INSULATE(D)	<u>N</u>		<u>R</u>	TEMP TF	TEMPORARY, TEMPERATURE TRANSPARENT FINISH	10-25
A	CLR CLEAR(ANCE)	FB	FACE BRICK	INSMTL	INSULATED METAL	NA NOT AVAILABLE, NOT APPLICABLE	R	RISE(R)	THK	THICK(NESS)	1-1
AREA	CLS CLOSURE	FBO	FINISHED BY OTHERS	INT	INTERIOR	NAT NATURAL	RA	RETURN AIR	THR	THRESHOLD	
AIR CONDITIONING	CMP CORRUGATED METAL PIPE	FBR	FIBERBOARD	INTERM	INTERMEDIATE	NEC NATIONAL ELECTRICAL CODE, NECESSARY	RAD	RADIUS	TKBD	TACKBOARD	NS C
ANCHOR BOLT	CMU CONCRETE MASONRY UNIT	FC	FAN COIL	INV	INVERT (ELEVATION)	NEG NEGATIVE	RBR	RUBBER	TKS	TACKSTRIP	/ REVISIONS ED FOR BID
ABOVE ALTERNATING CURRENT	CO CLEANOUT, COMPANY COL COLUMN	FCU FD	FAN COIL UNIT FLOOR DRAIN		IRON PIPE / IRON PIPE SIZE	N/F NOW OR FORMERLY NIC NOT IN CONTRACT	RBT RC	RABBET REINFORCED CONCRETE	TMBR	TILE TERMINATION BAR	
ACOUSTIC CEILING TILE	COMB COMBINATION	FDN	FOUNDATION	_	<u>J</u>	NL NAILABLE	RCP	REINFORCED CONCRETE PIPE	TOF	TOP OF FOOTING	/R
W ALUMINUM CLAD WOOD	COMP COMPACT(ED)	FDR	FOLDING DOOR	JC	JANITOR'S CLOSET	NMT NONMETALLIC	RCP	REFLECTED CEILING PLAN	TOJ	TOP OF JOIST	
AREA DRAIN	CONC CONCRETE	FE	FIRE EXTINGUISHER	JF	JOINT FILLER	NO NUMBER	REF	REFERENCE	TOL	TOLERANCE	SSUE
D ADDENDUM	CON CONNECTOR, CONNECTION	FEC	FIRE EXTINGUISHER CABINET	JNT	JOINT	NOM NOMINAL	REFR	REFRIGERATE(D), REFIRGERATOR	TOM	TOP OF MASONRY	$ \Omega $
H ADHESIVE	CONST CONSTRUCTION	FF	FINISHED FLOOR	JST	JOIST	NRC NOISE REDUCTION COEFFICIENT	REG	REGISTER	TOPO	TOPOGRAPHY, TOPOGRAPHIC	0
DJ ADJACENT	CONT CONTINUOUS, CONTINUE	FFE	FINISH FLOOR ELEVATION		<u> </u>	NS NEAR SIDE	REINF	F REINFORCE(D), REINFORCING	TOS	TOP OF STEEL	7 H − − − − − − − − − − − − − − − − − −
O AUTOMATIC DOOR OPENER	CONTR CONTRACT(OR)	FG	FIBERGLASS		<u>^</u>	NTS NOT TO SCALE	REQ	REQUIRED	TOW	TOP OF WALL	125 I I OR AN OBER TI CHITEC
ARCH EXPOSED STRUCTURAL STEEL	COORD COORDINATE	FGL	FIBERGLASS	KIT	KITCHEN	-	RES	RESILIENT	TPD	TOILET PAPER DISPENSER	© 20 IGN
F.F. ABOVE FINISH FLOOR	CP CLAY PIPE	FIG	FIGURE	KO	KNOCKOUT	<u> </u>	RET	RETURN	TR	TRANSOM	3HT DES NOFI
G AGGREGATE	CPG COPING CPR COPPER	FIN	FINISH(ED) FLOOR CLEANOUT	- KPL	KICKPLATE	OA OVERALL OBS OBSCURE	REV	REVISED, REVISION(S) ROOFING	TWP	TELEVISION, CABLE TOWNSHIP	YRIC JH I
G AGGREGATE U AIR HANDLING UNIT	CPT CARPET(ED)	FLEX	FLEXIBLE		<u>L</u>	OC ON CENTER(S)	RFH	ROOF HATCH	TYP	TYPICAL	COP DRA SAVIG
T ALTERNATE	CR COLD ROLLED	FLG	FLASHING	L	LENGTH	OD OUTSIDE DIAMETER	RFL	REFLECT(ED), (IVE), (OR)	TPTN	TOILET PARTITION	T PER PROP
UM ALUMINUM	CRS COURSE(S)		FLOURESCENT	LAB	LABORATORY	OFF OFFICE	RH	RIGHT HAND	TZ	TERRAZZO	
IP AMPERAGE	CS COVER SHEET	FLR	FLOOR(ING)	LAD	LADDER	O/H OVERHEAD	RIM	RIM (ELEVATION)		1.1	
C ANCHOR(AGE)	CSMT CASEMENT	FO	FRAMED OPENING	LAM	LAMINATED	OHG OVERHANG	RL	RAIL(ING)		<u>U</u>	
OD. ANODIZED	CST CAST STONE	FOC	FACE OF CONCRETE	LAT	LATITUDE, LATITUDINAL	OPG OPENING	RM	ROOM	U/G	UNDERGROUND	
PROX. APPROXIMATE	CT CERAMIC TILE	FOF	FACE OF FINISH	LAV	LAVATORY	OPH OPPOSITE HAND	RMV	REMOVE	UC	UNDERCUT	
CH ARCHITECT(URAL)	CTR COUNTER	FOM	FACE OF MASONRY	LBL	LABEL	OPP OPPOSITE SUBSACE	RO	ROUGH OPENING	UN 	UNLESS NOTED	<b>         </b>
ASBESTOS CONTRACTOR	CU CUBIC	FOS	FACE OF STUDS	LED	LIGHT EMITTING DIODE	OPS OPPOSITE SURFACE	ROW		UNF	UNFINISHED  LINLESS OTHERWISE NOTED	
BC ASBESTOS CONTRACTOR  PH ASPHALT	CULV CULVERT  CV CHECK VALVE	FDI	FIRE PROOF	LCME	LINEAR FOOT LIGHT GAUGE METAL FRAMING	ORIG ORIGINAL OWSJ OPEN-WEB STEEL JOIST	PPN 4	RADIANT PANEL REVOLUTIONS PER MINUTE	UON	UNLESS OTHERWISE NOTED  UNPAINTED	(149)
/G AMERICAN WIRE GAGE	CV CHECK VALVE  CW COLD WATER	FR	FLOOR PLATE FRAME(D), FRAMING	I H	LEFT HAND	OVVOJ OI LIN-VVLD JILLL JUIJI	R2	RIENFORCING STEEL	UNF	URINAL	( <b>,</b>
/N AWNING	CW COLD WATER  CY CUBIC YARD	FRT	FIRE-RETARDANT	LIC	LICENSE(D)	<u> </u>	RT	RUBBER TILE	UH	UNIT HEATER	
X AUXILARY		F5	FRAME SIZE	LIN	LINEAR	P PLUMBING	RTE	ROUTE	UL	UNDERWRITER'S LABORATORIES	NHTS, N
	_ <u>ບ</u>	FT	FOOT, FEET	LINO	LINOLEUM	PA PUBLIC ADDRESS	RWC		UNEX	UNEXCAVATED	
<u>B</u>	DBL DOUBLE	FTG	FOOTING	LIQ	LIQUID	PAR PARALLEL		S	UV	UNIT VENTILATOR	ШШ≝≴
BLOWER CONTROL UNIT	DC DIRECT CURRENT	FUR	FURRED, FURRING	LKR	LOCKER	PART PARTITION		<del>-</del>		V	
BRICK CONTROL JOINT	DEG DEGREE	FURN	FURNITURE	LL	LIVE LOAD	PB PANIC BAR	SAN	· ,		<u>v</u>	
CNYS BUILDING CODE OF NEW YORK STATE	DEMO DEMOLISH, DEMOLITION	FXT	FIXTURE	LLH	LONG LEG HORIZONTAL	PBD PARTICAL BOARD	SB	SPLASHBLOCK	V	VENT, VOLT, VOLTAGE	
BOARD	DF DRINKING FOUNTAIN		G	LLV	LONG LEG VERTICAL	PLBG PLUMBING	SC	SOLID CORE	VB	VINYL/RUBBER BASE	STREE
J BRICK EXPANSION JOINT	DH DOUBLE HUNG			LMS	LONGITUDE LONGITUDINAL	PC PLUMBING CONTRACT(OR)	SCHE		VCP	VITRIFIED CLAY PIPE	1 T E E
BELOW  BEVELED	DIA, Ø DIAMETER  DIAG DIAGONAL, DIAGRAM	GA GA	GAS GAGE, GAUGE	LONG	LONGITUDE, LONGITUDINAL LIGHT PLATE	PCC PRECAST CONCRETE PCF POUNDS PER CUBIC FOOT	SCN SD	SCREEN SMOKE DETECTOR	VENT	VINYL COMPOSITION TILE  VENTILATOR	ll d "
F BOARD FEET	DIM DIMENSION	GALV	GALVANIZD	I PT	LOW POINT	PE PORCELAIN ENAMEL	SDG			V) VERTICAL	=
EL BELOW	DIV DIVISION	GB	GRAB BAR	LRG	LARGE	PEN PENETRATION	SEC	SECTION	VEST	VESTIBULE	
BOARD FEET	DL DEAD LOAD	GC	GENERAL CONTRACT(OR)	LS	LANDSCAPE	PERF PERFORATE(D)	SF	SQUARE FOOT	VF	VINYL FABRIC	
T BITUMINOUS	DLV DOOR LOUVER	GCMU	GLAZED CMU	LT	LIGHT	PERI PERIMETER	SFGL	SAFETY GLASS	VIF	VERIFY IN FIELD	
BUILDING LINE	DMPR DAMPER	GD	GRADE, GRADING	LTG	LIGHTING	PERM PERMANENT	SFR	STORE FOR REUSE	VIN	VINYL	
DG BUILDING	DN DOWN	GF	GRANULAR FILL	LTL	LINTEL	PERP PERPENDICULAR	SGT	STRUCTURAL GLAZED TILE	VJ	V-JOINT(ED)	
K BLOCK	DOZ DOZEN	GFI	GROUND FAULT INTERRUPTER	LVL	LAMINATED VENEER LUMBER, LEVEL	PFB PRE FABRICATE(D)	SH		VOL		
KG BLOCKING	DP DAMP-PROOFING	GI	GALVANIZED IRON	LVR	LOUVER	PFN PREFINISHED	SHT	SHEET	VWC	VINYL WALL COVERING	
M BENCH MARK	DR DOOR	GL	GLASS, GLAZING		M	PG PLATE GLASS	SHTG		VAR	VARIABLE, VARIES	
D BOTTOM OF BOTTOM OF FOOTING	DS DOWNSPOUT DT DRAIN TILE	GP GRM	GALLONG BER MINUTE	NAACH	MACHINE	PKG PARKING PL PROPERTY LINE	SHW	'R SHOWER SIMILAR	_	VARIABLE AIR VOLUME BOX  VENT THROUGH ROOF	
OT BOTTOM OF FOOTING	DTA DOVETAIL ANCHOR	GPM GSS	GALLONS PER MINUTE  GALVANIZED STEEL SHEET	_	MAHOGANY	PLAM PLASTIC LAMINATE	SKI	SKYLIGHT			
6MT BASEMENT	DTL DETAIL	GST	GLAZED STRUCTURAL TILE		MAINTENANCE	PLAST PLASTER	SL	SLIDING	_	W	
U BRITISH THERMAL UNIT	DW DISHWASHER	GVL	GRAVEL GRAVEL		MANUFACTURER	PLF POUNDS PER LINEAR FOOR	SNT	SEALANT	W	WIDE, WIDTH, WASTE, WATT, WEST	
TUH BRITISH THERMAL UNIT PER HOUR	DWG DRAWING	GWB	GYPSUM WALL BOARD	_	MASONRY	PLS PLASTIC	SP	SOUND PROOF	W/	WITH	
PL BEARING PLATE		GYP	GYPSUM	MATL	MATERIAL	PLT PLATE	SPC	SPACER	W/O	WITHOUT	
D BOARD	<u>E</u>		•	MAX	MAXIMUM	PLYWD PLYWOOD	SPEC	SPECIFICATION(S)	WB	WOOD BASE, WET BULB	
RG BEARING	EBCNYS EXISTING BUILDING CODE OF NEW YO	ORK STATE	<u> </u>	MBF	MEMBER	PNL PANEL	SPKR		WC	WATER CLOSET (TOILET) WOOD	
RK BRICK	EC ELECTRICAL CONTRACTOR	НВ	HOSE BIB	MC	MECHANICAL CONTRACT(OR)	PNT PAINT(ED)	SPL	SPECIAL	W/F	WALL FIN RADIATION	
RM BEDROOM	EF EACH FACE	HC	HVAC CONTRACTOR	MDF	MEDIUM DENSITY FIBERBOARD	POB POINT OF BEGINNING	5Q SSr	SQUARE	WG	WIRE(D) GLASS	
BOTH SIDES	EIFS EXTERIOR INSULATED FASCIA SYSTEM		HANDICAP	MDO	MEDIUM DENSITY OVERLAY	POL POLISHED	55K	SERVICE SINK	WH	WATER HEATER, WALL HYDRANT	
JR BUILT-UP ROOF  BOTH WAYS	EJ EXPANSION JOINT EL ELEVATION	HDIT	HEAVY DUTY HEAD JOINT	NAFCH	MEDIUM MECHANICAL	POS POSITIVE PR PAIR	]]]  ST	STAINLESS STEEL STREET	WHB	WHEEL BUMPER	
DOTH WATE	ELEC ELECTRIC(AL)	HDR	HEADER	MFM	MEMBRANE	PREP PREPARE	STA		WI	WROUGHT IRON	
<u>U</u>	ELEV ELEVATOR	HDW	HARDWARE	MFD	MANUFACURED	PRF PREFORMED	STV	SOUND TRANSMISSION COEFFICIENT	WM	WIRE MESH	
CHANNEL	EMER EMERGENCY	HDWD	HARDWOOD	MFG	MANUFACTURING	PROJ PROJECT	STD	STANDARD	WCO	WALL CLEANOUT	III Ä
C CENTER TO CENTER	ENC ENCLOSE, ENCLOSURE	НН	HANDHOLE	MFR	MANUFACTUR(ER)	PRT PRESERVATIVE TREATED	STL	STEEL	WDW	WINDOW	III Z
AB CABINET	ENG ENGINEER	HI	HEIGHT OF INSTRUMENT	MGMT	MANAGEMENT	PSC PRE-STRESSED CONCRETE	STN	STAIN(ED)	WP	WATERPROOF(ED), (ING)	<b>Ⅱ</b>
AP CAPACITY	ENT ENTRANCE	HK	HOOK(5)	MGR	MANAGER	PSF POUNDS PER SQUARE FOOT	STND		WK M/G	WATER REPELLENT WATERSTOP	O R
CATCH BASIN	EOC EVERY OTHER COURSE	HM	HOLLOW METAL	MH	MANHOLE	PSI POUNDS PER SQUARE INCH	STOR		W/S/T	WATERSTOP	III Ég
HUNDRED BOARD FEET	EOD EDGE OF GLAR	HOR	HORIZONTAL	MIN	MINIMUM	PT PRESSURE TREATED	STR		WT	WEIGHT	<b>  </b>
COLD DRAIN  M CEMENT	EOS EDGE OF SLAB	HP	HANDRAII		MIRROR	PTD PAPER TOWEL DISPENSER	<del>                                     </del>	STR SUBSTRUCTURE	WTW	WALL TO WALL	MA A A
	EP ELECTRICAL PANEL	HR	HANDRAIL HARDWARE SET		MARKERBOARD MOULDING, MOLDING	PTN PARTITION PTR PAPER TOWEL RECEPTOR	SUPT		WV	WALL VENT	× 000
CERAMIC  CUBIC FOOT	EQ EQUAL ES EACH SIDE	H5 HT	HARDWARE SET HEIGHT	MLD MMB	MEMBRANE	PTR PAPER TOWEL RECEPTOR PUR POLYURETHANE	SUPT		WWF	WELDED WIRE FABRIC	
CUBIC FOOT  COUNTER FLASHING	EST ESTIMATE(D)	HTG	HEATING	MO	MASONRY OPENING	PV PAVE(D), PAVING	SUSF		WWM	WELDED WIRE MESH	
M CUBIC FEET PER MINUTE	EW EACH WAY	HTR	HEATER	MOD	MODULAR	PVC POLYVINYL CHLORIDE	SW	SWITCH	-	Υ	RA 85
MF COLD-FORMED METAL FRAMING	EWC ELECTRIC WATER COOLER	HTX	HEAT EXCHANGE	MON	MONUMENT	PVCP PVC PIPE	SY	SQUARE YARD		<u>^</u>	OUEC
S CUBIC FEET PER SECOND	EWF ELECTRIC WALL FAN		HEATING, VENTILATION & AIR CONDITION		MOVABLE	PVMT PAVEMENT	5Y5		X	BY (BETWEEN DIMENSIONS)	FRG <b>EL</b>
CABINET HEATER	EXC EXCAVATE	HW	HOT WATER	MRB	MARBLE	PWD PLYWOOD		<del></del>	XSECT	CROSS SECTION	55
1BD CHALKBOARD	EXG EXISTING		HOT WATER HEATER	MRD	METAL ROOF DECKING	PWR POWER	•	<u></u>		V	AS NOT
CAST IRON	EXH EXHAUST		HYDRANT	MNT	MOUNT		T	TREAD			ISSUE DATE
P CAST-IN-PLACE CONCRETE	EXP EXPOSED			MTFR	METAL FURRING	<u> </u>	TRM	TOILET ROOM	YD	YARD ARY	10.28.2
n oincir	EXT EXTERNAL, EXTERIOR		•	MTL	METAL	QA QUALITY ASSURANCE	T¢B	TOP # BOTTOM	_ YR	YEAR PRELIMINARY NOT FOR CONSTRUCTION	PROJECT NO
R CIRCLE		ID	INSIDE DIAMETER	MUL	MULLION	QC QUALITY CONTROL	T#G	TONGE # GROOVE		TOP CONSTRUCTION	<b>11</b>   25-080
CONTROL JOINT	F	ID							1		
CONTROL JOINT CAULK(ING)	<u> </u>	IN	INCH(")	MULT	MULTIPLE	QT QUARRY TILE	TAB	TABULATE		NOT FUR SS	DRAWING NO
CONTROL JOINT	FA FIRE ALARM, FRESH AIR			_	MULTIPLE MILLWORK	QT QUARRY TILE  QTR QUARTER  QTY QUANTITY	TAB	TABULATE TERRA COTTA TELEPHONE		NOT APPROVED  THIS PLAN HAS NOT RECEIVED FINAL APPROVAL	G-1

### FIRE & LIFE SAFETY GENERAL NOTES

- VERIFY LOCATIONS OF NEW WORK REQUIRED FOR CONSTRUCTION.
- 2. THIS CONTRACTOR IS RESPONSIBLE FOR CUTTING \$ PATCHING MADE NECESSARY BY THEIR WORK.
  PATCHING \$ FINISHING SHALL MATCH ADJACENT SURFACES.
- 3. ALL DEBRIS \$ ITEMS SHALL BE REMOVED FROM THE JOB SITE \$ PROPERLY DISPOSED OF, EXCEPT AS DIRECTED BY THE OWNERS REPRESENTATIVE.
  4. COORDINATE ALL WORK WITH THE FUNCTIONS OF ADJACENT AREAS. PROVIDE SLAB CUTTING \$
- PATCHING AS NECESSARY TO MAKE CONNECTIONS.

  5. DO NOT INSTALL ANY FIRE PROTECTION WORK ABOVE ELECTRICAL PANELS.
- 6. SLEEVE & SEAL ALL PIPE PENETRATIONS OF WALLS & FLOORS. PACK VOID BETWEEN PIPE & SLEEVE WITH INSULATION IN NON-RATED WALLS & FLOORS. PACK VOID BETWEEN PIPE & SLEEVE WITH INSULATION IN FIRE-RATED WALLS & FLOORS; APPLY INTUMESCENT FIRE SAFING COMPOUND AT PENETRATION, MAINTAINING INTEGRITY & RATING OF FIRE SEPARATION. SLEEVES THROUGH FLOORS SHALL EXTEND 2" ABOVE FLOOR, BE GROUTED INTO PLACE & WATERPROOFED. PIPING THROUGH
- EXTERIOR WALLS SHALL BE SLEEVED & SEALED WEATHER TIGHT.

  7. COVERAGE SHALL MEET OR EXCEED THE REQUIREMENTS OF NFPA-13. FIELD CONDITIONS MAY DICTATE ADDITIONAL HEADS BE PROVIDED. CONTRACTOR SHALL MAKE PROVISIONS FOR SUCH
- CIRCUMSTANCES. NO ADDITIONAL COSTS WILL BE ALLOWED FOR SUCH SITUATIONS.

  8. CONTRACTOR SHALL VISIT THE SITE AND EXAMINE THE EXISTING CONDITIONS PRIOR TO SUBMITTING THEIR BID. NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR CIRCUMSTANCES ARISING OUT OF CONTRACTORS FAILURE TO PERFORM THIS EXAMINATION.
- 9. FIRE PROTECTION CONTRACTOR TO INSTALL SPRINKLERS AND TEST SYSTEM PER NFPA-13.
  10. THE ENTIRE INSTALLATION OF THE FIRE PROTECTION SYSTEM SHALL BE IN ACCORDANCE WITH "NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE", THE LATEST EDITION OF N.F.P.A. PAMPHLET #13 AND THE OWNER'S INSURANCE CARRIER, AS WELL AS THE LOCAL FIRE DEPARTMENT REGULATIONS.
- I . THE SPRINKLER HEADS INDICATED ON THE PLANS ARE SHOWN FOR BIDDING AND APPROVAL PURPOSES ONLY. THE PIPING SYSTEM MUST BE DESIGNED HYDRAULICALLY BY THE CONTRACTOR TO PROVIDE THE PRESCRIBED DENSITY OVER THE MOST REMOTE SPECIFIED AREA. ANY CHANGES IN LAYOUT REQUIRED BY THE FINAL DESIGN PROCEDURE SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER. THE FOLLOWING ARE DESIGN STANDARDS FOR SPRINKLER WORK. THE
- CONTRACTOR SHALL VERIFY THESE STANDARDS WITH OWNER'S INSURANCE CARRIER.

  12. ALL AREAS: LIGHT HAZARD GROUP, .10 GPM/SQ. FT. OVER 1500 SQ. FT., 225 SQ. FT. PER HEAD MAXIMUM COVERAGE, WET SYSTEM.

### FIRE & LIFE SAFETY SYMBOLS

494	EXIT SIGN W/DOOR HEAD EMERGENCY LIGHTS		OPEN TO BELOW, UNEXCAVATED, OR VERTICAL SHAFT
\$	WALL MOUNTED EXIT SIGN ARROW INDICATING DIRECTION		ACCESSIBLE ENTRANCE
	DUAL HEAD EMERGENCY LIGHT	F	FIRE PULL
<b>Y</b>	EXTERIOR REMOTE HEAD EMERGENCY LIGHT	F	FIRE ALARM W/STROBE
FE	WALL MOUNTED PORTABLE FIRE EXTINGUISHER W/SIGNAGE	<u>(5)</u>	HARD WIRED SMOKE DETECTOR
	EGRESS PATH	©	CARBON MONOXIDE DETECTOR
	ALTERNATE EGRESS PATH	H	HEAT DETECTOR
F¤	AUDIO/VISUAL DEVICE	•	RECESSED SPRINKLER HEAD
F	FIRE ALARM PULL BOX STATION	•	SEMI-RECESSED SPRINKLER HEAD
FACP	FIRE ALARM CONTROL PANEL		DENOTES FUTURE PHASE WALLS

### PROJECT CODE INFORMATION

2020 FIRE CODE OF NEW YORK STATE (NYSFC)

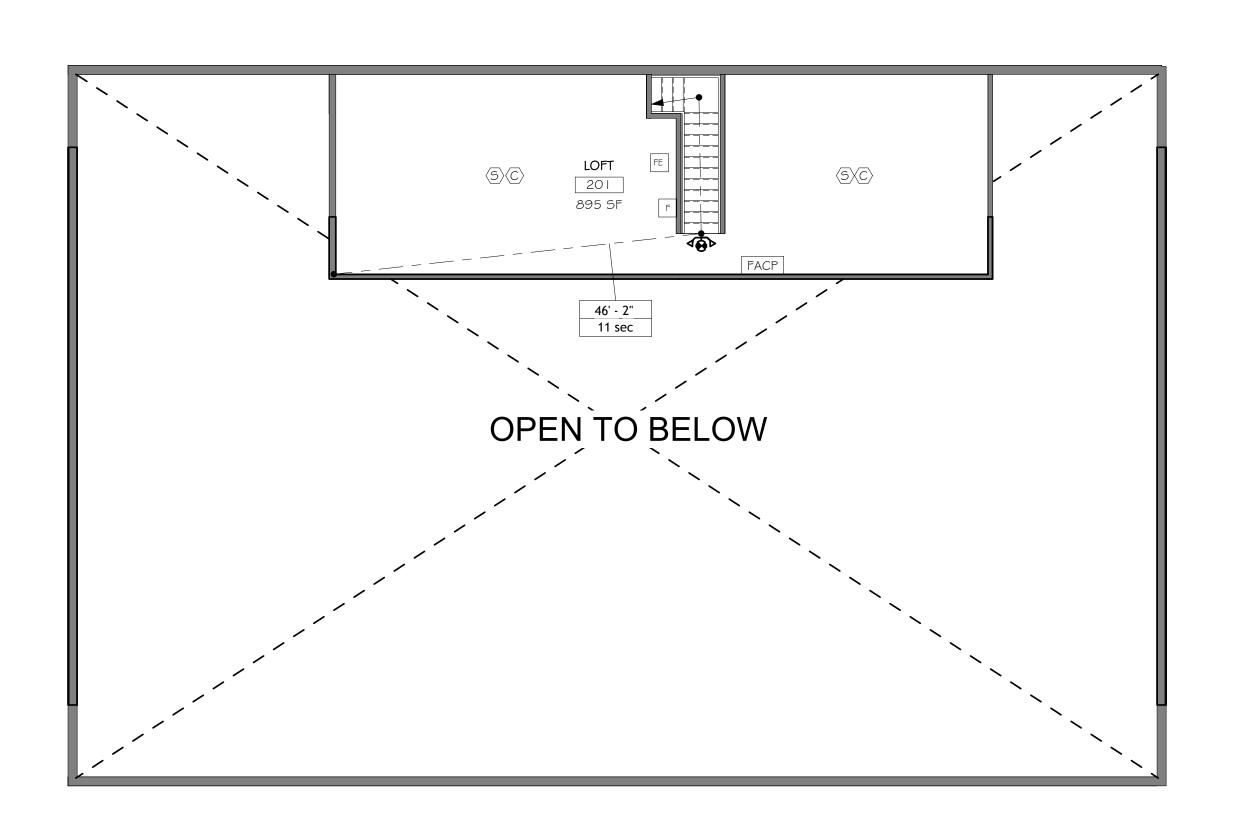
2020 MECHANICAL CODE OF NEW YORK STATE (NYSMC)

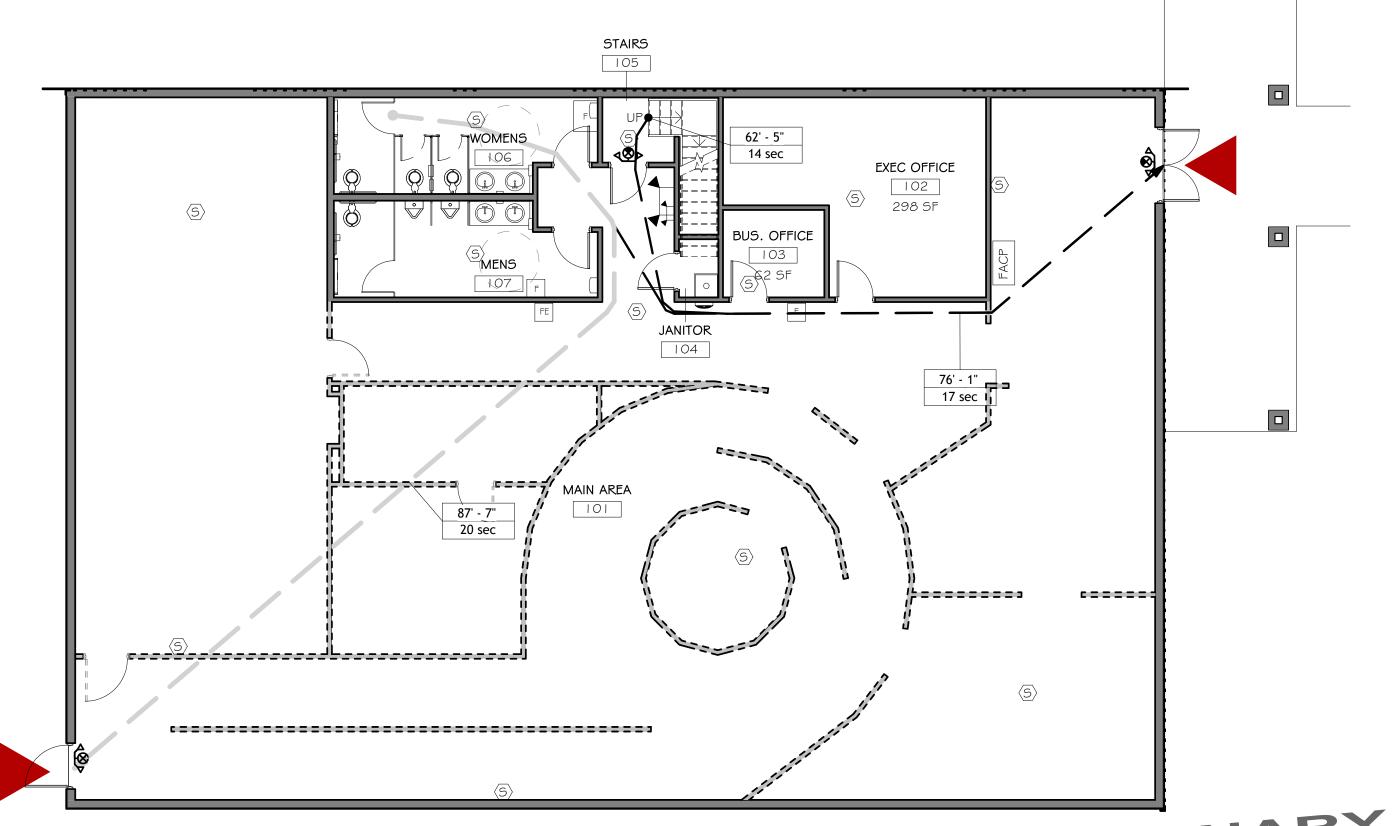
- THE BUILDING SHALL BE IN COMPLIANCE WITH THE MOST RECENT VERSION OF THE FOLLOWING CODES:
- 2020 BUILDING CODE OF NEW YORK STATE (NYSBC)
   2020 PLUMBING CODE OF NEW YORK STATE (NYSPC)
- 2020 ENERGY CONSERVATION CODE OF NY YORK STATE (NYSECC)
   2014 NATIONAL ELECTRICAL CODE (NEC)
  - CC) 2014 NATIONAL ELECTRICAL CODE (NEC)• 2013 ICC/ANSI A117.1
  - CURRENT NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

	EX	ISTING BUILDING INFO		
		NOTES		SECTION
DESCRIPTION	NEW CONSTRUCTION	OF A VISITOR CENTER	FOR THE PRISON CAMP	
CLASSIFICATION OF WORK	NEW CONSTRUCTION			
	OCCUPANCY	CLASS AND SQUARE	FOOTAGE	
OCCUPANCY	CLASS	SQ. FT.	NOTES	SECTION
ASSEMBLY (A-3)	A-3	6,369	BED # BREAKFAST	NYSBC 302-312
		15,898	TOTAL BUILDING	
		CONSTRUCTION TYPE	E	
OCCUPANCY	CONST. TYPE		NOTES	SECTION
A-3	VB			NYSBC 602
	CONSTRI	JCTION TYPE REQUIRE	MENTS	
BUILDING ELEMENT	RATING	CONST. TYPE	NOTES	SECTION
STRUCTURAL FRAME	0	VB		
BEARING WALLS (EXT.)	0	VB		NYSBC TABLE 601
BEARING WALLS (INT.)	0	VB		
NON-BEARING WALLS (EXT.)	0	VB		NYSBC TABLE 602
NON-BEARING WALLS (INT.)	0	VB		NYSBC TABLE 60 I
ROOF CONSTRUCTION	0	VB		NIODO TABLE 601
	ALLOW	ABLE HEIGHTS AND A	REA	
REQUIREMENT	ALLOWABLE	ACTUAL	NOTES	SECTION
BUILDING HEIGHT				NYSBC TABLE
ASSEMBLY (A-3)	60 FT	32 FT   IN	SPRINKLERED	504.3
NUMBER OF STORIES				NYSBC TABLE
ASSEMBLY (A-3)	3 STORIES	2 STORIES	SPRINKLERED	504.4
SQUARE FOOTAGE				NYSBC TABLE
ASSEMBLY (A-3)	18,000	6,369		506.2
	FIRE	PROTECTION SYSTEM	15	
ELEMENT	REQUIRED	PROVIDED	NOTES	SECTION
SPRINKLER SYSTEM	YES	YES	S13 NFPA 13	NYSBC 903
YARD HYDRANTS	N/A	NO		NYSBC 903
STANDPIPE SYSTEMS	NO	NO		NYSBC 905
PORTABLE FIRE EXTINGUISHERS	YES	YES		NYSBC 906
FIRE ALARM/DETECTION SYSTEMS	NO	YES	SMOKE ALARMS PROVIDED	NYSBC 907

	CORF	RIDORS	AND INCIDENTA	L USE AI	REAS				
ELEMENT	RATING				NOTES			SECTION	
FURNACE / BOILER ROOMS (LOFT - MECHANICAL SPACE)	0		SPRINKLER SYS PROVIDED	TEM				NYSBC TABLE 508.9	
			OCCUPANT LOA	D					
FUNCTION OF SPACE	SQ. FT.		RATIO	OCCU	JPANTS	1	NOTES	SECTION	
ASSEMBLY, A-3	4,446		30 NET	1.	43				
BUSINESS	366	l	50 GROSS					NYSBC TABLE	
MECHANICAL	858	3	00 GROSS		3				
		TOTAL	OCCUPANTS	1.	49				
		М	EANS OF EGRES	55					
ELEMENTS	REQUIREMEN	JT			NOTES			SECTION	
OCCUPANTS	149		RE: OCCUPANT	load ae	BOVE				
DOORS & CORRIDORS	0.2" x OCC L0	DAD	44" WIDTH MINI	MUM RF	OUIRED			NYSBC 1005 NYSBC 1010	
STAIRS	0.3" x OCC LC	DAD	- I-I WIDTH WIN	IVIOIVI IL	QUINED			NYSBC 1011.	
TRAVEL DISTANCE	250 FT MA)	<	(SPRINKLERED)					NYSBC TABLE 1017.2	
TOTAL EXITS			,						
FIRST FLOOR EXITS	2							AN/CDC	
SECOND FLOOR EXITS								NYSBC 1006.3	
SECOND FEOOR EXITS	l l	PI	UMBING FIXTUR	FS					
OCCUPANTS	RF	EQUIRED			F	PROVIDED	<u> </u>	SECTION	
ASSEMBLY (A-3)	MALE - 57		FEMALE - 57		MALE	10000	FEMALE	32311311	
WATER CLOSETS (1 PER 75)	1		2	1 \$	2 URINAL		3	NYSPC TABLE	
LAVATORIES (1 PER 200)			1		2		2	403.1	
DRINKING FOUNTAIN (1 PER 500)						1			
SERVICE SINK		1				1			
		EN	ERGY COMPLIAN	ICE					
APPLICABILITY	CHANGE				COMPLY V	VITH IECC		IECC 101	
ALL LICADILITY	OCCUPAN	ICY		IVIUST	COMILT V	VIIII ILCC		ILCC TOT	
CLIMATE ZONE	5A							NYSECC TABLE 301.	
BUILDING ELEMENT	BUILDING ELEMENT TYPE OF CONSTRUCTION REQUIREMENT NOTES						SECTION		
ROOF	ATTIC AND OTH		R38						
	, ATTO AND OTT								
WALLS, ABOVE GRADE	WOOD FRAMED		R-13 + R- OR R2						
WALLS, BELOW GRADE			R-7.5					NNC500 500	
FLOORS	JOIST/FRAMING		R-30					NYSECC 502	
			R-10 FOF	24"	4"				
SLAB-ON-GRADE FLOORS	UNHEATED		BELO\						
OPAQUE DOORS	SWING		U37	,					

WAR





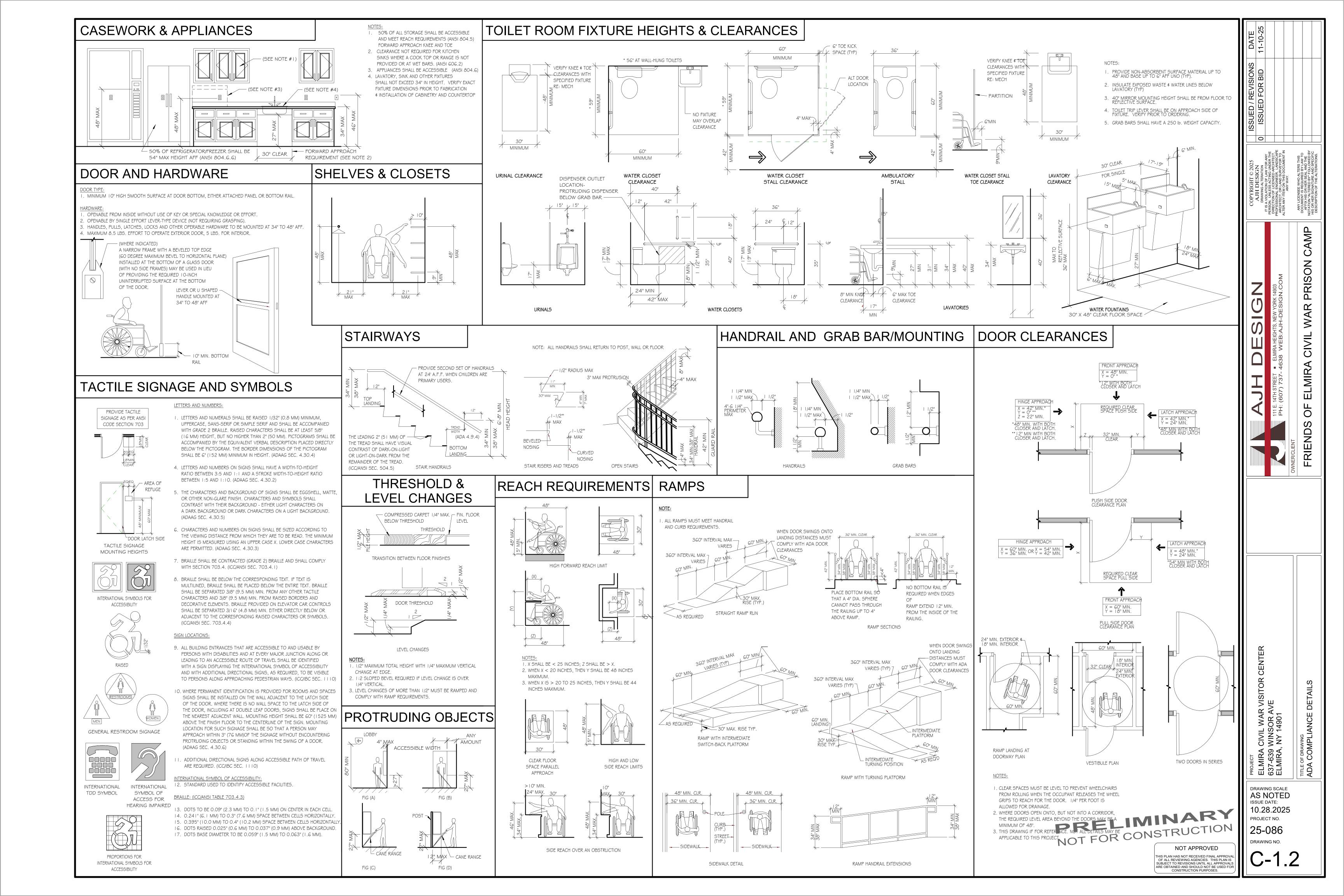
PRELIMINARY
NOT FOR CONSTRUCTION
NOT APPROVED
THIS PLAN HAS NOT RECEIVED FINAL APPROVAL
OF ALL REVIEWING AGENCIES. THIS PLAN IS
SUBJECT TO REVISIONS UNTIL ALL APPROVALS

AS NOTED ISSUE DATE:

10.28.2025

CALLET LIFE SAFETY PLAN

FIRST FLOOR LIFE SAFETY PLAN



### ARCHITECTURAL SPECIFICATIONS

#### DIVISION I / GENERAL REQUIREMENTS 1.1 RE: CIVIL. STRUCT. MECH & ELEC FOR SPECIFICATIONS IN

- ADDITION TO THOSE DESCRIBED BELOW: 1.2 THE LOCALLY ADOPTED STATE BUILDING CODE W/LATEST AMENDMENTS, BULLETINS, AND INTERPRETATIONS AN ALL ADOPTED & REFERENCED SUB CODES, PUBLICATIONS, REPORTS (THE "CODE") APPLIES TO ALL CONSTRUCTION ACTIVITIES (THE "WORK") OF A NATURE AND INTENT INDICATED BY THESE CONSTRUCTION DRAWINGS, SPECIFICATIONS, ADDENDA, ETC. (THE "DOCUMENTS") AT THE STRUCTURE, BUILDING, AND/OR PROJECT/SITE (THE "WORK AREA") REFERENCED HEREIN. THE GENERAL CONTRACTOR (THE "CONTRACTOR" OR "G.C.") SHALL VERIFY ALL CODE REQUIREMENTS BEFORE COMMENCEMENT OF WORK AND BRING ANY DISCREPANCIES BETWEEN CODE REQUIREMENTS AND THE ARCHITECT/ENGINEER. ALL TRADES, I.E. MECHANICAL,
- CONSTRUCTION DOCUMENTS TO THE ATTENTION OF THE ELECTRICAL, AND PLUMBING SUBCONTRACTORS OR INDEPENDENTLY CONTRACTED INDIVIDUAL TRADE CONTRACTORS (THE "CONTRACTORS"), SHALL PERFORM ALL WORK IN ACCORDANCE WITH ANY AND ALL APPLICABLE CODES CURRENTLY IN EFFECT AT THE TIME OF CONSTRUCTION. CONSTRUCTION "ELEMENTS" OR "COMPONENTS" ARE SPECIFIC PORTIONS OF THE PROJECT SCOPE OF WORK OR SITE CONDITIONS ADDRESSED BY THE DRAWING NOTATION.
- OSHA REGULATIONS SHALL APPLY WHERE REQUIRED DURING THE COURSE OF THE WORK AS IT APPLIES TO WORKER SAFETY. CONTRACTOR SHALL DESIGNATE A "SAFETY DIRECTOR" WHO SHALL BE RESPONSIBLE FOR ALL OSHA SAFETY REQUIREMENTS. NOTHING CONTAINED IN THESE DOCUMENTS IN ANY WAY REQUIRES THE ARCHITECT, ENGINEER, OR OWNER TO BE RESPONSIBLE FOR ANY ASPECT OF SAFETY DURING CONSTRUCTION OR TO ENSURE THAT THE CONTRACTOR FOLLOWS WHATEVER SAFETY REGULATIONS MAY BE APPLICABLE.
- 1.4 ALL WORK SHALL BE IN CONFORMANCE WITH ALL FEDERAL, STATE, AND LOCAL CODES AND ACTS, MANUFACTURER'S RECOMMENDATIONS AND INDUSTRY STANDARDS OF GOOD PRACTICE.
- 1.5 ALL MATERIALS SHALL BE AS SPECIFIED AND/OR DETAILED, AND STORED AND INSTALLED IN A WORKMANLIKE MANNER, IN ACCORDANCE WITH APPLICABLE CODES, MANUFACTURER'S RECOMMENDATIONS, AND INDUSTRY STANDARDS OF GOOD PRACTICE ("AS REQUIRED").
- ALL CONTRACTOR SHALL MAINTAIN THE PREMISES CLEAN AND FREE OF ALL TRASH, DEBRIS AND SHALL PROTECT ALL ADJACENT WORK FROM DAMAGE, SOILING, PAINT OVER SPRAY, ETC. ALL FIXTURES, EQUIPMENT, GLAZING, FLOORS, ETC., SHALL BE LEFT CLEAN AND READY FOR OWNER'S INTENDED USE UPON COMPLETION OF THE PROJECT.
- 1.7 THE CONTRACTORS SHALL BRING ERRORS AND OMISSIONS WHICH MAY OCCUR IN CONTRACT DOCUMENTS TO THE ATTENTION OF THE ARCHITECT/ENGINEER AND INSTRUCTIONS SHALL BE OBTAINED BEFORE PROCEEDING WITH AFFECTED WORK. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR RECTIFYING UNACCEPTABLE RESULTS OF ANY ERRORS, DISCREPANCIES, OR OMISSIONS IN THE CONTRACT DOCUMENTS WHICH CAN READILY OR REASONABLY BE DETERMINED AND FOR WHICH THE CONTRACTOR FAILED TO NOTIFY THE ARCHITECT/ENGINEER BEFORE CONSTRUCTION AND/OR FABRICATION OF SUBJECT WORK. THE GENERAL CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS WITHIN THE CONTRACT LIMITS. DEVIATIONS FROM THE CONTRACT DOCUMENTS NECESSITATED BY FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF AND REVIEWED BY THE ARCHITECT/ENGINEER AND INSTRUCTIONS SHALL BE OBTAINED BEFORE PROCEEDING WITH WORK.
- CONTRACTOR TO COORDINATE ALL DIMENSIONS ON PREFABRICATED ITEMS WITH MANUFACTURER'S INSTRUCTIONS.
- CONTRACTOR RESPONSIBLE FOR SUPPLYING ALL RELATED ITEMS REQUIRED FOR CONSTRUCTION, UNLESS OTHER ARRANGEMENTS ARE MADE WITH OWNER. SPECIFIC ITEMS TO BE FURNISHED BY OWNER OR OTHERS ARE NOTED IN THESE DOCUMENTS.
- . 10 CIVIL ENGINEERING AND SITE IMPROVEMENTS. GEOTECHNICAL, ENVIRONMENTAL, TELECOM, AUDIO-VISUAL, COMPUTER, AND SECURITY SYSTEMS, INTERIOR DESIGN & DOCUMENTATION PROVISIONS ARE NOT INCLUDED AS PART OF THE SCOPE OF THESE CONSTRUCTION DOCUMENTS UNLESS SPECIFICALLY NOTED HEREIN. THE GENERAL CONTRACTOR SHALL CONSULT WITH THE OWNER REGARDING THE COORDINATION OF THESE PROVISIONS WITH THE SCOPE OF WORK IDENTIFIED BY THESE DOCUMENTS AND ANY OTHER WORK REQUIRED BY THE OWNER RELATED TO THIS PROJECT AND/OR SUPPLEMENTAL OWNER PROVIDED DOCUMENTATION.
- . I I THE ARCHITECT, ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR WORK COMPLETED BY CONTRACTOR(S) THAT DEVIATES FROM ADOPTED APPLICABLE CODES, OR THE INTENT OF THESE DOCUMENTS. THE G.C. SHALL RECTIFY ALL NON-CONFORMANCE ISSUES IN ORDER TO COMPLY WITH CODE AND THE INTENT OF THESE DOCUMENTS AT NO ADDITIONAL COST TO THE OWNER, ATTAINMENT OF A CERTIFICATE OF OCCUPANCY FOR THE OWNER IS REQUIRED BUT MAY NOT REPRESENT THE ENTIRETY OF THE SCOPE OF WORK THAT IS TO BE COMPLETED BY THE G.C. FOR THIS PROJECT.
- . 12 ENLARGED DRAWINGS/DETAILS SHALL TAKE PRECEDENCE OVER SMALLER SCALE DRAWINGS.
- 1.13 DO NOT SCALE DRAWINGS. MATERIALS, GRAPHIC CONDITIONS AND DISTANCES SHOWN SHALL BE SUPERSEDED BY WRITTEN TEXT AND DIMENSIONS.
- 14 DETAILS AND SECTIONS ON THE DRAWINGS ARE TAKEN AT SPECIFIC LOCATIONS AND ARE INTENDED TO SERVE AS A REPRESENTATION OF TYPICAL CONSTRUCTION METHODOLOGY FOR ALL SIMILAR CONDITIONS. MODIFICATIONS SHALL BE MADE BY THE CONTRACTORS TO ACCOMMODATE MINOR VARIATIONS. IF MAJOR VARIATIONS FROM TYPICAL DETAILS AND SECTIONS ARE REQUIRED, G.C. SHALL NOTIFY ARCHITECT PRIOR TO PERFORMING SUCH WORK.

- . 15 CONTRACTOR TO INSURE STABILITY AND SAFETY OF STRUCTURE AT ALL TIMES DURING THE CONSTRUCTION PERIOD. CONTRACTOR SHALL NOT OCCUPY ADJACENT PROPERTIES WITHOUT FIRST OBTAINING WRITTEN PERMISSION FROM PROPERTY OWNERS AND SUBMITTING A RECORD OF THIS PERMISSION TO THE OWNER FOR REVIEW AND APPROVAL.
- 1.16 SPECIAL PROVISIONS FOR RADON CONTROL HAVE NOT BEEN INCLUDED IN THE DESIGN OF THIS PROJECT. CONTRACTOR TO NOTIFY OWNER IF SITE CONDITIONS WARRANT THE INCLUSION OF POSITIVE RADON CONTROL SYSTEM IN THE SCOPE OF WORK FOR THIS PROJECT.
- 1.17 THE GENERAL CONTRACTOR SHALL SECURE AND REMIT THE COST OF ALL REQUIRED PERMITS AND INSPECTIONS FOR THIS PROJECT AND SHALL COORDINATE ALL INSPECTIONS IN ORDER TO OBTAIN A CERTIFICATE OF OCCUPANCY PERMIT UPON COMPLETION OF THE WORK, UNLESS OTHERWISE AGREED BY THE OWNER.
- 1.18 CONTRACTOR IS TO PROVIDE AN ENTIRELY FINISHED PRODUCT UPON COMPLETION OF CONSTRUCTION INCLUDING ANY FINAL REPAIRS OR WORK IDENTIFIED BY PUNCHLIST ITEMS TO THE SATISFACTION OF THE OWNER AND ENGINEER/ARCHITECT.
- 1.19 THE GENERAL CONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE (I) YEAR MINIMUM OR AS OTHERWISE AGREED BY THE OWNER.

#### DIVISION 2 / SITE CONSTRUCTION 2.1 RE: CIVIL & STRUCTURAL FOR SPECIFICATIONS IN

ADDITION TO THOSE DESCRIBED BELOW:

- 2.2 CONSULT THE CIVIL ENGINEERING DOCUMENTS CREATED FOR THIS SPECIFIC PROJECT. FOR ADDITIONAL SITE UTILITIES CONSTRUCTION INFORMATION, WHERE INFORMATION CONTAINED THEREIN DIFFERS FROM INFORMATION PROVIDED ON THESE DOCUMENTS, CONTRACTOR SHALL OBTAIN CLARIFICATION FROM THE CIVIL ENGINEER, NOTIFY THE ARCHITECT/ENGINEER, AND CONTINUE TO PERFORM THE WORK IN ACCORDANCE WITH THE MOST STRINGENT REQUIREMENTS UNLESS OTHERWISE DIRECTED.
- 2.3 GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES AND SERVICES USING 'ONE-CALL' PROTOCOLS OR OTHER METHODS AS PER LOCAL JURISDICTION. UTILITIES SHALL BE VERIFIED PRIOR TO CONSTRUCTION AND THE G.C. SHALL COORDINATE THE CONNECTION INTO, REMOVAL OF AND/OR RELOCATION OF ABOVE-GROUND OR UNDERGROUND UTILITIES WITH OWNER AND LOCAL MUNICIPAL UTILITY AUTHORITIES / PUBLIC UTILITY COMPANIES AS REQUIRED TO MEET THE INTENT OF THIS PROJECT.

#### DIVISION 3 / CONCRETE 3.1 RE: STRUCTURAL

### DIVISION 4 / MASONRY

### 4.1 RE: STRUCTURAL

### DIVISION 5 / METALS

- 5. I RE: STRUCTURAL FOR SPECIFICATIONS IN ADDITION TOT THOSE DESCRIBED BELOW: 5.2 WHERE ALUMINUM IS ADJACENT TO STEEL, PROVIDE
- ADEQUATE BARRIER TO PREVENT OXIDATION OF ALUM. DIVISION 6 / WOOD, PLASTICS, AND

### COMPOSITES 6. I RE: STRUCTURAL FOR SPECIFICATIONS IN ADDITION TO

- THOSE DESCRIBED BELOW: 6.2 ALL MISCELLANEOUS WOOD SHALL BE DRY LUMBER
- (SEASONED TO A MOISTURE CONTENT OF 19% OR LESS), UNLESS PRESERVATIVE PRESSURE-TREATED. ALL WOOD PRODUCTS AND MATERIALS SHALL BE STORED, STAGED, AND INSTALLED DRY AND SHALL BE PROTECTED FROM MOISTURE TO GREATEST EXTENT PRACTICABLE. STANDING WATER SHALL BE IMMEDIATELY REMOVED FROM WOOD MATERIALS EXPOSED TO MOISTURE DURING CONSTRUCTION. PRESERVATIVE PRESSURE-TREATED LUMBER SHALL BE
- "ARSENIC-FREE". 6.3 ALL METAL AND/OR WOOD FRAMING MATERIALS SHALL BE FREE OF VISUALLY OBSERVABLE WARPING, CUPPING, CHECKING, AND OTHER SUBSTANTIVE IMPERFECTIONS THAT ADVERSELY AFFECT STRUCTURAL PERFORMANCE OR THE PROVISION OF PLUMB AND TRUE CONNECTIONS WITH OTHER FRAMING MEMBERS.
- 6.4 ALL WOOD TRIM EXPOSED TO THE ELEMENTS, OR IN CONTACT WITH EARTH, CONCRETE, OR MASONRY, SHALL BE OF ARSENIC-FREE PRESSURE-TREATED
- 6.5 THE CONTRACTOR SHALL PROVIDE ADEQUATE SUPPORTS AND/OR BACKING MATERIAL IN NEW OR EXISTING WALLS FOR EQUIPMENT AND/OR ACCESSORIES ATTACHED THERETO.

### DIVISION 7 / THERMAL & MOISTURE PROTECTION

- 7. I INSTALL EXTERIOR PAINTABLE URETHANE SEALANTS AND INTERIOR PAINTABLE SILICONE CAULKING (WITH BACKER ROD AND PRIMER TAPE WHERE INDICATED) AT ALL JOINTS WHERE SHOWN ON THE DRAWINGS AND ELSEWHERE AS REQUIRED (UNLESS NOTED OTHERWISE) TO PROVIDE A POSITIVE BARRIER AGAINST MOISTURE AND PASSAGE OF AIR. ELASTOMERIC SEALANTS SHALL
- COMPLY WITH ASTM C920 AND ASTM C1193. 7.2 BACKPAINT METAL FLASHINGS WITH BITUMINOUS PAINT WHERE IN CONTACT WITH CEMENTITIOUS MATERIALS OR DISSIMILAR METALS.

- 7.3 PROVIDE INSULATION AS INDICATED ON DRAWINGS AS MANUFACTURED BY OWENS CORNING. POSITION FACED INSULATION SO THAT FACING / VAPOR BARRIER FACES INWARD TOWARDS THE CONDITIONED SIDE OF THE WALL OR CEILING ASSEMBLY OR SPACE. FACED INSULATION IS TO BE INSTALLED ONLY WHERE IN SUBSTANTIAL DIRECT CONTACT WITH AN APPROVED FINISH SURFACE. IF EXPOSED, USE UNFACED INSULATION OR FSK-FACED FIRE-RATED FACINGS. INSTALL COMPLETELY IN DESIGNATED LOCATIONS WITHOUT GAPS OR VOIDS - FILL SPACES BETWEEN DOOR AND WINDOW UNITS AND ADJACENT FRAMING -FIT INSULATION INTO ALL SPACES BEHIND MECHANICAL, PLUMBING, AND ELECTRICAL SERVICES / EQUIPMENT LOCATED WITHIN THE PLANE OF INSULATION. FASTEN INSULATION TO SUBSTRATE / FRAMING MEMBERS AND OTHERWISE INSTALL ALL INSULATION IN COMPLETE ACCORDANCE WITH
- MANUFACTURER'S INSTRUCTIONS. 7.4 PROVIDE AND INSTALL VAPOR/MOISTURE RETARDER AS PER CODE, AS INDICATED ON DRAWINGS AND AS PER MANUFACTURER'S INSTRUCTIONS WITH CLASS A FLAME SPREAD AND SMOKE DEVELOPED VALUES.
- 7.5 EXTRUDED POLYSTYRENE BOARD INSULATION SHALL CONFORM TO ASTM C 578, OF TYPE IV, I .60LB/CU.FT. DENSITY WITH A MAXIMUM FLAME SPREAD AND SMOKE DEVELOPED INDICES OF 75 AND 450 RESPECTIVELY.
- 7.6 FIBERGLASS BLANKET INSULATION SHALL CONFORM TO ASTM C 665, TYPE I WITH MAXIMUM FLAME SPREAD AND SMOKE DEVELOPED INDICES OF 25 AND 50 RESPECTIVELY, PASSING ASTM E 136 FOR COMBUSTION CHARACTERISTICS.
- 7.7 PROTECT ALL INSULATION MATERIALS FROM PHYSICAL DAMAGE FROM DETERIORATION BY MOISTURE, SOILING, AND OTHER SOURCES. STORE INSIDE AND IN A DRY LOCATION
- 7.8 CONCEALED INSULATION SHALL HAVE A FLAME SPREAD INDEX OF NO MORE THAN 25 AND A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 450 IN ACCORDANCE WITH ASTM E 84.
- 7.09 METAL GUTTER AND RAINWATER CONDUCTOR COMPONENTS SHALL BE PROVIDED AND INSTALLED AS INDICATED ON DRAWINGS, AS PER CODE AND AS PER MANUFACTURER DIRECTIONS. ALL GUTTERS SHALL BE INSTALLED SO AS TO POSITIVELY DIRECT WATER TO CONDUCTORS. INSTALL LONGEST GUTTER LENGTHS AS PRACTICABLE AND PROVIDE APPROPRIATE SEALANTS AT SEAMS. POSITION GUTTERS SO THAT ICE THAT MAY SLIDE FROM ADJACENT SLOPED ROOFING BYPASSES TOP LEADING EDGE OF GUTTER.
- 7.10 PROVIDE AND INSTALL RAINWATER CONDUCTORS PLUMB AND TRUE AND FASTEN TO SUBSTRATE AS REQUIRED FOR SECURE ATTACHMENT CONSIDERING POTENTIAL DYNAMIC THRUST CREATED BY STORMWATER FLOW AND VOLUME. ALL FASTENERS AND SUPPORT ACCESSORIES SHALL BE OF THE SAME MATERIAL AS THE CONDUCTOR AND SHALL BE PROVIDED TO ELIMINATE THE POSSIBILITY OF GALVANIC CORROSION DUE TO DISSIMILAR METALS. PROVIDE PROTECTION OF CONDUCTOR AT BOTTOM RUNOUT WHERE ADJACENT TO PAVING AS PER PLUMBING CODE PROVISIONS IN A METHOD ACCEPTABLE TO OWNER. COORDINATE LOCATION OF CONDUCTORS WITH UNDERGROUND STORMWATER PIPING SYSTEMS AS PER THE CIVIL ENGINEERING DESIGN AS APPLICABLE.
- 7.11 BLOWN-IN INSULATION SHALL BE MANUFACTURED BY OWENS CORNING "INSUL SAFE 3" AND INSTALLED BY A CERTIFIED CONTRACTOR 90 DAYS AFTER SUBSTANTIAL CONSTRUCTION COMPLETION. BLOWN-IN INSULATION TO COVER ENTIRE ATTIC AREA FOR A COMPLETE THERMAL BARRIER. RE: DWGS.

### DIVISION 8 / DOORS AND WINDOWS

- 8. I DOOR UNITS AND FRAMES SHALL BE PROTECTED DURING CONSTRUCTION. THE GENERAL CONTRACTOR SHALL REPAIR/REPLACE ANY DAMAGE TO SUCH MATERIALS AND PRODUCTS AT NO ADDITIONAL COST
- TO THE OWNER. 8.2 ALL DOOR HEIGHTS TO BE AS INDICATED ON DOOR SCHEDULE. DOOR HEIGHT TO BE MODIFIED BY G.C. AS REQUIRED TO ACCOMMODATE VARIOUS FLOOR FINISHES, THRESHOLDS, ROUGH OPENINGS AND MECHANICAL DESIGN UNDERCUTS.
- 8.3 CONTRACTOR SHALL CONFORM TO THE ADOPTED ENERGY CODE AND VERIFY THAT MAXIMUM WINDOW AND DOOR INFILTRATION RATES ARE NOT EXCEEDED. 8.4 ALL DOORS, WINDOW, TRANSOMS, SIDELIGHTS, ETC. OPENING TO THE EXTERIOR OR TO UNCONDITIONED
- OR OTHERWISE TREATED TO LIMIT AIR INFILTRATION. 8.5 GLAZING IN LOCATIONS WHICH MAY BE SUBJECT TO HUMAN IMPACT SUCH AS GLASS ENTRANCE DOORS, FIXED GLASS PANELS, DOOR LIGHTS, ETC. SHALL MEET THE REQUIREMENTS SET FORTH IN THE ADOPTED CONSTRUCTION CODE AND THE SAFETY STANDARD FOR ARCHITECTURAL GLAZING MATERIALS (16 CFR 1201). ALL GLAZED PANELS LOCATED WITHIN 12" OF A DOOR SHALL BE TEMPERED GLASS UNLESS SUCH PANELS ARE PROVIDED WITH A HORIZONTAL MEMBER I-I/2" MINIMUM WIDTH LOCATED BETWEEN 24" AND

AREAS SHALL BE FULLY WEATHER STRIPPED, GASKETED

- 36" ABOVE THE ADJACENT WALKING SURFACE. 8.6 PROTECT ALL GLAZING MATERIALS ACCORDING TO MANUFACTURER'S WRITTEN SPECIFICATIONS AND AS REQUIRED TO PREVENT DAMAGE FROM CONDENSATION, TEMPERATURE CHANGES, DIRECT EXPOSURE TO SUN, OR ANY OTHER HARMFUL CONDITIONS.
- 8.7 GLAZING SHALL BE AS NOTED OR SCHEDULED ON THE DRAWINGS AND SHALL BE INSTALLED AS PER MANUFACTURER'S INSTRUCTION AND COORDINATED WITH THE ALUMINUM DOOR AND GLAZING FRAMING SYSTEMS. USE TEMPERED SAFETY GLAZING AS PER CODE. PROVIDE WINDLOAD DESIGN SUPPORT DATA FROM GLASS MANUFACTURER FOR ARCHITECT REVIEW PRIOR TO ORDERING GLAZING FOR THIS PROJECT. ALL EXTERIOR GLAZING SHALL BE INSULATED TYPE, FULLY GASKETED.

- 8.8 ALL EXTERIOR DOOR HARDWARE TO COMPLY WITH AMERICANS WITH DISABILITIES ACT (ADA) "ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAAG)" AND NFPA 101.
- 8.9 REFER TO DRAWINGS FOR DOOR TYPES, SIZES, FRAME DETAILS, AND HARDWARE SET DESIGNATIONS. 8.10 ALL DOORS SHALL BE STORED IN A THERMALLY CONTROLLED ENVIRONMENT ON SITE UNTIL INSTALLED. STORE DOORS UPRIGHT WITH HEADS UP AND BLOCKING BETWEEN DOORS TO PREVENT DAMAGE OR
- WARPING. 8.11 ALL LOCKS AND LOCKSETS SHALL BE COORDINATED WITH THIRD PARTY SECURITY CONTRACTOR AND/OR OWNER. VERIFY KEY QUANTITIES AND COPIES NEEDED AND ADHERE TO OWNER'S SECURITY POLICY FOR DOOR LOCKING ACCESSORIES
- 8.12 ALL ALUMINUM STOREFRONT DOORS SHALL BE MANUFACTURED BY KAWNEER OR APPROVED EQUAL 8.13 INTERIOR AND EXTERIOR STL DOORS SHALL BE
- DIVISION 9 / FINISHES AND FINISH
- 9.1 PRIOR TO PAINT APPLICATION, CLEAN WALL AND ENSURE ALL SURFACES ARE SOUND. LIGHTLY SAND AND PREPARE SURFACES AS NECESSARY.

MANUFACTURED BY STEELCRAFT OR APPROVED.

- 9.2 APPLICATION OF PAINT OR OTHER COATING SHALL BE IN STRICT ACCORDANCE WITH MANUFACTURER'S DIRECTIONS. READY-MIXED PAINT SHALL NOT BE THINNED, EXCEPT AS PERMITTED IN THE APPLICATION INSTRUCTIONS.
- 9.3 ALL SURFACE TO BE FINISHED SHALL BE CLEAN AND FREE OF FOREIGN MATERIALS (DIRT, GREASE, ASPHALT, RUST, ETC.). APPLICATION SHALL BE IN A WORKMANLIKE MANNER PROVIDING A SMOOTH SURFACE. APPLICATION RATE SHALL BE THAT RECOMMENDED BY THE MANUFACTURER. APPLICATION MAY BE BY BRUSH OR ROLLER OR BY SPRAY IF PAINT IS FORMULATED FOR SPRAY APPLICATION. EXPOSED STEEL TO BE FINISHED AS INDICATED ON DRAWINGS
- 9.4 SOLVENT-BASED COATINGS (IF APPLICABLE) -MANUFACTURER TO BE SELECTED BY OWNER - USE VOC-COMPLIANT MATERIALS THAT CONFORM TO THE LAWS IN THE JURISDICTION WHERE THE PROJECT IS LOCATED - CONTRACTOR TO PROVIDE AND INSTALL AS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. 9.5 GENERAL PAINT USAGE PER SUBSTRATE:
- DOORS: EXTERIOR FACES OF HOLLOW METAL FRAMES AND DOORS: 2 COATS SPRAY-APPLIED LOW VOC SOLVENT-BASED SEMI-GLOSS ENAMEL TOPCOAT ON FACTORY-PRIMED COATING. INTERIOR FACES OF HOLLOW METAL FRAMES AND DOORS: 2 COATS SPRAY-APPLIED LATEX SEMI-GLOSS ENAMEL TOPCOAT ON FACTORY-PRIMED COATING. LATEX MATERIAL: USE "SHERWIN-WILLIAMS" "SUPERPAINT" (OR APPROVED EQUAL) - G.C. TO PROVIDE AND INSTALL AS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- STRUCTURAL STEEL: ONE COAT OF SHOP APPLIED APPROVED PRIME PAINT. 9.6 FLOOR COVERING MATERIALS TO BE TESTED BY AN APPROVED AGENCY PER NFPA 253. MATERIAL TO BE PROVIDED WILL TAG TO IDENTIFY MANUFACTURER \$ FLOOR COVERING CLASSIFICATION AND MUST COMPLY
- WITH ALL STANDARDS. CEILING AND WALL FINISHES TO BE CLASS 'C' IN
- ACCORDANCE WITH ASTM E 84, AT MINIMUM. 9.8 PROVIDE GYPSUM WALL BOARD AS INDICATED ON DRAWINGS AS MANUFACTURED BY AMERICAN GYPSUM CO. (OR APPROVED EQUAL) COMPLYING WITH ASTM C 36/C 36M OR ASTM 1396/C 1396M, AS APPLICABLE TO TYPE OF GYPSUM BOARD INDICATED AND WHICHEVER IS MORE STRINGENT ALONG WITH JOINT COMPOUND PER MANUFACTURER'S RECOMMENDATIONS. FOR TILE BACKING AREAS. PROVIDE GLASS-MAT, WATER RESISTANT BACKING BOARD COMPLYING WITH ASTM C | | 78/C | | 78M WITH JOINT COMPOUND PER MANUFACTURERS
- RECOMMENDATIONS. 9.9 STORE GYPSUM WALL BOARD PANELS IN THERMALLY CONTROLLED ENVIRONMENT, INDOORS, AND AWAY FROM DAMP AREAS UNTIL READY FOR USE. ALL GYPSUM WALL BOARD PANELS SHALL BE DRY AND FREE OF MOISTURE OR CONDENSATION FROM STORAGE
- PRIOR TO INSTALLATION. 9.10 ALL JOINTS IN GYPSUM WALL BOARD PANELS SHALL BE JOINT TAPED WITH JOINT COMPOUND PER
- MANUFACTURER'S RECOMMENDATIONS. 9.11 ALL FINISHES SPECIFIED SHALL BE INSTALLED AND/OR APPLIED PER MANUFACTURER'S SPECIFICATIONS. PROVIDE ANY AND ALL RELATED ACCESSORIES OR MATERIALS AS NEEDED FOR PROPER AND COMPLETE
- INSTALLATION. 9.12 FRP WALL COVERINGS SHALL BE INSTALLED AS SHOWN ON DRAWINGS. APPLY WITH MANUFACTURER'S RECOMMENDED ADHESIVE ONLY. NO MECHANICAL FASTENERS, SCREWS, OR HEADS SHALL BE VISIBLE ON THE SURFACE.

### DIVISION 10/SPECIALTIES

- 10.1 TOILET ROOM ACCESSORIES SHOWN ARE BASIS OF DESIGN AS MANUFACTURED BY BOBRICK. (OR APPROVED EQUAL). ALL FIXTURES AND ACCESSORIES SHALL BE PROVIDED AND INSTALLED BY G.C. UNLESS NOTED OTHERWISE. ACCESSORIES TO BE PROVIDED BY OWNER SHALL BE INSTALLED BY G.C. IN ACCORDANCE WITH 2017 ICC/ANSI A117.1 AND 2020 IBC.
- 10.2 PROVIDE AND INSTALL WHITE. ANTIMICROBIAL. MOLDED VINYL UNDERLAVATORY GUARDS AS MANUFACTURED BY BROCAR PRODUCTS, INC. (OR APPROVED EQUAL). GUARDS SHALL BE INSTALLED ON DRAIN PIPING ASSEMBLIES FOR BATHROOM LAVATORIES AS INDICATED ON DRAWINGS. PROVIDE COMPONENTS AS REQUIRED WITH FLIP TOPS AT VALVES TO ALLOW
- SERVICE ACCESS WITHOUT REMOVING COVERINGS. 10.3 PROVIDE FIRE EXTINGUISHERS DURING CONSTRUCTION AND AS OTHERWISE REQUIRED BY CODE FOR PERMANENT INSTALLATION AFTER CONSTRUCTION IS COMPLETE AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL FIRE OFFICIAL.

10.5 PROVIDE COLOR CHARTS AND SAMPLES FOR ACRYLIC SHEET ADA TACTILE SIGNAGE A INDICATED ON THE DRAWINGS. ALL SIGNS SHALL BE TEXT, SYMBOL, AND BRAILLE TYPE OBTAINED FROM A SINGLE MANUFACTURER AND MEET THE MINIMUM REQUIREMENTS OF 2017 ICC/ANSI A117.1 AND 2020 IBC. COMPLY WITH MANUFACTURER'S SPECIFICATIONS FOR INSTALLATION AND MOUNTING.

### DIVISION 1 1 / EQUIPMENT

II.I NO SPECIALIZED EQUIPMENT IS PROPOSED UNDER THIS CONTRACT. COORDINATE WITH OWNER OR THIRD PARTY CONTRACTORS AND RELATED N.I.C. EQUIPMENT FOR ANY SCHEDULING OR CONTRACTIBILITY CONCERNS AS

#### DIVISION 12/FURNISHINGS/ CASEWORK

- INDICATED ON THE DRAWINGS.
- LAMINATE COUNTERTOPS, AND CABINET HARDWARE AS APPLICABLE. SUBMIT SHOP DRAWINGS FOR CABINETS AND COUNTERTOPS INCLUDING PLANS, ELEVATIONS, DETAILS, AND ATTACHMENTS TO OTHER WORK. SHOW AND BACKSPLASH PROFILES, AND METHODS OF COUNTERTOP ATTACHMENT. ALSO INCLUDE COLOR SAMPLES FOR SELECTION BY OWNER AND ARCHITECT EACH TYPE OF MATERIAL EXPOSED TO VIEW.
- 12.3 CASEWORK SHALL NOT BE DELIVERED, STORED, OR INSTALLED ON SITE UNTIL BUILDING IS ENCLOSED., WET-WORK IS COMPLETE, AND HVAC SYSTEM IS OPERATIONAL AND WILL MAINTAIN TEMPERATURE AND RELATIVE HUMIDITY FOR THE REMAINDER OF THE
- 12.4 FIELD VERIFY ALL NEW CONSTRUCTION FINISH CONDITIONS PRIOR TO CASEWORK INSTALLATION. NOTIFY ARCHITECT OF ANY CONCERNS REGARDING WITH ADJACENT WALLS, FLOORS, OR EQUIPMENT.
- COLOR AND GRAIN. DO NOT USE TWO ADJACENT SURFACES THAT ARE NOTICEABLY DISSIMILAR IN COLOR, GRAIN, FIGURE, OR NATURAL CHARACTER MARKINGS. STAIN SELECTION BY OWNER AND ARCHITECT FROM MANUFACTURER'S FULL RANGE.
- NOTED OTHERWISE WITH GRACE C FACES AND NOT LESS THAN GRADE 3 BACKS OF SAME SPECIES AS FACES. FACE VENEERS OF SAME SPECIES AS EXPOSED SURFACES OR STAINED TO BE COMPATIBLE WITH EXPOSED SURFACES.
- 12.7 CONCEALED MATERIALS SHALL BE SOLID WOOD OR PLYWOOD, OF ANY HARDWOOD OR SOFTWOOD SPECIES WITH NO DEFECTS, AFFECTING STRENGTH OR UTILITY; PARTICLEBOARD, MDF, OR HARDBOARD.
- CLOSING HINGES. CASEWORK PULLS SHALL BE SELECTED BY OWNER AND ARCHITECT. PROVIDE PRODUCT DATA SUBMITTALS FOR FULL RANGE OF MANUFACTURER'S PRODUCT LINE. DRAWER GUIDES SHALL BE EPOXY COATED METAL, SELF CLOSING, WITH BALL BEARING ROLLERS.

DIVISION 22 / PLUMBING

RE: ELECTRICAL

# NEEDED.

- 12.1 CASEWORK SHALL BE PROVIDED IN UNIT DIMENSIONS AND PRODUCT SIZES AND MOUNTED AT HEIGHTS AS
- 12.2 SUBMIT PRODUCT DATA FOR CABINETS, PLASTIC MATERIALS, FINISHES, FILLER PANELS, HARDWARE, EDGE INCLUDING SELECTIONS OF UNITS SHOWING FULL RANGE OF COLORS, TEXTURES, AND PATTERNS AVAILABLE FOR
- CONSTRUCTION PERIOD.
- PROPER INSTALLATION DUE TO UNFORESEEN CONFLICTS
- 12.5 EXPOSED MATERIALS SHALL BE OAK OF COMPATIBLE
- 2.6 SEMI-EXPOSED MATERIALS SHALL BE PLYWOOD UNLESS
- 12.8 HINGES SHALL BE CONCEALED EUROPEAN STYLE

RE: PLUMBING DIVISION 23 / HVAC - MECHANICAL RE: MECHANICAL DIVISION 26 / ELECTRICAL

> PRELIMINARY NOT FOR CONSTRUCTION

DRAWING NO. NOT APPROVED IIS PLAN HAS NOT RECEIVED FINAL APPRO OF ALL REVIEWING AGENCIES. THIS PLAN IS SUBJECT TO REVISIONS UNTIL ALL APPROVALS ARE OBTAINED AND SHOULD NOT BE USED FOR CONSTRUCTION PURPOSES.

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DRAWING SCALE

10.28.2025

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### GENERAL

- A. NYS BUILDING CODE INTERNATIONAL BUILDING CODE (IBC), 2018 EDITION B. AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) -

#### MINIMUM DESIGN LOADS FOR BUILDINGS & OTHER STRUCTURES, 2010 EDITION (ASCE 7).

- 1.4 GENERAL REQUIREMENTS C. VERIFY EXISTING CONDITIONS & DIMENSIONS PRIOR TO BEGINNING WORK OR FABRICATING MATERIALS. NOTIFY STRUCTURAL ENGINEER OF RECORD (SER) OF ANY DISCREPANCIES BEFORE PROCEEDING WITH ANY PHASE OF WORK.
- D. DO NOT SCALE DRAWINGS FOR THE PURPOSE OF ESTABLISHING DIMENSIONS.
- DETAILS LABELED "TYPICAL DETAILS" ON DRAWINGS APPLY TO SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY DETAILED. SUCH DETAILS APPLY WHETHER OR NOT DETAILS ARE REFERENCED AT EACH LOCATION. NOTIFY SER OF CONFLICT REGARDING APPLICABILITY OF "TYPICAL
- DETAILS". F. DO NOT LOAD THE SLAB ON GRADE OR SUPPORTED SLAB WITH ERECTION CRANES OR ERECTION EQUIPMENT. THE SLABS HAVE NOT BEEN DESIGNED FOR CRANE LOADS & WILL REQUIRE AN INCREASE IN THICKNESS &/OR REINFORCEMENT. OBTAIN SER APPROVAL ON PROPOSED CRANE SUPPORT PLAN FOR SLABS PRIOR TO COMMENCING WORK
- DO NOT STORE OR STACK CONSTRUCTION MATERIALS ON POURED OR ERECTED FLOORS/ROOFS IN EXCESS OF 80 PERCENT OF LIVE LOAD. GENERAL CONTRACTOR SHALL ENSURE THAT ALL SUB-CONTRACTORS ARE INFORMED OF LOADING RESTRICTIONS. AVOID IMPACT WHEN PLACING MATERIALS ON POURED OR ERECTED FLOORS OR ROOF.
- BEFORE PROCEEDING WITH ANY WORK WITHIN THE PROJECT AREA, THE CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH EXISTING STRUCTURE & OTHER CONDITIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL NECESSARY BRACINGS. SHORINGS \$ OTHER AFE GUARDS TO MAINTAIN ALL PARTS OF EXISTING STRUCTURES & FACILITIES IN A SAFE CONDITION DURING THE PROCESS OF DEMOLITION \$ CONSTRUCTION \$ TO PROTECT FROM DAMAGE THOSE PORTIONS OF EXISTING STRUCTURES \$ FACILITIES WHICH 2.3 THE CONTRACTOR SHALL PROVIDE \$ OPERATE DEWATERING ARE TO REMAIN.
- THESE DRAWINGS REPRESENT THE COMPLETED PROJECT WHICH HAS BEEN DESIGNED FOR THE WEIGHTS OF MATERIALS INDICATED ON THE DRAWINGS & FOR THE SUPERIMPOSED LOADS INDICATED IN THE DESIGN LOADS. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE ALLOWABLE CONSTRUCTION LOADS \$ TO PROVIDE PROPER DESIGN & CONSTRUCTION OF FALSE WORK, STAGINGS, BRACING, SHEETING & SHORING, ETC
- I. .THE CONTRACT STRUCTURAL DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS \$ METHODS OF CONSTRUCTION. PROVIDE ALL MEASURES REQUIRED TO PROTECT THE STRUCTURE, WORKMEN, & OTHER PERSONS DURING CONSTRUCTION; INCLUDING BRACING, SHORING FOR CONSTRUCTION EQUIPMENT, SHORING FOR THE BUILDING, FORMS & SCAFFOLDING, SHORING OF RETAINING WALLS & OTHER TEMPORARY SUPPORTS AS REQUIRED. COMPLY WITH APPLICABLE REQUIREMENTS OF OSHA & OTHER GOVERNING BODIES HAVING JURISDICTION AT THE SITE.
- 2. IMPLEMENTING JOB SITE SAFETY & CONSTRUCTION PROCEDURES ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 3. THE CONTRACTOR SHALL PROVIDE DRAWINGS \$ CALCULATIONS SIGNED \$ SEALED BY A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF NEW YORK 2.6 STRUCTURAL FILL FOR THE FOLLOWING ASSEMBLIES. THE DESIGN OF THESE ASSEMBLIES IS THE RESPONSIBILITY OF THE ENGINEER WHO HAS SIGNED & SEALED THESE DRAWINGS & CALCULATIONS.
- a. WOOD TRUSS ROOF SYSTEM IN ITS ENTIRETY INCLUDING BUT NOT LIMITED TO TRUSSES, PURLINS, & BRACING. THESE ASSEMBLIES SHALL BE DESIGNED TO SUPPORT ALL GRAVITY \$ LATERAL LOADS REQUIRED IN THE DRAWINGS \$ INTERNATIONAL BUILDING CODE.
- J. PRINCIPAL OPENINGS THROUGH THE FRAMING ARE SHOWN ON DRAWINGS. COORDINATE WITH THE ARCHITECTURAL & MECHANICAL DRAWINGS FOR THE REQUIRED OPENINGS & PROVIDE FOR REQUIRED OPENINGS WHETHER SHOWN ON THE STRUCTURAL DRAWINGS OR NOT, VERIFY SIZE \$ LOCATION OF OPENINGS WITH THE MECHANICAL CONTRACTOR. DEVIATIONS FROM THE OPENINGS SHOWN ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE SER PRIOR TO IMPLEMENTING THE CHANGES.
- K. LOADINGS FOR MECHANICAL EQUIPMENT ARE BASE ON THE UNITS SHOWN ON THE MECHANICAL DRAWINGS. ANY CHANGES IN TYPE, SIZE, OR NUMBER OF PIECES OF EQUIPMENT SHALL BE REPORTED TO THE SER FOR VERIFICATION OF THE ADEQUACY OF SUPPORTING MEMBERS PRIOR TO THE PLACEMENT OF SUCH EQUIPMENT.
- L. SEE ARCHITECTURAL DRAWINGS FOR STRUCTURE ELEVATIONS NOT INDICATED ON STRUCTURAL DRAWINGS \$ FOR ADDITIONAL INFORMATION FOR ALL SLAB DEPRESSIONS. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE SER PRIOR TO FABRICATING OR INSTALLING STRUCTURAL MEMBERS.

### 1.5 SPECIAL INSPECTIONS

- A. SPECIAL INSPECTIONS SHALL BE PROVIDED IN ACCORDANCE WITH THE GOVERNING BUILDING CODE \$ THE STATEMENT OF REQUIRED SPECIAL INSPECTIONS
- PREPARED BY THE DESIGN PROFESSIONAL. B. WHERE SPECIAL INSPECTION REQUIREMENTS DUPLICATE THE REQUIREMENTS OF OTHER SPECIFIED TESTING. DUPLICATE INSPECTIONS SHALL NOT BE REQUIRED.

### 2. EARTHWORK & **FOUNDATIONS**

### 2.1 DESIGN DATA

- A. FOUNDATION DESIGN IS BASED UPON IBC TABLE 1806.2 \$ AN ASSUMED ALLOWABLE BEARING CAPACITY OF 1,500
- B. ALL EXTERIOR FOUNDATIONS SHALL BEAR A MINIMUM OF 4'-0" BELOW GRADE.
- C. BUILDING SPREAD FOOTINGS SHALL BEAR ON UNDISTURBED SOILS ON PROPERLY PLACED & COMPACTED STRUCTURAL FILL WITH AN ASSUMED ALLOWABLE BEARING PRESSURE OF 1,500 PSF

# 2. EARTHWORK & **FOUNDATIONS**

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- UNDISTURBED SOILS ON PROPERLY PLACED & COMPACTED STRUCTURAL FILL WITH AN ASSUMED ALLOWABLE BEARING PRESSURE OF 1,500 PSF 2.2 DESIGN DATA
- A. CONTRACTOR SHALL VERIFY ALL EXISTING FIELD CONDITIONS THAT MAY AFFECT THE INSTALLATION OF THE FOUNDATION SYSTEM AS SHOWN PRIOR TO STARTING
- B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION # PROTECTING ALL EXISTING UTILITIES, EXISTING STRUCTURES, ETS., WHETHER INDICATED OR NOT, WHICH
- MAY BE AFFECTED BY THE CONSTRUCTION PROCESS C. BEARING ELEVATIONS INDICATED ON THE DRAWINGS ARE ESTIMATED FROM EXPECTED SITE CONDITIONS. AN EXPERIENCED, QUALIFIED GEOTECHNICAL ENGINEER SHALL MAKE DETERMINATION OF FINAL BEARING ELEVATIONS \$ VERIFICATION OF ALLOWABLE BEARING PRESSURE.
- D. CONCRETE FOR FOUNDATIONS SHALL BE POURED ON THE SAME DAY SUBGRADE APPROVAL IS GIVEN BY THE GEOTECHNICAL ENGINEER E. FOLLOWING REQUIRED STRIPPING OPERATIONS, ANY
- PROOFROLLING SHALL BE AS DIRECTED BY AN EXPERIENCED, QUALIFIED GEOTECHNICAL ENGINEER. THE 3.2 REINFORCING PURPOSE OF THE PROOFROLLING WILL BE TO LOCATE ANY ISOLATED AREAS OF SOFT OR LOOSE SOILS REQUIRING IMPROVEMENT OR REPLACEMENT. SOFT AREAS SHALL BE UNDERCUT & REPLACED BY PROPERLY COMPACTED MATERIALS
- F. ALL SHORING, SHEETING, & DEWATERING SHALL BE THE TOTAL RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR'S ENGINEER REGISTERED IN THE PROJECT'S JURISDICTION SHALL DESIGN SHEETING \$ SHORING. ALL SUBMITTALS SHALL BEAR THE ENGINEERS'S SEAL \$ SIGNATURE.
- EQUIPMENT & BE RESPONSIBLE FOR MAINTAINING EXCAVATIONS & WORK AREAS IN A DRY CONDITION SATISFACTORY TO THE SER. WATER SHALL BE DISCHARGED TO C. EXECUTION A LOCATION SUITABLE TO THE SER \$ IN ACCORDANCE WITH APPLICABLE LOCAL STATE & FEDERAL LAWS & REGULATIONS. 2.4 ARRANGE FOR OWNER'S INDEPENDENT TESTING AGENCY TO
- MONITOR CUT & FILL OPERATIONS & PERFORM FIELD DENSITY & MOISTURE CONTENT TEST TO VERIFY COMPACTION & APPROVE FOOTING SUBGRADES PRIOR TO PLACING CONCRETE. 2.5 BACKFILL
- A. ALL BACKFILL & TRENCHING OPERATIONS SHALL COMPLY WITH ALL CURRENT & APPLICABLE LOCAL, STATE, & FEDERAL SAFETY CODES, INCLUDING THE OCCUPATIONAL SAFETY \$ HEALTH ADMINISTRATION. B. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING
- ADEQUATE SHORING OF THE NEW & EXISTING CONSTRUCTION DURING CONSTRUCTION OPERATIONS IN ORDER TO PREVENT ANY DAMAGE DUE TO BACKFILLING \$ TRENCHING.
- C. ALL BACKFILL SHALL BE ACCOMPLISHED USING MATERIAL APPROVED BY THE GEOTECHNICAL ENGINEER, WITH OPTIMUM MOISTURE CONTENT FOR COMPACTING \$ SHALL BE FREE OF DEBRIS.
- D. WHERE THE FINAL GRADE ELEVATIONS ARE APPROXIMATELY EQUAL ON BOTH SIDES OF A WALL, BACKFILL IN LIFTS TO BAR SIZE TOP BARS OTHER BARS COMPRESSION SPLICES (IN) MAINTAIN LEVEL ELEVATIONS WITHIN 10" ON BOTH SIDES AT ANY TIME.
- A. COMPACTED STRUCTURAL FILL SHALL MEET N.Y.S. D.O.T. TYPE 4 REQUIREMENTS. INSPECTION OF THE PLACEMENT OF COMPACTED STRUCTURAL FILL SHALL BE BY AN EXPERIENCED, QUALIFIED GEOTECHNICAL ENGINEER. I. COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION (PENNDOT) PUBLICATION 408 SPECIFICATIONS (PUB 408), LATEST EFFECTIVE
- VERSION. B. INSPECTION OF THE PLACEMENT OF COMPACTED STRUCTURAL FILL SHALL BE BY AN EXPERIENCED, QUALIFIED GEOTECHNICAL ENGINEER. I. GENERAL AGGREGATE....PENNDOT NO. 2A 2. CONTROLLED LOW STRENGTH MATERIAL... TYPE C
- (PUB 408) SECTION 220) C. EXECUTION I. AFTER ACHIEVING FINISHED SUBGRADE IN CUT AREAS # PRIOR TO PLACING STRUCTURAL FILL IN AREAS BELOW FINISHED SUBGRADE, THE EXPOSED SUBGRADE SHALL BE EVALUATED BY THE GEOTECHNICAL ENGINEER OF RECORD TO CONFIRM THAT ALL UNSUITABLE OR
- UNSTABLE MATERIALS HAVE BEEN REMOVED. 2. ALL STRUCTURAL FILL SHALL BE PLACED IN HORIZONTAL LIFTS NOT EXCEEDING EIGHT (8) INCHES IN LOOSE THICKNESS & WITHIN TWO (2) PERCENT OF OPTIMUM MOISTURE FOR COMPACTION. THE STRUCTURAL FILL SHALL BE COMPACTED TO 95 PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED
- BY MODIFIED PROCTOR (ASTM D | 557). 3. MAINTAIN SUBGRADE & STRUCTURAL FILL MOISTURE CONTENT UNTIL FOUNDATIONS ARE PLACED.

4. PROVIDE CLASS "B" REINFORCEMENT SPLICES FOR

- CONTINUOUS REINFORCEMENT. REINFORCEMENT SPLICES SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE UNLESS NOTED OTHERWISE. 2.7 GRANULAR BASE MATERIAL
- A. A MINIMUM OF SIX (6) INCHES OF GRANULAR SUBBASE SHALL BE PLACED UNDER ALL CONCRETE SLABS-ON-GRADE.

### 2.8 FOUNDATIONS

A. ALL BEARING AREAS FOR FOUNDATIONS SHALL HAVE BEEN INSPECTED AND APPROVED BY THE GEOTECHNICAL ENGINEER OF RECORD PRIOR TO ANY PLACEMENT OF CONCRETE. IF BEARING AREAS ARE NOT SUITABLE, AS DETERMINED BY THE GEOTECHNICAL ENGINEER, THE CONTRACTOR MAY BE REQUESTED TO CARRY THE EXCAVATION DEEPER TO MORE SUITABLE BEARING MATERIAL. SUCH ADDITIONAL EXCAVATION WILL BE PAID FOR BY A LUMP SUM OR UNIT PRICE BASIS. B. DO NOT PLACE FOOTINGS OR SLABS AGAINST SUBGRADE

CONTAINING FREE WATER, FROST OR ICE.

- C. PROTECT PIPES AND CONDUITS RUNNING THROUGH WALLS AND SLABS WITH 1/2 INCH EXPANSION MATERIAL. LOWER CONTINUOUS FOOTINGS AND GRADE BEAMS PERPENDICULAR TO PIPE RUNS TO ALLOW PIPES TO PASS ABOVE THE FOOTINGS. ALTERNATIVELY, PROVIDE A CONCRETE JACKET IF PIPES AND CONDUITS ARE LOW ENOUGH TO BE PLACED BELOW THE FOOTINGS. LOWER FOOTINGS PARALLEL TO PIPE RUNS TO AVOID SURCHARGE
- ONTO ADJACENT TRENCH EXCAVATIONS. D. COORDINATE WITH ELECTRICAL CONTRACTOR AND ELECTRICAL ONE-LINE DIAGRAM FOR PROPER BONDING OF THE FOOTING REINFORCEMENT TO THE GROUNDING

### 3. CONCRETE

#### 3.1 FORMWORK

- A. STANDARDS I. AMERICAN CONCRETE INSTITUTE (ACI) - GUIDE TO FORMWORK FOR CONCRETE, ACI 347-04 2. ACI - FORMWORK FOR CONCRETE SP-4, FIFTH **EDITION**
- B. FORMWORK MAY BE OMITTED FOR FOUNDATIONS PROVIDED EARTH IS FIRM AND STABLE AND CONCRETE SURFACES WILL NOT BE EXPOSED TO PUBLIC VIEW. EXCAVATIONS SHALL BE CUT NEAT AND ACCURATE TO SIZE. LOOSE AND UNSTABLE MATERIALS SHALL BE COMPACTED OR REMOVED. PROVIDE TWO (2) INCHES ADDITIONAL CONCRETE COVER AT SIDES FOR EARTH FORMS WHEN USED IN LIEU OF TEMPORARY FORMWORK.
- C. INSULATED CONCRETE FORMWORK (ICF) SHALL BE MANUFACTURED BY THE NUDURA CORPORATION OR APPROVED EQUAL. INSTALL ICF PER THE MANUFACTURER'S REQUIREMENTS AND SPECIFICATIONS.
- A. STANDARDS 1. ACI 301-16 - SPECIFICATIONS FOR STRUCTURAL
- 2. CONCRETE REINFORCING STEEL INSTITUTE (CRSI) -MANUAL OF STANDARD PRACTICE, EIGHTH EDITION. 3. WIRE REINFORCEMENT INSTITUTE, INC. (WRI) - DESIGN OF SLAB-ON-GROUND FOUNDATIONS, WRI/CRSI-8 I
- WITH 1996 UPDATE. 4. ACI DETAILING MANUAL - SP-66 (04)
- B. MATERIALS 1. DEFORMED AND PLAIN BARS ..... ASTM AG 15 GRADE 60 2. WELDED WIRE REINFORCEMENT (WWR)..... A 185. PLAIN, 65,000 PSI YIELD STRESS IN FLAT
- SHEETS. I. UNLESS NOTED OTHERWISE MAINTAIN THE FOLLOWING CONCRETE COVER FOR REINFORCEMENT. a. CONCRETE CAST AGAINST EARTH....... 3 INCHES
  - b. CONCRETE EXPOSED TO THE WEATHER: #5 AND SMALLER BARS..... #6 AND LARGER BARS... c. CONDITIONS OTHER THAN ABOVE:
- #11 AND SMALLER BARS... ..3/4 INCHES #14 AND #18 BARS.. ...2 INCHES 2. ALL REINFORCEMENT SHALL BE SUPPORTED AND HELD IN PLACE BY MANUFACTURED STEEL WIRE BAR SUPPORTS IN ACCORDANCE WITH CRSI. USE OF ANY OTHER MATERIALS WITHOUT WRITTEN AUTHORIZATION
- BY THE SER IS PROHIBITED 3. PROVIDE STANDARD 90° HOOKS IN ACCORDANCE WITH ACI 318 UNLESS NOTED OTHERWISE
- 4. PROVIDE CLASS "B" REINFORCEMENT SPLICES FOR CONTINUOUS REINFORCEMENT. REINFORCEMENT SPLICES SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE UNLESS NOTED OTHERWISE.

### TENSION SPLICES (IN)

#3	21	16	12
#4	28	21	15
#5	35	27	19
#6	46	35	23
#7	62	48	26
#8	82	63	30
#9	90	104	34
#10	131	101	<i>38</i>
#	162	125	42

- COMPRESSION DOWEL EMBEDMENT SHALL BE 22 BAR DIAMETERS. SPLICES FOR WELDED WIRE FABRIC SHALL BE TWO (2) INCHES IN ADDITION TO ONE SPACING OF CROSS WIRES. 5. PROVIDE CONTINUOUS HORIZONTAL WALL
  - REINFORCEMENT WITH 90° BENDS \$ EXTENSIONS AT CORNERS \$ INTERSECTIONS AS SHOWN ON TYPICAL REINFORCEMENT DETAILS. 6. ALL RE-ENTRANT CORNERS FOR SLAB-ON-GRADE CONSTRUCTION SHALL BE REINFORCED WITH ONE (1) #4
  - BY 2'-0" LONG (MIN) AT 45° FROM THE SLAB EDGES \$ AT SLAB MID-DEPTH.
  - 7. WHERE REQUIRED \$ UNLESS NOTED OTHERWISE, PROVIDE DOWELS TO MATCH SIZE & SPACING OF MAIN REINFORCEMENT. 8. DO NOT WELD OR BEND REINFORCEMENT IN THE FIELD
  - UNLESS SPECIFICALLY SHOWN OR APPROVED BY STRUCTURAL ENGINEER. 9. PRIOR TO FABRICATION, CONTRACTOR SHALL SUBMIT STEEL REINFORCEMENT SHOP DRAWINGS FOR SER'S
- REVIEW & APPROVAL. SHOP DRAWINGS SHALL BE CREATED IN ACCORDANCE WITH SP-66 (04). 3.3 CAST - IN - PLACE CONCRETE A. STANDARDS
  - 1. ACI 301-16 SPECIFICATIONS FOR STRUCTURAL CONCRETE
  - 2. BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE. ACI 3 | 8-08 \$ COMMENTARY, ACI 318R-08. 3. RECOMMENDED PRACTICE FOR CONCRETE FLOOR \$
- SLAB CONSTRUCTION, ACI 302.2-06. B. MATERIALS I. PRIOR TO THE PLACEMENT OF ANY CONCRETE, CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGN(S) PERFORMED BY A QUALIFIED TESTING LABORATORY FOR SER'S REVIEW & APPROVAL. NO CALCIUM CHLORIDE OR ADMIXTURES CONTAINING CHLORIDES SHALL BE USED IN ANY CONCRETE. MIX MATERIALS
  - SHALL COMPLY WITH THE FOLLOWING: a. PORTLAND CEMENT ..ASTM C150 b. FLY ASH.. ..ASTM C618 CLASS C OR F c. SILICA FUME.. ..ASTM C1240 d. NORMAL WEIGHT AGGREGATE ASTM C33 CLASS 3S e. WATER... .ASTM C94 POTABLE

..ASTM C260

..ASTM C494 TYPE A

f. AIR-ENTRAINING.

a. WATER-REDUCING.

 NOT EXPOSED TO WEATHER..... (+/- | 1/2%) TROWELED FINISHED SLABS.......3% MAX 3. CONCRETE SURFACES SHALL BE CURED A MINIMUM OF

BUILDING ELEMENTS:

OTHERWISE:

SEVEN (7) DAYS PER THE USE OF THE FOLLOWING: a. ABSORPTIVE COVER......AASHTO M182 CLASS 2 b. MOISTURE-RETAINING COVER.....ASTM C171 c. MEMBRANE-FORMING CURING COMPOUND....ASTM C309 TYPE I CLASS B

...ASTM C494 TYPE B

I. WATER-REDUCING/RETARDING..ASTM C494 TYPE D

2. CONCRETE MIXTURES SHALL BE THE NORMAL WEIGHT

TYPE (145 PCF) \$ THE FOLLOWING FOR INDIVIDUAL

a. ALL BUILDING ELEMENTS, UNLESS NOTED

• WALLS...... 4000psi

• FOOTINGS......3000psi

CONTENT IN CEMENT

7. AIR CONTENT

3. WATER/CEMENT RATIO...O.59 (MAX)

6. SLUMP LIMIT..4 INCHES (+/- I INCH)

I. PORTLAND CEMENT...TYPE I (GRAY)

2. COMPRESSIVE STRENGTH @ 28 DAYS ....

4. COARSE AGGREGATE SIZE.. I 1/2 INCHES (MAX)

• EXPOSED TO WEATHER......4% TO 6%

5. FINE AGGREGATE... FREE OF ANY MATERIALS

THAT NEGATIVELY REACT TO THE ALKALI

PLASTICIZING/RETARDING......ASTM C1017 TYPE II

- d. MEMBRANE-FORMING CURING/SEALING COMPOUND.... ......ASTM C1315 TYPE | CLASS A 4. ACCESSORIES:
- a. BONDING AGENT/DOWEL & ANCHOR GROUT: SIKADUR 32 HI-MOD AS MANUFACTURED BY SIKA CORP. OF LYNDHURST. NJ OR APPROVED EQUAL. b. CONTRACTION OR CONSTRUCTION JOINT SEALANT:
- SIKADUR 5 I SL AS MANUFACTURED BY SIKA CORP. OF LYNDHURST, NJ OR APPROVED EQUAL c. ISOLATION JOINT SEALANT: SKIAFLEX - I a AS MANUFACTURED BY SIKA CORP. OF LYNDHURST, NJ OR APPROVED EQUAL
- d. VAPOR RETARDER: ASTM E1745 CLASS A e. PREMOLDED EXPANSION JOINT FILLER (PMF): HOMEX 300 AS MANUFACTURED BY HOMASOTE COMPANY, WEST TRENTON, NJ OR APPROVED
- f. UNDERSLAB INSULATION: EXTRUDED-POLYSTYRENE PER ASTM C578 TYPE IV, 25 PSI COMPRESSIVE STRENGTH, WITH MAXIMUM FLAME-SPREAD \$ SMOKE-DEVELOPED INDICES OF 75 \$ 450, RESPECTIVELY, PER ASTM E 84
- g. WATERSTOP: VOLCLAY WATERSTOP-RX AS MANUFACTURED BY CETCO, ARLINGTON HEIGHTS, IL OR APPROVED EQUAL
- h. ANCHORING SYSTEM: ADHESIVE REINFORCING HILTI HY-150 SYSTEM OR APPROVED EQUAL EXPANSION BOLTS HILTI KWIK BOLT II OR APPROVED EQUAL C. EXECUTION
- I. COORDINATE PLACEMENT OF CAST-IN-PLACE EMBEDMENTS & ANCHOR RODS WITH A TEMPLATE. SECURELY ATTACH EMBEDMENT ITEMS TO FORMWORK OR REINFORCING. 2. PLACE CONCRETE IN ONE LAYER OR IN HORIZONTAL LAYERS OF SUCH THICKNESS SO THAT NO NEW
- CONCRETE WILL BE PLACED ON CONCRETE THAT HAS HARDENED ENOUGH TO CAUSE SEAMS OF PLANES OF WEAKNESS (COLD JOINTS) 3. PROVIDE CONSTRUCTION, CONTRACTION \$ ISOLATION JOINTS AS INDICATED ON DRAWINGS. HORIZONTAL CONSTRUCTION JOINTS ARE NOT ALLOWED UNLESS
- SPECIFICALLY NOTED OR APPROVED BY THE SER. PROPOSED JOINT LOCATIONS THAT ARE DIFFERENT OR IN ADDITION TO THE JOINT LOCATIONS INDICATED ON THE DRAWINGS MUST BE REVIEWED \$ APPROVED BY THE SER. a. CONSTRUCTION JOINTS & CONTROL JOINTS IN SLABS
- ON GRADE SHALL BE ARRANGED TO LIMIT MAXIMUM LENGTH BETWEEN JOINTS TO 15'-O" IN ANY DIRECTION. ALLOW A MINIMUM OF 48 HOURS TIME BETWEEN PLACEMENT OF ADJACENT SECTIONS. 4. UNLESS NOTED OTHERWISE, CHAMFER ALL EXPOSED
- EDGES OF CONCRETE 3/4 INCH. 5. ALL INTERIOR SLABS-ON-GRADE SHALL BE PLACED OVER A 10 MIL (MIN) VAPOR RETARDER. ALL EDGES OF THE VAPOR RETARDER SHALL BE LAPPED A MINIMUM OF 6 INCHES & TAPED TO PREVENT ANY & ALL PASSAGE OF
- MOISTURE. 6. BEGIN CURING PROCEDURES IMMEDIATELY AFTER COMPLETING PLACEMENT. CONCRETE SHALL BE PROTECTED FROM PREMATURE DRYING, EXCESSIVELY HOT OR COLD TEMPERATURES & MECHANICAL INJURY. METHODS OF CURING SHALL BE AS FOLLOWS: a. MATS, PADS \$ SLABS SHALL BE COVERED WITH WATERPROOF SHEETING FOR AT LEAST SEVEN (7) ACCEPTABLE DAYS. A DAY ON WHICH THE "CURING" TEMPERATURE DROPS BELOW 50° IS NOT CONSIDERED TO BE AN ACCEPTABLE DAY. THE "CURING TEMPERATURE" IS CONSIDERED TO BE THE
- TEMPERATURE OF AIR IMMEDIATELY ADJACENT TO THE CONCRETE. b. PROVIDE A CONTINUOUS, UNIFORM MEMBRANE BY SPRAY APPLYING TWO (2) COATS OF A CURING COMPOUND TO ALL FORMED SURFACES. APPLY FIRST COAT IMMEDIATELY AFTER STRIPPING FORMS \$ AFTER ACCEPTANCE OF THE CONCRETE FINISH. APPLY THE SECOND AFTER THE FIRST APPLICATION HAS SET
- (+/-3 DAYS).7. ALUMINUM MATERIALS ARE NOT PERMITTED TO BE EMBEDDED IN CONCRETE.
- 8. DEPOSIT CONCRETE IN HORIZONTAL LAYERS OF DEPTH NOT TO EXCEED FORMWORK DESIGN PRESSURES \$ IN A MANNER TO AVOID INCLINED CONSTRUCTION. 9. CONSOLIDATE PLACED CONCRETE WITH MECHANICAL VIBRATING EQUIPMENT ACCORDING TO ACI 301.
- 10. DO NOT USE VIBRATORS TO TRANSPORT CONCRETE INSIDE FORMS. INSERT AND WITHDRAW VIBRATORS VERTICALLY AT UNIFORMLY SPACED LOCATIONS TO RAPIDLY PENETRATE PLACED LAYER AND AT LEAST 6 INCHES INTO PRECEDING LAYER. DO NOT INSERT VIBRATORS INTO LOWER LAYERS OF CONCRETE THAT HAVE BEGUN TO LOSE PLASTICITY. AT EACH INSERTION LIMIT DURATION OF VIBRATION TO TIME NECESSARY TO CONSOLIDATE CONCRETE AND COMPLETE EMBEDMENT OF REINFORCEMENT AND OTHER EMBEDDED ITEMS WITHOUT CAUSING MIXTURE TO SEGREGATE.

### 4. MASONRY

- 4. I STANDARDS A. BUILDING CODE REQUIREMENTS FOR MASONRY
- STRUCTURES, ACI 530-08. B. STANDARDS SPECIFICATION FOR MASONRY JOINT REINFORCEMENT, ASTM A951-02.
- 4.2 MATERIALS A. LOAD-BEARING CONCRETE MASONRY UNITS (CMU)......ASTM C90 TYPE I GRADE N. NET AREA COMPRESSIVE STRENGTH.....2,000 PSI

- NON-LOAD-BEARING CMU.. ..ASTM C129
- MORTAR . NET AREA COMPRESSIVE STRENGTH = 2.000 PSI. 2. CMU CONSTRUCTION BELOW FINISHED GRADE......ASTM
- C270 TYPE S 3. CMU CONSTRUCTION ABOVE FINISHED
- GRADE.....ASTM C270 TYPE S
- D. GROUT......ASTM C476 28 DAY MINIMUM COMPRESSIVE STRENGTH = 2,500 PSI
- E. REINFORCEMENT: . DEFORMED & PLAIN BARS.....ASTM AG 15 GRADE 60 2. CARBON STEEL WIRE... ..ASTM A82
- 3. MASONRY STEEL ANCHORS, GALVANIZED PER......ASTM A153
- ASSEMBLY ..f'm = 1.500 PSI4.3 EXECUTION
- B. ALL LOAD BEARING CMU WALLS REQUIRE INSPECTION. INSPECTION CONTROL SHALL BE ESTABLISHED TO ASSURE THAT THE MASONRY MATERIALS & CONSTRUCTION PRACTICES COMPLY WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
- C. ALL CMU WALLS ARE TO BE LAID IN RUNNING BOND. ALIGN ALL CELLS VERTICALLY TO MAINTAIN A CLEAR, UNOBSTRUCTED SYSTEM OF FLUES.
- D. WHEN PLACING CMU, FULLY MORTAR FACE SHELLS OF BED \$ HEAD JOINTS, EXCEPT AT FIRST COURSE ON TOP OF FOUNDATION WALL OR FOOTING, WHICH SHALL BE FULLY BEDDED IN MORTAR AT LEAST 1/4 INCH THICK BUT NOT MORE THAN 3/4 INCH THICK. TOOL ALL JOINTS, INSIDE \$ OUTSIDE. TO A CONCAVE, DENSE SMOOTH SURFACE.
- E. ALL CMU WALLS SHALL HAVE GALVANIZED, STANDARDS WEIGHT (MINIMUM) TRUSS TYPE REINFORCEMENT SPACED VERTICALLY AT 16" OC MAXIMUM. PROVIDE CORNER \$ "TEE" SECTIONS OF REINFORCEMENT AT ALL WALL INTERSECTIONS. LAP ALL JOINT REINFORCEMENT 8 INCHES MINIMUM. F. ALL CMU WALLS SHALL BE REINFORCED AS SHOWN ON THE DRAWINGS FOR THE FULL HEIGHT OF THE WALL. ALL LAP THE BAR DIAMETER. AVOID LAP SPLICES AT POINTS OF
- SPLICES SHALL HAVE A MINIMUM LAP EQUAL TO 40 TIMES MAXIMUM STRESS. GROUT ALL VERTICALLY REINFORCED CELLS SOLID BY PLACING GROUT IN LIFTS NOT EXCEEDING FIVE (5) FEET HIGH. REINFORCING SHALL BE LOCATED IN CENTER OF CELLS UNLESS NOTED OTHERWISE ON DRAWINGS. POSITION \$ HOLD REINFORCING IN PLACE BY THE USE OF PREFABRICATED STEEL WIRE BAR POSITIONERS. CONSOLIDATE GROUT WHEN PLACING BY USING A MECHANICAL VIBRATOR. RECONSOLIDATE BY MECHANICAL
- OCCURRED. G. LINTELS BEARING ON CMU SHALL HAVE A MINIMUM BEARING LENGTH OF (8) INCHES, UNLESS OTHERWISE NOTED. A MINIMUM OF TWO (2) MASONRY COURSES, 24 INCHES WIDE SHALL BE FULLY GROUTED FOR LINTEL BEARING.

VIBRATION AFTER INITIAL WATER LOSS \$ SETTLEMENT HAS

- H. ALL BOND BEAMS INDICATED ON DRAWINGS SHALL BE GROUTED SOLID. I. FOR MASONRY OPENINGS EQUAL TO & GREATER THAN TWO (2) FEET IN EITHER DIRECTION, PROVIDE TWO (2) #5 BARS, FULLY GROUTED ON ALL SIDES OF THE OPENING. BARS
- SHALL EXTEND A MINIMUM OF TWO (2) FEET BEYOND EDGE OF OPENING. MECHANICAL OPENINGS THROUGH CMU WALLS FOR EQUIPMENT, PIPES, ETC. ARE TO BE PROVIDED WITH STEEL PIPE SLEEVES OR LINTELS, WHICH ARE PRE-INSTALLED IN THE CMU WALLS. J. PROVIDE ADJUSTABLE MASONRY-VENEER ANCHORS THAT ALLOW VERTICAL ADJUSTMENT BUT RESIST TENSION \$
- COMPRESSION FORCES PERPENDICULAR TO THE PLANE OF THE WALL, FOR ATTACHMENT OVER SHEATHING TO WOOD OR METAL STUDS K. FOR CMU WALL ANCHORS TO STRUCTURAL STEEL MEMBERS, PROVIDE A HOMANN & BARNARD 351, 352 WIRE ANCHORS AT A MAXIMUM OF 32 INCHES O.C.
- L. ALL EXPOSED MASONRY SHALL BE THOROUGHLY CLEANED \$ LEFT FREE OF MORTAR SPOTS & DROPPINGS. MASONRY WORK SHALL BE PROTECTED FROM DAMAGE DURING SUBSEQUENT CONSTRUCTION OPERATIONS. ALL COSTS NECESSARY TO REPAIR DAMAGED WALLS SHALL BE BORNE BY THE CONTRACTOR \$ SHALL BE DONE TO THE SATISFACTION OF THE SER.

6. WOOD

- A. "DESIGN SPECIFICATIONS." TIMBER CONSTRUCTION MANUAL, AMERICAN INSTITUTE OF TIMBER CONSTRUCTION
- B. "NATIONAL DESIGN SPECIFICATIONS OF WOOD CONSTRUCTION", AMERICAN FOREST & PAPER ASSOCIATION, AMERICAN WOOD
- C. "PERFORMANCE STANDARDS & POLICIES FOR STRUCTURAL USE
- PANELS, PRP-108, AMERICAN PLYWOOD ASSOCIATION (APA).
- A. SAWN LUMBER ALL SAWN LUMBER SHALL HAVE 19% MAXIMUM MOISTURE CONTENT & SHALL BE SURFACE DRY SOUTHERN PINE
- WITH THE FOLLOWING MIN. DESIGN VALUES:
- CEILING JOISTS / RAFTER / BEAMS: NUMBER | OR BETTER Fb = 875 psi Fa (PAR) = 1150 psi Fv = 135 psiFt = 450 psi Fc (PERP) = 425 psi E = 1,400,000 psi
- B. APA PERFORMANCE RATED PLYWOOD PANELS (I) PLYWOOD WALL SHEATHING 19/32" THICK, EXPOSURE 1, SPAN RATING 32/16

(2) PLYWOOD ROOF SHEATHING

- 19/32" THICK, EXPOSURE 1, SPAN RATING 40/20 (3) PLYWOOD SUBFLOOR23/32" THICK, EXPOSURE 1, SPAN RATING
- 6.3 SAWN LUMBER A. MEMBERS SHALL BE SET WITH CROWN UP \$ HAVE A MINIMUM OF
- 3" BEARING B. MEMBERS FRAMING TO BEAMS, HEADERS, ETC. SHALL BE SECURED WITH SIMPSON STRONG-TIE FRAMING ANCHORS OR APPROVED EQUAL, UNLESS OTHERWISE NOTED OR SHOWN
- C. ALL JOISTS & RAFTERS SHALL BE RIGIDLY BRIDGED AT INTERVALS NOT EXCEEDING 8'-0". D. PROVIDE CONTINUOUS SOLID BLOCKING UNDER CONCENTRATED LOADS DOWN THROUGH ROOF FRAMING TO EXISTING BEARING
- E. DESIGN OF TRUSSES, TRUSS BRACING & DETAILING OF TRUSS CONNECTIONS IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS SHALL BE BY THE FABRICATOR'S
- ENGINEER REGISTERED IN THE PROJECTS JURISDICTION F. ALL BOLTS \$ LAG BOLTS SHALL BE FITTED WITH GALVANIZED,
- MALLEABLE IRON OR STEEL PLATE WASHERS. G. CONNECTION DETAILS SHOW ARRANGEMENT OF STRUCTURAL MEMBERS ONLY. DESIGN OF CONNECTIONS SHALL BE THE RESPONSIBILITY OF THE BUILDER/FABRICATOR.
- H. MANUFACTURED WOOD BEAMS UTILITY MICROLAM FRAMING MEMBERS SHALL BE "I.9E MICROLAM", "PARALLAM", OR APPROVED EQUAL WITH THE FOLLOWING MECHANICAL PROPERTIES # MINIMUM STRENGTH VALUES: MICROLLAM
- Fb = 2600 psi Fc (PER) = 2310 psi Fv = 285 psiFc (PERP) = 750 psi E - 2,000,000 psi MOMENT SHEAR
- I 3/4" x 9 3/4" 3075 LBS 5600 FT/LBS I-3/4" x | I-7/8" 3950 LBS 8925 FT/LBS 6.4 PLYWOOD PANELS A. FACTORY-MARK EACH CONSTRUCTION PANEL WITH APA
- TRADEMARK EVIDENCING COMPLIANCE WITH GRADE REQUIREMENTS B. INSTALL PANELS WITH FACE GRAIN PERPENDICULAR TO THE SUPPORTING MEMBERS, UNLESS SHOWN OTHERWISE.
- 6.5 WOOD PRESERVATIVE TREATMENT A. WHERE LUMBER OR PLYWOOD IS INDICATED AS "TREATED" OR "PRESSURE TREATED", COMPLY WITH APPLICABLE REQUIREMENTS OF AMERICAN WOOD PRESERVERS ASSOCIATION (AWPA) STANDARDSS C2 (LUMBER) & C9 (PLYWOOD) & WITH AWPB STANDARDSS LISTED BELOW. MARK EACH TREATED ITEM WITH
- THE AWPB QUALITY MARK REQUIREMENTS. PRESSURE TREAT ABOVE-GROUND ITEMS WITH WATER-BORNE PRESERVATIVES TO COMPLY WITH AMERICAN WOOD PRESERVERS BUREAU (AWPB) LP-2. AFTER TREATMENT. KILN-DRY LUMBER # PLYWOOD TO A MAXIMUM MOISTURE CONTENT, RESPECTIVELY, OF 10 PERCENT \$ 15 PERCENT.

C. TREAT INDICATED ITEMS \$ WOOD SILLS, SLEEPERS, BLOCKING, \$

SIMILAR CONCEALED MEMBERS IN CONTACT WITH MASONRY OR

# METALS

**PRIS** WAR

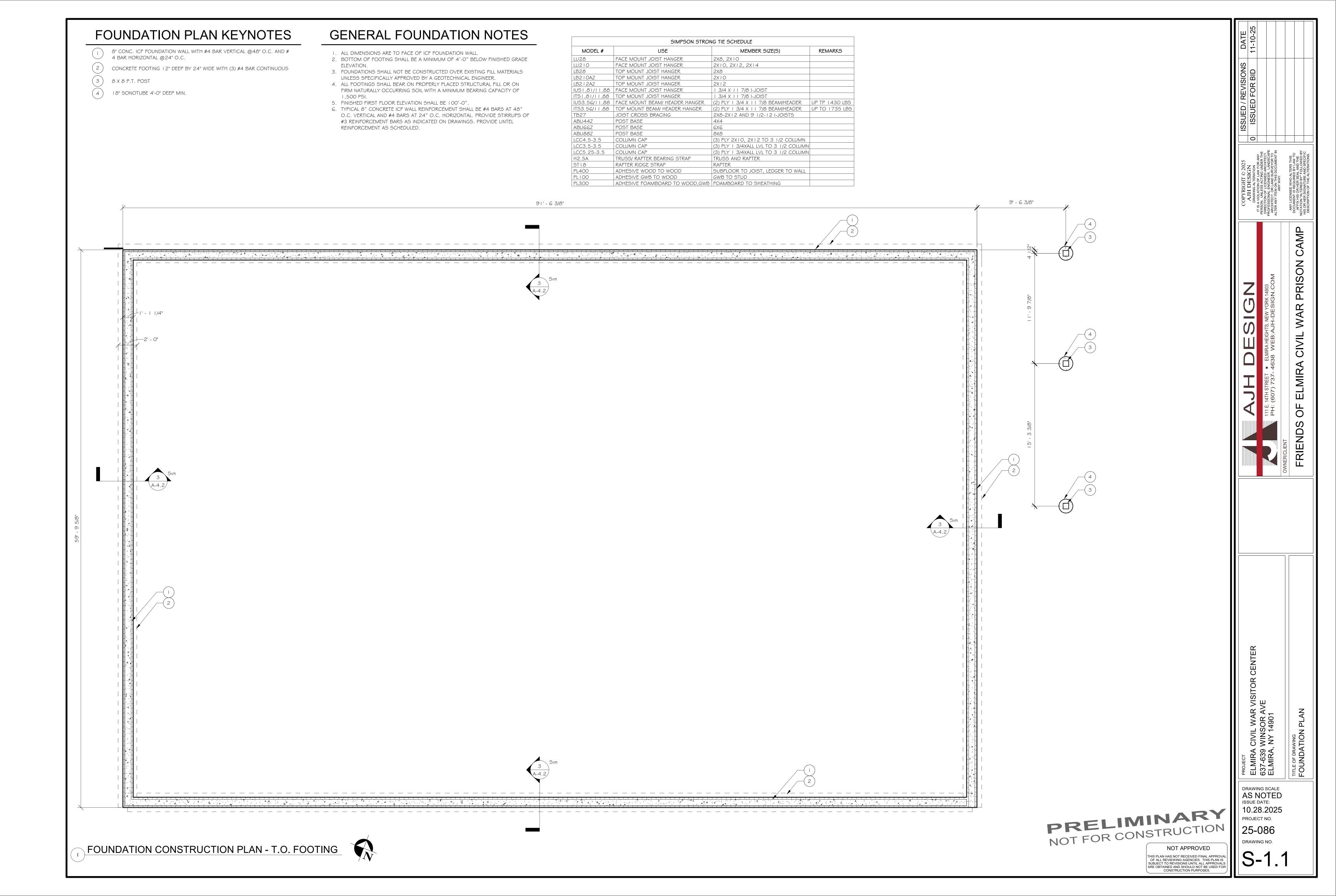
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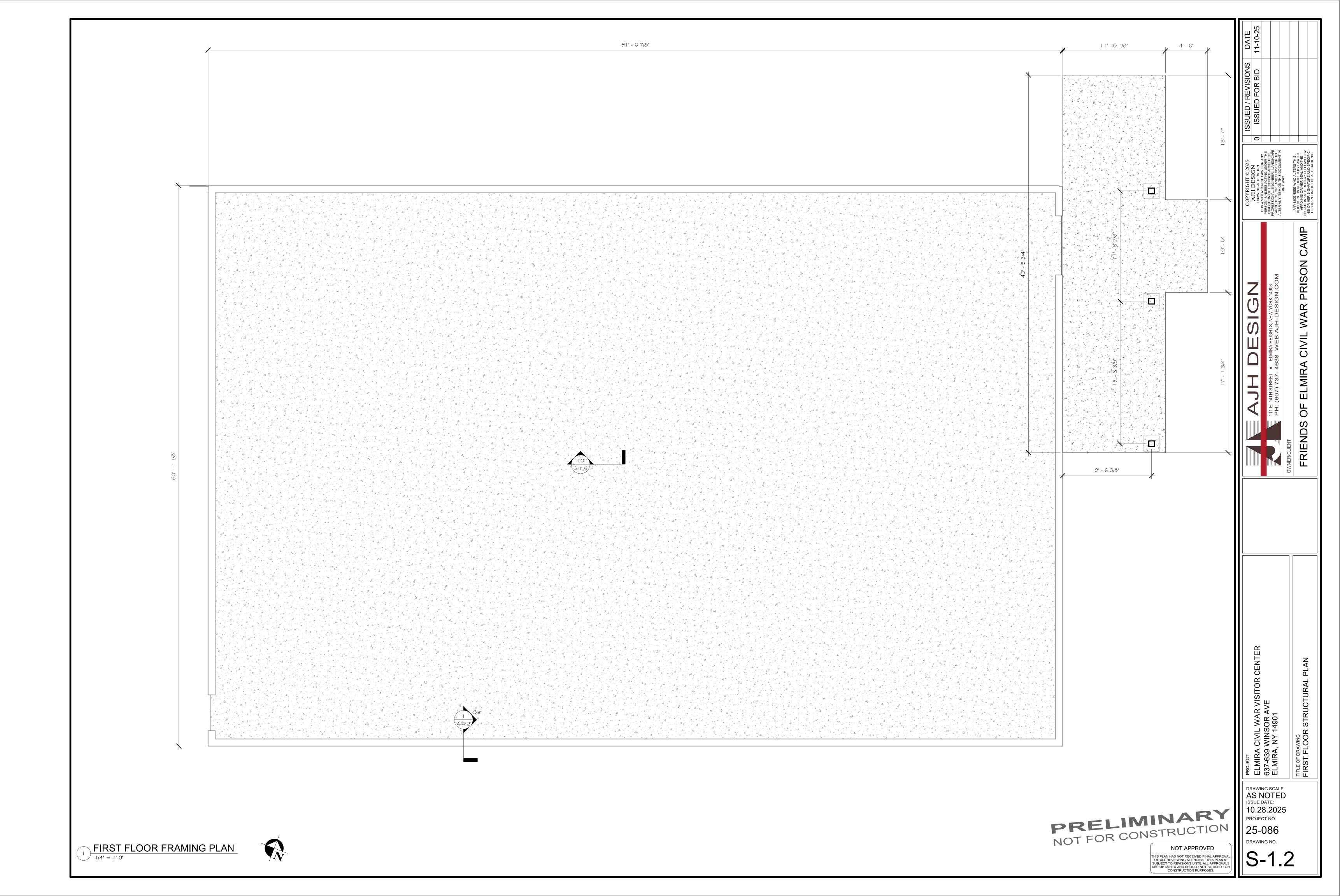
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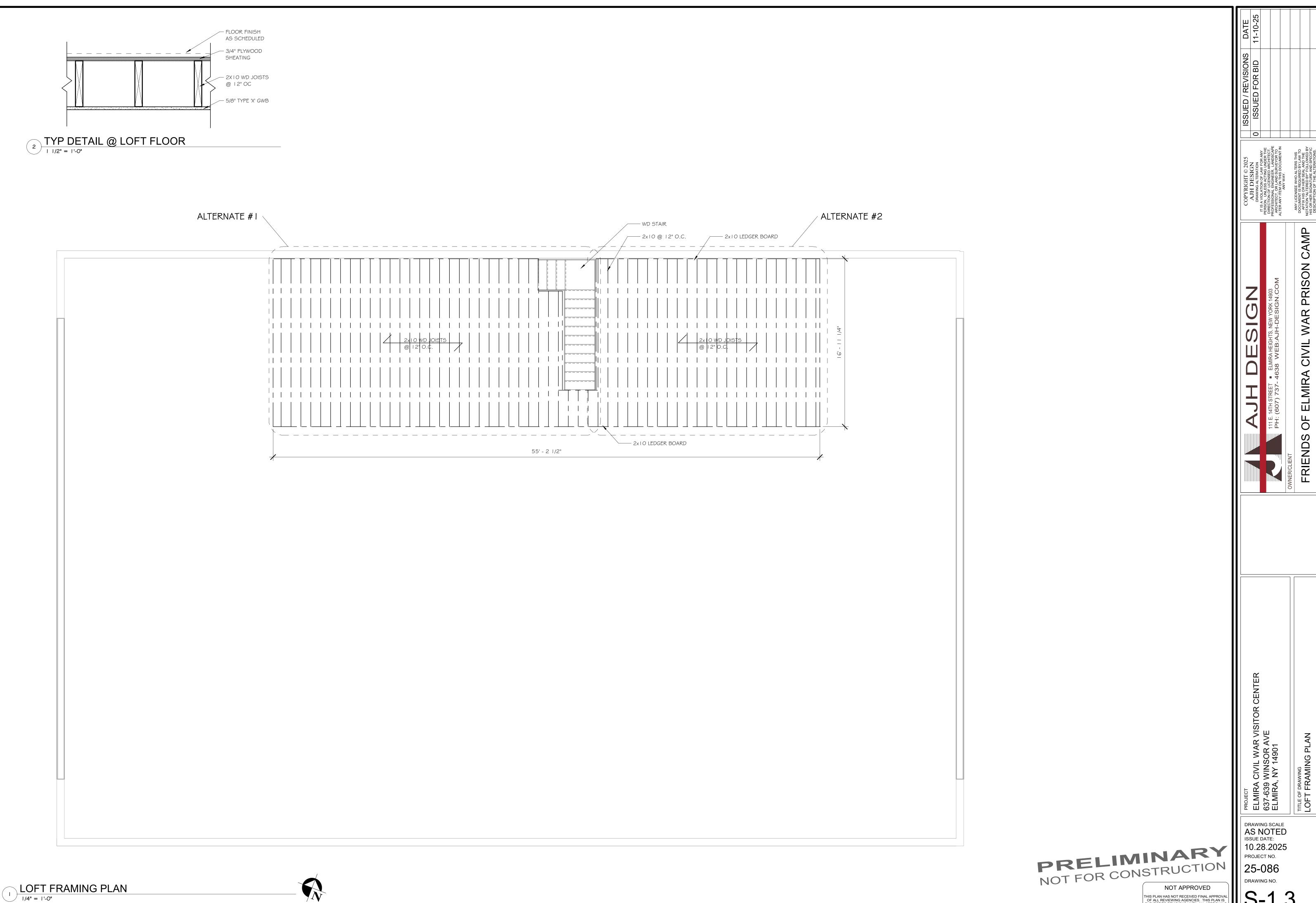
PRELIMINARY NOT FOR CONSTRUCTION

DRAWING NO.

NOT APPROVED IIS PLAN HAS NOT RECEIVED FINAL APPRO OF ALL REVIEWING AGENCIES. THIS PLAN IS SUBJECT TO REVISIONS UNTIL ALL APPROVALS ARE OBTAINED AND SHOULD NOT BE USED FOR CONSTRUCTION PURPOSES.



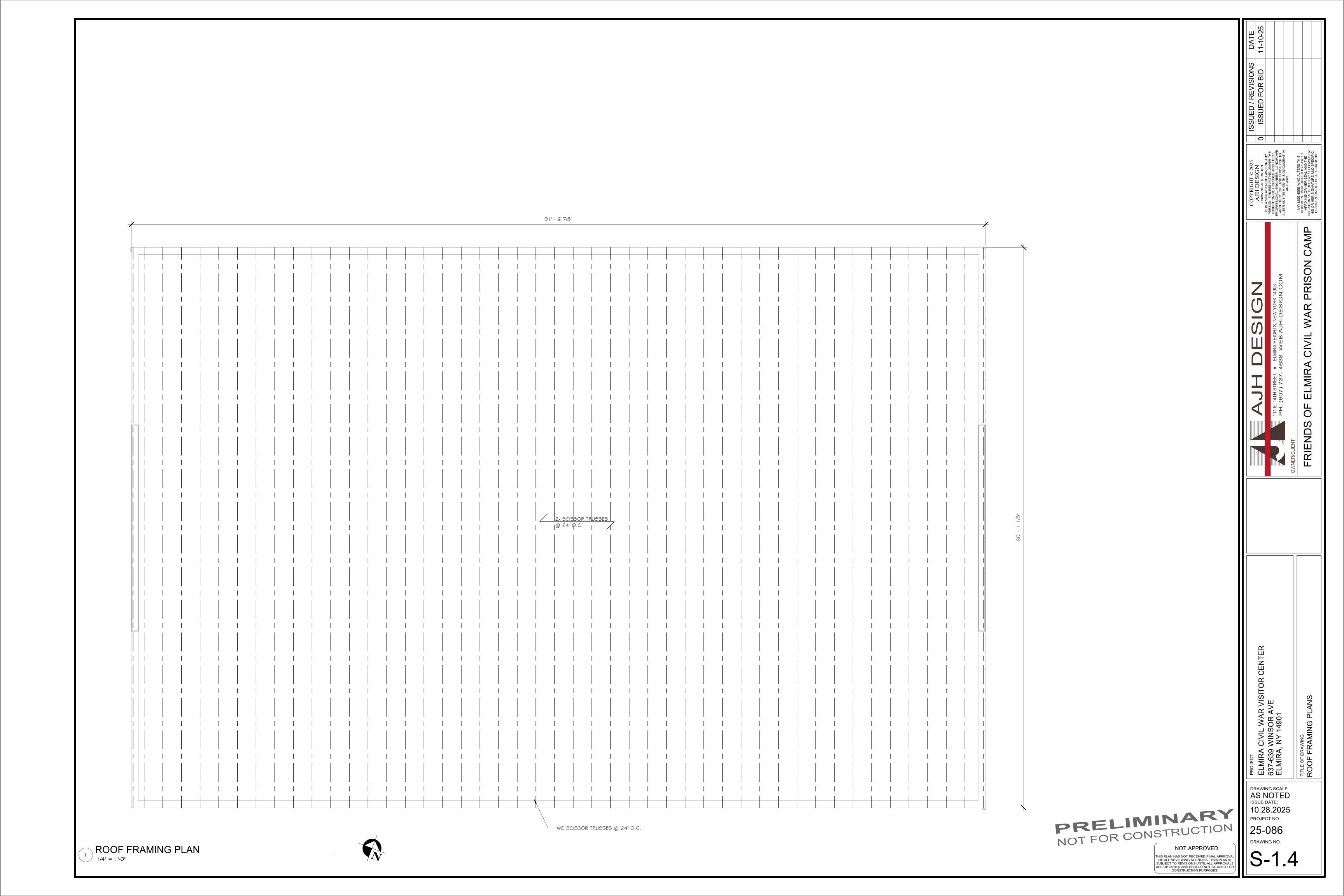


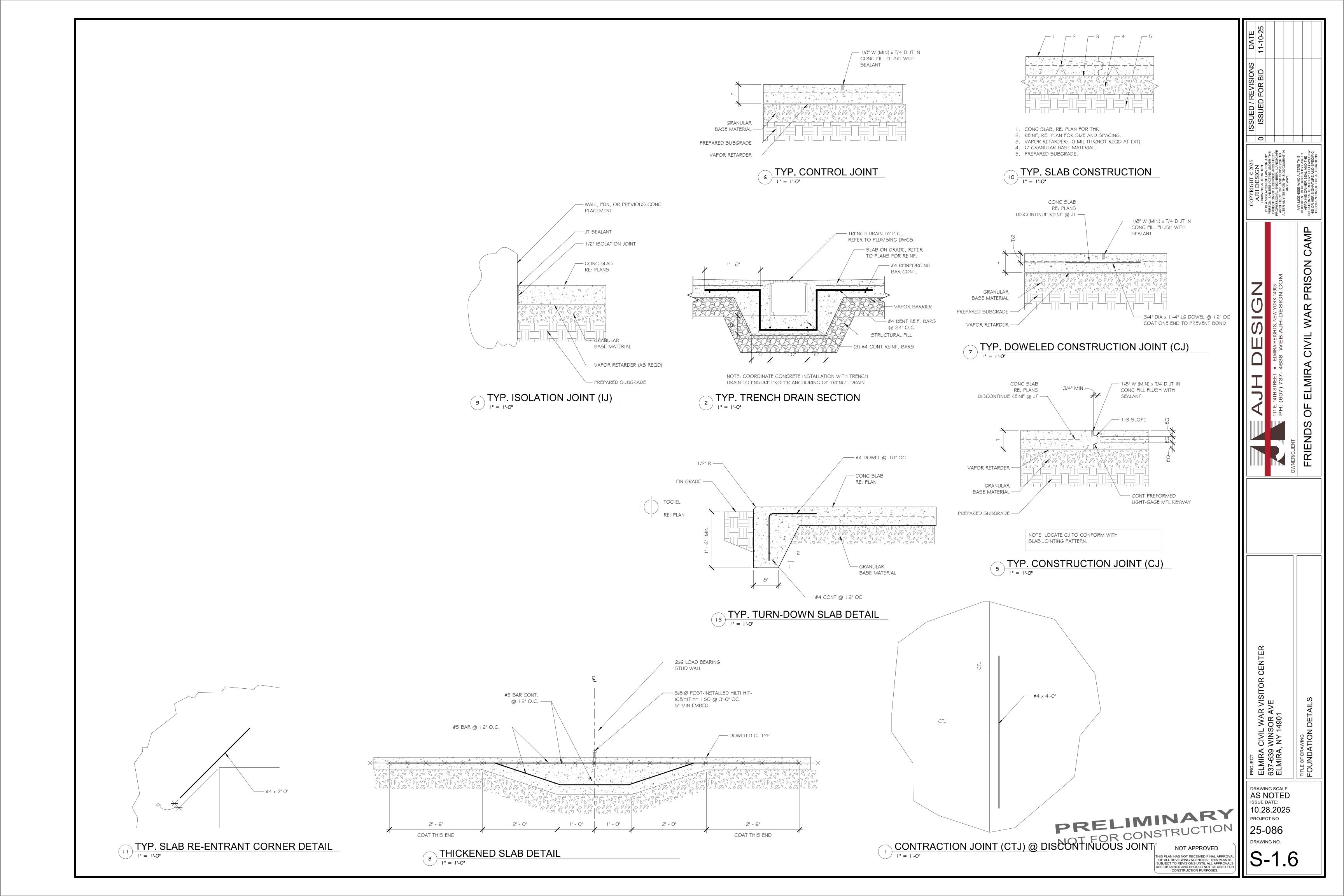


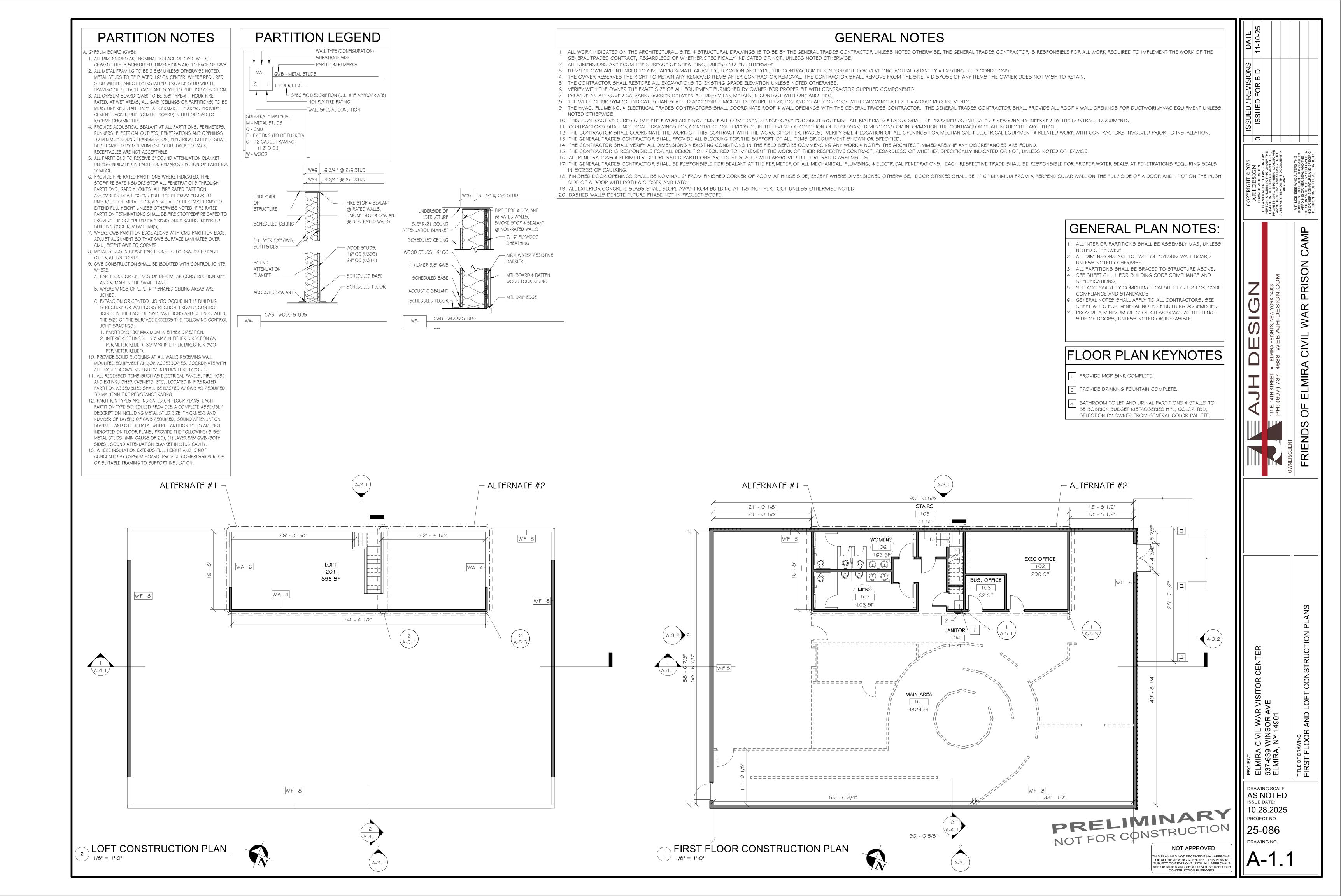
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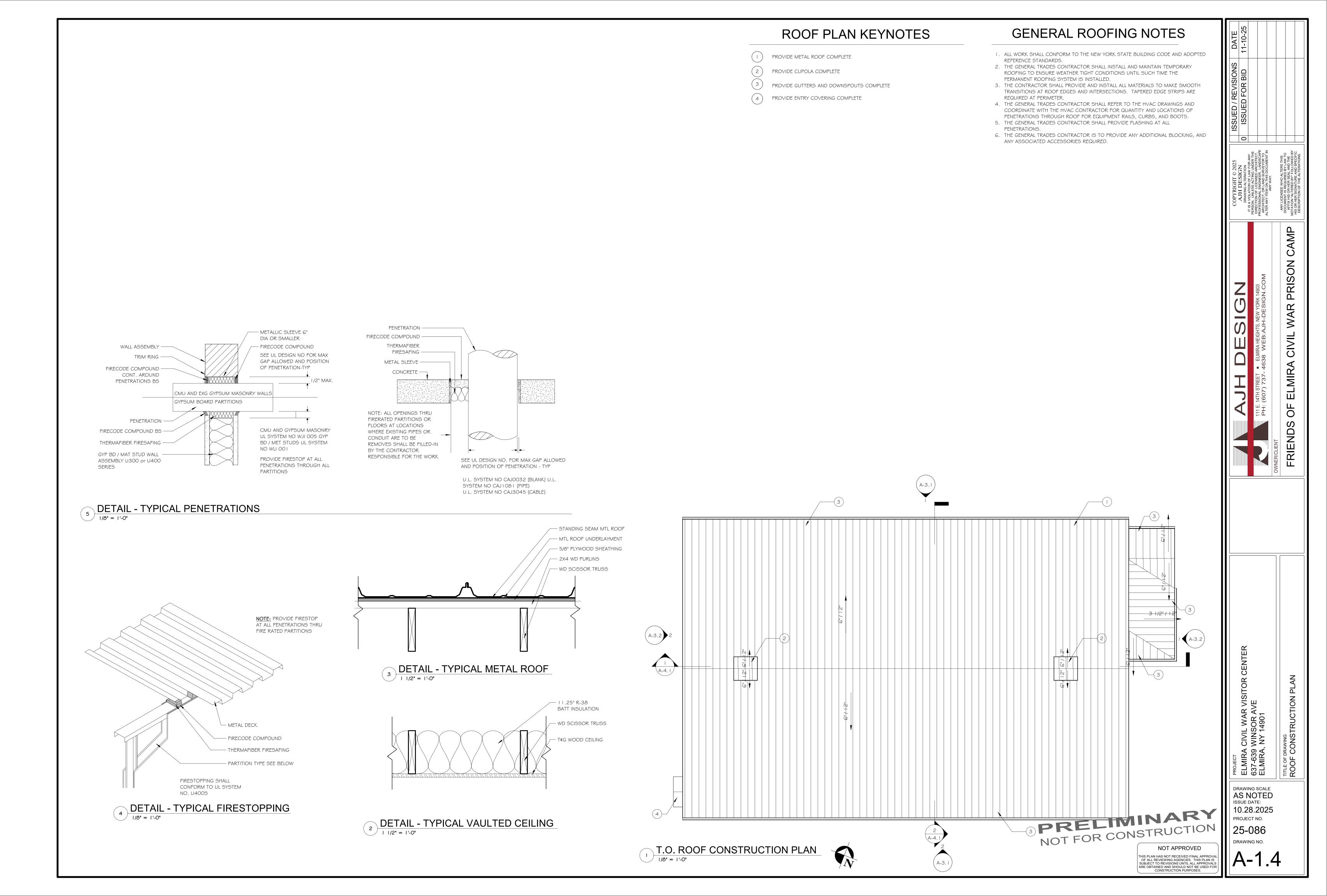
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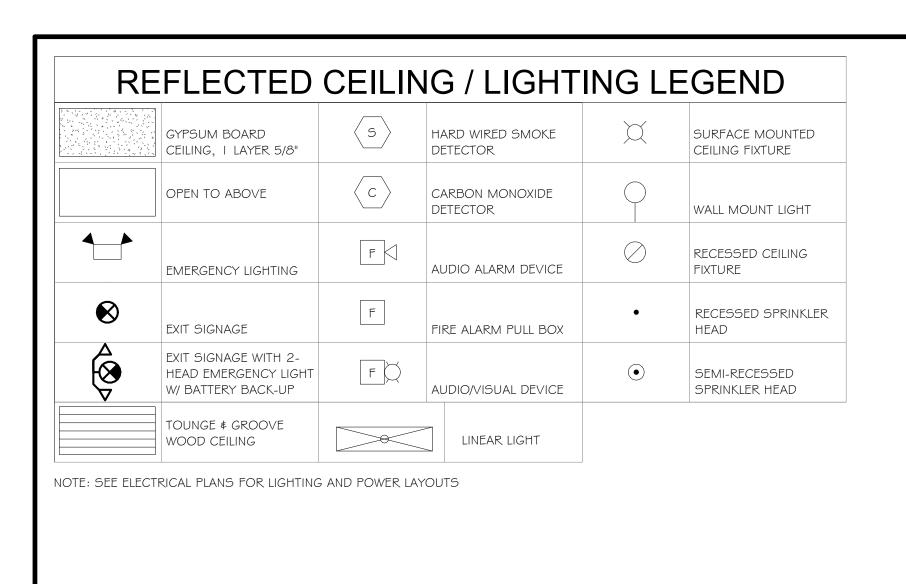
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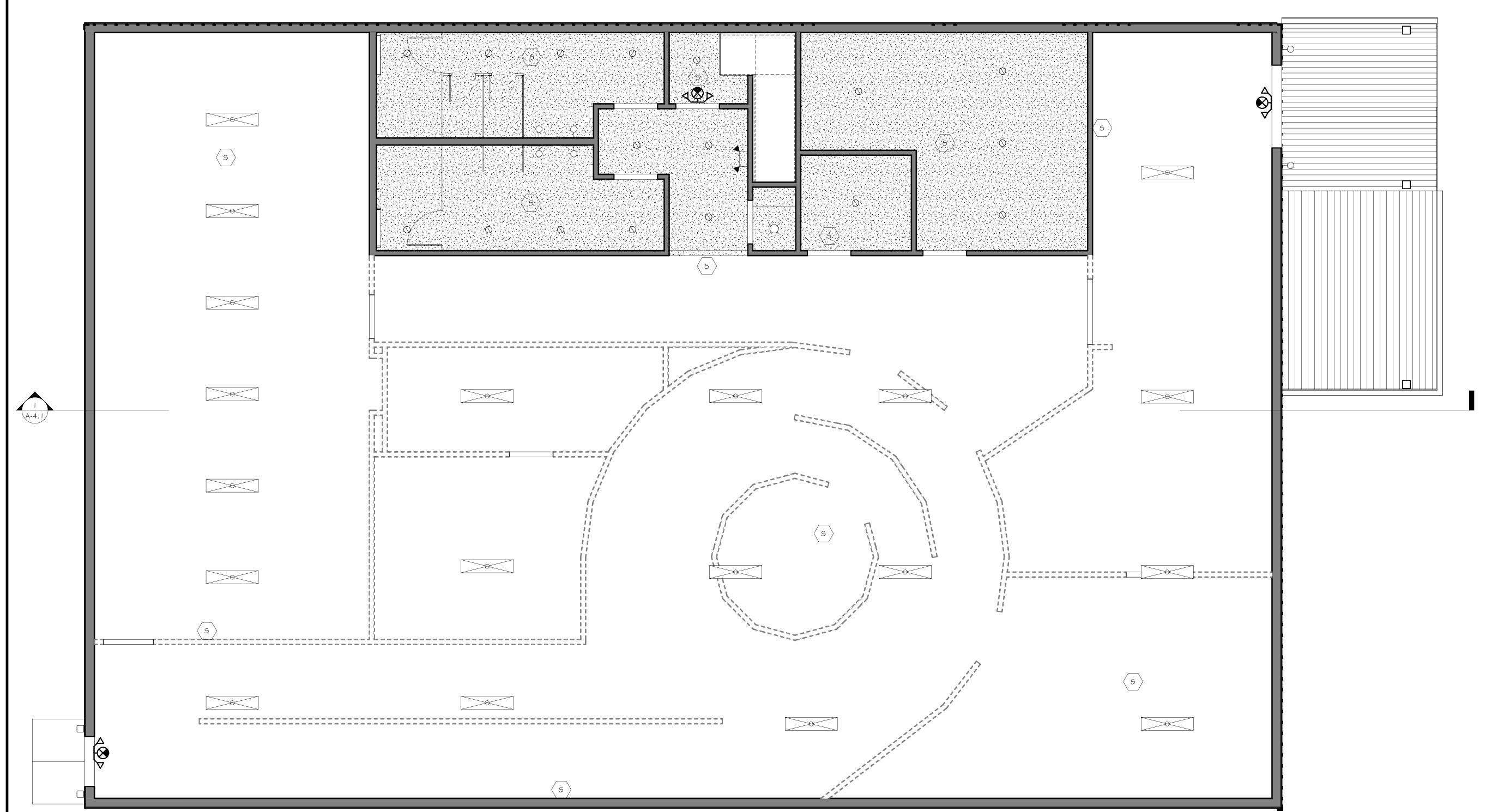


REFLECTED CEILING PLAN NOTES:

A. ALL CEILINGS SHALL BE AT 8'-0" ABOVE FINISHED FLOOR UNLESS NOTED

. ALL GWB CEILINGS AND SOFFITS ARE 1/2" GWB, UNLESS NOTED OTHERWISE, ALL VERTICAL FACES OF SOFFITS ARE 1/2" GWB, UNLESS NOTED OTHERWISE. REFER TO ELECTRICAL DRAWINGS FOR SPECIFIC LIGHT FIXTURE TYPES, EXIT SIGNS, SMOKE DETECTORS AND ALARMS. REFER TO MECHANICAL DRAWINGS FOR MECHANICAL PENETRATIONS.

D. ALL FIRE PROTECTION AND LIFE SAFETY SHALL BE IN ACCORDANCE WITH 2020 FIRE CODE OF NEW YORK STATE AND NFPA 72.



PRELIMINARY

NOT FOR CONSTRUCTION

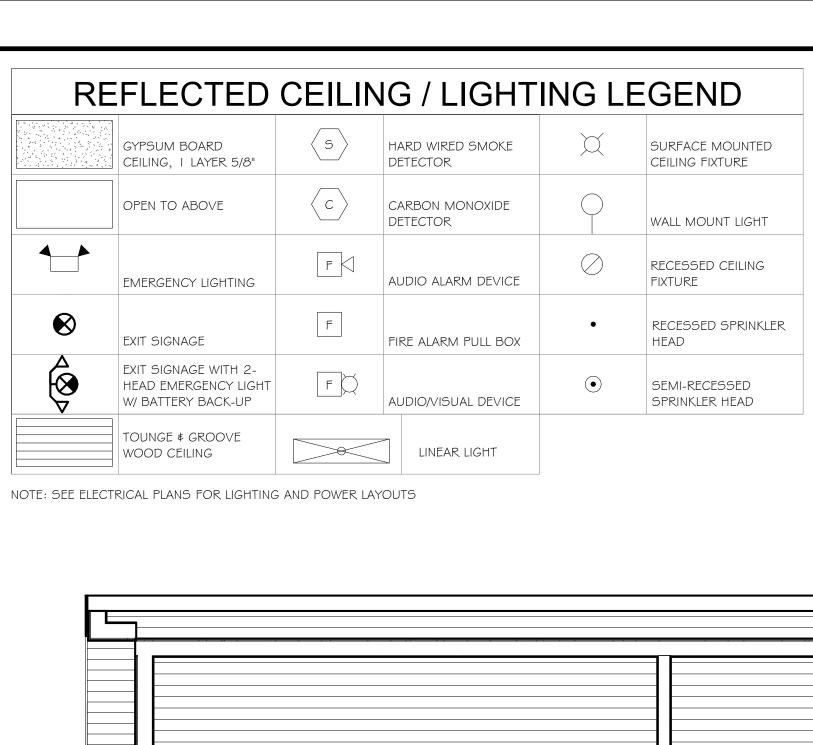
ISSUE DATE:
10.28.2025
PROJECT NO.
25-086

FIRST FLOOR REFLECTED CEILING PLAN

1/4" = 1'-0"



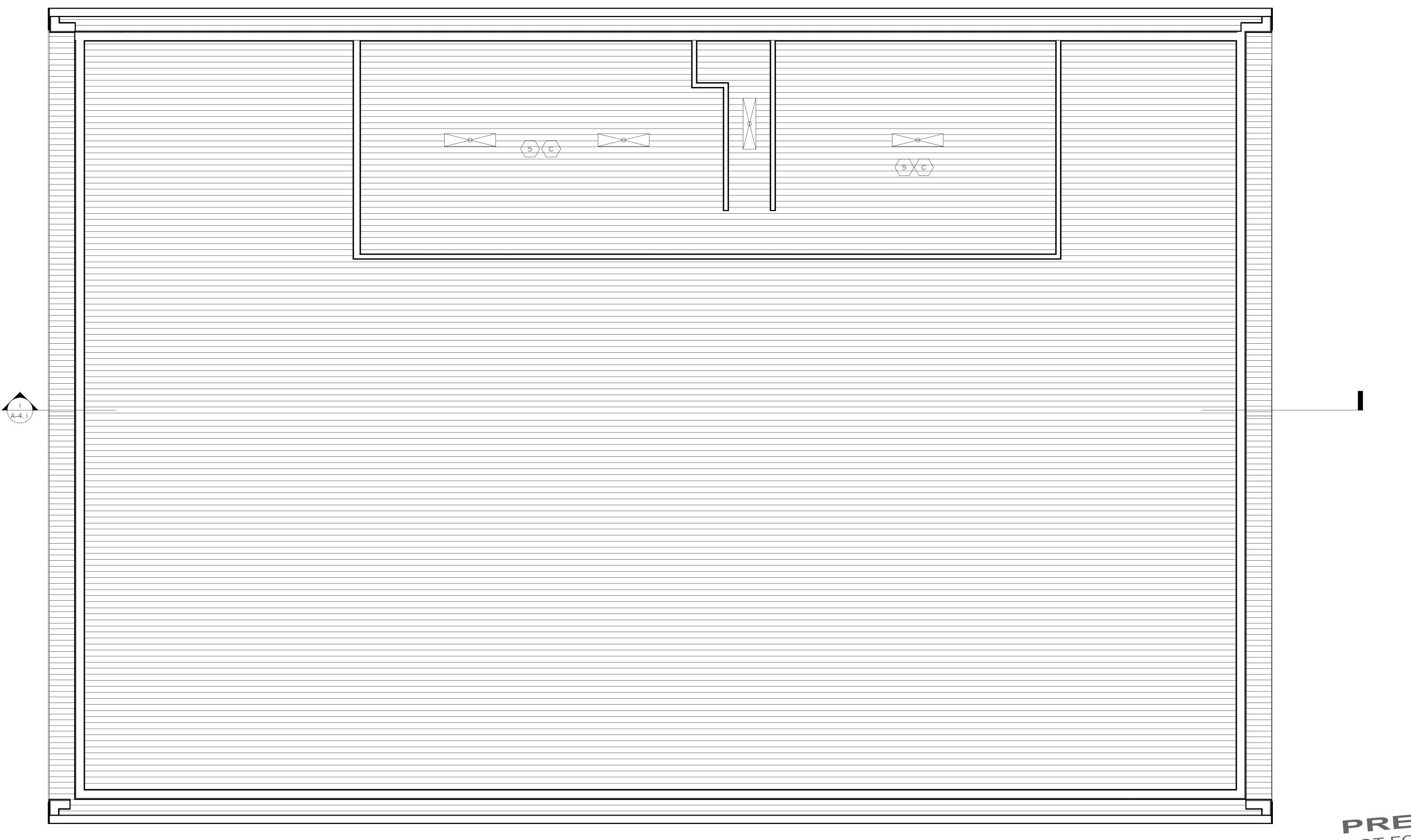
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LOFT REFLECTED CEILING PLAN

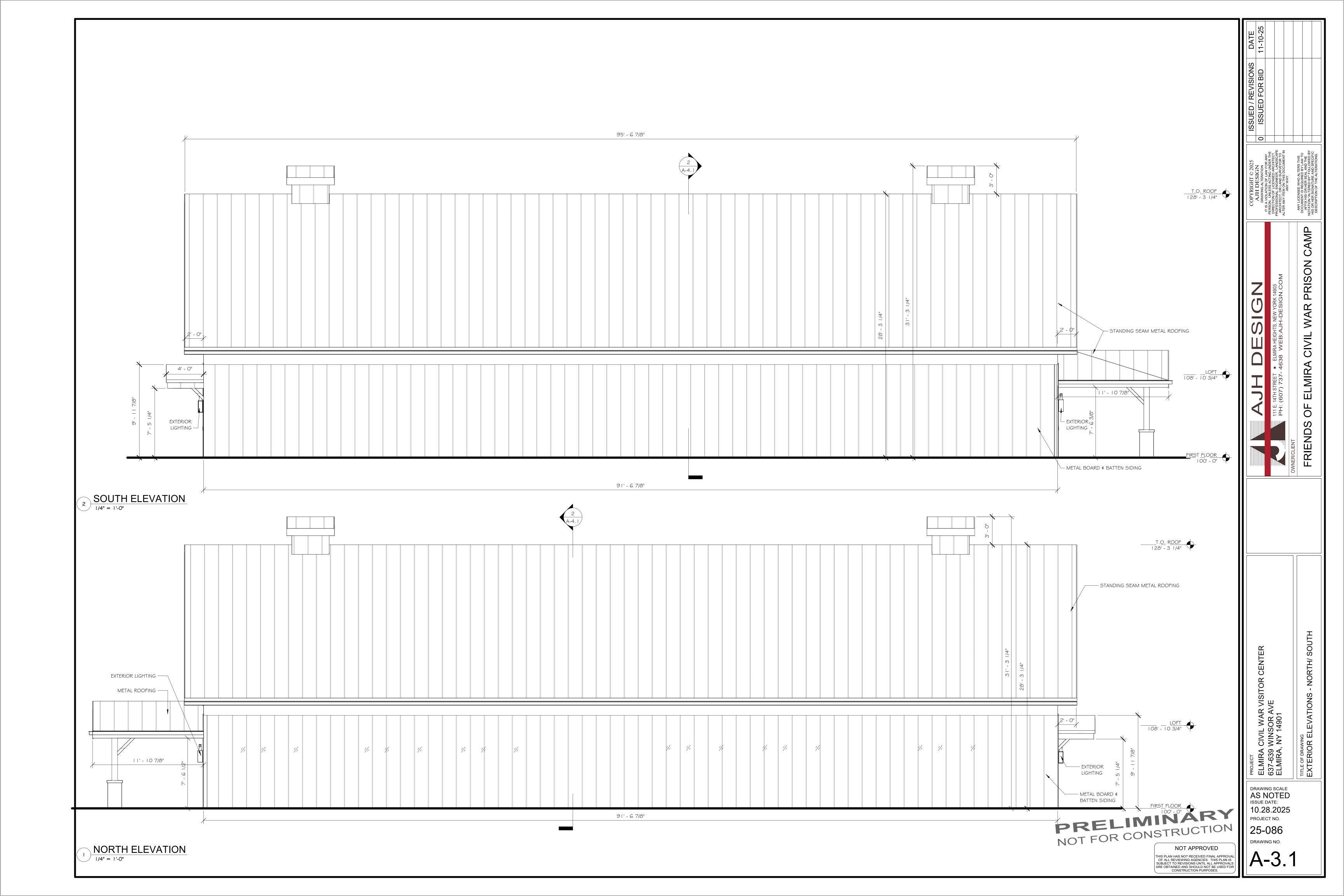
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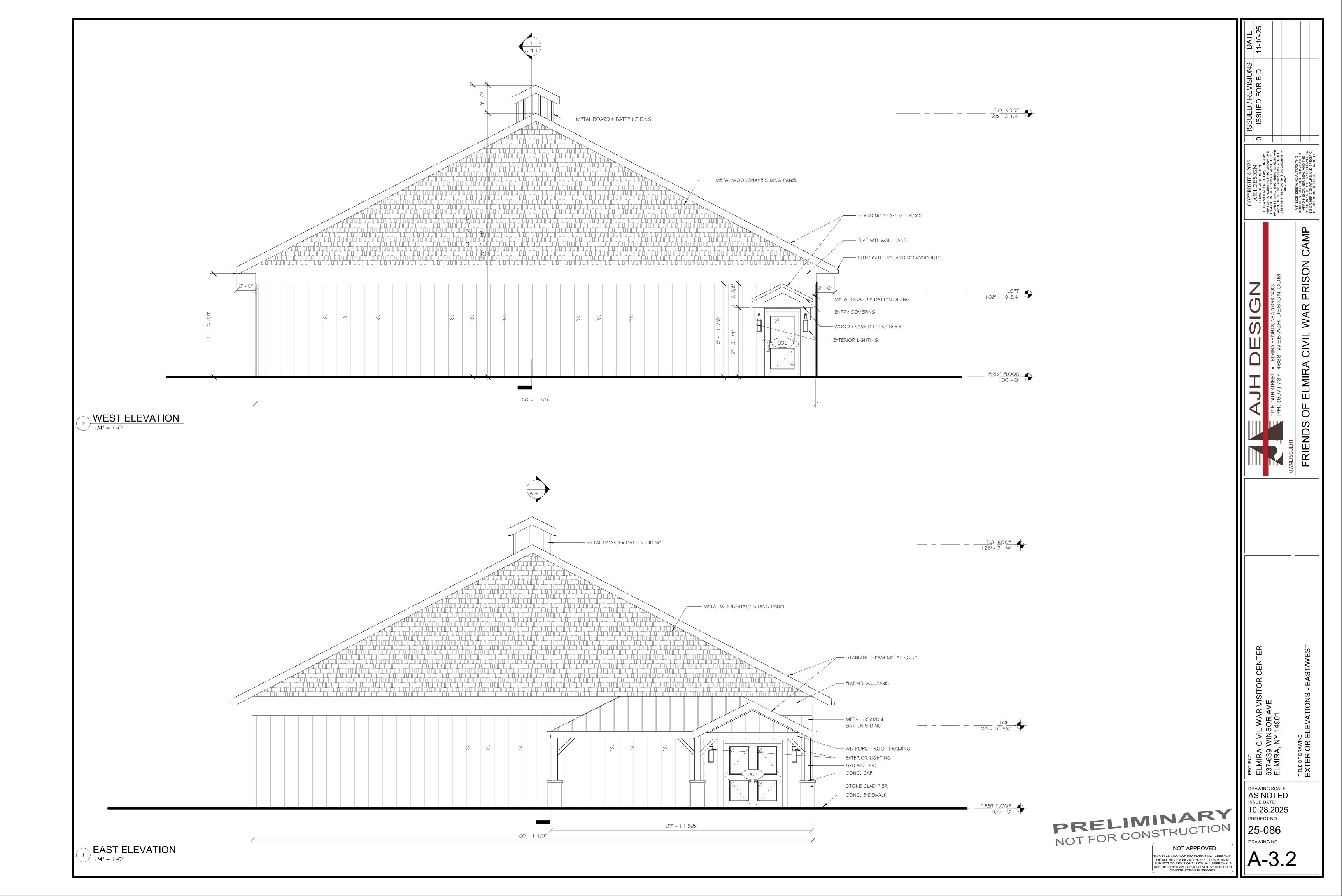
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- REFER TO ELECTRICAL DRAWINGS FOR SPECIFIC LIGHT FIXTURE TYPES, EXIT SIGNS, SMOKE DETECTORS AND ALARMS. REFER TO MECHANICAL DRAWINGS FOR MECHANICAL PENETRATIONS.
- D. ALL FIRE PROTECTION AND LIFE SAFETY SHALL BE IN ACCORDANCE WITH 2020 FIRE CODE OF NEW YORK STATE AND NFPA 72.

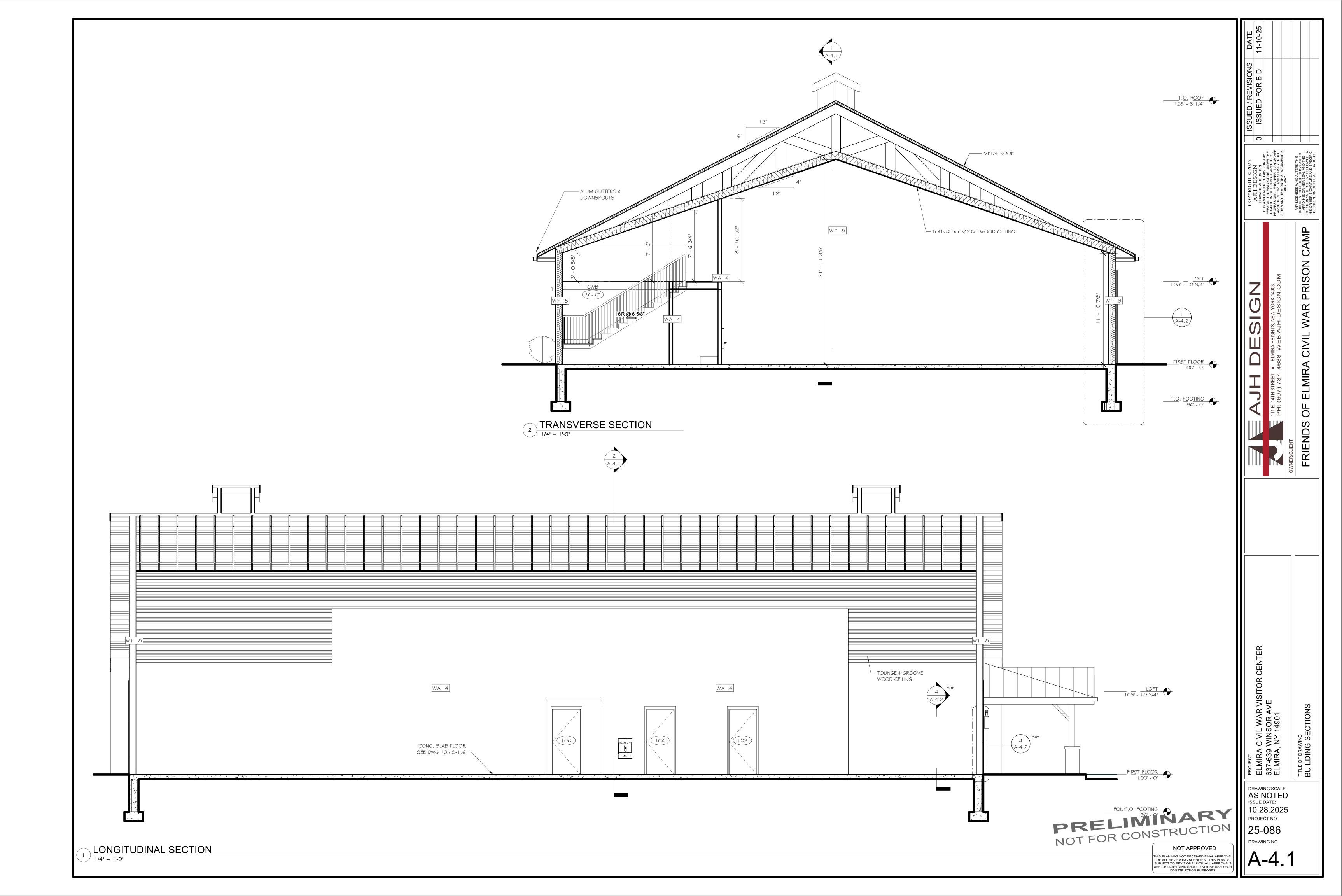


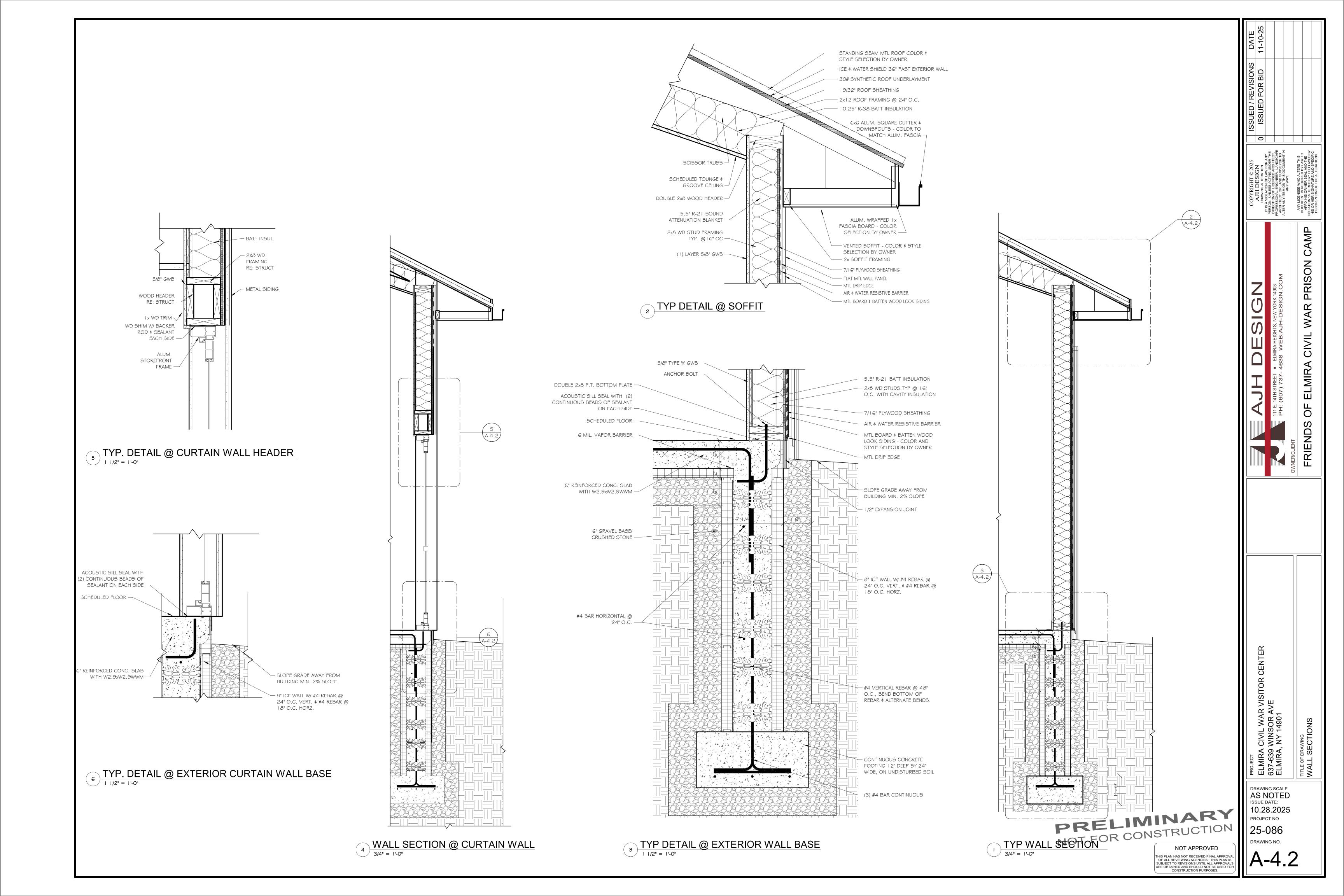
PRELIMINARY
10.28.2025
PROJECT NO.
25-086

AS NOTED ISSUE DATE:









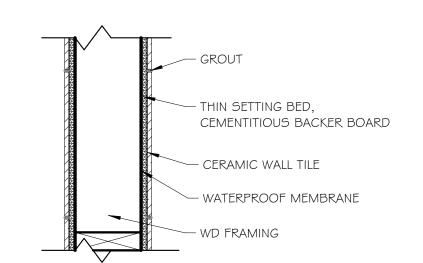


- ALL INTERIOR PARTITIONS SHALL BE ASSEMBLY MA3, UNLESS NOTED OTHERWISE.
- ALL DIMENSIONS ARE TO FACE OF GYPSUM WALL BOARD UNLESS NOTED OTHERWISE.
- ALL PARTITIONS SHALL BE BRACED TO STRUCTURE ABOVE. SEE SHEET C-1.1 FOR BUILDING CODE COMPLIANCE AND
- SPECIFICATIONS. SEE ACCESSIBILITY COMPLIANCE ON SHEET C-1.2 FOR CODE
- COMPLIANCE AND STANDARDS
- GENERAL NOTES SHALL APPLY TO ALL CONTRACTORS. SEE SHEET A-1.0 FOR GENERAL NOTES \$ BUILDING ASSEMBLIES. PROVIDE A MINIMUM OF 6" OF CLEAR SPACE AT THE HINGE

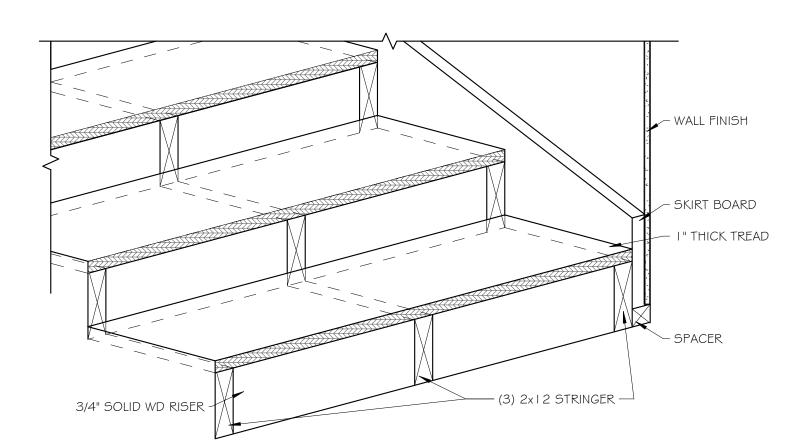
SIDE OF DOORS, UNLESS NOTED OR INFEASIBLE.

### FLOOR PLAN KEYNOTES

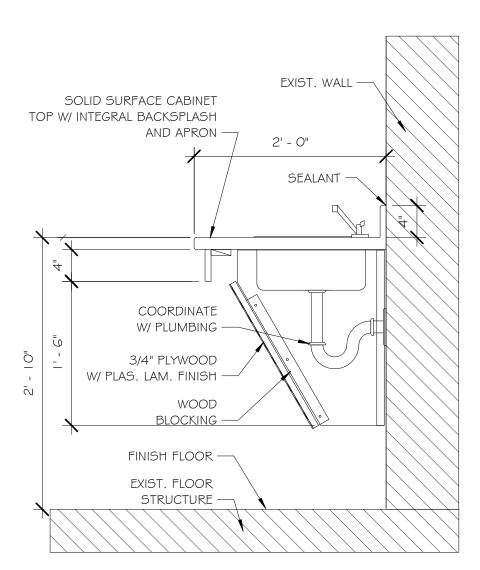
- PROVIDE MOP SINK COMPLETE.
- 2 PROVIDE DRINKING FOUNTAIN COMPLETE.
- 3 BATHROOM TOILET AND URINAL PARTITIONS & STALLS TO BE BOBRICK BUDGET METROSERIES HPL, COLOR TBD, SELECTION BY OWNER FROM GENERAL COLOR PALLETE.



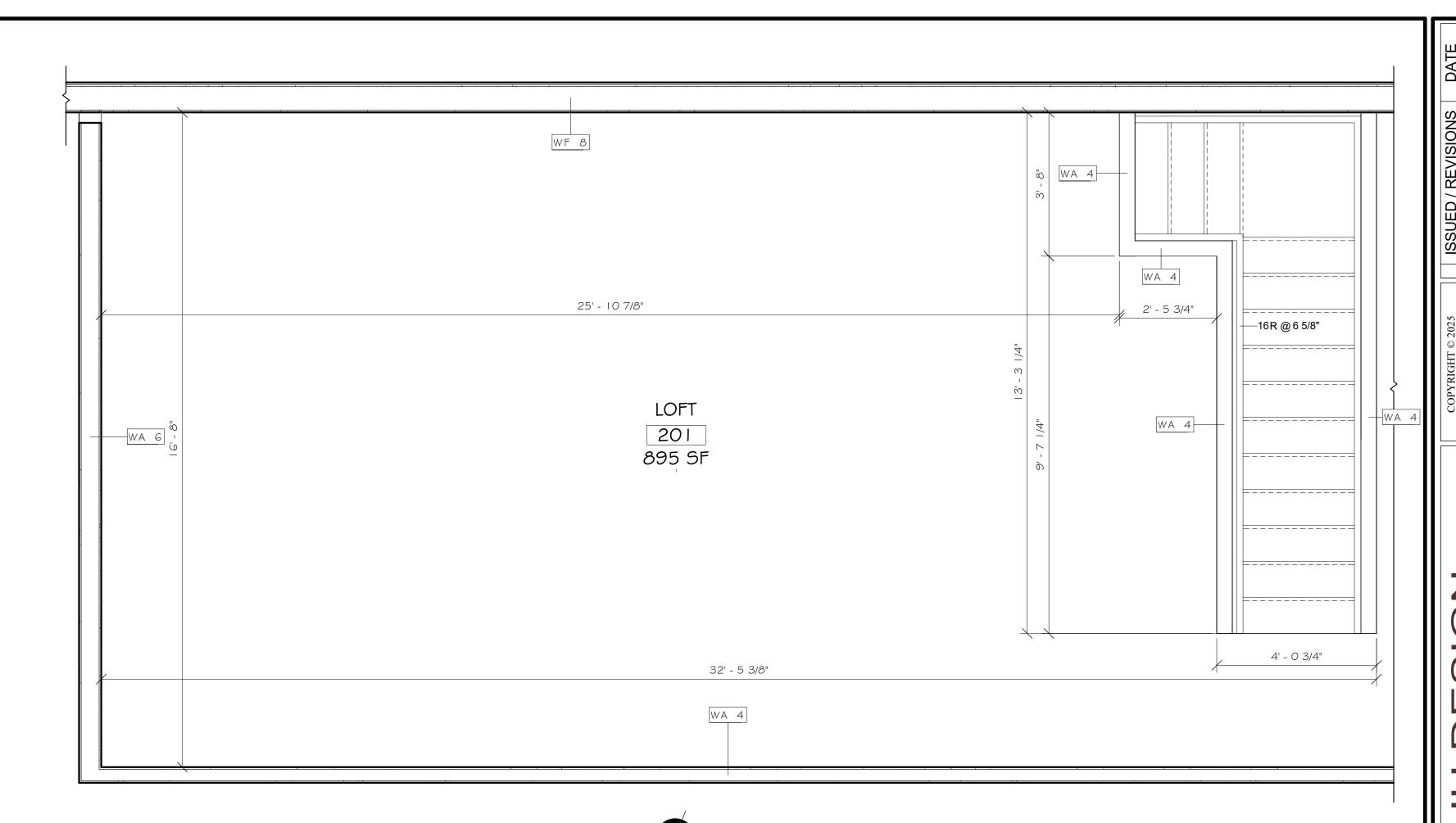
DETAIL - CERAMIC TILE WALL FINISH



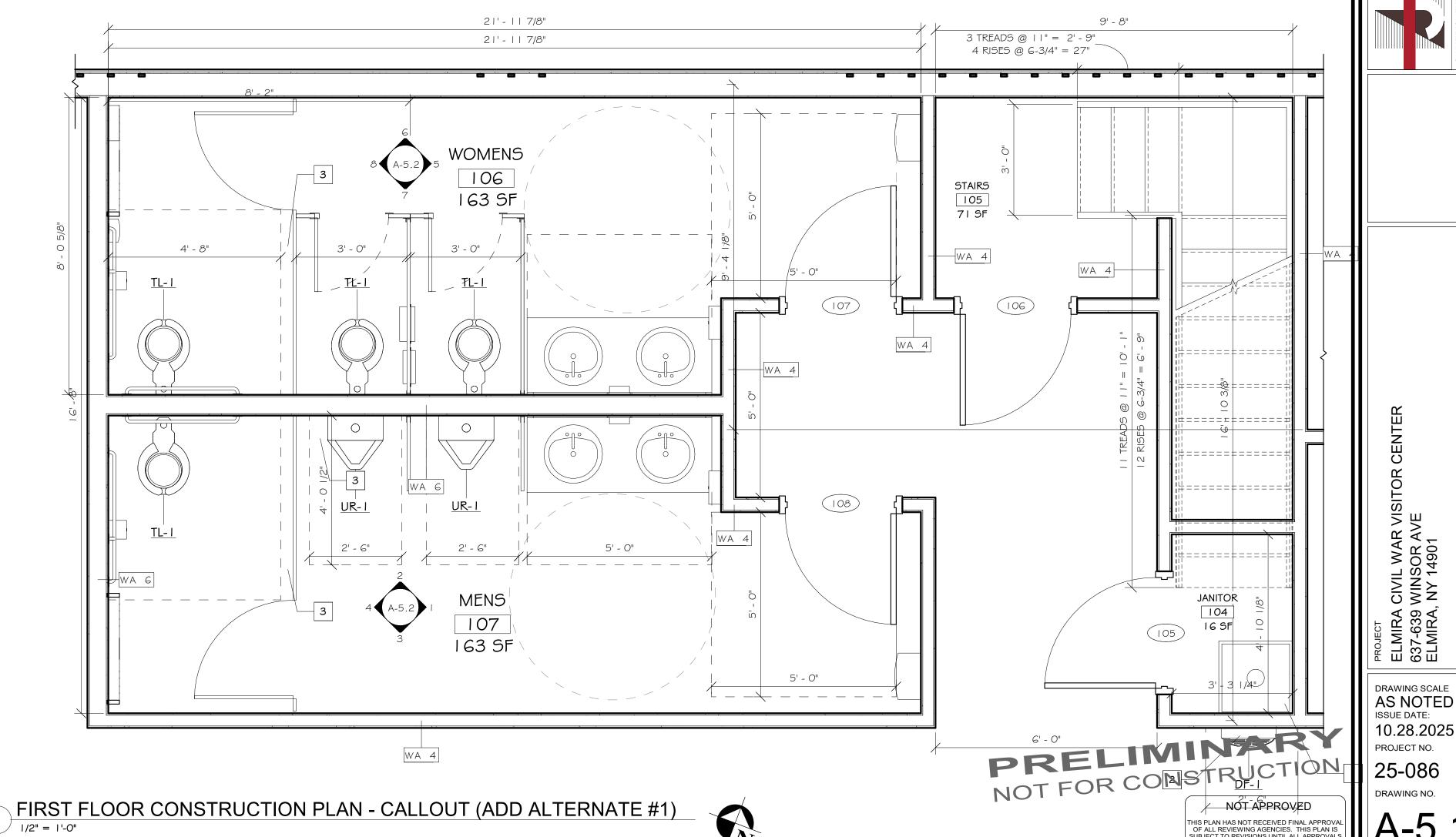
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DETAIL - ADA - LAVATORY SECTION DETAIL



LOFT CONSTRUCTION PLAN - CALLOUT (ADD ALTERNATE #1)

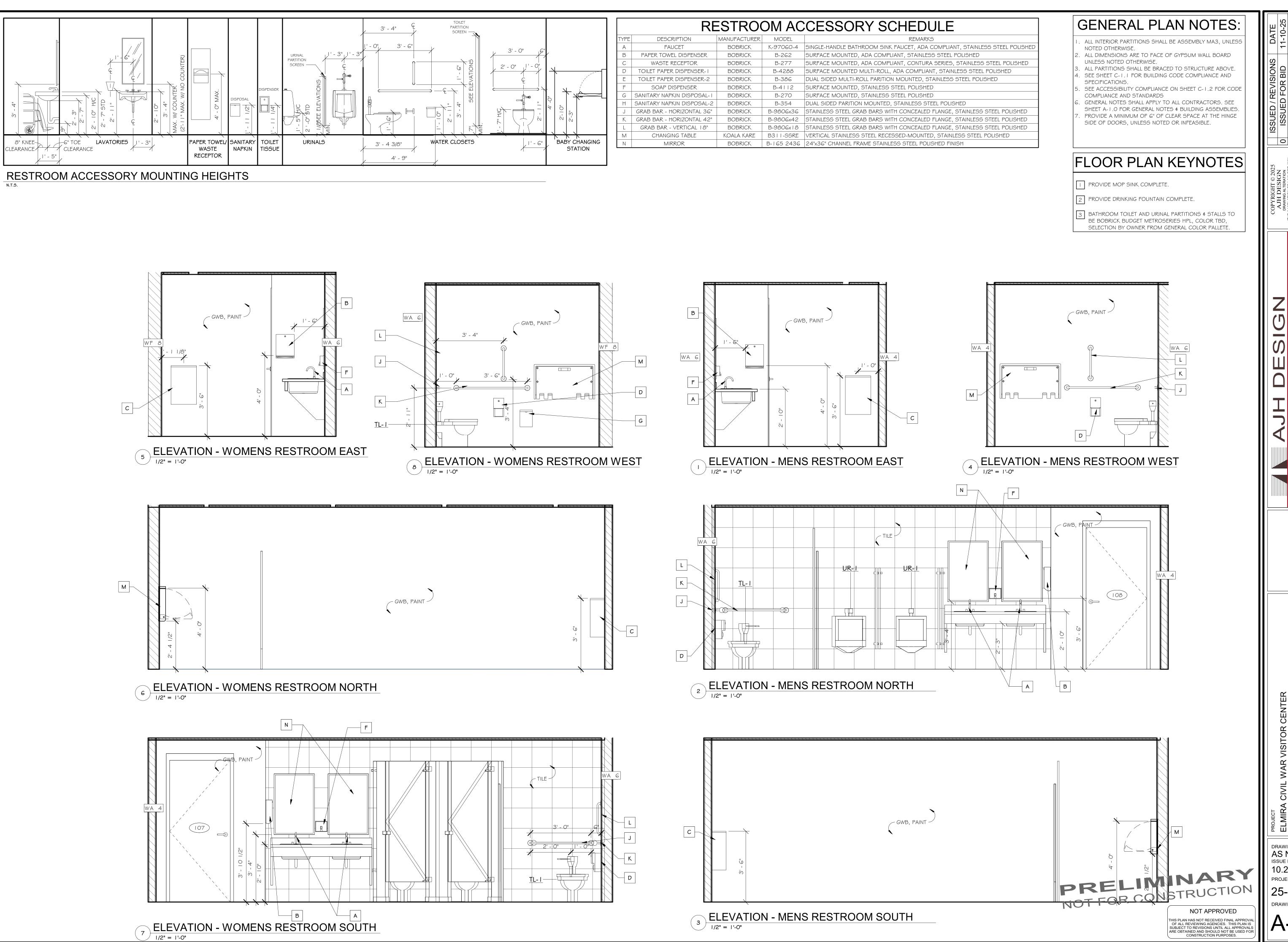




DRAWING SCALE AS NOTED ISSUE DATE:

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TERNATE #1)



**PRISON** WAR

#1)

DRAWING SCALE AS NOTED ISSUE DATE: 10.28.2025

## GENERAL PLAN NOTES:

- . ALL INTERIOR PARTITIONS SHALL BE ASSEMBLY MA3, UNLESS NOTED OTHERWISE.
- ALL DIMENSIONS ARE TO FACE OF GYPSUM WALL BOARD UNLESS NOTED OTHERWISE.
- 3. ALL PARTITIONS SHALL BE BRACED TO STRUCTURE ABOVE. 4. SEE SHEET C-1.1 FOR BUILDING CODE COMPLIANCE AND
- SPECIFICATIONS.

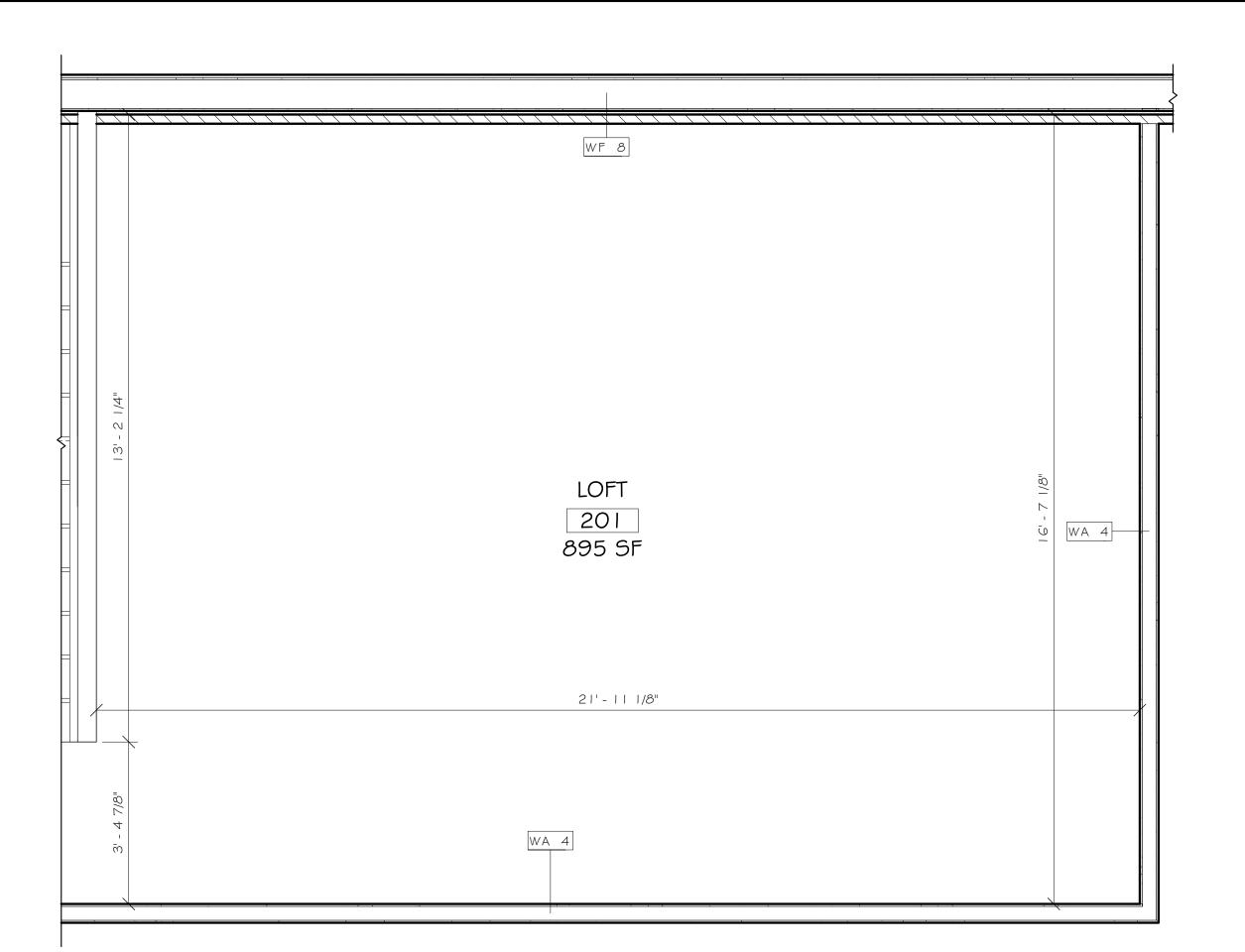
  5. SEE ACCESSIBILITY COMPLIANCE ON SHEET C-1.2 FOR CODE COMPLIANCE AND STANDARDS
- COMPLIANCE AND STANDARDS

  G. GENERAL NOTES SHALL APPLY TO ALL CONTRACTORS. SEE
- SHEET A-1.0 FOR GENERAL NOTES & BUILDING ASSEMBLIES.

  7. PROVIDE A MINIMUM OF 6" OF CLEAR SPACE AT THE HINGE SIDE OF DOORS, UNLESS NOTED OR INFEASIBLE.

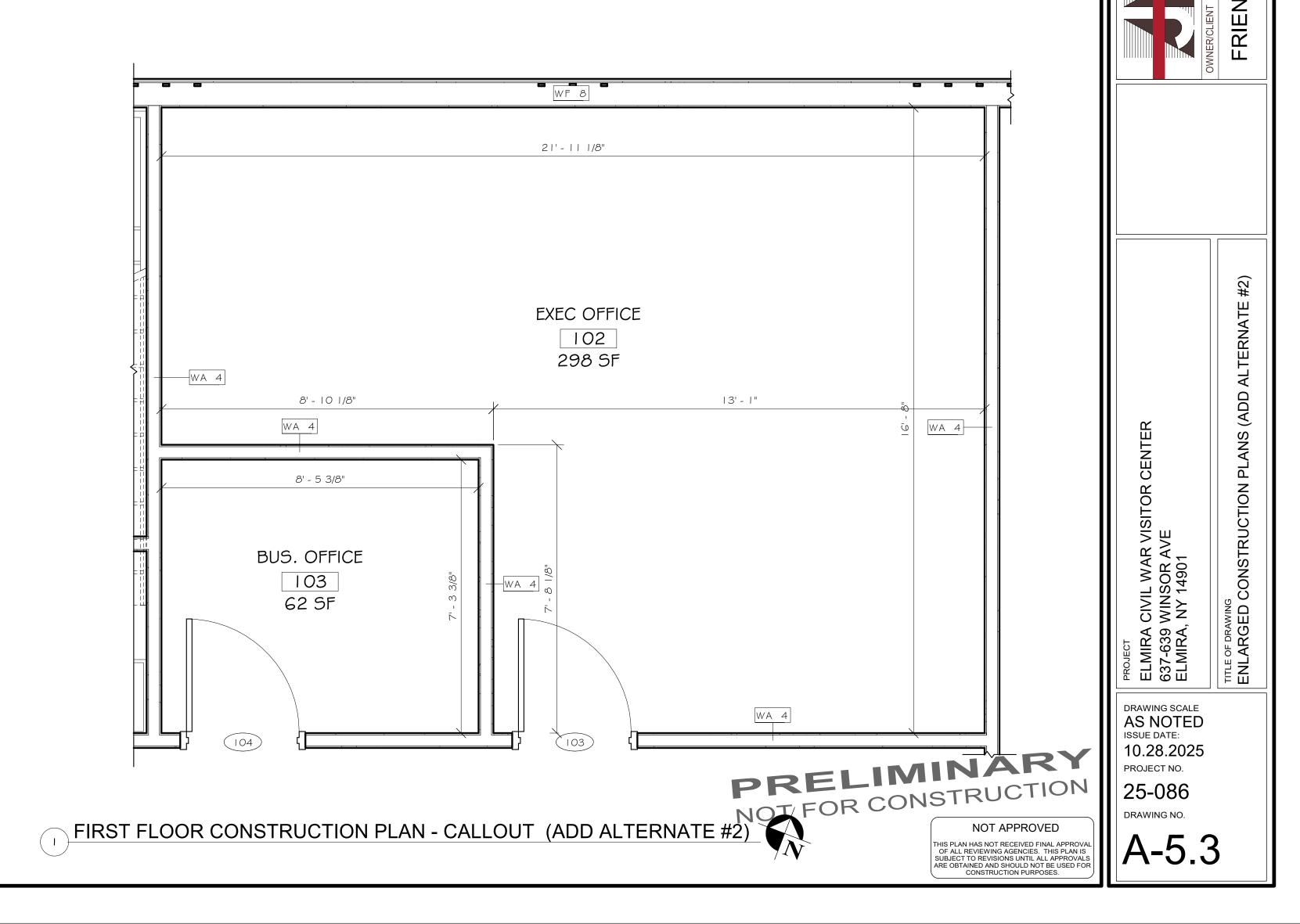
## FLOOR PLAN KEYNOTES

- PROVIDE MOP SINK COMPLETE.
- 2 PROVIDE DRINKING FOUNTAIN COMPLETE.
- BATHROOM TOILET AND URINAL PARTITIONS \$ STALLS TO BE BOBRICK BUDGET METROSERIES HPL, COLOR TBD, SELECTION BY OWNER FROM GENERAL COLOR PALLETE.



WAR





	DOOR SCHEDULE															
	DOOR FRAME															
		SIZE										DETAIL		FIRE		
TAG	WIDTH	HEIGHT	THK	TYPE	MATERIAL	FINISH	GLASS	FRAME TYPE	FRAME MAT	FRAME FINISH	HEAD	JAMB	SILL	RATING	HARDWARE SET	REMARKS
101	6' - 0"	7' - 0"	0' - 1 3/4"	1	ALUM	PNT-I		А	ALUM	PNT- I					1	EXTERIOR: STOREFRONT ENTRY - DOUBLE DOORS
102	3' - 6"	7' - 0"	0' - 1 3/4"	2	ALUM	PNT-I		В	ALUM	PNT- I					2	EXTERIOR: STOREFRONT ENTRY - SINGLE DOOR
103	3' - 0"	7' - 0"	0' - 1 3/4"	3	WD	STN-I		С	WD	STN-I					3	INTERIOR: FLUSH PANEL - SINGLE DOOR
104	3' - 0"	7' - 0"	0' - 1 3/4"	3	WD	STN-I		С	WD	STN-I					3	INTERIOR: FLUSH PANEL - SINGLE DOOR
105	3' - 0"	7' - 0"	0' - 1 3/4"	3	WD	STN-I		С	WD	STN-I					3	INTERIOR: FLUSH PANEL - SINGLE DOOR
106	3' - 0"	7' - 0"	0' - 1 3/4"	3	WD	STN-I		С	WD	STN-I					3	INTERIOR: FLUSH PANEL - SINGLE DOOR
107	3' - 0"	7' - 0"	0' - 1 3/4"	4	WD	STN-I		С	WD	STN-I					4	INTERIOR: FLUSH PANEL W/ LOUVER - SINGLE DOOR
108	3' - 0"	7' - 0"	0' - 1 3/4"	4	WD	STN-I		С	WD	STN-I					4	INTERIOR: FLUSH PANEL W/ LOUVER - SINGLE DOOR

Cl	JRTAIN WA	LL SC	HEDU	LE
		DETAILS	DETAILS	DETAILS

THERMAL

GLASS

HEAD

JAMB

MFR

COUNT

REMARKS

	ROOM FINISH SCHEDULE														
	ROOMS	WALLS													
RM.			BASE	NO	DRTH	E	AST	50	OUTH	V	/EST				
NO.	ROOM NAME	FLOOR MA	T MAT	MAT	FIN	MAT	FIN	MAT	FIN	MAT	FIN	MAT	FIN	HEIGHT	NOTES
101	MAIN AREA	CONCI		GWB-1	PNT-I	GWB-I	PNT-I	GWB-1	PNT-I	GWB-1	PNT- I	GWB- I	PNT- I	UNDERSIDE ROOF	
102	EXEC OFFICE	CONCI		GWB-1	PNT-I	GWB- I	PNT-I	GWB-1	PNT- I	GWB-1	PNT- I	GWB- I	PNT- I	8'-0"	
103	BUS. OFFICE	CONCI		GWB-1	PNT- I	GWB- I	PNT- I	GWB-1	PNT- I	GWB-1	PNT-I	GWB- I	PNT- I	8'-0"	
104	JANITOR	CONC2	VB-I	GWB-2	PNT-1	GWB-2	PNT-1	GWB-2	PNT-1	I GWB-2	PNT-1	GWB- I	PNT- I	8'-0"	
105	STAIRS	CONCI		GWB- I	PNT-I	GWB-I	PNT- I	GWB-1	PNT-I	GWB-I	PNT- I	GWB- I	PNT- I	UNDERSIDE ROOF	
106	WOMENS	CONC2	CT.B-I	GWB-2	PNT- I	GWB-2	PNT-I	GWB-2	PNT- I	GWB-2	PNT-I	GWB- I	PNT- I	8'-0"	
107	MENS	CONC2	CT.B-I	GWB-2	PNT- I	GWB-2	PNT- I	GWB-2	PNT- I	GWB-2	PNT-I	GWB- I	PNT- I	8'-0"	
201	LOFT	PLYI		PNT-I		GWB- I		GWB-I		GWB-I		GWB- I	PNT- I	UNDERSIDE ROOF	

NOTES:

I. COORDINATE PAINT COLOR SELECTION WITH OWNER.

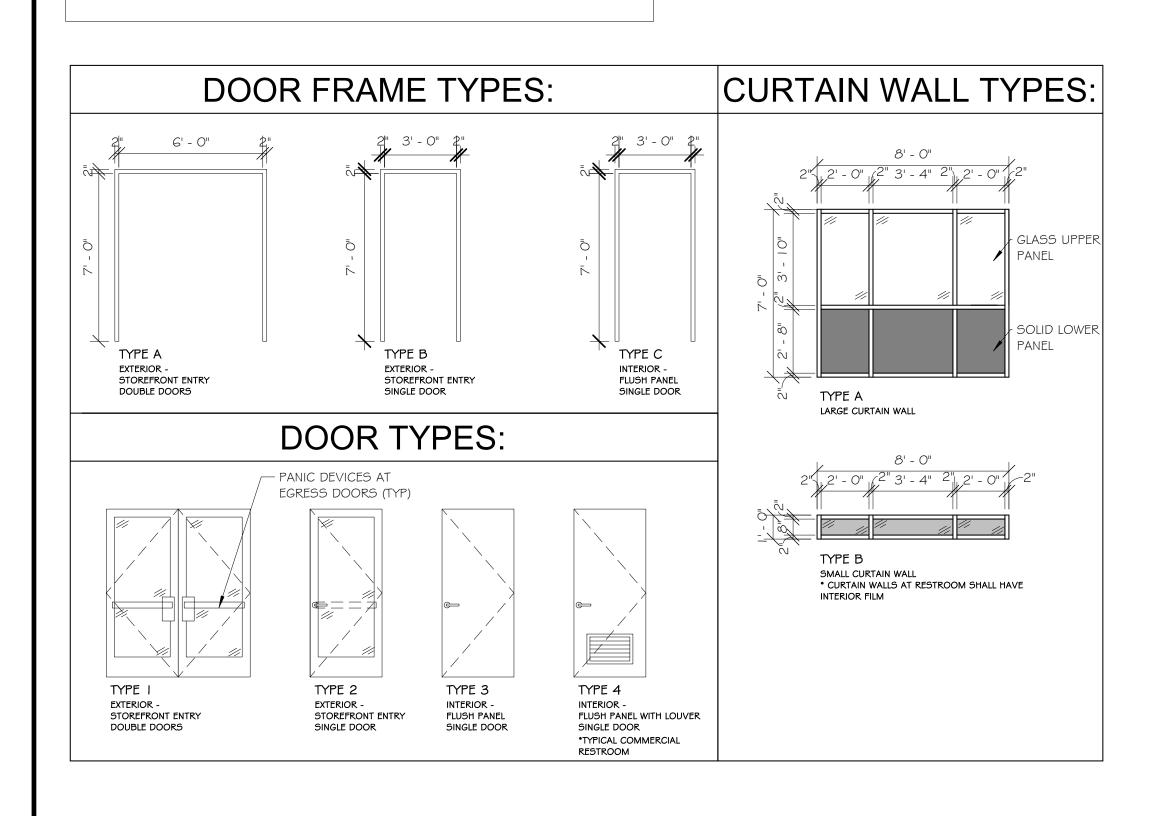
2. ALL NEWLY PAINTED SURFACES SHALL RECEIVE (I) COAT PRIMER AND (2) FINISH COATS.

3. ALL GWB SOFFITS SHALL BE PAINTED WITH SW CEILING PAINT.

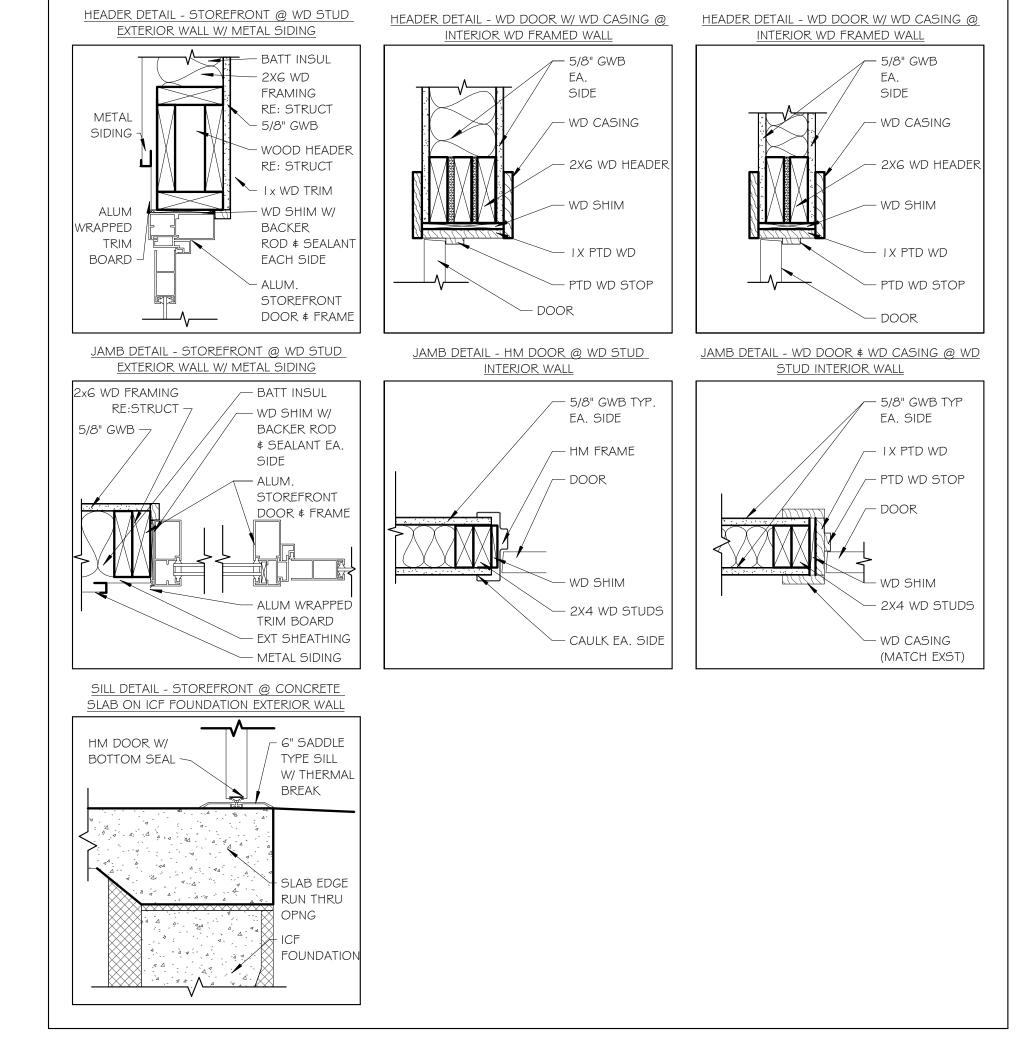
TYPE

MARK

WIDTH



DOOR HARD	WARE SETS:	GENERAL DOOR NOTES:
HARDWARE SET I (EXTERIOR - DOUBLE DOOR)  (2) I I/2 PAIR OF HINGES  (2) PANIC EXIT DEVICE (INTERIOR)  KEYED CYLINDER LOCKSET  SURFACE-MOUNTED CLOSER  SURFACE-MOUNTED STOP AND BUMP  SILENCERS  DOOR GASKETING  ADA THRESHOLD  (2) EXTERIOR PULL HANDLES	HARDWARE SET 3 (OFFICES, JANITOR, \$ STAIRS)  1 1/2 PAIR OF HINGES PRIVACY LOCKSET SURFACE-MOUNTED CLOSER SURFACE-MOUNTED STOP AND BUMP SILENCERS LEVER HANDLES	<ol> <li>INSTALL ADA APPROVED HARDWARE FOR ALL INTERIOR \$         EXTERIOR DOORS</li> <li>LOCATE DOORS HANDLES BETWEEN 35" \$ 48" ABOVE FLOOR         LEVEL.</li> <li>DOORS SHALL HAVE 6" MINIMUM CLEAR SPACE @ THE HINGE         SIDE, WHILE THE REMAINDER SHALL BE AT THE PUSH/PULL         SIDE, UNLESS OTHERWISE NOTED OR TECHNICALLY INFEASIBLE.</li> <li>ANY DOORS THAT OPEN PARALLEL TO A WALL SHALL HAVE A         DOOR STOP.</li> <li>SEE DOOR, FINISH, \$ MATERIAL SCHEDULES FOR FINISH AND         MATERIAL TYPES.</li> </ol>
HARDWARE SET 2 (EXTERIOR)  I 1/2 PAIR OF HINGES  PANIC EXIT DEVICE (INTERIOR)  KEYED CYLINDER LOCKSET  SURFACE-MOUNTED CLOSER  SURFACE-MOUNTED STOP AND BUMP  SILENCERS  DOOR GASKETING  ADA THRESHOLD  EXTERIOR PULL HANDLES  KICK PLATES	HARDWARE SET 4 (RESTROOMS)  I 1/2 PAIR OF HINGES  SURFACE-MOUNTED CLOSER  SURFACE-MOUNTED STOP AND BUMP  SILENCERS  ADA THRESHOLD  PULL HANDLES (INTERIOR)  EXTERIOR PUSH PLATES (EXTERIOR)  KICK PLATES	GENERAL CURTAIN WALL NOTES:  1. CURTAIN WALL ASSEMBLY SHALL HAVE A WATER-TIGHT SEAL. THE EXTERIOR SHALL BE CAULKED WITH MANUFACTURER APPROVED CAULK, COLOR SHALL MATCH WINDOW.  2. ALL GLAZING LOWER THAN 1'-6" SHALL BE TEMPERED.  3. ALL CURTAIN WALL SHIMS SHALL BE LOW EXPANSION FOAM.



# DETAIL - DOOR - HEAD AND JAMB DETAILS

			INTERIOR FINISH \$ MATERIAL SCHE	DULE		
			DESCRIPTION			
KEY	MATERIAL	MANUFACTURER	STYLE: COLOR	DIMENSION	LOCATION	ADDITIONAL INFORMATION
CONCI	CONCRETE SEALED				MAIN AREA, STAIRS, \$ OFFICES	
CONC2	CONCRETE W/ EPOXY FINISH	SHERWIN WILLIAMS	RESUFLOR DECO QUARTZ SD (COLOR TBD: SELECTION BY OWNER FROM GENERAL COLOR PALETTE)		RESTROOMS \$ JANITOR CLOSET	
CT.B-I	CERAMIC TILE - BASE- I	DALTILE	COLOR: TBD - SELECTION BY OWNER FROM GENERAL COLOR PALETEE		RESTROOM WET WALL	
CT.C-I	CERAMIC TILE - CAP- I	DALTILE	COLOR: TBD - SELECTION BY OWNER FROM GENERAL COLOR PALETEE		RESTROOM WET WALL	
CT.W-I	CERAMIC TILE - WALL- I	DALTILE	COLOR: TBD - SELECTION BY OWNER FROM GENERAL COLOR PALETEE		RESTROOM WET WALL	
D-1	DOOR- I	404 VT DOOR TYPE, PC-HPDL-5 HIGH PRESSURE DECORATIVE LAMINATE BONDED PARTICLE BOARD CORE 5-PLY CONSTRUCTION, NO-RATED OR 20 MIN	FINISH: PLASTIC LAMINATE, NEVAMAR WZ2001 SANTA ROSA PLUM TREE, MATTE FINISH			***RATING AS REQUIRED
FRP-1	FIBER REINFORCED POLYMER PANELS	PANOLAM SURFACE SYSTEMS	COLOR/FINISH: TBD - SELECTION BY OWNER FROM GENERAL COLOR PALETEE	UP TO 4'-0" A.F.F.	JANITOR CLOSET	
GWB-1	GYPSUM WALL BOARD					
(P-1	DOOR KICK PLATE	ACROVYN	I GGA S/S KICK PLATE/ 304 STAINLESS STEEL ALLOY	16 GAUGE		CONTACT: CONSTRUCTION SPECIALTIES
TG-1	LIGHTING					
P-	PRIMER	SHERWIN WILLIAMS	MULTI-PURPOSE INTERIOR/ EXTERIOR LATEX PRIMER/ SEALER		GENERAL WALLS, CEILING SOFFITS, COLUMNS	PCOAT OF RIMER, 2 COATS OF FINISH TRUCTION OF FOR CONSTRUCTION OF APPROVED
PLY-1	PLYWOOD				LOFT FLOORING	PELIMINA
PNT-I	PAINT- I				ALL WALLS	HECOAT OF PRIMER, 2 COATS OF FINISH TO CTO
5S-I	SOLID SURFACE- I	WILSONART	QUARTZ - COLOR TBD - SELECTION BY OWNER FROM GENERAL COLOR PALETEE		RESTROOM COUNTERS	NOT FOR CONSTITUTION
/B- I	VINYL BASE- I	JOHNSONITE	COLOR: TBD - SELECTION BY OWNER FROM GENERAL COLOR PALETEE			NOT APPROVED

NOT APPROVED

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A-7.1

EX	EXHAUST FAN SCHEDULE											
TYPE								L	REMARKS			
					STATIC PRESSURE	VOLTS	PHASE	MCA				
EF-I	BROAN	QTXEII0I50DC	CEILING EXHAUST FAN	150	.125	120V	1	O.4A	ALUMINUM WALL CAP			

AIR OUTLET SCHEDULE									
TYPE	MANUFACTURER	MODEL	DESCRIPTION	MATERIAL & COLOR	BORDER TYPE	NEC	K SIZE	REMARKS	
						WIDTH	HEIGHT		
D-1	PRICE	96	STEEL GYMNASIUM GRILLE	STEEL/B12 WHITE	SURFACE MOUNT	30	12		
D-2	PRICE	SPD	SQUARE PLAQUE DIFFUSER	STEEL/B12 WHITE	LAY-IN	12	12		
R-I	PRICE	96	STEEL GYMNASIUM GRILLE	STEEL/B   2 WHITE	SURFACE MOUNT	30	12		
R-2	PRICE	530	SINGLE DEFLECTION LOUVERED AIR GRILLE	STEEL/B12 WHITE	LAY IN	30	30		

#### **HEAT PUMP SCHEDULE SYSTEM #1** TYPE NOMINAL COOLING NOMINAL ELECTRIC PER MODULE NOTES & OPTIONS MANUFACTURER MODEL DESCRIPTION SIZE COOLING **EFFICIENCY** HEATING IEER/EER MCA 208/230 PHASE MOCP (BTU/HR) (BTU/HR) WEIGHT LENGTH | WIDTH | HEIGHT | [SEER] VOLT 60,000 5TWR5060A1000 OUTDOOR CONDENSER 35" 35" 301 50 CU-1 208-230 45 VARIABLE-SPEED AIR 208-230 TAM9AOD60V5 I DA TRANE 60,000 25" 180 12.5 15 HANDLER TWO-STAGE VARIABLE-F-I 57,600 34" 29" 15 TRANE 4SHP9606040V21 18" 140 8.3 208-230 SPEED FURNACE

### **HVAC GENERAL NOTES**

- I. COORDINATE HVAC AND PLUMBING WORK WITH ALL OTHER TRADES. 2. ALL DIMENSIONS AND PIPE SIZES ARE IN INCHES, UNLESS OTHERWISE NOTED.
- 3. INSTALL DUCTWORK IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS. PRESSURE CLASSIFICATION OF DUCT WORK IS TO BE AS FOLLOWS: a. SUPPLY I", b. RETURN I", c. EXHAUST I" PROVIDE TURNING VANES IN ALL MITERED ELBOWS, OR PROVIDE ELBOWS WITH CENTER LINE.
- 4. INSTALL ALL WORK IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS.
- 5. REFLECTED CEILING PLANS FOR ANY AND ALL AREAS PREPARED BY THE ARCHITECT SHOWING THE LOCATION OF AIR INTAKES AND OUTLETS SHALL TAKE PRECEDENCE OVER THE LOCATION OF THOSE SHOWN ON THE HVAC DRAWINGS OF THIS CONTRACT SET OF DRAWINGS. THE CONTRACTOR SHALL INSTALL THE AIR INTAKES AND OUTLETS IN ANY GIVEN AREA TO AGREE WITH THE ARCHITECT'S REFLECTED CEILING PLANS.
- 6. ALL SCHEDULED MOTOR DATA AND ELECTRICAL CHARACTERISTICS ARE MAXIMUM. WHERE EQUIPMENT IS SUPPLIED WITH TARGET MOTORS OR ELECTRICAL CHARACTERISTICS THE HC IS TO
- COORDINATE WITH THE EC AND PAY FOR ALL CHANGES AS A RESULT INCREASED CAPACITY. 7. INSTALL ALL EQUIPMENT AND MATERIALS IN STRICT ACCORDANCE WITH RESPECTIVE MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 8. ALL EQUIPMENT MECHANICAL CONTRACTOR MUST REVIEW THE EQUIPMENT SCHEDULES, SPECIFICATIONS, AND DRAWINGS IN ALL CONTRACT DOCUMENTS AND SUBSEQUENT SHOP DRAWINGS. PROVIDE ALL LABOR AND MATERIALS FOR A COMPLETE AND OPERABLE SYSTEM AS PART OF THE CONTRACT. FAILURE TO REVIEW DOES NOT RELIEVE THE CONTRACTOR OF FULFILLING
- THE CONTRACTUAL OBLIGATIONS. 9. REFER TO ARCHITECTURAL DRAWINGS AND SHOP DRAWINGS FOR FINAL EXACT LOCATIONS AND CONNECTIONS AND FOR ALL WORK REQUIRED FOR EQUIPMENT NOT FURNISHED UNDER THIS CONTRACT
- I O. MECHANICAL CONTRACTOR TO FIELD MEASURE AND/OR REVIEW ALL PERTINENT DOCUMENTS TO ASSURE LAYOUTS SHOWN ON HVAC DRAWINGS ARE COMPATIBLE WITH AVAILABLE SPACE AND WORK OF OTHER TRADES. DRAWINGS ARE IN ACCORDANCE WITH LAYOUTS SHOWN ON GENERAL CONTRACT ANY CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION PRIOR TO SUBMITTING EQUIPMENT SHOP DRAWINGS.
- II. MECHANICAL CONTRACTOR IS CAUTIONED THAT LIMITED SPACE IS AVAILABLE IN CEILING CAVITY. ALL DUCTWORK MUST BE COORDINATED WITH SPACE AND EQUIPMENT. PROVIDE ALL OFFSETS
- REQUIRED TO ACCOMMODATE WORK OF OTHER TRADES. I 2. PROVIDE FLEXIBLE CONNECTIONS AT UNIT SUPPLY AND RETURN CONNECTIONS. OFFSET AND TRANSITION SUPPLY AND RETURN DUCTWORK AS REQUIRED TO AVOID STRUCTURE. PROVIDE MITERED ELBOWS WITH TURNING VANES AT BOTTOM OF SUPPLY AND RETURN DUCT DROPS.
- 13. 4" HIGH CONCRETE HOUSEKEEPING PAD BY MECHANICAL CONTRACTOR. 14. DO NOT INSTALL ANYTHING WITHIN THE EQUIPMENT TROUBLESHOOTING SPACE. COORDINATE WITH OTHER TRADES TO KEEP THIS SPACE CLEAR. COORDINATE WITH TRUSSES IN SUCH A
- MANNER THAT EQUIPMENT SHALL CLEAR TRUSS WORK. I 5. DUCTWORK TO BE INSULATED WITH FIBERGLASS FLEXIBLE BLANKET INSULATION UNLESS OTHERWISE NOTED ON DRAWING OR DETAILS. JACKETS SHALL BE NOTED ON THE DRAWINGS. I G. FOR ALL BRANCH DUCT CONNECTIONS TO MAIN TRUNK, PROVIDE 45 DEGREE TRANSITION FITTING
- OR CONICAL TAP FOR ROUND DUCT. BUTT FITTINGS ARE NOT PERMITTED. PROVIDE MANUAL VOLUME DAMPER WITH LOCKING QUADRANT IN ALL BRANCH RUN OUTS TO GRILLES AND DIFFUSER.
- 17. PROVIDE TURNING VANES IN ALL MITERED ELBOWS, OR PROVIDE ELBOWS WITH CENTERLINE RADIUS EQUAL TO 1.5 TIMES DUCT WIDTH.
- 18. SLEEVE AND SEAL ALL PIPE, OR DUCT PENETRATIONS OF WALLS AND FLOORS. PACK VOID BETWEEN PIPE, OR DUCT AND SLEEVE WITH INSULATION IN NON-RATED WALLS AND FLOORS. PACK VOID BETWEEN PIPE, OR DUCT AND SLEEVE WITH INSULATION IN FIRE-RATED WALLS AND FLOORS, APPLY INTUMESCENT FIRE SAFING COMPOUND AT PENETRATION, MAINTAINING INTEGRITY AND RATING OF FIRE SEPARATION. SLEEVES THROUGH FLOORS SHALL EXTEND 2" ABOVE FLOOR, BE GROUTED INTO PLACE AND WATERPROOFED. PIPING THROUGH EXTERIOR WALLS SHALL BE SLEEVED AND SEALED WEATHER TIGHT.
- 19. AS APPLICABLE AND AS INDICATED, PIPE DROPS ARE TO BE ON WALL, IN WALL, OR IN ENCLOSED SPACE PROVIDED BY THE GENERAL CONTRACTOR.
- 20. CONCEALED PIPING DROPS IN WALLS OR ENCLOSED SPACES SHALL BE INSULATED WITH 1/2" THICK UN-SLIT FLEXIBLE UNICELLULAR INSULATION. 2 I . IF, FOR ANY REASON, IT IS NECESSARY TO RUN PIPING THROUGH FINISHED AREAS IN A MANNER
- THAT PIPING WOULD BE VISIBLE, THE CONTRACTOR WILL BE RESPONSIBLE TO PROVIDE AN APPROVED TYPE OF ENCLOSURE FOR CONCEALMENT, AT NO ADDITIONAL COST. CONTACT ARCHITECT IF THIS SITUATION OCCURS.
- 22. PROVIDE OPENINGS THROUGH WALLS I" DIAMETER LARGER THAN PIPE. SET SLEEVE AND PACK OPENING WITH FIBERGLASS TO PREVENT RUBBING OR NOISE TRANSFER.

### MECHANICAL SPECIFICATIONS

#### I. BASIC HVAC MATERIALS AND METHODS

- A. ALL WORK TO BE DONE AND MATERIALS FURNISHED COMPLYING WITH APPLICABLE LAWS AND REGULATIONS, INCLUDING THE INTERNATIONAL BUILDING, MECHANICAL, PLUMBING, FUEL AND FIRE SAFETY CODES. OBTAIN AND PAY FOR REQUIRED PERMITS AND FEES.
- B. ALL MATERIALS USED SHALL BE NEW AND UNDAMAGED. C. ALL WORK PERFORMED SHALL BE IN ACCORDANCE WITH CURRENT CONSTRUCTION INDUSTRY STANDARDS AND
- D. MARK ALL NEW PIPING RUNS, IDENTIFYING TYPE AND DIRECTION OF FLOW.
- E. FURNISH ACCESS DOORS (RATED OR NON-RATED AS REQUIRED) WHERE VALVES OR EQUIPMENT ARE CONCEALED BEHIND A NON-ACCESSIBLE CEILING OR WALL. FURNISH ACCESS DOORS TO GENERAL CONTRACTOR FOR INSTALLATION.
- F. FURNISH STEEL PIPE SLEEVES WHERE PIPES PENETRATE RATED WALLS. PROVIDE SEALANT MATERIALS AND SYSTEM TO MAINTAIN THE WEATHER TIGHT WALL PENETRATION.
- G. CONTRACTOR SHALL ARRANGE TO MEET AND INSTRUCT THE OWNER IN THE USE AND MAINTENANCE OF SYSTEMS AND EQUIPMENT. THIS INSTRUCTION SHALL BE FOR A MINIMUM OF (4) HOURS.
- H. ALL MANUFACTURED EQUIPMENT, ACCESSORIES AND MATERIALS SHALL BE USED AS INTENDED BY THE MANUFACTURER IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTALLATION, OPERATION, AND MAINTENANCE INSTRUCTIONS.
- I. CONTRACTOR SHALL PROVIDE IN ADDITION TO ANY OTHER WARRANTIES SPECIFIED, A ONE YEAR FULL LABOR AND MATERIAL WARRANTY ON ALL WORKMANSHIP, MATERIAL AND EQUIPMENT FURNISHED FOR THIS PROJECT.

#### 2. VALVES

- A. GATE VALVES OR BALL VALVES SHALL BE CLASS I 50 WITH ENDS AND MATERIALS TO MATCH PIPING SYSTEMS.
- B. BALL VALVES 2" AND SMALLER SHALL HAVE BRONZE BODY, STAINLESS STEEL BALL, TEFLON SEATS AND STUFFING BOX RING, LEVER HANDLE AND BALANCING STOPS, ENDS TO MATCH PIPING SYSTEM. C. STOP-CHECK VALVES SHALL BE BRASS ALLOY WITH A PRESSURE CLASS OF 150.

#### 3. SUPPORTS AND ANCHORS

A. FURNISH PIPE AND DUCT HANGERS, WHERE REQUIRED, FIRMLY SUPPORTED FROM BUILDING STRUCTURE. SUPPORT PIPING SYSTEMS SECURELY WHILE ALLOWING FOR PIPE AND BUILDING EXPANSION AND CONTRACTION. PROVIDE COPPER PLATED HANGERS FOR COPPER PIPE. USE ADJUSTABLE CLEVIS HANGERS OR ADJUSTABLE STEEL BAND HANGERS. MAXIMUM SPACING SHALL BE 5'-O" FOR 1/2" PIPING, 7'-O" FOR 3/4" TO I-1/4" PIPING, 9'-0" FOR I-1/2" TO 2" PIPING. FURNISH MECHANICAL EQUIPMENT SUPPORTS AS DETAILED OR AS REQUIRED TO SAFELY AND PERMANENTLY CARRY THE WEIGHT OF THE EQUIPMENT.

#### 4. MECHANICAL INSULATION

A. INSULATE ABOVE FLOOR HVAC PIPING WITH FIBERGLASS PREFORMED PIPE INSULATION WITH FACTORY APPLIED PAPER BACKED ALUMINUM FOIL VAPOR BARRIER MATERIAL. INSULATE FITTINGS WITH SIMILAR MATERIAL AS PIPE AND COVER WITH PVC FITTING COVERS. ALL INSULATING MATERIALS TO HAVE FLAME SPREAD RATING OF 25 OR LESS AND SMOKE DEVELOPMENT RATING OF 50 OR LESS AS TESTED BY ANSI/ASTM E 84 (NFPA 233) METHOD. INSULATE ALL PIPING WITH SURFACE TEMPERATURES BELOW 75 DEGREES F WITH 1/2" INSULATION. INSULATE ALL PIPING WITH SURFACE TEMPERATURES 75 DEGREES F AND HIGHER WITH I THICK INSULATION. WHERE PIPES ARE EXPOSED AND LESS THAN 8'-O" ABOVE FLOOR, PROVIDE HEAVY DUTY METAL JACKETING OVER INSULATION.

#### 5.NATURAL GAS SYSTEMS

- A. GAS PIPING SHALL COMPLY WITH NFPA 54 "NATIONAL GAS CODE", NFPA TO "NATIONAL ELECTRIC CODE" AND BOCA BASIC MECHANICAL CODE.
- B. ABOVE GROUND GAS PIPING SHALL BE SCHEDULE 40, BLACK IRON WITH MALLEABLE IRON THREADED FITTINGS, SUPPORT PIPING WITH ADJUSTABLE BAND TYPE PIPE HANGERS, EQUAL TO ITT-GRINNEL FIG. 97. INSTALL DRIP LEG WITH UNION AND VALVE AT CONNECTION TO EACH PIECE OF EQUIPMENT. PROVIDE VALVE ON DISCHARGE
- OF METER. GAS VALVES SHALL BE 150 PSI, NON-SHOCK WOG, BRONZE BODY, STRAIGHT CONFIGURATION. C. INSTALL AND TEST PIPING IN COMPLIANCE WITH UTILITY COMPANY REGULATIONS AND THE NATIONAL FUEL GAS CODE, NFPA NO. 54.

#### 6. NATURAL GAS SYSTEMS

- A. ATMOSPHERIC VENT STACKS SHALL BE TYPE B DOUBLE WALL GAS VENTS WITH UL LABEL AND MEETING NFPA 211 "STANDARDS FOR CHIMNEYS, FIREPLACES, VENTS, AND SOLID FUEL BURNING APPLIANCES" AS MANUFACTURED BY AMERICAN METAL PRODUCTS. HART \$ COOLEY, METAL-FAB, INC., SELKIRK.
- B. VENTS AND COMBUSTION AIR PIPES FOR CLOSED COMBUSTION EQUIPMENT AND HIGH EFFICIENCY EQUIPMENT SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE LISTING OF THE EQUIPMENT.

A. THE TEMPERATURE CONTROLS SHALL BE ELECTRIC AND SHALL BE FURNISHED AS PART OF THE WORK OF THE

### 8. TESTING, ADJUSTING, AND BALANCING

- A. THE MECHANICAL CONTRACTOR SHALL SUBCONTRACT AN AIR BALANCER TO BALANCE THE SYSTEMS DESCRIBED BELOW.
- B. THE BALANCING SHALL BE COMPLETED BY AN INDEPENDENT AIR BALANCER WHO IS NOT AN EMPLOYEE OF THE MECHANICAL CONTRACTOR.
- C. PER COMPLIANCE WITH ASHRAE 90.1-1999, THE BALANCER SHALL SUBMIT AN AIR BALANCE REPORT TO THE
- ARCHITECT AND STATE OR COUNTY INSPECTOR. D. THE BALANCE REPORT SHALL SHOW PROOF THAT THE SYSTEM HAS BEEN BALANCED TO +/- 10% OF THE DESIGNED AIRFLOW. IT IS THE MECHANICAL CONTRACTOR AND AIR BALANCER'S DUTY TO PROVIDE ACCURATE

DATA, SO AREAS OF INCORRECT FLOW MAY BE DISCLOSED TO THE ARCHITECT, INSPECTOR, AND OWNER.

- E. ALL AIRSIDE SYSTEMS, COMPONENTS, ETC. INCLUDING SUPPLY, RETURN, OUTDOOR, AND EXHAUST AIR SYSTEMS SHALL BE BALANCED. THE BALANCER SHALL PROVIDE SHEAVES AND BELTS AS NEEDED TO PROPERLY BALANCE EQUIPMENT TO =/- 10% OF THE DESIGNED AIRFLOWS. ALL EQUIPMENT, SUPPLY, RETURN, AND OUTDOOR AIR FLOWRATES SHALL BE LISTED IN THE BALANCE REPORT.
- F. ALL HAVAC MOTOR DATA INCLUDING FREQUENCY (RPM), AMP DRAW, HORSEPOWER, EXTERNAL STATIC PRESSURE, HEAD PRESSURE, ETC., SHALL BE INCLUDED IN THE BALANCE REPORT.

### 9. METAL DUCTWORK

- A. ALL DUCTWORK SHALL BE FABRICATED AND INSTALLED IN COMPLIANCE WITH THE 2018 INTERNATIONAL MECHANICAL CODE, SECTION 603, AND SMACNA HVAC DUCT CONSTRUCTION STANDARDS. ALL DUCTWORK SHALL BE SEALED AND INSULATED IN ACCORDANCE WITH ASHRAE 90.1 1999.
- B. ROUND FLEX DUCT SHALL BE USED FOR DIFFUSER-GRILLE CONNECTIONS ABOVE LAY-IN CEILINGS. FLEX DUCT MAY BE USED IN OTHER AREAS WHERE THE DUCT AND GRILLE ARE PERMANENTLY AND REASONABLY ACCESSIBLE. MAXIMUM FLEX DUCT LENGTH IS 6'-O". PERFORMANCE OF FLEXIBLE DUCT SHALL MEET OR EXCEED THE RIGID DUCTWORK.
- C. UNLESS OTHERWISE NOTED ON PLANS, ALL SUPPLY AND RETURN DUCTWORK LOCATED WITHIN (10) FEET OF THE EQUIPMENT FAN SHALL BE LINED WITH 1/2" ACOUSTICAL DUCT LINER. DUCT DIMENSIONS SHOWN ON
- MECHANICAL PLANS ARE INTERIOR DIMENSIONS. D. DUCTWORK LOCATED OUTDOORS: ALL DUCTWORK LOCATED OUTDOORS SHALL BE LINED WITH 2" DUCT LINER, AND SEALED WATER-TIGHT WITH 100% SILICONE CAULK. ALL OUTDOOR DUCTWORK SHALL HAVE INSIDE DIMENSIONS AS LISTED ON THE MECHANICAL DRAWINGS. ALL DUCT LINER SHALL MEET THE 2015 INTERNATIONAL MECHANICAL CODE, SECTION 604.
- E. ALL DUCT LINER SHALL HAVE A FLAME SPREAD AND SMOKE DEVELOPMENT 25 OR LESS AND 50 OR LESS WHEN TESTED BY ASTM E-84 (NFPA 255) METHOD.

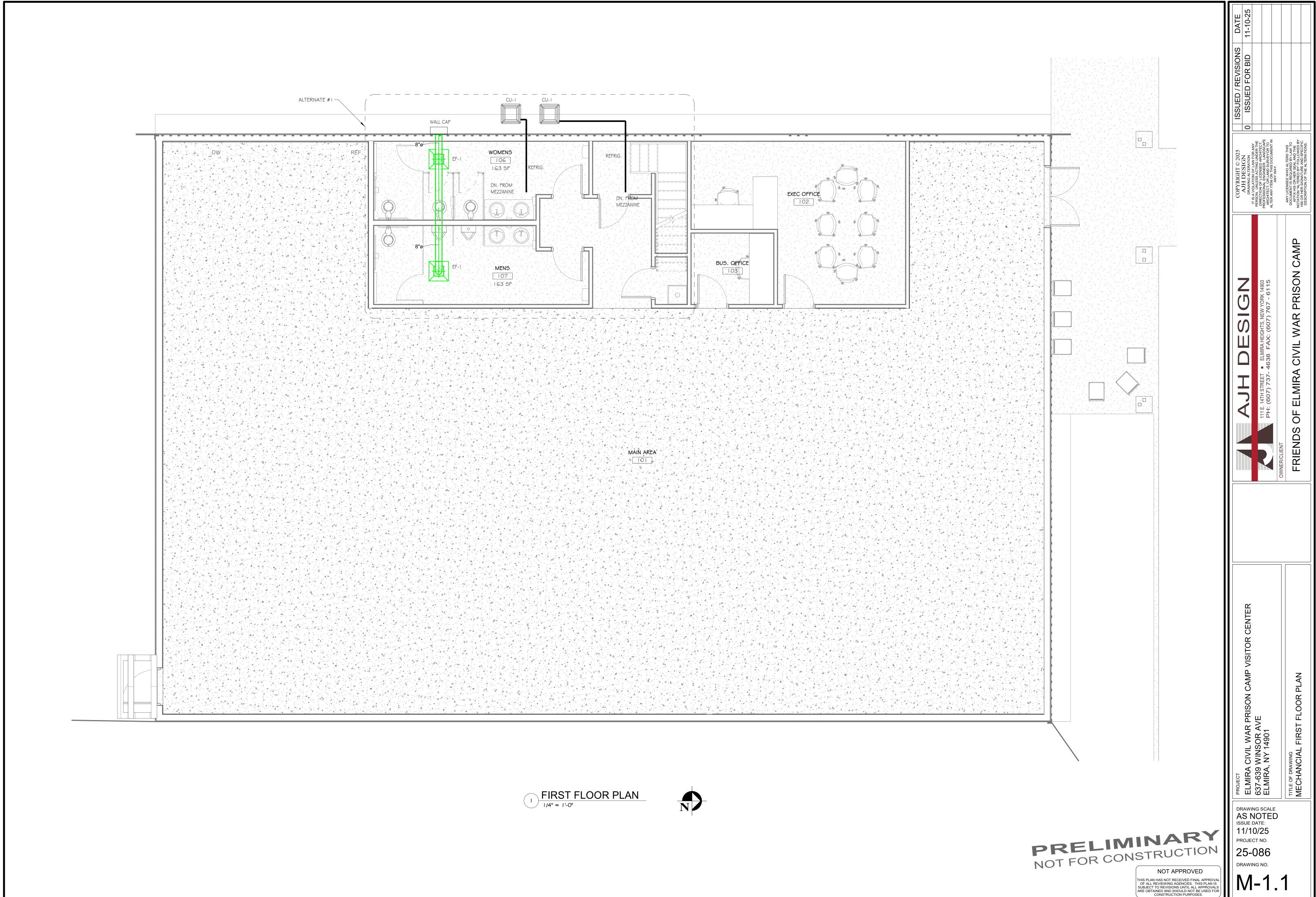
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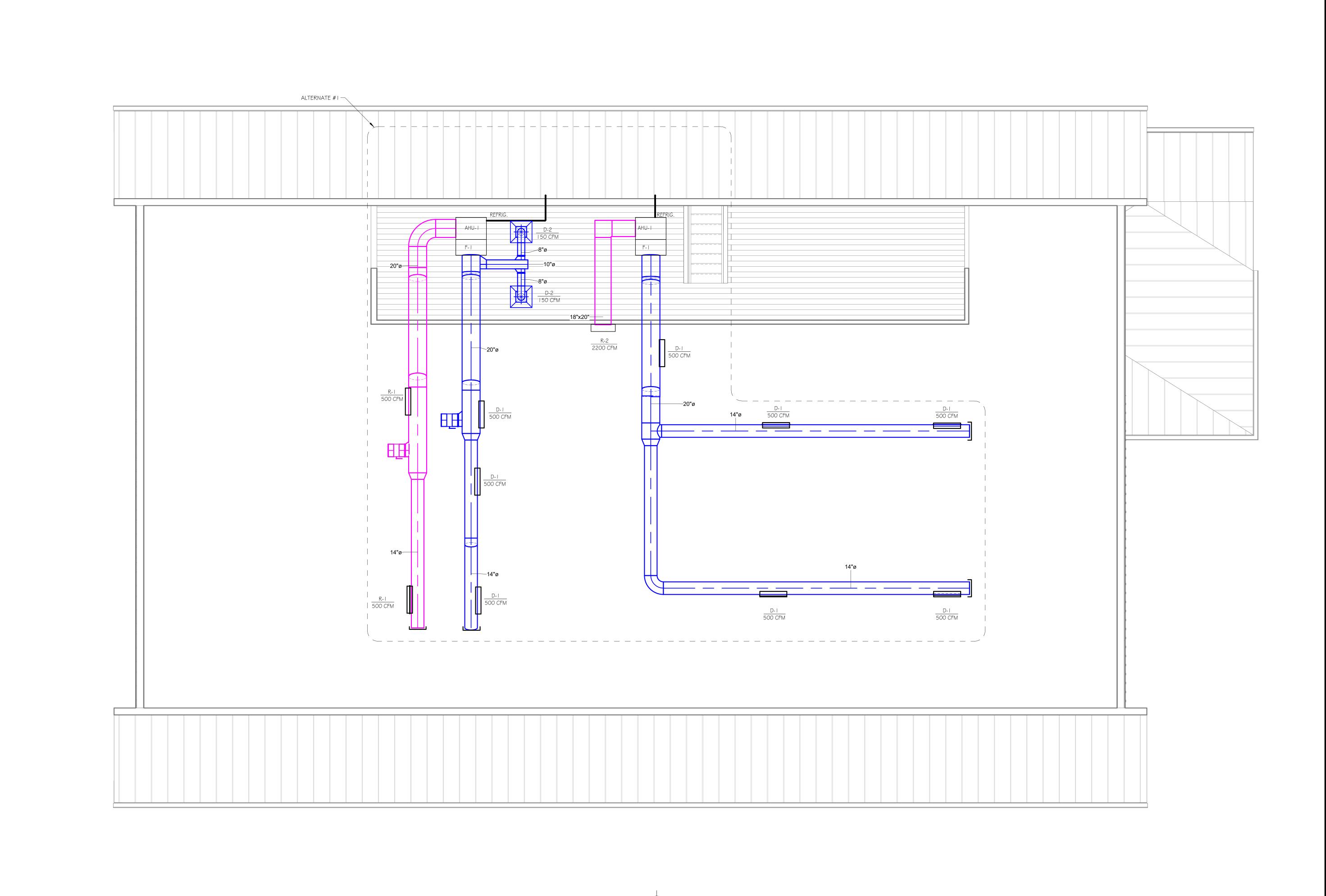
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DRAWING NO.





SECOND FLOOR PLAN

1/4" = 1'-0"



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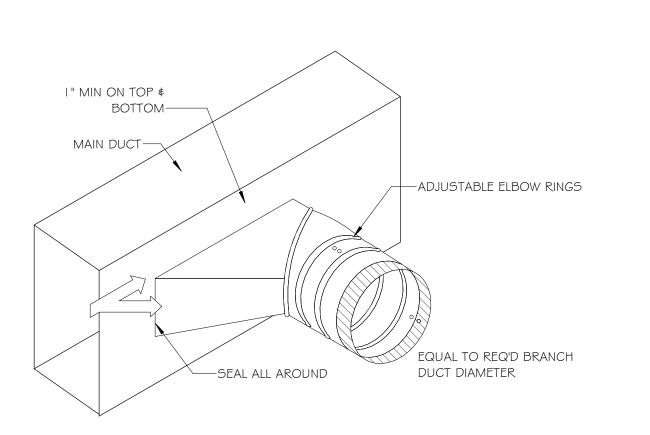
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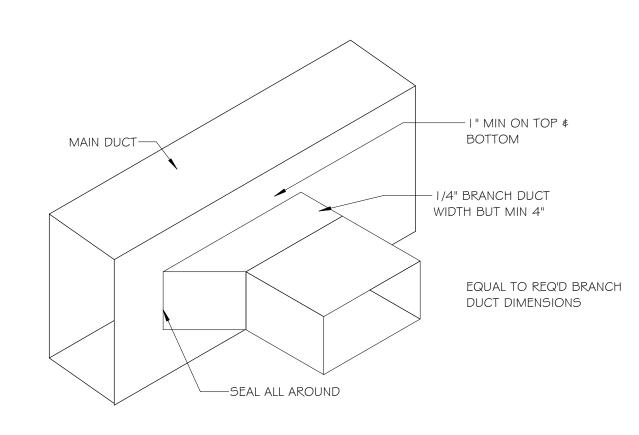
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11/10/25
PROJECT NO.
25-086

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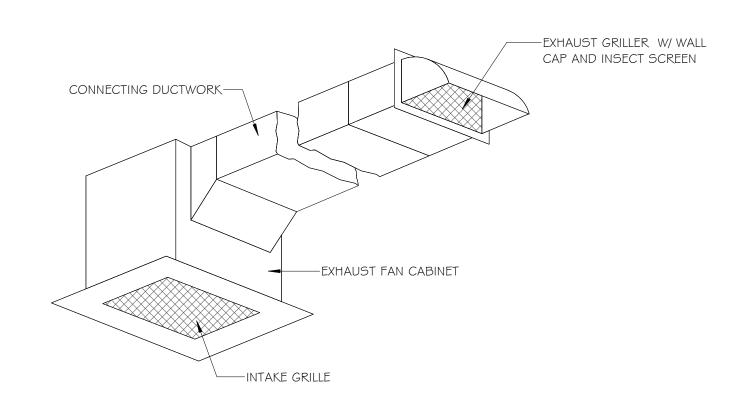
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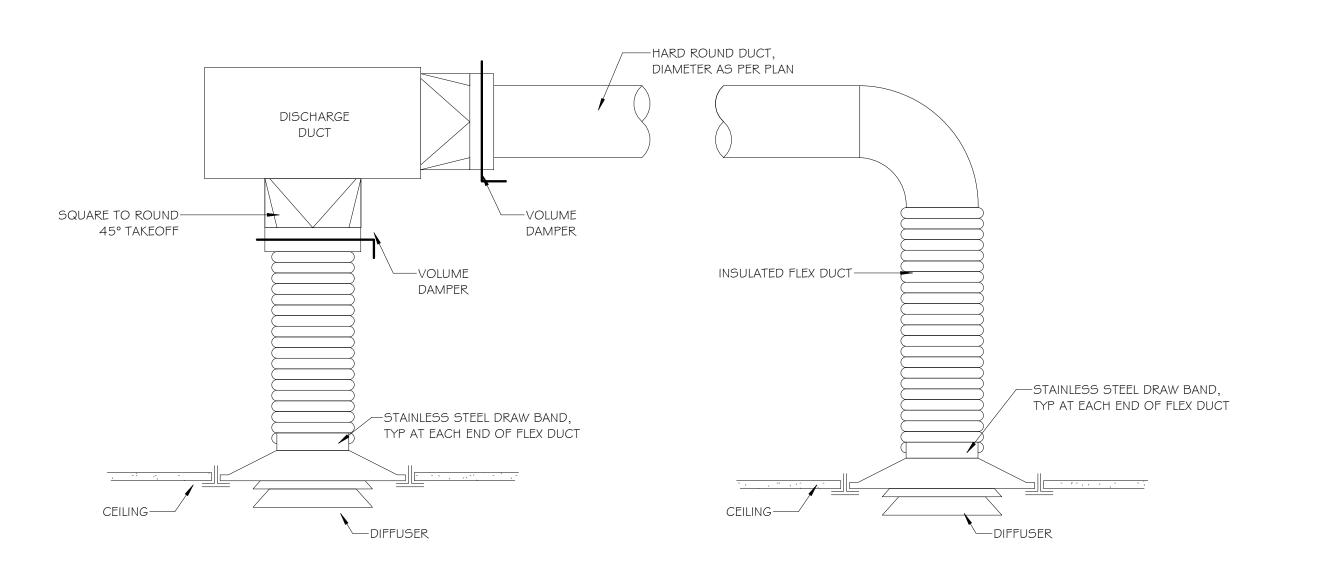




9 TYPICAL BRANCH TAKE-OFF FITTINGS



# TYPICAL EXHAUST AIR DUCT DETAIL N.T.9.



DUCT BRANCH FLEX PIPE DETAIL
N.T.S.



NOT APPROVED THIS PLAN HAS NOT RECEIVED FINAL APPROVAL
OF ALL REVIEWING AGENCIES. THIS PLAN IS
SUBJECT TO REVISIONS UNTIL ALL APPROVALS
ARE OBTAINED AND SHOULD NOT BE USED FOR
CONSTRUCTION PURPOSES.

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### PLUMBING - GENERAL NOTES

- I. VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS IN FIELD BEFORE ORDERING EQUIPMENT OR FABRICATING COMPONENTS
- 2. UNLESS NOTED OTHERWISE, CONSTRUCTION MATERIAL AND EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE LEGALLY DISPOSED OF OFF THE SITE.
- 3. COORDINATE WORK WITH EXISTING STRUCTURAL AND ARCHITECTURAL FEATURES AND PROVIDE OFFSETS AND FITTINGS AS REQUIRED.
- 4. COORDINATE WORK WITH ALL OTHER TRADES. REFER TO ARCHITECTURAL PLANS FOR CEILING ELEVATIONS.
- 5. CONTRACTOR SHALL VERIFY LOCATION OF EXISTING UNDERGROUND UTILITIES AND PIPING BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ALL DAMAGES WHICH MIGHT OCCUR BY THE FAILURE TO EXACTLY LOCATE AND PRESERVE ANY UNDERGROUND UTILITIES 6. INSTALL ALL WORK IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS
- 7. CONTRACTOR IS REQUIRED TO NOTIFY FACILITY OWNERS NOT LESS THAN 3 AND NOT MORE THAN 10 WORKING DAYS PRIOR TO EXCAVATION OR DEMOLITION WORK WHEN USING POWERED EQUIPMENT
- 8. COORDINATE LOCATION OF ALL PIPING AND DEVICES BEFORE INSTALLATION WITH THE WORK OF OTHER TRADES. WHERE A CONFLICT IN AVAILABLE CLEARANCES OCCURS, OBTAIN CLARIFICATION FROM PRIME CONTRACTOR, AND PROVIDE WHATEVER ADDITIONAL PIPING, FITTINGS, ETC., ARE
- REQUIRED TO INSTALL PLUMBING SYSTEM WITHOUT ANY ADDITIONAL COST TO THE CONTRACT 9. VERIFY MOUNTING HEIGHTS OF EQUIPMENT FIXTURES W/ARCHITECT DRAWING BEFORE ROUGH-IN. IO. BUILDING STORM WATER, DOMESTIC WATER, SANITARY, & GAS PIPING SHALL BE EXTENDED TO5 FT
- OUTSIDE OF BUILDING. II. THE PLUMBING CONTRACTOR SHALL MAKE COMPLETE WASTE, VENT, HOT & COLD WATER
- CONNECTIONS TO ALL OWNER FURNISHED EQUIPMENT. I 2. INSTALL ALL EQUIPMENT AND MATERIALS IN STRICT ACCORDANCE WITH RESPECTIVE MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 13. DIMENSIONS AND PIPE SIZES ARE IN INCHES UNLESS NOTED OTHERWISE.
- 14. RUN PIPING CONCEALED EXCEPT IN MECHANICAL ROOMS OR WHERE NOTED OTHERWISE.
- 15. ALL EXPOSED PIPING SHALL BE CLEANED AND HAVE THE SURFACE PREPARED TO RECEIVE PAINTED FINISH. PRIME AND PAINT THE EXPOSED PIPING IN COLOR AS SELECTED BY THE ARCHITECT
- I 6. RUN 2" MINIMUM SIZE WASTE PIPING BELOW GROUND INSIDE BUILDING REGARDLESS OF SIZE NOTED ON FIXTURE SCHEDULE. SLOPE ALL SOIL, WASTE AND STORM WATER LINES PER CODE. 17. CONNECT WATER, WASTE, AND VENT PIPING TO FIXTURES IN ACCORDANCE WITH SIZES INDICATED ON
- FIXTURE SCHEDULE. 18. CONTRACTOR SHALL PROVIDE PIPE SLEEVES IN ALL FOUNDATION WALLS FOR PIPING PENETRATIONS. 19. MAKE ALL FINAL CONNECTIONS TO THE EQUIPMENT AS SHOWN ON THE DRAWINGS. PROVIDE SHUT-
- OFF VALVES IN ALL INDIVIDUAL WATER CONNECTIONS. IF APPLICABLE, PROVIDE SHUT-OFF VALVES IN ALL INDIVIDUAL GAS CONNECTIONS. 20. RUN ALL PIPING ABOVE CEILING UNDER BUILDING INSULATION OR CONCEALED IN WALLS, UNLESS
- NOTED OTHERWISE. ALL WASTE LINES AS SHOWN SHALL BE BELOW FLOOR, UNLESS NOTED OTHERWISE. 21. FURNISH AND INSTALL ACCESS PANELS (FIRE-RATED) WHERE REQUIRED, WHERE SHOWN, OR
- UNDER THIS CONTRACT WHERE NO OTHER MEANS IS PROVIDED. A. COORDINATE ACCESS PANELS AND DOORS WITH ARCHITECT FEATURES.
- 22. INSTALL UNIONS ON PIPING TO PERMIT EASY DISCONNECTING.
- 23. CONCEAL ALL PIPING, VALVES AND FITTINGS ABOVE CEILINGS AND IN CHASES WHERE THEY OCCUR, UNLESS NOTED OTHERWISE.

REQUIRED FOR ACCESS TO ALL CONCEALED VALVES, TRAPS OR OTHER EQUIPMENT FURNISHED

- 24. THE CONTRACTOR SHALL RIGIDLY SUPPORT ALL EQUIPMENT.
- 25. ALL SANITARY AND STORM SEWER PIPING SHALL BE RUN AT 1/8" PER FOOT SLOPE UNLESS OTHERWISE NOTED. ALL SANITARY SEWER PIPING 2" AND SMALLER SHALL BE RUN AT 1/4" PER FOOT
- SLOPE. ALL SANITARY SEWER PIPING 3" AND LARGER SHALL BE RUN AT 1/8" PER FOOT SLOPE. 26. PROVIDE AND INSTALL ANGLE SHUTOFF VALVES AT EACH FIXTURE. WATER VALVES FOR WALL MOUNTED FIXTURES SHALL BE CHROME PLATED, THREADED, HEAVY DUTY TYPE AND HAVE LOOSE KEY STOPS. VALVES FOR COUNTERTOP FIXTURES SHALL BE 1/4 TURN BALL VALVES. PROVIDE SHUT-OFF VALVE IN ALL HOT WATER SUPPLY BRANCHES AND COMBINATION SHUT-OFF AND BALANCE VALVE IN ALL HOT WATER RETURN BRANCHES. LOCATE IN ACCESSIBLE CEILING SPACE OR IF INSIDE EQUIPMENT ENCLOSURES, PROVIDE ACCESS DOOR.
- 27. HOT & COLD-WATER PIPING SHALL BE COPPER/PEX. 28. SEAL ALL FLOOR AND WALL PENETRATION IN FIRE RATED CEILING & PARTITIONS TO MAINTAIN FIRE
- 29. PROVIDE PIPE COVERING INSULATION, I" THICK FOR HOT WATER PIPING, AND 1/2" THICK FOR COLD WATER PIPING.

	PLUME	BING FIXTL	JRE	5	CH	EDL	JLE			
NAME	DESCRIPTION	MANUFACTURER	PIPE SIZE				REMARKS			
	DESCRIPTION		CW	HW	VENT	WASTE	KLIVIAIN			
WC-I	WATER CLOSET, ADA	AMERICAN STANDARD	1"	-	2"	4"	MODEL 3461.528.020 MADERA ADA ELONGATED VITREOUS CHINA TOILET WITH 1.28 GPF MANUAL PISTON FLUSH VALVE.			
LAV-I	LAVATORY	ACORN ENGINEERING	1/2"	1/2"	1-1/2"	1-1/2"	MODEL DUADA-3   18 30-3/4" X 18-1/2"   18-GAUGE STAINLESS STEEL UNDERMOUNT DOUBLE BOWL SINK (13-1/2" X 16" X 5.5" BOWLS). REQUIRES FAUCET, 1-1/2" DRAIN ASSEMBLY, P-TRAP, MOUNTING CLIPS/BRACKETS, 3/8" TO 1/2" FLEXIBLE SUPPLY LINES, SHUT-OFF VALVES, AND SILICONE SEALANT. FITS 36" MIN. CABINET FOR ADA.			
UR-I	URINAL	SLOAN	3/4"	-	1-1/2"	2"	MODEL SU-1009 VITREOUS CHINA WASHDOWN URINAL (17-1/4" W X 14-1/4" D X 25-1/2" H, O.125-0.5 GPF). REQUIRES FLUSHOMETER VALVE, STRAINER, WALL HANGER/CARRIER, 3/4" SUPPLY LINE, 2" NPT OUTLET FLANGE, SWEAT SOLDER ADAPTER, AND SEALING COMPOUND. MEETS ADA 17" RIM HEIGHT AND FLOOR SPACE.			
SK-I	SINK, SINGLE	KOHLER	1/2"	1/2"	1-1/2"	2"	MODEL K-RH20062-NA BALLAD 32" I 6-GAUGE STAINLESS STEEL UNDERMOUNT DOUBLE BOWL SINK WITH SOUND-ABSORPTION			
MS-I	MOP SINK	ELKAY	1/2"	1/2"	1-1/2"	2"	MODEL FLR-1X 24" X 20" X 11-1/4" 16-GAUGE STAINLESS STEEL FLOOR-MOUNTED MOP SINK (20" X 16" X 10" BOWL)			
DW- I	DISHWASHER	OATEY	-	1/2"		1-1/2"	MODEL 3790   MODA  -VALVE DISHWASHER SUPPLY BOX WITH HAMMER ARRESTOR OPTION			
FD-I	FLOOR DRAIN	ZURN	-	-	-	2"	MODEL Z4   5B ADJUSTABLE CAST IRON FLOOR DRAIN WITH SQUARE NICKEL BRONZE STRAINER.			
DF-I	DRINKING FOUNTAIN	ELKAY	1/2""		- /4"	1-1/2"	MODEL LZS8WSLK WALL-MOUNTED STAINLESS STEEL ADA COOLER WITH REFRIGERATION AND OPTIONAL BOTTLE FILLER			
HWH-I	HOT WATER HEATER	RHEEM	3/4"	3/4"			MODEL XG50T0GEC38U   50-GAL TALL NATURAL GAS WATER HEATER (38,000 BTU)			
НВ-1	HOSE BIB	EVERBILT QUARTER MASTER	1/2"				1/2" FORGED BRASS MPT HOSE BIBB, MODEL# 103-053EB			

### PLUMBING SPECIFICATIONS

#### I GENERAL NOTES

#### I.I BUILDING CODES & STANDARDS

- A. CONFORM TO ALL APPLICABLE CODES (LOCAL, STATE, NATIONAL CODES, NFPA, OSHA, ETC.). GOVERNMENT REGULATIONS, UTILITY COMPANY REQUIREMENTS, AND APPLICABLE STANDARDS.
- B. ARRANGE FOR ALL REQUIRED INSPECTIONS AND APPROVALS.

#### 1.2 GENERAL REQUIREMENTS

EXPENSE.

- A. CONFORM TO ALL GENERAL AND SPECIAL CONDITIONS OF CONTRACT AS SPECIFIED
- BY SITE ENGINEER'S AND/OR OWNER. B. VISIT SITE, CHECK FACILITIES AND CONDITIONS AND MAKE ALL NECESSARY
- OBSERVATIONS AND MEASUREMENTS. NOTE CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED AND TAKE ALL ITEMS INTO CONSIDERATION IN SCOPE OF WORK. C. SYSTEMS ARE TO BE COMPLETE AND WORKABLE IN ALL RESPECTS, PLACED IN
- OPERATION AND PROPERLY ADJUSTED. D. CONTRACTOR SHALL PROVIDE THEIR OWN CLEAN-UP, REMOVAL AND LEGAL DISPOSAL
- OF ALL RUBBISH DAILY.
- E. CONTRACTOR SHALL PROTECT THEIR WORK, EXISTING AND ADJACENT PROPERTY AGAINST WEATHER.
- F. CONTRACTOR SHALL PROTECT THEIR WORK, MATERIALS, APPARATUS AND FIXTURES FROM DAMAGE. ANY WORK DAMAGED BY FAILURE TO PROVIDE PROTECTION REQUIRED SHALL BE REMOVED AND REPLACED WITH NEW MATERIAL AT THE CONTRACTOR'S
- G. ARRANGE FOR AND OBTAIN OWNER'S REPRESENTATIVE'S PERMISSION FOR ANY SERVICE SHUTDOWNS.
- H. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, SEQUENCES OF CONSTRUCTION AND THE SAFETY OR WORKMEN. I. NO PIPING, DUCTWORK, WIRING, ETC. SHALL BE INSTALLED OR ROUTED ABOVE ELECTRICAL PANELS AND EQUIPMENT.

#### 1.3 DRAWINGS

- A. THE SYSTEM AS SHOWN ON PLUMBING DRAWINGS ARE DIAGRAMMATIC. CONFIRM ALL DIMENSIONS BY FIELD MEASUREMENT.
- B. THE EXACT LOCATIONS FOR FIXTURES, EQUIPMENT AND PIPING WHICH IS NOT COVERED BY DRAWINGS, SHALL BE OBTAINED FROM THE SITE ENGINEER'S OR THEIR REPRESENTATIVE IN THE FIELD AND THE WORK SHALL BE LAID OUT ACCORDINGLY.
- 1.4 BASE EQUIPMENT, MATERIALS AND SUBSTITUTIONS:
- A. ALL EQUIPMENT AND MATERIALS SHALL BE NEW, FREE OF DEFECTS,
- B. BASE BID MANUFACTURERS ARE INCLUDED IN THE SPECIFICATIONS OR LISTED IN THE NAME OR MAKE OF ANY ARTICLE, DEVICE, MATERIAL, FORM OF CONSTRUCTION, FIXTURE, ETC. ARE INCLUDED AS A BASIS OF DESIGN, WHETHER OR NOT THE WORDS "OR APPROVED EQUAL" ARE USED, SHALL BE KNOWN AS A "STANDARD".
- C. ALL PROPOSALS SHALL BE BASED ON "STANDARDS" SPECIFIED.
- D. THE EQUIPMENT SCHEDULES ON THE DRAWINGS INDICATE MANUFACTURERS EQUIPMENT MODEL NUMBERS THAT THIS DESIGN HAS BEEN BASED ON. THE USE OF OTHER MANUFACTURERS EQUIPMENT THAT IS LISTED AS ACCEPTABLE ALTERNATES AND REFLECTS ANY ADDITIONAL COST OF SUCH CHANGES SHALL BE PAID BY THE CONTRACTOR.
- E. SUBSTITUTIONS ARE SUBJECT TO THE APPROVAL OF THE OWNER. IF A SUBSTITUTION IS SUBMITTED, IT IS THE CONTRACTOR'S RESPONSIBILITY TO EVALUATE IT AND CERTIFY THAT THE SUBSTITUTION IS EQUIVALENT IN ALL RESPECTS TO THE BASE SPECIFICATIONS.
- F. COORDINATE ALL APPROVED SUBSTITUTIONS. ANY COSTS RESULTING FROM SUBSTITUTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. APPROVED SHOP DRAWINGS DO NOT ABSOLVE THIS CONTRACTOR FROM THIS RESPONSIBILITY.

#### 1.5 WARRANTY

- A. FULLY WARRANT ALL MATERIALS, EQUIPMENT AND WORKMANSHIP FOR (I) YEAR FROM DATE OF ACCEPTANCE.
- B. EXTEND ALL MANUFACTURERS' WARRANTIES TO OWNER.
- C. REPAIR OR REPLACE WITHOUT CHARGE TO THE OWNER ALL ITEMS FOUND DEFECTIVE DURING THE WARRANTY PERIOD. IN THE CASE OF REPLACEMENT OR REPAIR DUE TO FAILURE WITHIN THE WARRANTY PERIOD, THE WARRANTY ON THAT PORTION OF THE WORK SHALL BE EXTENDED FOR A MINIMUM PERIOD OF ONE (I) YEAR FROM THE DATE OF SUCH REPLACEMENT OR REPAIR.

### 2. BASIC MATERIALS AND METHODS

### 2.1 GENERAL

A. THIS SECTION INCLUDES BASIC PLUMBING MATERIALS AND METHODS TO COMPLEMENT OTHER SECTIONS IN THIS SPECIFICATION AND REQUIREMENTS INDICATED ON THE MECHANICAL DRAWINGS.

### 2.2 SUPPORTS & HANGERS

A. INSTALL HANGERS, SUPPORTS, CLAMPS AND ATTACHMENTS AS REQUIRED TO PROPERLY SUPPORT PIPING FROM BUILDING STRUCTURE. THE INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF MSS SP-69 AND SP-89.

### 2.3 ESCUTCHEONS

A. FIT ALL PIPE PASSING THROUGH WALLS, FLOORS OR CEILINGS IN FINISHED ROOMS WITH STEEL OR BRASS ESCUTCHEONS. WHERE SURFACE IS TO RECEIVE A PAINT FINISH, MAKE ESCUTCHEONS NICKEL OR CHROME PLACED. WHERE PIPING IS INSULATED, FIT ESCUTCHEONS OUTSIDE INSULATION.

### 2.4 IDENTIFYING DEVICES \$ LABELS

- A. PROVIDE METAL EQUIPMENT NAMEPLATES PERMANENTLY FASTENED TO EQUIPMENT WITH OPERATIONAL DATA ENGRAVED OR STAMPED.
- B. IDENTIFY ALL PIPES AND VALVES AT UNEXPOSED AREAS, AND ACCESSIBLE CEILINGS
- AND SHAFTS. C. COLOR CODE IDENTIFICATION BANDS OR MARKER BACKGROUNDS TO IDENTIFY CONTENTS OF PIPE AND DIRECTION OF FLOW LOCATED NEAR EACH VALVE AND FITTING, ON BOTH SIDES OF PIPE PASSING THROUGH WALLS AND ON LONG RUNS AT NOT OVER 20 FOOT INTERVALS.

### 2.5 FLUES

A. FLUES SHALL BE TYPE B DOUBLE WALL TYPE. INNER PIPE SHALL BE FABRICATED OF TYPE 430M STAINLESS STEEL AND THE OUTER PIPE OF ALUMINIZED STEEL. PROVIDE VENTILATED ROOF THIMBLE, EXIT CONE AND STACK CAP.

### 2.6 CUTTING, PATCHING & DRILLING

- A. PATCH AND FINISH TO MATCH ADJACENT AREAS THAT HAVE BEEN CUT, DAMAGED OR MODIFIED AS A RESULT OF THE INSTALLATION OF THE MECHANICAL SYSTEMS. B. EXACT LOCATION OF ROOF TOP MECHANICAL UNITS SHALL BE APPROVED BY THE
- STRUCTURAL ENGINEER. CONTRACTOR SHALL FURNISH AND INSTALL ALL SUPPLEMENTAL SUPPORT STEEL FOR EQUIPMENT AND ROOF PENETRATIONS AFTER APPROVAL OF STRUCTURAL ENGINEER.

### 3. INSULATION

- A. PLUMBING INSULATION (AS MANUFACTURED BY OWNES CORNING, KNAUF, SCHULLER OR CERTAINTEED)
- I. INSULATE ALL ABOVE GRADE HOT AND COLD WATER PIPING WITH MOLDED FIBER GLASS HAVING AN ALL SERVICE JACKET.
- B. INSULATION THICKNESS SCHEDULE: I) LESS THAN 2" DIAMETER PIPE: I" THICK-HW AND
- 1/2" THICK CW; 2) 2"-8" DIAMETER PIPE: 1-1/2" THICK. I. INSULATE ALL ABOVE-GRADE, HORIZONTAL RAIN CONDUCTORS AND ROOF DRAIN SUMPS WITH ONE (I) INCH THICK MOLDED FIBER GLASS HAVING TYPE ASJ JACKET
- AND MANUFACTURED BY OWENS-CORNING FIBERGLASS COMPANY. 2. INCLUDE INSULATION OF FITTINGS AND VALVES. KEEP VAPOR BARRIERS INTACT. APPLY TO MANUFACTURER'S RECOMMENDATIONS.

#### 4. PIPING AND VALVES

#### 4.1 GENERAL A. LABEL ALL PIPING AND SHOW DIRECTION OF FLOW EVERY 20 FEET ON CENTER.

#### 4.2 CONNECTIONS TO EQUIPMENT A. PROVIDE VALVES AT ALL WATER AND/OR GAS CONNECTION FOR EQUIPMENT. B. INCLUDE ACCESSORIES REQUIRED BY CODE, DRAWING OR MANUFACTURER'S INSTRUCTIONS.

#### 4.3 SANITARY AND STORM SEWERS

- A. SANITARY AND STORM SEWERS I. ROOF DRAINS SHALL BE PROVIDED WITH A FLASHING RING AND A 30"x30"x 4LB. LEAD FLASHING PROPERLY FASTENED TO THE FLASHING RING.
- 2. PVC PIPING SHALL NOT BE INSTALLED UNLESS PERMITTED BY CODE. B. ABOVE GRADE SANITARY/STORM SEWER AND VENT MATERIAL SHALL BE AS FOLLOWS:
- I. NO-HUB CAST IRON PIPE CISPI 1-301-78. 2. PVC-DWV PLASTIC ASTMD | 785 WITH ASTM D2665 DWV SOLVENT WELD SOCKET

#### FITTINGS C. SITE STORM AND SANITARY SEWERS

1. UP TO 15" - PVC PLASTIC ASTM D3034 SDR 35 WITH ASTM D3212 GASKET JOINTS.

#### 4.4 DOMESTIC WATER PIPING

- A. INSTALL DOMESTIC WATER PIPING AS INDICATED ON DRAWINGS. INCLUDE ALL FITTINGS, VALVES, HANGERS AND OTHER ACCESSORIES INCLUDING WATER METER AND BACKFLOW PREVENTER. EXTEND DOMESTIC WATER PIPING TO ALL FIXTURES AND EQUIPMENT REQUIRED FOR COMPLETE INSTALLATION.
- B. INCLUDE UNIONS, OR OTHER DISCONNECT MEANS, STOPS OR VALVES FOR ISOLATION OF FIXTURES AND EQUIPMENT. VALVES TO BE FULLY COMPATIBLE WITH PIPING FOR SERVICE INTENDED AS MANUFACTURED BY NIBCO, CRANE OR MILWAUKEE. INCLUDE HOSE OR DRAIN VALVES AT LOW POINTS WHERE FIXTURES CANNOT BE USED FOR DRAINAGE.
- C. PROVIDE WATER HAMMER ARRESTERS OF TYPE REQUIRED FOR FIXTURES AND WATER PRESSURES. THESE SHALL BE ASSE 1010 OR PDI-WH201, PISTON TYPE WITH PRESSURIZED METAL-TUBE CUSHIONING CHAMBER AS MANUFACTURED BY SIOUX CHIEF, AMTROL, JOSAM OR ZURN HANGERS ON INSULATED PIPE TO BE OUTSIDE OF
- INSULATION, SIZED ACCORDINGLY AND WITH A SUFFICIENT SADDLE TO PROTECT INSULATION.
- D. DOMESTIC WATER PIPING SHALL BE AS FOLLOWS: ABOVE GRADE:
  - a. I-I/2" NPS AND LARGER- TYPE "L" HARD COPPER ASTM B88-832 WITH WROUGHT COPPER FITTINGS ASTM B16.22 1980 AND NON-LEAD OR ANTIMONY SOLDER JOINTS.
- b. I-I/4" NPS AND SMALLER PEX TUBING PER ASTM F877 STANDARD GRADE HYDROSTATIC PRESSURE RATINGS 200°F AT 80 PSI.
- 2. BELOW GRADE PEX PIPING WITHOUT JOINTS. PROVIDE CPVC CONDUIT. 3. FLUSH, VENT AND SANITIZE ALL WATER PIPING WITH CHLORINE AS REQUIRED PER

AWWA, LOCAL BUILDING DEPARTMENT AND HEALTH DEPARTMENT CODES.

- 4. DOMESTIC HOT AND COLD WATER PIPING UNDER CONCRETE FLOOR TO BE COVERED WITH 6" OF SAND SO THAT PIPING WILL NOT BECOME EMBEDDED IN THE
- E. ALL PIPING UNDER CONCRETE FLOOR SHALL BE PEX, CONTINUOUS. NO SPLICES OR FITTINGS WILL BE ALLOWED. PROVIDE CPVC CONDUITS FOR ALL UNDERSLAB PIPING.

#### 4.5 CONDENSATE DRAIN PIPING

A. INSTALL SCH 40 PVC CONDENSATE PIPING AT A MINIMUM 1% DOWNWARD SLOPE IN THE DIRECTION OF FLOW UNLESS OTHERWISE INDICATED.

#### 4.6 STRAINERS

A. INSTALL SCH 40 PVC CONDENSATE PIPING AT A MINIMUM 1% DOWNWARD SLOPE IN THE DIRECTION OF FLOW UNLESS OTHERWISE INDICATED.

#### 4.7 PRESSURE REGULATORS

A. WATER PRESSURE REDUCING VALVE SHALL HAVE AN INITIAL WORKING PRESSURE OF I 50 PSI WITH AN ADJ OUT PRESSURE SETTING. VALVES 2" AND SMALLER SHALL BE OF BRONZE BODY WITH THREADED CONNECTIONS.

### 4.8 BACKFLOW PREVENTER.

A. DOUBLE CHECK BACKFLOW PREVENTION ASSEMBLY SHALL CONSIST OF TWO POSITIVE SEATING CHECK MODULES WITH CAPTURED SPRINGS AND RUBBER SEAT DISCS THAT ARE REPLACEABLE. IT SHALL HAVE A LOW PRESSURE DROP. BACKFLOW PREVENTER SHALL REQUIRE NO SPECIAL TOOLS FOR SERVICING. IT SHALL BE A CAST BRONZE BODY CONSTRUCTION FROM 1/2"-2" AND FUSED EPOXY COATED CAST IRON BODY FOR 2-1/2" - 3".

### 4.9 PIPE SUPPORTS

A. .PIPE SUPPORTS FOR HOT WATER PIPE SHALL BE ANVIL FIG. 181 OR EQUAL. B. PIPE SUPPORTS FOR NATURAL GAS SHALL BE ANVIL FIG. 260 OR EQUAL

### 5. PLUMBING SYSTEMS AND EQUIPMENT

### 5.1 GENERAL

- A. CONTRACTORS SHALL VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THEIR WORK.
- B. VERIFY EXACT CONDITIONS IN FIELD AND COORDINATE WITH THESE DRAWINGS AND OTHER TRADES BEFORE BEGINNING NEW WORK.
- C. DETERMINE EXACT LOCATIONS FOR ALL EQUIPMENT, PIPING, CONDUITS AND DUCTWORK IN FIELD.
- D. COORDINATE WORK OF THIS CONTRACT WITH OTHER TRADES. CONFLICTS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
- THE ACTUAL CONDITIONS IN THE FIELD SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER'S BEFORE PROCEEDING. F. BUILDING AND SURFACES DAMAGED DURING INSTALLATION SHALL BE REPAIRED,

REPLACED, AND/OR RESTORED TO ORIGINAL CONDITION AFTER COMPLETION OF WORK

E. ANY DISCREPANCIES BETWEEN WHAT IS SHOWN ON DRAWINGS OR SPECIFIED AND

### 5.2 EQUIPMENT

- A. PLUMBING CONTRACTOR IS TO FURNISH ALL PLUMBING EQUIPMENT INDICATED AND/OR SCHEDULED ON THE DRAWINGS COMPLETE WITH BASES, ISOLATORS, SUPPORTS AND OTHER REQUIRED ACCESSORIES.
- B. INSTALL COMPLETE AND PLACE IN PROPER OPERATION PER MANUFACTURER'S
- RECOMMENDATIONS, LUBRICATE AND ADJUST AS REQUIRED. C. EQUIPMENT TO BE MAKE AND MODEL AS SCHEDULED UNLESS ALTERNATE EQUIPMENT OF EQUIVALENT QUALITY AND PERFORMANCE IS SUBMITTED AS A SUBSTITUTION. ALL SUBSTITUTIONS ARE SUBJECT TO ACCEPTANCE WITHOUT QUALIFICATION BY OWNER, ENGINEER AND SITE ENGINEER.

### 6. PLUMBING INSTRUMENTS AND CONTROLS

AND BEFORE ACCEPTANCE BY OWNER.

### 6.1 GENERAL

- A. AFTER INSTALLATION, CHECK ALL EQUIPMENT AND PERFORM START UP IN
- ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. B. ALL PIPING SHALL BE TESTED AND FREE OF LEAKS AS REQUIRED BY THE LOCAL
- AUTHORITY HAVING JURISDICTION. C. WORK THAT IS SCHEDULED TO BE CONCEALED OR INSULATED SHALL REMAIN

MAINTENANCE MANUAL FOR ALL EQUIPMENT AND SYSTEM

- UNCOVERED UNTIL REQUIRED TESTS HAVE BEEN COMPLETED. IF THE CONSTRUCTION SCHEDULE REQUIRES, ARRANGE FOR TESTS ON SECTIONS AT A TIME.
- D. BALANCE ALL SYSTEMS, CALIBRATE CONTROLS, CHECK FOR PROPER OPERATION AND SEQUENCE UNDER ALL CONDITIONS AND MAKE ALL NECESSARY ADJUSTMENTS. E. INSTRUCT OWNER IN OPERATION OF SYSTEMS AND SUBMIT OPERATING AND

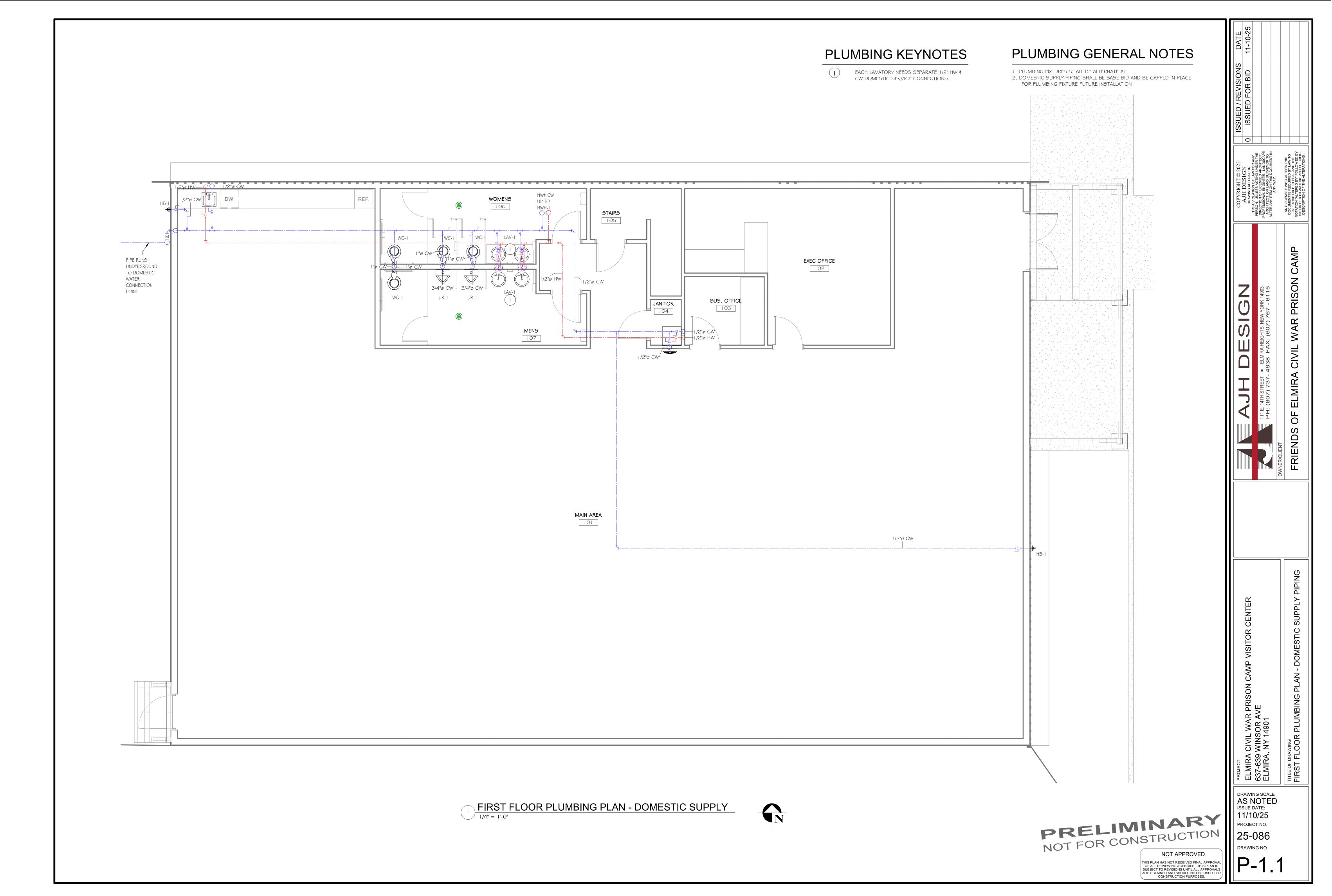


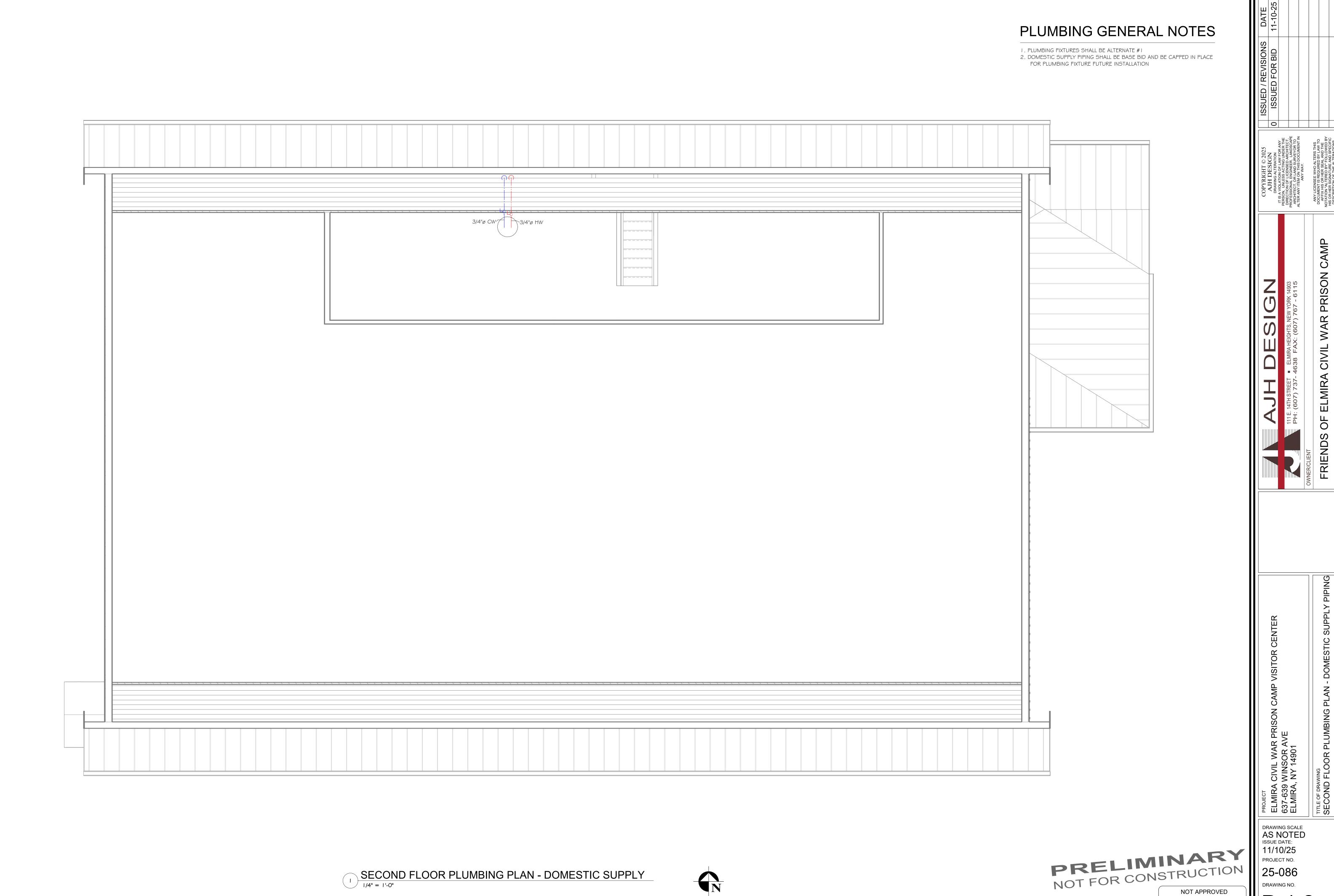
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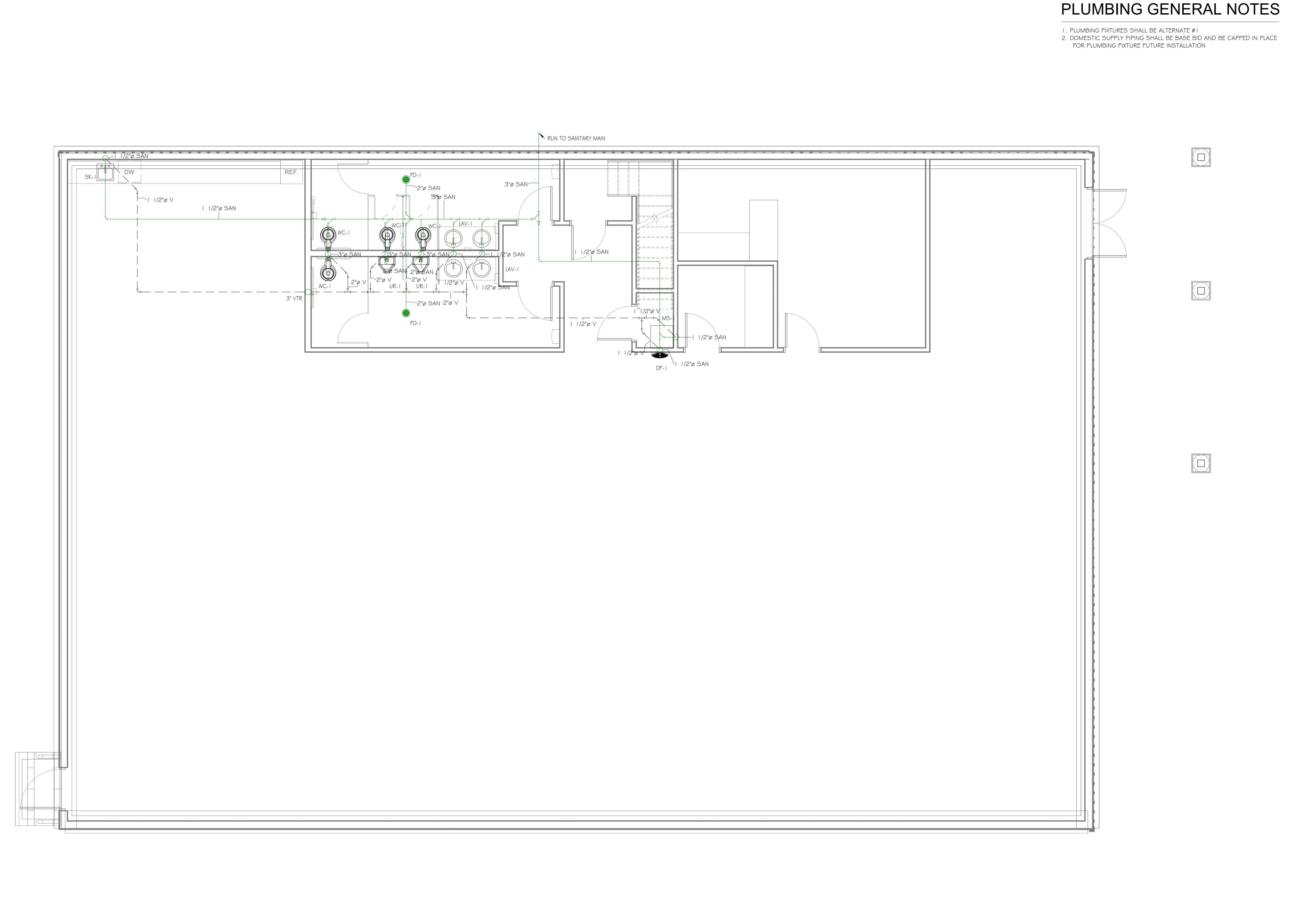
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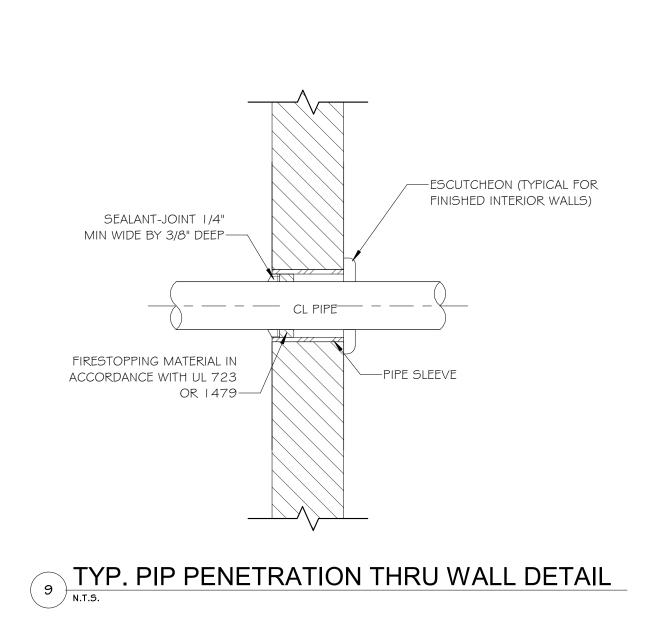


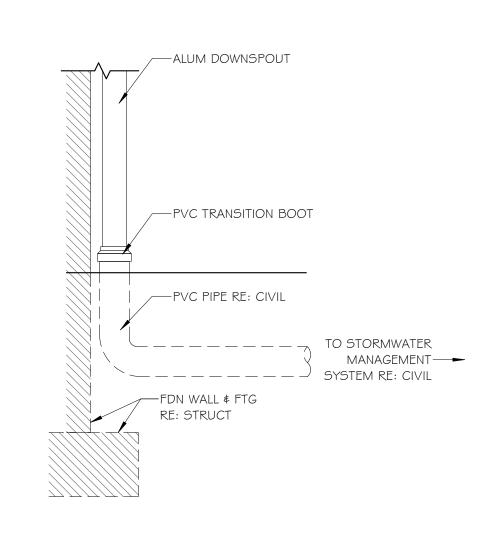
FIRST FLOOR PLUMBING PLAN - SANITARY & VENT

PRELIMINARY

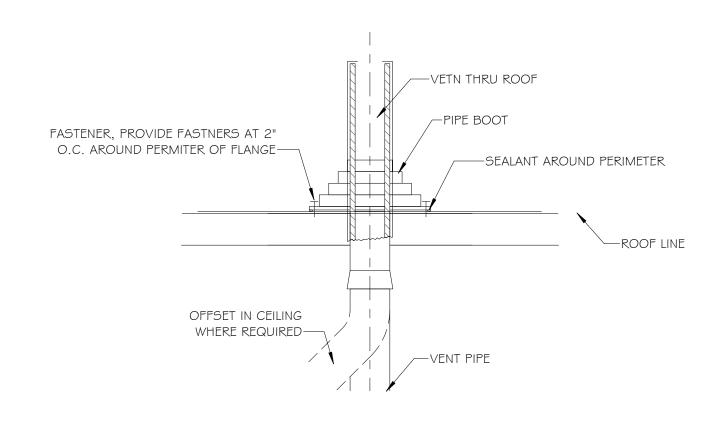
NOT FOR CONSTRUCTION

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ISSUE DATE:
11/10/25
PROJECT NO.
25-086 NOT APPROVED THIS PLAN HAS NOT RECEIVED FINAL APPROVAL OF ALL REVIEWING AGENCIES. THIS PLAN IS SUBJECT TO REVISIONS UNTIL ALL APPROVALS ARE OBTAINED AND SHOULD NOT BE USED FOR CONSTRUCTION PURPOSES.



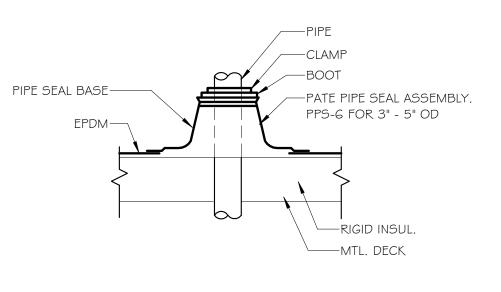






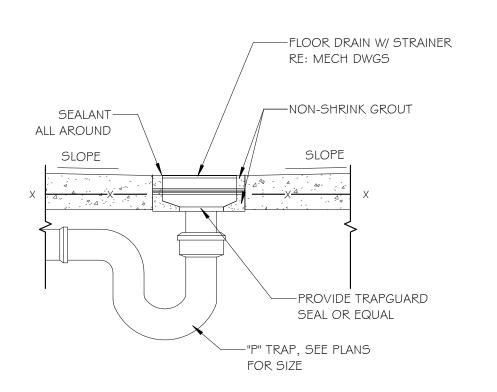






TYP. PIPE PENETRATION THRU ROOF DETAIL

5 N.T.S.



/--3/8" THREADED ROD

SUPPORT FROM

AS REQ'D-

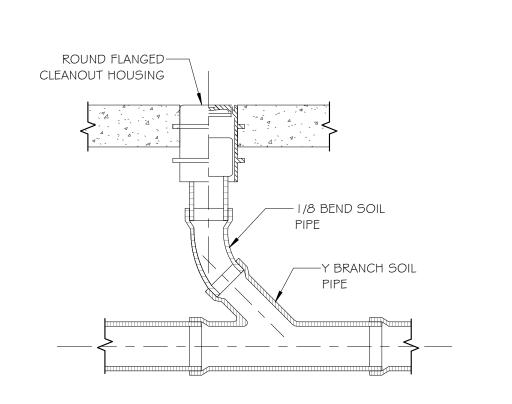
CLEVIS HANGER (SIZE

INSULATION SADDLE-

ROOF JOIST

SINGLE PIPE RUN





MOP HANGER-

SERVICE FAUCET-

MOP SINK ELEVATION DETAIL

N.T.S.

HIGH DENSITY INSULATION

HIGH DENSITY INSULATION INSERT-LOWER HALF OF PIPE-

PIPE SUPPORT DETAILS

N.T.S.

-LENGTH AS REQUIRED—

3/8" TYPE 24 U-BOLT-

MULTIPLE PIPE RUNS

HOSE # HOSE BRACKET-

VINYL BUMPER GUARD——

I 1/4 x 1 1/4 x 3/16 ANGLE IRON SUPPORTS

UN-INSULATION PIPE, TYP----

TYP. FLOOR CLEANOUT DETAIL
N.T.S.



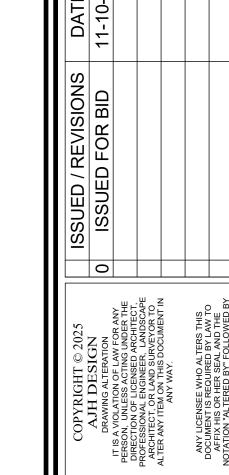
-NUTS & WASHERS BOTH SIDES OF ANGLE STRUCTURAL JOIST, TYP

THREADED HANGER ROD

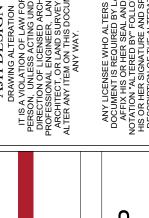
----NUT \$ WASHER BOTH SIDES

TYPE 40 PROTECTION SHILED TOP \$ BOTTOM

-UNISTRUT PIPE SUPPORT FRAME



AJH DESIGN DRAWING ALTERATION	IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE	DIRECTION OF LICENSED ARCHITECT, PROFESSIONAL ENGINEER, LANDSCAPE ARCHITECT, OR LAND SURVEYOR TO	ALTER ANY ITEM ON THIS DOCUMENT IN ANY WAY.	ANY LICENSEE WHO ALTERS THIS DOCUMENT IS REQUIRED BY LAW TO	AFIX HIS OR HER SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY	DESCRIPTION OF THE ALTERATIONS.



WAR PRISON CIVIL

DRAWING SCALE
AS NOTED
ISSUE DATE:

#### I. GENERAL NOTES

#### I.I BUILDING CODES AND STANDARDS

- A. ALL ELECTRICAL WORK TO CONFORM TO:
- 1. NFPA 70 (NATIONAL ELECTRIC CODE) CURRENT VERSION.
- 2. NECA (NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION) STANDARD OF INSTALLATION. 3. NETA ATS (INTERNATIONAL ELECTRICAL TESTING ASSOCIATION) - ACCEPTANCE TESTING SPECIFICATIONS
- FOR ELECTRICAL POWER DISTRIBUTION EQUIPMENT AND SYSTEMS. 4. NFPA 72 (NATIONAL FIRE PROTECTION ASSOCIATION - NATIONAL FIRE ALARM CODE).
- 5. ALL APPLICABLE CODES.

- 1.2 GENERAL REQUIREMENTS A. PRIOR TO CONSTRUCTION \$ INSTALLATION, CONTRACTOR IS TO VERIFY EXISTING CONDITIONS AND NOTIFY ARCHITECT/ENGINEER OF CONFLICTS OR CONDITIONS WHICH INTERFERE WITH INSTALLATION AS SET FORTH
- B. CONTRACTOR RESPONSIBLE FOR ALL NEW FLOOR OPENINGS, EXCAVATIONS, AND PENETRATIONS, UNLESS SPECIFICALLY NOTED. UPON COMPLETION, ALL PENETRATIONS TO BE SEALED.
- C. ALL CUTTING AND PATCHING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS CLEARLY
- INDICATED AS PART OF ANOTHER PRIME CONTRACT. D. COORDINATE ANY NEW ROOF PENETRATIONS WITH THE OTHER TRADES.
- E. TAG UNUSED CIRCUITS AS SPARE AND SWITCH BREAKER TO THE "OFF" POSITION.
- F. ALL WORK SHOWN ON THIS DRAWING IS THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS CLEARLY
- INDICATED AS PART OF ANOTHER PRIME CONTRACT.
- G. PROVIDE TEMPORARY POWER REQUIRED FOR ALL TRADES. H. MATCH OWNERS EXISTING STANDARD EQUIPMENT.
- I. COORDINATE WORK TO MINIMIZE OUTAGE DURATION.
- J. OBTAIN ALL REQUIRED REMITS \$ INSPECTIONS. K. PROVIDE FOR ELECTRICAL INSPECTIONS AND SUBMIT REPORTS TO THE OWNER.
- L. SUBMIT O#M MANUALS TO OWNER UPON COMPLETION OF WORK.
- M. PROVIDE TRAINING SESSION FOR DESIGNATED MAINTENANCE PERSONNEL.
- N. PROVIDE SUBMITTALS FOR ALL ELECTRICAL EQUIPMENT, EXCLUDING WIRE, CONDUIT, AND FASTENERS.
- 2. PANELBOARD SHOP DRAWINGS (INDICATE OUTLINE AND SUPPORT POINT DIMENSIONS, VOLTAGE, MAIN BUS AMPICITY, INTEGRATED SHORT CIRCUIT AMPERE RATINGS, CIRCUIT BREAKER AND FUSIBLE SWITCH ARRANGEMENT AND SIZES) AND CATALOG DATA SHOWING SPECIFIED FEATURES OF STANDARD
- 3. ENCLOSED SWITCHES SWITCH RATINGS AND ENCLOSURE DIMENSIONS
- 4. DEVICES MANUFACTURER'S CATALOG INFORMATION SHOWING DIMENSIONS, COLORS, AND
- 5. LUMINARIES (INCLUDING EMERGENCY & EXIT FIXTURES) CATALOG INFORMATION SHOWING DIMENSIONS, RATINGS, AND PERFORMANCE DATA.
- O. SELECT MATERIALS, SIZES, AND TYPES OF ANCHORS, FASTENERS, AND SUPPORTS TO CARRY LOADS OF EQUIPMENT AND RACEWAY, INCLUDING WEIGHT OF WIRE AND CABLE IN RACEWAY.

#### 2. RACEWAY AND BOXES

- A. PROVIDE RACEWAY AND BOXES LOCATED AS INDICATED, AND AT OTHER LOCATIONS REQUIRED FOR SPLICES, TAPS, WIRE PULLING, EQUIPMENT CONNECTIONS, AND COMPLIANCE WITH REGULATORY REQUIREMENTS. RACEWAY AND BOXES ARE SHOWN IN APPROXIMATE LOCATIONS UNLESS DIMENSIONED.
- PROVIDE RACEWAY TO COMPLETE WIRING SYSTEM. B. UNDERGROUND MORE THAN 5 FEET OUTSIDE FOUNDATION WALL: PROVIDE SCHEDULE 80 PVC. PROVIDE
- CAST METAL BOXES OR NONMETALLIC HANDHOLES WHERE REQUIRED. C. UNDERGROUND WITHIN 5 FEET FROM FOUNDATION WALL: PROVIDE RIGID STEEL CONDUIT OR THICKWALL
- NONMETALLIC CONDUIT (SCHEDULE 80 PVC). PROVIDE CAST METAL OR NONMETALLIC BOXES. D. IN OR UNDER SLAB ON GRADE: PROVIDE THICKWALL NONMETALLIC CONDUIT. PROVIDE CAST OR
- NONMETALLIC METAL BOXES. E. OUTDOOR LOCATIONS ABOVE GRADE: PROVIDE NON-METALLIC CONDUIT. PROVIDE NONMETALLIC OUTLET,
- PULL, AND JUNCTION BOXES.
- F. IN SLAB ABOVE GRADE: PROVIDE THICKWALL NONMETALLIC CONDUIT. PROVIDE CAST NONMETALLIC BOXES. G. WET AND DAMP LOCATIONS: PROVIDE THICKWALL NONMETALLIC CONDUIT. PROVIDE NONMETALLIC OUTLET,
- JUNCTION, AND PULL BOXES. PROVIDE FLUSH MOUNTING OUTLET BOX IN FINISHED AREAS. H. CONCEALED DRY LOCATIONS: PROVIDE ELECTRICAL METALLIC TUBING. PROVIDE SHEET-METAL BOXES. PROVIDE FLUSH MOUNTING OUTLET BOX IN FINISHED AREAS. PROVIDE HINGED ENCLOSURE FOR LARGE
- MINIMUM RACEWAY SIZE: 3/4 INCH UNLESS OTHERWISE SPECIFIED. ARRANGE RACEWAY AND BOXES TO MAINTAIN HEADROOM AND PRESENT NEAT APPEARANCE, GROUP
- RELATED RACEWAY; SUPPORT USING CONDUIT RACK; PROVIDE SPACE ON EACH FOR 25 PERCENT K. RACEWAY ROUTING IS SHOWN IN APPROXIMATE LOCATIONS UNLESS DIMENSIONED. ROUTE TO COMPLETE
- DO NOT SUPPORT RACEWAY WITH WIRE, PERFORATED PIPE STRAPS, CEILING SUPPORT WIRES OR OTHER
- M. ROUTE EXPOSED \$ ABOVE ACCESSIBLE CEILINGS RACEWAY PARALLEL AND PERPENDICULAR TO WALLS.
- N. DO NOT CROSS CONDUITS IN SLAB.
- O. INSTALL NO MORE THAN EQUIVALENT OF THREE 90 DEGREE BENDS BETWEEN BOXES. INSTALL CONDUIT BODIES TO MAKE SHARP CHANGES IN DIRECTION, AS AROUND BEAMS. INSTALL FACTORY ELBOWS FOR BENDS IN METAL CONDUIT LARGER THAN 2 INCH SIZE.
- P. AVOID MOISTURE TRAPS; INSTALL JUNCTION BOX WITH DRAIN FITTING AT LOW POINTS IN CONDUIT SYSTEM. Q. INSTALL FITTINGS TO ACCOMMODATE EXPANSION AND DEFLECTION WHERE RACEWAY CROSSES SEISMIC,
- CONTROL AND EXPANSION JOINTS.
- R. INSTALL SUITABLE PULL STRING OR CORD IN EACH EMPTY RACEWAY EXCEPT SLEEVES AND NIPPLES. S. CLOSE ENDS AND UNUSED OPENINGS IN WIREWAY.
- T. INSTALL PULL BOXES AND JUNCTION BOXES ABOVE ACCESSIBLE CEILINGS AND IN UNFINISHED AREAS ONLY. U. IN ACCESSIBLE CEILING AREAS: INSTALL OUTLET AND JUNCTION BOXES NO MORE THAN 6 INCHES FROM
- V. LOCATE FLUSH MOUNTING BOX IN MASONRY WALL TO REQUIRE CUTTING OF MASONRY UNIT CORNER ONLY. COORDINATE MASONRY CUTTING TO ACHIEVE NEAT OPENING.
- W. DO NOT INSTALL FLUSH MOUNTING BOX BACK-TO-BACK IN WALLS; INSTALL WITH MINIMUM 6 INCHES
- SEPARATION. INSTALL WITH MINIMUM 24 INCHES SEPARATION IN ACOUSTIC RATED WALLS.
- X. DO NOT FASTEN BOXES TO CEILING SUPPORT WIRES OR OTHER PIPING SYSTEMS. Y. SUPPORT BOXES INDEPENDENTLY OF CONDUIT.
- Z. USE FLUSH MOUNTING OUTLET BOX IN FINISHED AREAS.
- AA. SET FLOOR BOXES LEVEL AND FLUSH WITH FINISH FLOORING MATERIAL.

CEILING ACCESS PANEL OR FROM REMOVABLE RECESSED LUMINAIRE.

BB. INSTALL CONDUIT TO PRESERVE FIRE RESISTANCE RATING OF PARTITIONS AND OTHER ELEMENTS. CC. ALIGN ADJACENT WALL MOUNTED OUTLET BOXES FOR SWITCHES, THERMOSTATS, AND SIMILAR DEVICES.

### 2. GROUNDING SYSTEMS

- A. GROUNDING SYSTEM RESISTANCE: 25 OHMS.
- B. GROUNDING SYSTEMS:
- I. MECHANICAL CONNECTORS: BRONZE CONNECTORS, SUITABLE FOR GROUNDING AND BONDING
- APPLICATIONS, IN CONFIGURATIONS REQUIRED FOR PARTICULAR INSTALLATION.
- C. EXOTHERMIC CONNECTIONS: EXOTHERMIC MATERIALS, ACCESSORIES, AND TOOLS FOR PREPARING AND MAKING PERMANENT FIELD CONNECTIONS BETWEEN GROUNDING SYSTEM COMPONENTS.
- D. WIRE: STANDARD COPPER. E. GROUNDING ELECTRODE CONDUCTOR: SIZE TO MEET NFPA 70 AND LOCAL MUNICIPALITY REQUIREMENTS.
- I. EQUIPMENT GROUNDING CONDUCTOR: INSTALL SEPARATE, INSULATED CONDUCTOR WITHIN EACH FEEDER AND BRANCH CIRCUIT RACEWAY. TERMINATE EACH END ON SUITABLE HUB, BUS, OR BUSHING. 2. DO NOT FASTEN SUPPORTS TO PIPES, DUCTS, MECHANICAL EQUIPMENT, OR CONDUIT.
- 3. OBTAIN PERMISSION FROM ARCHITECT/ENGINEER BEFORE USING POWDER-ACTUATED ANCHORS OR DRILLING OR CUTTING STRUCTURAL MEMBERS.

### 3. HANGERS AND SUPPORTS

- A. ANCHORS & FASTENERS TO BE CORROSION RESISTANT.
- B. ANCHOR AND FASTEN ELECTRICAL PRODUCTS TO BUILDING ELEMENTS AND FINISHES AS FOLLOWS:
- I. CONCRETE STRUCTURAL ELEMENTS: PROVIDE EXPANSION ANCHORS. 2. STEEL STRUCTURAL ELEMENTS: PROVIDE BEAM CLAMPS AND SPRING STEEL CLIPS.
- 3. CONCRETE SURFACES: PROVIDE EXPANSION ANCHORS.
- 4. HOLLOW MASONRY, PLASTER, AND GYPSUM BOARD PARTITIONS: PROVIDE TOGGLE BOLTS AND HOLLOW
- WALL FASTENERS. 5. SOLID MASONRY WALLS: PROVIDE EXPANSION ANCHORS.
- 6. SHEET-METAL: PROVIDE SHEET-METAL SCREWS. 7. WOOD ELEMENTS: PROVIDE WOOD SCREWS.
- C. SUPPORTS:
- I. FABRICATE SUPPORTS FROM STRUCTURAL STEEL OR FORMED STEEL MEMBERS. RIGIDLY WELD MEMBERS OR INSTALL HEXAGON HEAD BOLTS TO PRESENT NEAT APPEARANCE WITH ADEQUATE STRENGTH AND RIGIDITY. INSTALL SPRING LOCK WASHERS UNDER NUTS.
- 2. INSTALL SURFACE MOUNTED CABINETS AND PANELBOARDS WITH MINIMUM OF FOUR ANCHORS.
- 3. IN WET AND DAMP LOCATIONS INSTALL STEEL CHANNEL SUPPORT TO STAND CABINETS AND
- PANELBOARDS I INCH OFF WALL. 4. INSTALL SHEET-METAL CHANNEL TO BRIDGE STUDS ABOVE AND BELOW CABINETS AND PANELBOARDS RECESSED IN HOLLOW PARTITIONS.

#### 4. BUILDING WIRE & CABLE

- A. PROVIDE PRODUCTS AS FOLLOWS:
- I. SOLID CONSTRUCTION FOR FEEDERS AND BRANCH CIRCUITS #10 AWG AND SMALLER. 2. STRANDED CONDUCTORS FOR CONTROL CIRCUITS.
- 3. PROVIDE CONDUCTORS #12 AWG OR LARGER FOR POWER AND LIGHTING CIRCUITS.
- 4. PROVIDE CONDUCTORS #16 AWG OR LARGER FOR CONTROL CIRCUITS. 5. #10 AWG CONDUCTORS FOR 20 AMPERE, 120 VOLT BRANCH CIRCUITS LONGER THAN 75 FEET.
- 6. #10 AWG CONDUCTORS FOR 20 AMPERE, 277 VOLT BRANCH CIRCUITS LONGER THAN 200 FEET.
- B. WIRING METHODS: PROVIDE THE FOLLOWING WIRING METHODS: A. CONCEALED DRY INTERIOR LOCATIONS: USE ONLY BUILDING WIRE, TYPE THHN/THWN INSULATION IN
- B. ABOVE ACCESSIBLE CEILINGS: USE ONLY BUILDING WIRE, TYPE THHN/THWN INSULATION, IN RACEWAY
- C. WET OR DAMP INTERIOR LOCATIONS: USE ONLY BUILDING WIRE, TYPE THHN/THWN INSULATION, IN
- D. UNDERGROUND LOCATIONS: USE ONLY BUILDING WIRE, TYPE THHN/THWN INSULATION, IN RACEWAY. C. WIRE AND CABLE ROUTING INDICATED IS APPROXIMATE UNLESS DIMENSIONED. INCLUDE WIRE AND CABLE LENGTHS WITHIN 10 FT OF LENGTH SHOWN.
- D. COMPLETELY AND THOROUGHLY SWAB RACEWAY BEFORE INSTALLING WIRE.
- E. NEATLY TRAIN AND LACE WIRING INSIDE BOXES, EQUIPMENT, AND PANELBOARDS.
- F. SPECIAL TECHNIQUES-BUILDING WIRE IN RACEWAY: I. PULL CONDUCTORS INTO RACEWAY AT SAME TIME.
- 2. INSTALL BUILDING WIRE #4 AWG AND LARGER WITH PULLING EQUIPMENT.
- G. SPECIAL TECHNIQUES CABLE:
- I. PROTECT EXPOSED CABLE FROM DAMAGE. 2. SUPPORT CABLES ABOVE ACCESSIBLE CEILING, USING SPRING METAL CLIPS OR CABLE TIES TO SUPPORT CABLES FROM STRUCTURE OR CEILING SUSPENSION SYSTEM. DO NOT REST CABLE ON
- 3. USE SUITABLE CABLE FITTINGS AND CONNECTORS.
- H. SPECIAL TECHNIQUES DIRECT BURIAL CABLE: I. TRENCH AND BACKFILL FOR DIRECT BURIAL CABLE INSTALLATION. INSTALL WARNING TAPE ALONG ENTIRE LENGTH OF DIRECT BURIAL CABLE. WITHIN 3 INCHES OF GRADE.
- 2. USE SUITABLE DIRECT BURIAL CABLE FITTINGS AND CONNECTORS. I. SPECIAL TECHNIQUES - WIRING CONNECTIONS:
- I. CLEAN CONDUCTOR SURFACES BEFORE INSTALLING LUGS AND CONNECTORS. 2. MAKE SPLICES, TAPS, AND TERMINATIONS TO CARRY FULL AMPICITY OF CONDUCTORS WITH NO
- PERCEPTIBLE TEMPERATURE RISE. 3. TAPE UNINSULATED CONDUCTORS AND CONNECTORS WITH ELECTRICAL TAPE TO 150 PERCENT OF
- INSULATION RATING OF CONDUCTOR. 4. INSTALL SPLIT BOLT CONNECTORS OR MULTI-TAP BLOCKS FOR COPPER CONDUCTOR SPLICES AND
- 5. INSTALL SOLDERLESS PRESSURE CONNECTORS WITH INSULATING COVERS FOR COPPER CONDUCTOR
- SPLICES AND TAPS, #8 AWG AND SMALLER. 6. INSTALL INSULATED SPRING WIRE CONNECTORS WITH PLASTIC CAPS FOR COPPER CONDUCTOR SPLICES AND TAPS, #10 AWG AND SMALLER.
- 7. TERMINATE EXISTING ALUMINUM CONDUCTORS WITH TIM-PLATED, ALUMINUM-BODIED COMPRESSION CONNECTORS ONLY. FILL WITH ANTI-OXIDANT COMPOUND BEFORE INSTALLING CONDUCTOR.
- 8. INSTALL SUITABLE REDUCING CONNECTORS OR MECHANICAL CONNECTOR ADAPTORS FOR CONNECTING ALUMINUM CONDUCTORS TO COPPER CONDUCTORS.
- J. GROUND CONDUCTORS: I. FOR #6 AWG AND SMALLER: GREEN.
- 2. FOR #4 AWG AND LARGER: IDENTIFY WITH GREEN TAPE AT BOTH ENDS AND VISIBLE POINTS INCLUDING
- K. ALL WIRING SHALL BE #12 CU UNLESS SPECIFIED OTHERWISE.

- A. IDENTIFY ELECTRICAL COMPONENTS AS FOLLOWS:
- I. ENGRAVED LAMINATED PLASTIC NAMEPLATE FOR EACH ELECTRICAL DISTRIBUTION, CONTROL EQUIPMENT ENCLOSURE, AND COMMUNICATION CABINET.
- 2. CLOTH TYPE WIRE MARKER FOR EACH CONDUCTOR AT PANELBOARD GUTTERS, AND PULL BOXES. 3. RACEWAY MARKER FOR EACH RACEWAY WHERE IT STUBS ABOVE THE CEILING OR BELOW THE FLOOR.
- 4. UNDERGROUND WARNING TAPE ALONG LENGTH OF EACH UNDERGROUND RACEWAY OR CABLE, 3" BELOW FINISHED GRADE. TAPE TO BE 4-INCH WIDE PLASTIC TAPE, DETECTABLE TYPE, COLORED YELLOW WITH SUITABLE WARNING LEGEND DESCRIBING BURIED ELECTRICAL LINES.

#### 6. SEALING AND FIREPROOFING

- A. INSTALL FIRESTOPPING TO MAINTAIN ALL RATINGS AT ALL FIRE SEPARATIONS.
- a. INSTALL I 2 GAUGE STEEL SLEEVE THROUGH OPENING AND EXTENDING BEYOND MINIMUM OF I INCH ON EACH SIDE OF BUILDING ELEMENT.
- b. SIZE SLEEVE ALLOWING MINIMUM OF I INCH VOID BETWEEN SLEEVE AND BUILDING ELEMENT. c. PACK VOID WITH BACKING MATERIAL.
- a. SEAL ENDS OF SLEEVE WITH UL LISTED FIRE RESISTIVE SILICONE COMPOUND TO MEET FIRE RATING OF STRUCTURE PENETRATED. 2. WHERE CABLE TRAY, BUS, CABLE BUS, CONDUIT, WIREWAY, OR TROUGH PENETRATES FIRE RATED SURFACE, INSTALL FIRESTOPPING PRODUCT IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED
- INSTRUCTIONS. NON-RATED SURFACES:
- I. SEAL OPENING THROUGH NON-FIRE RATED ROOF OPENING AS FOLLOWS:
- a. INSTALL 12 GAUGE STEEL SLEEVE THROUGH OPENING AND EXTENDING BEYOND MINIMUM OF 1 INCH ON EACH SIDE OF BUILDING ELEMENT.
- b. SIZE SLEEVE ALLOWING MINIMUM OF I INCH VOID BETWEEN SLEEVE AND BUILDING ELEMENT.
- c. INSTALL TYPE OF FIRESTOPPING MATERIAL RECOMMENDED BY MANUFACTURER. 2. EXTERIOR WALL OPENINGS BELOW GRADE: ASSEMBLE RUBBER LINKS OF MECHANICAL SEAL TO SIZE OF CONDUIT AND TIGHTEN IN PLACE, IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

### 7. PANELBOARDS

- A. MANUFACTURERS: I. EATON/CUTLER-HAMMER.
- 2. GE ELECTRICAL.
- 3. SIEMENS/ITE.
- 4. SQUARE D MODEL
- B. BOLT-ON CIRCUIT BREAKER TYPE, DISTRIBUTION, LIGHTING AND APPLIANCE BRANCH CIRCUIT PANELBOARD. C. PANELBOARD BUS: COPPER CURRENT CARRYING COMPONENTS, RATINGS AS INDICATED ON DRAWINGS.
- FURNISH COPPER GROUND BUS IN EACH PANELBOARD; FURNISH INSULATED GROUND BUS AS INDICATED D. MINIMUM INTEGRATED SHORT CIRCUIT RATING: 22,000 AMPERES RMS SYMMETRICAL FOR 240 VOLT
- PANELBOARDS; 65,000 AMPERES RMS SYMMETRICAL FOR 480 VOLT PANELBOARDS. E. E. MOLDED CASE CIRCUIT BREAKERS; NEMA AB I, BOLT-ON TYPE THERMAL MAGNETIC TRIP CIRCUIT BREAKERS, WITH COMMON TRIP HANDLE FOR ALL POLES, LISTED AS TYPE SWD FOR LIGHTING CIRCUITS, TYPE HACR FOR AIR CONDITIONING EQUIPMENT CIRCUITS, CLASS A GROUND FAULT INTERRUPTER CIRCUIT
- BREAKERS AS INDICATED ON DRAWINGS. DO NOT USE TANDEM CIRCUIT BREAKERS. F. ENCLOSURE: NEMA PB 1, TYPE 1. G. CABINET BOX: 6 INCHES DEEP, 20 INCHES WIDE FOR 240 VOLT AND LESS PANELBOARDS, 20 INCHES WIDE
- FOR 480 VOLT PANELBOARDS. H. CABINET FRONT: SURFACE DOOR-IN-DOOR TYPE, FASTENED WITH HINGE AND LATCH, HINGED DOOR WITH FLUSH LOCK, METAL DIRECTORY FRAME, FINISHED IN MANUFACTURER'S STANDARD GRAY ENAMEL. OUTER PANELBOARD TRIMS SHALL COVER ALL LIVE PARTS. SWITCHING DEVICE HANDLES SHALL BE ACCESSIBLE.
- I. SURFACE TRIMS SHALL BE SAME HEIGHT AND WIDTH AS BOX. FLUSH TRIMS SHALL OVERLAP THE BOX BY 3/4 OF AN INCH ON ALL SIDES.
- J. INSTALL RECESSED PANELBOARDS FLUSH WITH WALL FINISHES. K. HEIGHT: 6 FEET TO TOP OF PANELBOARD; INSTALL PANELBOARDS TALLER THAN 6 FEET WITH BOTTOM NO
- MORE THAN 4 INCHES ABOVE FLOOR. L. INSTALL FILLER PLATES FOR UNUSED SPACES IN PANELBOARDS. M. PROVIDE TYPED CIRCUIT DIRECTORY FOR EACH BRANCH CIRCUIT PANELBOARD PER ARCHITECTURAL ROOM DESIGNATIONS. REVISE DIRECTORY TO REFLECT CIRCUITING CHANGES TO BALANCE PHASE LOADS.
- N. MARK UNUSED CIRCUIT BREAKERS AS SPARE AND SWITCH TO OFF POSITION. O. MEASURE STEADY STATE LOAD CURRENTS AT EACH PANELBOARD FEEDER; REARRANGE CIRCUITS IN PANELBOARD TO BALANCE PHASE LOADS TO WITHIN 20 PERCENT OF EACH OTHER. MAINTAIN PROPER PHASING FOR MULTI-WIRE BRANCH CIRCUITS.

#### 8. ENCLOSED SWITCHES

- A. MANUFACTURERS:
- I. CUTLER-HAMMER
- 2. SQUARE D.
- 3. GE ELECTRICAL
- B. PRODUCT DESCRIPTION: NEMA KS 1, TYPE HD WITH EXTERNALLY OPERABLE HANDLE INTERLOCKED TO PREVENT OPENING FRONT COVER WITH SWITCH IN ON POSITION, ENCLOSED LOAD INTERRUPTER KNIFE SWITCH. HANDLE LOCKABLE IN OFF POSITION, WITH PROVISIONS FOR THREE PADLOCKS.
- C. SWITCH MECHANISM: TO BE QUICK-MAKE, QUICK-BREAK SUCH THAT, DURING NORMAL OPERATION OF THE SWITCH, THE OPERATION OF THE CONTACTS SHALL NOT BE CAPABLE OF BEING RESTRAINED BY THE
- OPERATING HANDLE AFTER THE CLOSING OF OPENING ACTION OF THE CONTACTS HAS STARTED.
- D. FUSE CLIPS: DESIGNED TO ACCOMMODATE NEMA FU I, CLASS R, J FUSES. E. ENCLOSURE: NEMA CONFIGURATION TO MEET CONDITIONS:
- I. INTERIOR DRY LOCATIONS: TYPE I. 2. EXTERIOR LOCATIONS: TYPE 3R.
- 3. INDUSTRIAL LOCATIONS: TYPE 4X.
- F. SERVICE ENTRANCE: SWITCHES IDENTIFIED FOR USE AS SERVICE EQUIPMENT ARE TO BE LABELED FOR
- THIS APPLICATION, FURNISH SOLID NEUTRAL ASSEMBLY AND EQUIPMENT GROUND BAR.
- G. FURNISH SWITCHES WITH CURRENT CARRYING PARTS ENTIRELY OF COPPER. H. SWITCH RATING: HORSEPOWER RATED FOR AC AS INDICATED ON DRAWINGS
- I. SHORT CIRCUIT CURRENT RATING: 200,000 RMS SYMMETRICAL AMPERES WHEN USED WITH OR PROTECTED BY CLASS R OR CLASS J FUSES (30-600 AMPERE SWITCHES EMPLOYING APPROPRIATE FUSE REJECTION SCHEMES).
- J. HEIGHT: 5 FEET TO OPERATING HANDLE. K. INSTALL FUSES FOR FUSIBLE DISCONNECT SWITCHES.

### 9. WIRING DEVICES

- A. MANUFACTURERS: 1. PASS & SEYMOUR LEGRAND.
- 2. HUBELL.
- 3. LEVITON.
- 4. GENERAL ELECTRIC.
- B. PRODUCT DESCRIPTION: NEMA WD I, HEAVY-DUTY, AC ONLY SPECIFICATION GRADE
- SWITCH/RECEPTACLE. ALL DEVICES TO BE SPECIFICATION GRADE OR BETTER.
- C. BODY / HANDLE: IVORY PLASTIC WITH TOGGLE HANDLE. D. RATINGS: MATCH BRANCH CIRCUIT AND LOAD CHARACTERISTICS, MINIMUM 20A.
- E. GFCI RECEPTACLE: CONVENIENCE RECEPTACLE WITH INTEGRAL GROUND FAULT CIRCUIT INTERRUPTER TO MEET REGULATORY REQUIREMENTS.
- F. WP RECEPTACLE: (WEATHERPROOF) TO BE GFI PROTECTED.

#### 10. WALL PLATES

- MANUFACTURERS:
- a. PASS & SEYMOUR LEGRAND. b. TAYMAC 20510 (WEATHERPROOF-IN-USE).
- c. HUBELL (BELL/RACO). d. LEVITON.
- e. GENERAL ELECTRIC. B. INSTALL DECORATIVE PLATES ON SWITCH, RECEPTACLE, AND BLANK OUTLETS IN FINISHED AREAS. DECORATIVE COVER PLATE: NYLON.
- C. INSTALL JUMBO SIZE PLATES FOR OUTLETS INSTALLED IN MASONRY WALLS. JUMBO COVER PLATE: NYLON.
- D. WEATHERPROOF COVER PLATE (RECEPTACLE): IMPACT RESISTANT PLASTIC PLATE WITH HINGED AND GASKETED DEVICE COVER. COVER TO BE RATED FOR WET LOCATION WHILE IN USE, AND TO BE LOCKABLE.
- E. WEATHERPROOF COVER PLATE (SWITCH): GASKETED CAST METAL PLATE WITH HINGED AND GASKETED DEVICE COVER OR LEVER SWITCH MECHANISM. (P\$S CA-3 | G/HUBELL/BELL/RACO 5 | 25 OR EQUAL).
- F. KITCHEN AREAS: 302/430 STAINLESS STEEL, WEATHERPROOF FOR STARTUPS. G. INSTALL GALVANIZED (STAMPED) STEEL PLATES ON OUTLET BOXES AND JUNCTION BOXES IN UNFINISHED
- AREAS, ABOVE ACCESSIBLE CEILINGS, AND ON SURFACE MOUNTED OUTLETS. H. INSTALL DEVICES PLUMB AND LEVEL.
- I. INSTALL SWITCHES WITH OFF POSITION DOWN. J. INSTALL RECEPTACLES WITH GROUNDING POLE ON TOP, OR TO THE LEFT (IF MOUNTED HORIZONTALLY).
- K. CONNECT WIRING DEVICE GROUNDING TERMINAL TO OUTLET BOX WITH BONDING JUMPER AND BRANCH CIRCUIT EQUIPMENT GROUNDING CONDUCTOR. CONNECT WIRING DEVICES BY WRAPPING SOLID CONDUCTOR AROUND SCREW TERMINAL. INSTALL STRANDED CONDUCTOR FOR BRANCH CIRCUITS #10 AWG AND SMALLER. WHEN STRANDED CONDUCTORS
- ARE USED IN LIEU OF SOLID, USE CRIMP ON FORK TERMINALS FOR DEVICE TERMINATIONS. DO NOT PLACE STRANDED CONDUCTORS DIRECTLY UNDER DEVICE SCREWS. M. ADJUST DEVICES AND WALL PLATES TO BE FLUSH AND LEVEL
- I I . INTERIOR LUMINARIES

REGULATORY REQUIREMENTS FOR FIRE RATING.

- A. ALL FIXTURES TO BE SPECIFICATION GRADE OR BETTER. B. INSTALL SUSPENDED LUMINARIES USING PENDANTS SUPPORTED FROM SWIVEL HANGERS. INSTALL
- PENDANT LENGTH REQUIRED TO SUSPEND LUMINAIRE AT INDICATED HEIGHT.
- C. SUPPORT LUMINARIES LARGER THAN 2x4 SIZE INDEPENDENT OF CEILING FRAMING. D. INSTALL SURFACE MOUNTED LUMINARIES PLUMB AND ADJUST TO ALIGN WITH BUILDING LINES AND WITH EACH OTHER. SECURE TO PREVENT MOVEMENT. E. EXPOSE GRID CEILINGS: SUPPORT SURFACE-MOUNTED LUMINARIES ON GRID CEILING DIRECTLY FROM
- BUILDING. FASTEN SURFACE MOUNTED LUMINARIES TO CEILING GRID MEMBERS USING BOLTS, SCREWS,
- RIVETS, OR SUITABLE CLIPS. F. INSTALL RECESSED LUMINARIES TO PERMIT REMOVAL FROM BELOW. G. INSTALL RECESSED LUMINARIES USING ACCESSORIES AND FIRESTOPPING MATERIALS TO MEET
- H. INSTALL CLIPS TO SECURE RECESSED GRID-SUPPORTED LUMINARIES IN PLACE. I. CONNECT LUMINARIES TO BRANCH CIRCUIT OUTLETS USING FLEXIBLE CONDUIT. MAXIMUM LENGTH FIXTURE WHIP TO BE 5 FEET. J. MAKE WIRING CONNECTIONS TO BRANCH CIRCUIT USING BUILDING WIRE WITH INSULATION SUITABLE FOR
- TEMPERATURE CONDITIONS WITHIN LUMINAIRE. K. INSTALL SPECIFIED LAMPS IN EACH LUMINAIRE.

### L. AIM AND ADJUST LUMINARIES TO PROVIDE LIGHT LEVELS CONSISTENT WITH DESIGN.

SELF-TEST DIAGNOSTICS.

- I 2. EMERGENCY LIGHTING A. MANUFACTURERS:
- I. AS SPECIFIED IN LIGHT FIXTURE SCHEDULE. B. PRODUCT DESCRIPTION: SELF-CONTAINED INCANDESCENT (HALOGEN) EMERGENCY LIGHTING UNIT, WITH
- C. BATTERY: 12 VOLT, NICKEL-CADMIUM TYPE, WITH 1.5 HOUR CAPACITY. D. BATTERY CHARGER: DUAL-RATE TYPE, WITH SUFFICIENT CAPACITY TO RECHARGE DISCHARGED BATTERY TO
- FULL CHARGE WITHIN TWELVE HOURS. E. LAMPS: I 2 WATT MINIMUM, SEALED BEAM TYPE IN NICKEL OR CHROME PLATED STEEL HOUSING.

G. BATTERY CHARGER: DUAL-RATE TYPE, WITH SUFFICIENT CAPACITY TO RECHARGE DISCHARGED BATTERY TO FULL

F. HOUSING: WHITE PLASTIC.

#### G. INDICATORS: LAMPS TO INDICATE AC ON AND RECHARGING. VOLTMETER TO INDICATE BATTERY VOLTAGE. H. TEST SWITCH: TRANSFERS UNIT FROM EXTERNAL POWER SUPPLY TO INTEGRAL BATTERY SUPPLY.

I. AIM AND ADJUST LAMP FIXTURES TO PROVIDE OPTIMAL COVERAGE.

A. MANUFACTURERS:

C. FACE: STENCIL FACE WITH RED LETTERS.

- I. AS SPECIFIED BY LIGHT FIXTURE SCHEDULE OR EQUAL. B. PRODUCT DESCRIPTION: EXIT SIGN FIXTURE, WITH SELF-TEST DIAGNOSTICS.
- MOUNTING: AS INDICATED ON DRAWINGS OR UNIVERSAL, FOR FIELD SELECTION. F. BATTERY: 12 VOLT, NICKEL-CADMIUM TYPE, WITH 1.5 HOUR CAPACITY.

I. INPUT VOLTAGE: I 20 VOLTS.

CHARGE WITHIN TWELVE HOURS. H. LAMPS: LED.

J. POSITION EXIT SIGN DIRECTIONAL ARROWS AS INDICATED ON DRAWINGS.

D. DIRECTIONAL ARROWS: UNIVERSAL TYPE FOR FIELD ADJUSTMENT.

#### FIRE ALARM SYSTEM

- A. SYSTEM DESCRIPTION: NONCODED ADDRESSABLE SYSTEM, WITH AUTOMATIC SENSITIVITY CONTROL OF CERTAIN SMOKE DETECTORS AND MULTIPLEXED SIGNAL TRANSMISSION, DEDICATED TO FIRE-ALARM SERVICE ONLY.
- I. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED. 2. SHOP DRAWINGS: FOR FIRE-ALARM SYSTEM. INCLUDE PLANS, ELEVATIONS, SECTIONS, DETAILS, AND ATTACHMENTS TO OTHER WORK.
- C. FIELD QUALITY-CONTROL REPORTS I. OPERATION AND MAINTENANCE DATA: FOR FIRE-ALARM SYSTEMS AND COMPONENTS TO INCLUDE IN
- EMERGENCY, OPERATION, AND MAINTENANCE MANUALS.
- D. INSTALLER QUALIFICATIONS: I. PERSONNEL SHALL BE TRAINED AND CERTIFIED BY MANUFACTURER FOR INSTALLATION OF UNITS. 2. INSTALLATION SHALL BE BY PERSONNEL CERTIFIED BY NICET AS FIRE-ALARM LEVEL II TECHNICIAN.
- E. OBTAIN FIRE-ALARM SYSTEM FROM SINGLE SOURCE FROM SINGLE MANUFACTURER. ELECTRICAL COMPONENTS, DEVICES, AND ACCESSORIES: LISTED AND LABELED AS DEFINED IN NFPA 70, BY A QUALIFIED TESTING AGENCY. AND MARKED FOR INTENDED LOCATION AND APPLICATION.
- F. FIRE-ALARM SIGNAL INITIATION SHALL BE BY ONE OR MORE OF THE FOLLOWING DEVICES:
- I. MANUAL STATIONS.
- 2. HEAT DETECTORS. 3. SMOKE DETECTORS.
- G. CONTINUOUSLY OPERATE ALARM NOTIFICATION APPLIANCES.
- H. IDENTIFY ALARM AT FIRE-ALARM CONTROL UNIT AND REMOTE ANNUNCIATORS. I. TRANSMIT AND ALARM SIGNAL TO THE REMOTE ALARM RECEIVING STATION.
- J. GENERAL REQUIREMENTS FOR FIRE-ALARM CONTROL UNIT: I. FIELD-PROGRAMMABLE, MICROPROCESSOR-BASED, MODULAR, POWER-LIMITED DESIGN WITH ELECTRONIC
- MODULES, COMPLYING WITH UL 864 AND LISTED AND LABELED BY AN NRTL. 2. ADDRESSABLE CONTROL CIRCUITS FOR OPERATION OF MECHANICAL EQUIPMENT 3. ALPHANUMERIC DISPLAY AND SYSTEM CONTROLS: ARRANGED FOR INTERFACE BETWEEN HUMAN OPERATOR AT FIRE-ALARM CONTROL UNIT AND ADDRESSABLE SYSTEM COMPONENTS INCLUDING ANNUNCIATION AND
- PROGRAMMING AND CONTROL MENU. 4. KEYPAD: ARRANGED TO PERMIT ENTRY AND EXECUTION OF PROGRAMMING, DISPLAY AND CONTROL

SUPERVISION. DISPLAY ALARM, SUPERVISORY, AND COMPONENT STATUS MESSAGES AND THE

- COMMANDS AND TO INDICATE CONTROL COMMANDS TO BE ENTERED INTO THE SYSTEM FOR CONTROL OF SMOKE-DETECTOR SENSITIVITY AND OTHER PARAMETERS.
- K. ADDRESSABLE INITIATION DEVICES THAT COMMUNICATE DEVICE IDENTITY AND STATUS.
- L. SMOKE SENSORS SHALL ADDITIONALLY COMMUNICATE SENSITIVITY SETTING AND ALLOW FOR ADJUSTMENT OF SENSITIVITY AT FIRE-ALARM CONTROL UNIT.
- M. TEMPERATURE SENSORS SHALL ADDITIONALLY TEST FOR AND COMMUNICATE THE SENSITIVITY RANGE OF THE N. ANNUNCIATOR AND DISPLAY: LIQUID-CRYSTAL TYPE, I LINE(S) OF 40 CHARACTERS, MINIMUM.
- O. INITIATING DEVICE, NOTIFICATION APPLIANCE, AND SIGNALING LINE CIRCUITS: NFPA 72, CLASS B. P. AUTOMATICALLY TRANSMIT ALARM, SUPERVISORY, AND TROUBLE SIGNALS TO A REMOTE ALARM STATION. Q. GENERAL REQUIREMENTS FOR MANUAL FIRE-ALARM BOXES: COMPLY WITH UL 38. BOXES SHALL BE FINISHED IN RED WITH MOLDED, RAISED-LETTER OPERATING INSTRUCTIONS IN CONTRASTING COLOR; SHALL SHOW VISIBLE INDICATION OF OPERATION; AND SHALL BE MOUNTED ON RECESSED OUTLET BOX. IF INDICATED AS
- SURFACE MOUNTED, PROVIDE MANUFACTURER'S SURFACE BACK BOX. R. DOUBLE-ACTION MECHANISM REQUIRING TWO ACTIONS TO INITIATE AN ALARM, PULL-LEVER TYPE; WITH INTEGRAL ADDRESSABLE MODULE ARRANGED TO COMMUNICATE MANUAL-STATION STATUS (NORMAL, ALARM,
- U. AN OPERATOR AT FIRE-ALARM CONTROL UNIT, HAVING THE DESIGNATED ACCESS LEVEL, SHALL BE ABLE TO
- MANUALLY ACCESS THE FOLLOWING FOR EACH DETECTOR: I. PRIMARY STATUS.
- 2. DEVICE TYPE. 3. PRESENT AVERAGE VALUE.

4. PRESENT SENSITIVITY SELECTED.

X. EQUIPMENT INSTALLATION:

OR TROUBLE) TO FIRE-ALARM CONTROL UNIT.

S. STATION RESET: KEY- OR WRENCH-OPERATED SWITCH.

T. GENERAL REQUIREMENTS FOR SYSTEM SMOKE DETECTORS:

- 5. SENSOR RANGE (NORMAL, DIRTY, ETC.). V. HEAT DETECTORS, GENERAL REQUIREMENTS FOR HEAT DETECTORS: COMPLY WITH UL 521.
- I. ANNUNCIATOR FUNCTIONS SHALL MATCH THOSE OF FIRE-ALARM CONTROL UNIT FOR ALARM, SUPERVISORY, AND TROUBLE INDICATIONS. MANUAL SWITCHING FUNCTIONS SHALL MATCH THOSE OF FIRE-ALARM CONTROL UNIT, INCLUDING ACKNOWLEDGING, SILENCING, RESETTING, AND TESTING. 2. MOUNTING: FLUSH CABINET, NEMA 250, TYPE 1.

3. DISPLAY TYPE AND FUNCTIONAL PERFORMANCE: ALPHANUMERIC DISPLAY AND LED INDICATING LIGHTS

Y. LOCATE DETECTORS NOT CLOSER THAN 3 FEET (I M) FROM AIR-SUPPLY DIFFUSER OR RETURN-AIR OPENING.

CC. ENGAGE A FACTORY-AUTHORIZED SERVICE REPRESENTATIVE TO TRAIN OWNER'S MAINTENANCE PERSONNEL TO

Z. LOCATE DETECTORS NOT CLOSER THAN 12 INCHES (300 MM) FROM ANY PART OF A LIGHTING FIXTURE.

SHALL MATCH THOSE OF FIRE-ALARM CONTROL UNIT. PROVIDE CONTROLS TO ACKNOWLEDGE, SILENCE,

I. COMPLY WITH NFPA 72 FOR INSTALLATION OF FIRE-ALARM EQUIPMENT. 2. INSTALL WALL-MOUNTED EQUIPMENT, WITH TOPS OF CABINETS NOT MORE THAN 72 INCHES (1830 MM)

RESET, AND TEST FUNCTIONS FOR ALARM, SUPERVISORY, AND TROUBLE SIGNALS.

AA. AA. FIRE-ALARM CONTROL UNIT: SURFACE MOUNTED, WITH TOPS OF CABINETS NOT MORE THAN 72 INCHES (1830 MM) ABOVE THE FINISHED FLOOR. BB. GROUND FIRE-ALARM CONTROL UNIT AND ASSOCIATED CIRCUITS; COMPLY WITH IEEE 1 100. INSTALL A

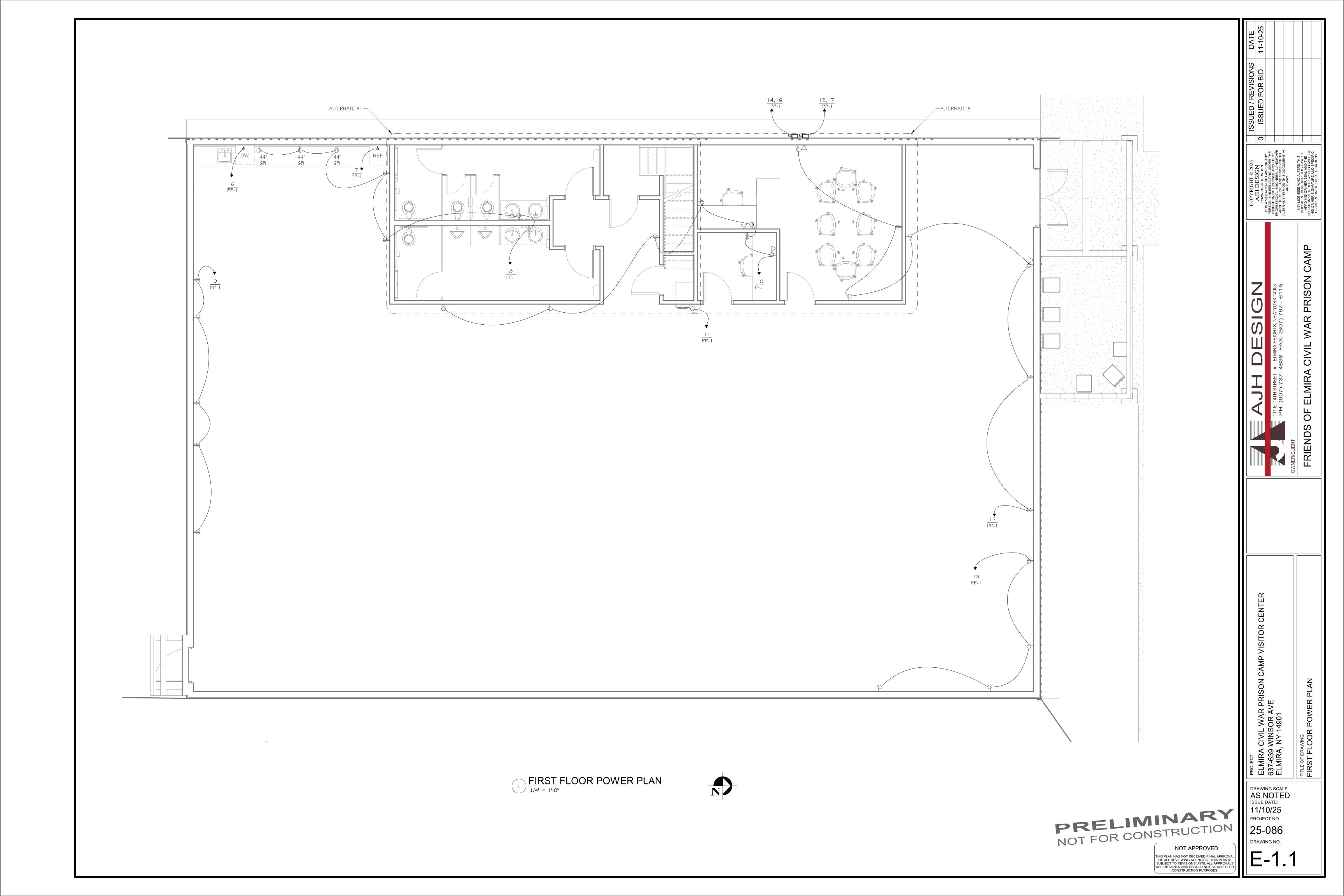
GROUND WIRE FROM MAIN SERVICE GROUND TO FIRE-ALARM CONTROL UNIT.

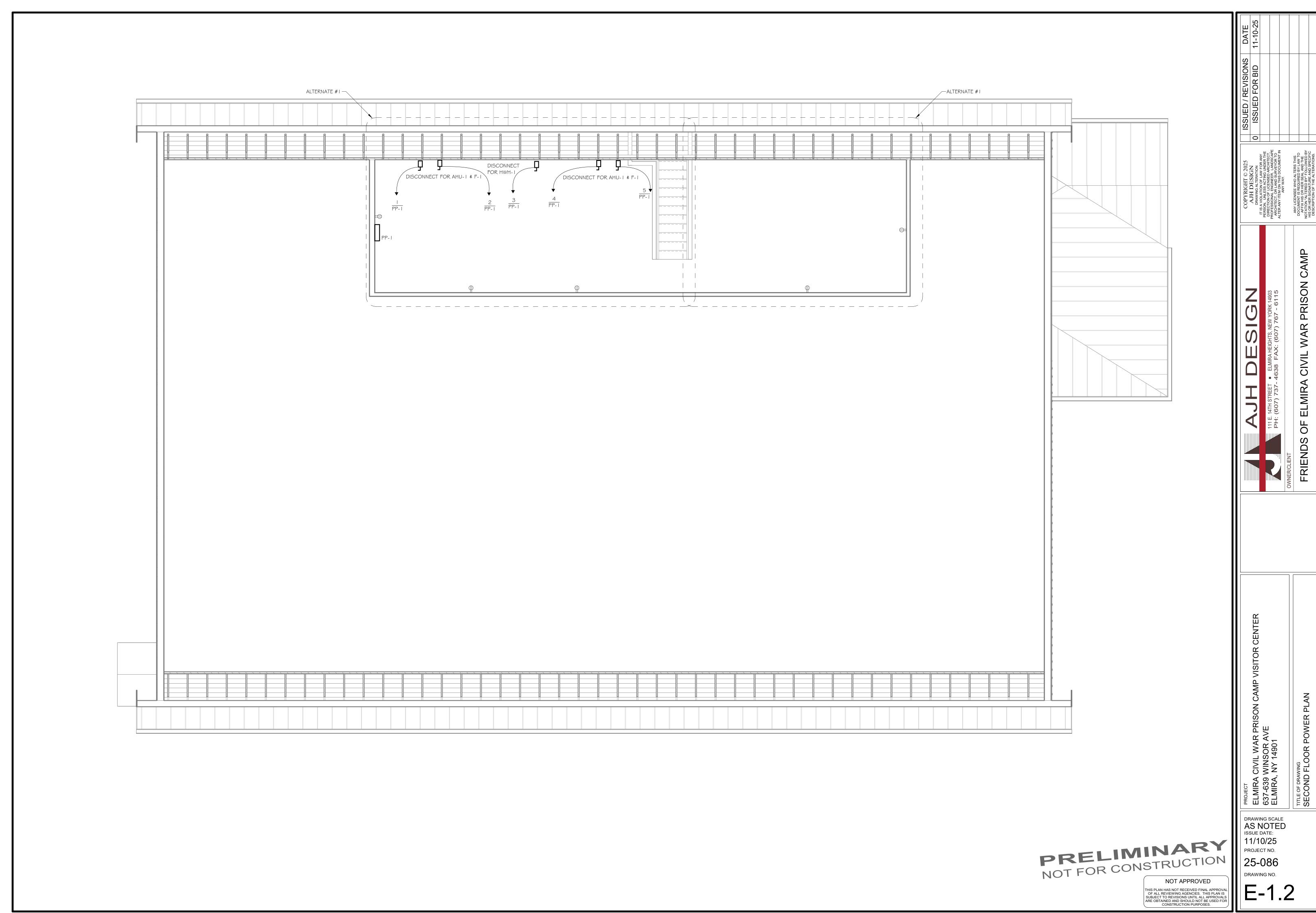
ADJUST, OPERATE, AND MAINTAIN FIRE-ALARM SYSTEM.

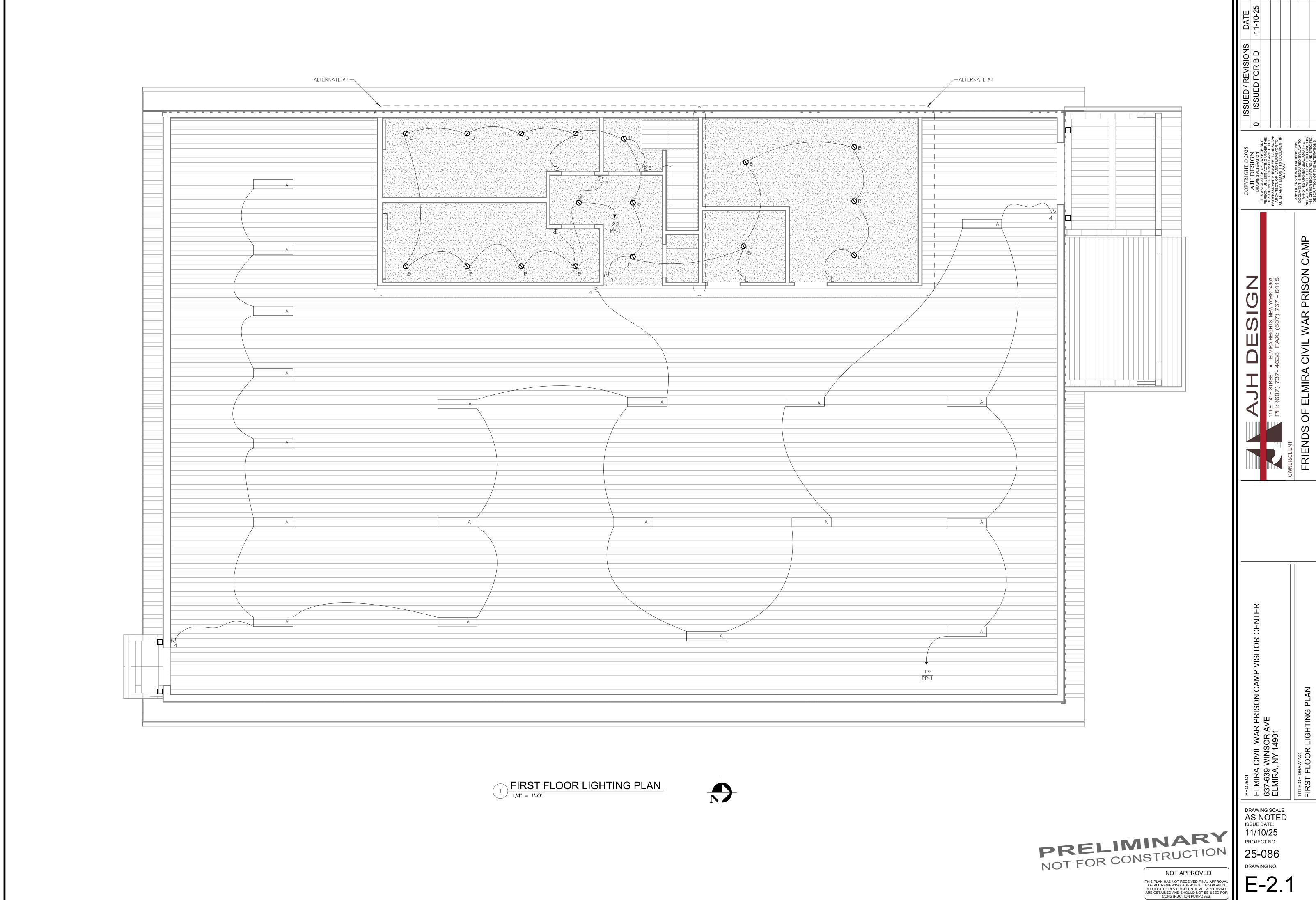
DRAWING SCALE AS NOTED ISSUE DATE:

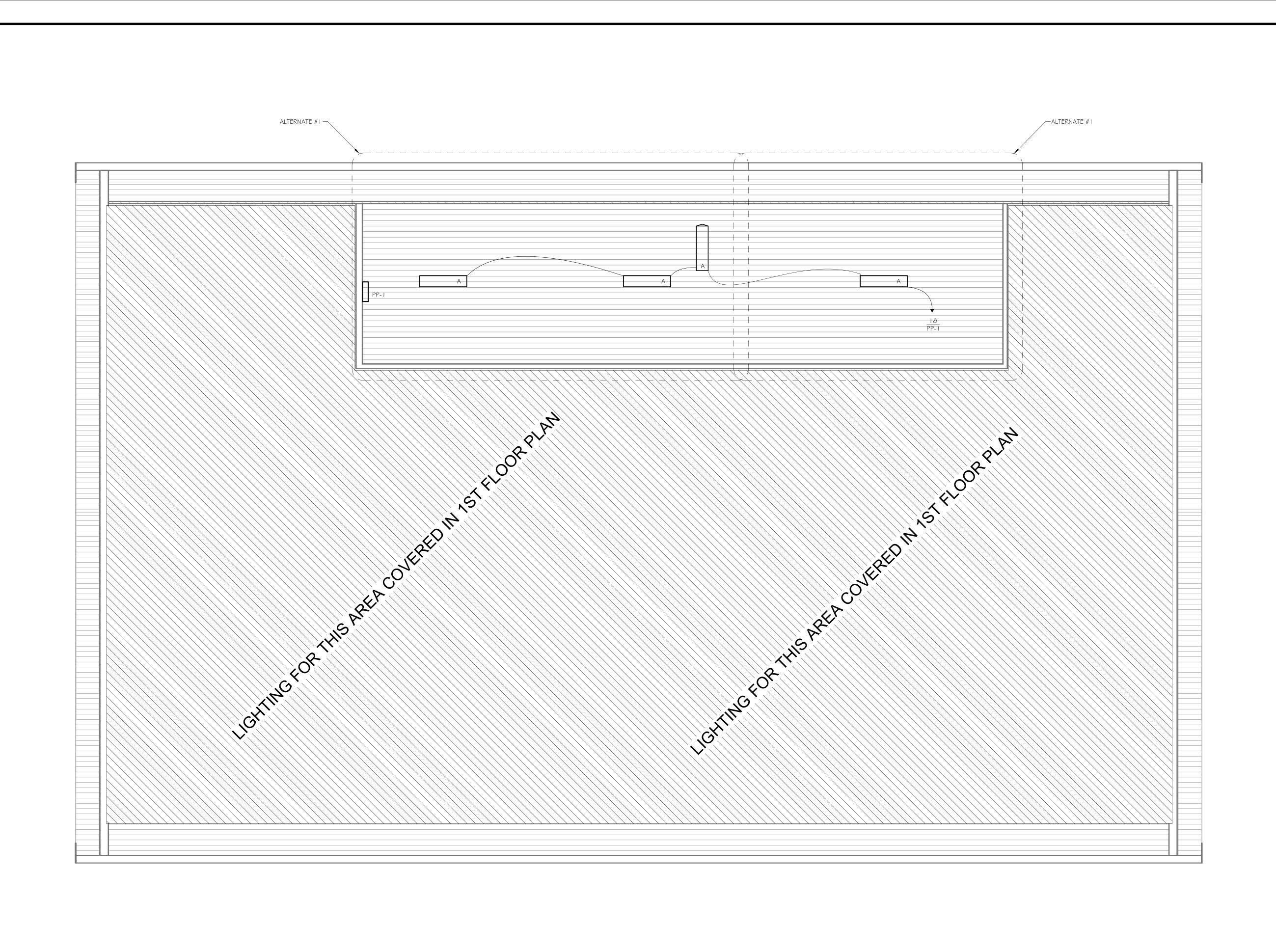
PRELIMINARY NOT FOR CONSTRUCTION DRAWING NO. OF ALL REVIEWING AGENCIES. THIS PLAN IS SUBJECT TO REVISIONS UNTIL ALL APPROVALS ARE OBTAINED AND SHOULD NOT BE USED FOR CONSTRUCTION PURPOSES.

NOT APPROVED









SECOND FLOOR LIGHTING PLAN

1/4" = 1'-0"



PRELIMINARY

NOT FOR CONSTRUCTION

NOT FOR CONSTRUCTION

PROJECT NO.

25-086

THIS PLAN HAS NOT RECEIVED FINAL APPROVAL
OF ALL REVIEWING AGENCIES. THIS PLAN IS
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ARE OBTAINED AND SHOULD NOT BE USED FOR
CONSTRUCTION PURPOSES.

LIGHTING FIXTURE SCHEDULE							
TYPE MARK	DESCRIPTION	MANUFACTURER	MODEL #	LAMP	COMMENTS		
А	IX4 PENDANT LIGHT	MAXLITE	MLFP I 4DI3640ICL	LED	-		
В	6" RECESSED CAN LIGHT	ALCON LIGHTING	14008-6	LED	-		

	PP-1 P	ANI		_ `	SC	HEDULE	
						AIC: 12, SERVICE: 120 MOUNTING: REC	V/208V
CIR.	DESIGNATION	AMP	PH A	ASE B	AMP	DESIGNATION	CIR.
1	AHU- I	20			20	F-I	2
3	HWH-3	20			20	AHU-I	4
5	F-I	20			20	DISHWASHER	6
7	REFRIGERATOR	20			20	CAFETERIA COUNTER # BR RECEPTS.	8
9	CAFETERIA RECEPTS.	20			20	HALLWAY AND OFFICE RECEPTS.	10
11	DRINKING FOUNTAIN	20			20	RECEPTION RECEPTS.	12
13	SOUTH EAST ROOM RECEPTS.	20			50	CU-I	14
15	CU-1	50			30		
17					20	SECOND FLOOR LIGHTING	
19	MAIN BUILDING 1X4 LIGHT FIXTURES	20			20	BATHROOM AND OFFICE LIGHTS	20
21		20			20		22
23		20			20		24
25		20			20		26
27		20			20		28
29		20			20		30
31		20			20		32
33		20			20		34
35		20			20		36
37		20			20		38
39		20			20		40
41		20			20		42



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VISITOR CENTER

SCHEDULES & LEGENDS

TITLE OF DRAWING ELECTRICAL (