

BASIC ELECTRICAL REQUIREMENTS

FURNISH ALL LABOR AND MATERIALS AND PERFORM ALL OPERATIONS NECESSARY FOR THE INSTALLATION OF COMPLETE AND OPERATING ELECTRICAL SYSTEMS SUBJECT TO THE CONDITIONS OF THE CONTRACT. PROVIDE SATISFACTORY OPERATION OF ALL EQUIPMENT AND CONTROLS TO THE ARCHITECT/ENGINEER UPON REQUEST.

ALL MATERIALS SHALL BE NEW. SUBSTITUTIONS SHALL BE APPROVED BY OWNER AND/OR ENGINEER.

VISIT THE PREMISES BEFORE SUBMITTING BID AS NO CHANGE ORDERS WILL BE ALLOWED FOR LACK OF KNOWLEDGE OF EXISTING CONDITIONS.

COORDINATE AND ORDER THE PROGRESS OF WORK TO CONFORM TO THE PROJECT SCHEDULE AND THE PROGRESS OF THE WORK OF THE OTHER TRADES.

ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND BECAUSE OF THE SMALL SCALE, IT IS NOT POSSIBLE TO INDICATE EVERY REQUIRED OFFSET, FITTING, ETC. VERIFY ALL SPACE REQUIREMENTS, COORDINATING WITH OTHER TRADES, AND INSTALL THE SYSTEMS IN THE SPACE PROVIDED WITHOUT EXTRA CHARGES TO THE OWNER.

PERFORM WORK IN ACCORDANCE WITH GOOD COMMERCIAL PRACTICE. THE GOOD APPEARANCE OF THE FINISHED WORK SHALL BE OF EQUAL IMPORTANCE WITH ITS ELECTRICAL EFFICIENCY AND INTENT. THE OWNER MAY REJECT WORK IF WORKMANSHIP AND APPEARANCE ARE NOT SATISFACTORY.

INSTALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE, OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.

COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS AND ORDINANCES. COMPLY WITH REQUIREMENTS OF THE UTILITY COMPANIES. IN THE CASE OF DIFFERENCES BETWEEN REQUIREMENTS AND ORDINANCES, THE MOST STRINGENT SHALL GOVERN. CALL FOR INSPECTIONS REQUIRED BY LOCAL BUILDING INSPECTION AUTHORITY.

PLANS AND SPECIFICATIONS GO HAND IN HAND. WHAT IS REQUIRED IN ONE IS REQUIRED IN BOTH. WHERE CONFLICTS BETWEEN SPECIFICATIONS AND PLANS EXIST, THE MOST STRINGENT REQUIREMENTS SHALL APPLY.

ELECTRICAL PLANS SUPERSEDE ARCHITECTURAL PLANS. BACKGROUND FLOOR PLANS USED FOR ELECTRICAL DRAWINGS MAY SHOW DIFFERENT THAN THE FINAL ARCHITECTURAL LAYOUT. REFER TO ARCHITECTURAL DRAWINGS FOR ACTUAL DIMENSIONS AND LAYOUT PLACEMENTS FOR SPACE CONDITIONS.

ELECTRICAL DETAILS MAY OR MAY NOT BE DIRECTLY REFERENCED. ALL DETAILS SHOWN ARE TO BE USED FOR BASIS OF INSTALLATION IN ALL CASES, IN COORDINATION WITH MANUFACTURERS' INSTALLATION RECOMMENDATIONS.

ELECTRICAL SHEETS ARE NOT INTENDED TO SPECIFICALLY BE TRADE SPECIFIC TO ELECTRICAL INSTALLATION WORK. ALL MECHANICAL AND ELECTRICAL TRADES ARE RESPONSIBLE FOR FAMILIARIZING THEMSELVES AND INCLUDING A COMPLETE PACKAGE WITHIN THEIR OFFER FOR A COMPLETE SYSTEM.

AT COMPLETION OF WORK, DELIVER COMPLETED PROJECT RECORD DOCUMENTS MARKED WITH FIELD CHANGES TO OWNER.

PROVIDE A WRITTEN WARRANTY TO THE OWNER COVERING THE ENTIRE ELECTRICAL WORK TO BE FREE FROM DEFECTIVE MATERIALS, EQUIPMENT AND WORKMANSHIP FOR A PERIOD OF 1 YEAR AFTER DATE OF ACCEPTANCE.

CLEAN EXPOSED SURFACES OF LIGHT FIXTURES, SWITCHGEAR, AND OTHER EXPOSED ITEMS OF GREASE, DIRT OR OTHER FOREIGN MATERIAL. REMOVE RUBBISH AND DEBRIS RESULTING FROM THE OPERATIONS AND LEAVE EQUIPMENT SPACES CLEAN AND READY FOR USE.

MAINTAIN ALL CEILING, FLOOR AND WALL FIRE AND SMOKE PROTECTION RATINGS. SEAL ALL CONDUIT AND ENCLOSURE PENETRATIONS TO COMPLY WITH UL ASSEMBLY AND BUILDING CODE REQUIREMENTS. ALL SEALANTS AND CONSTRUCTIONS SHALL BE APPROVED BY OWNER PRIOR TO APPLICATION. ALL OPENINGS SHALL BE SEALED DAILY.

CONTRACT DRAWINGS FOR ELECTRICAL WORK ARE IN PART DIAGRAMMATIC, INTENDED TO CONVEY THE SCOPE OF WORK AND INDICATE GENERAL ARRANGEMENT OF EQUIPMENT, CONDUITS, AND APPROXIMATE SIZES AND LOCATIONS OF EQUIPMENT AND OUTLETS. MECHANICAL/ELECTRICAL TRADES SHALL FOLLOW THESE DRAWINGS IN LAYING OUT THEIR WORK, CONSULT GENERAL CONSTRUCTION DRAWINGS TO FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THEIR WORK, AND SHALL VERIFY SPACES IN WHICH THEIR WORK WILL BE INSTALLED. COORDINATE WORK WITH OTHER TRADES AND AS PROJECT CONDITIONS REASONABLY REQUIRE WITHOUT EXTRA COSTS TO OWNER.

ELECTRICAL SPECIFIC: RACEWAYS SHALL BE LEFT WITH 30% FREE SPACE FOR FUTURE NEEDS.

SHARING OF NEUTRALS BETWEEN PHASES SHALL NOT BE ALLOWED.

SEPARATE GROUNDING CONDUCTORS SHALL BE PROVIDED IN ALL RACEWAYS.

CONDUCTORS SHALL BE COPPER. COLOR CODING SHALL BE NEC APPROVED AND AT MINIMUM SHALL BE AS FOLLOWS:

120/208 VOLT-BLACK, RED, BLUE FOR PHASE CONDUCTORS, WHITE FOR NEUTRAL CONDUCTORS, 277/480 VOLT-BROWN, ORANGE, YELLOW FOR PHASE CONDUCTORS, GRAY FOR NEUTRAL CONDUCTORS. GROUNDING CONDUCTORS SHALL BE GREEN.

ELECTRICAL SYSTEMS SHALL COMPLY WITH 2020 NATIONAL ELECTRICAL CODE AND BE INSTALLED BY LICENSED CONTRACTORS. LIGHTING SHALL COMPLY WITH THE 2021 IECC.

UTILITIES: LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE EXACT LOCATIONS IN THE FIELD (NOT ALL UTILITIES ARE SHOWN).

REGULATORY AND CODE REQUIREMENTS: APPLY FOR AND PAY FOR ALL PERMITS, FEES, LICENSES AND INSPECTIONS. ALL WORK IS SUBJECT TO APPROVAL BY THE CODE OFFICIAL AND ENGINEER. ALL CORRECTIONS SHALL BE MADE WITHOUT EXTRA COSTS TO OWNER.

ELECTRICAL LEGEND (FLOORPLAN)

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	MOTOR, SINGLE-PHASE		INSTANTANEOUS OVERCURRENT RELAY		NURSE CALL STATION
	MOTOR, THREE-PHASE		AC-TIME OVERCURRENT RELAY		D = CORRIDOR DOME LIGHT MTD 6" ABOVE DOOR
	TRANSFORMER		AC-DIRECTIONAL OVERCURRENT RELAY		I = AUXILIARY INTERSECTIONAL DOME LIGHT
	WYE CONNECTION		LOCKING OUT RELAY		TELECOMMUNICATIONS TERMINAL CABINET
	DUCT, CELL FLOOR HEADER		DISCONNECT SWITCH, FUSED		TELECOMMUNICATIONS BACKBOARD (WALL MTD)
	DUCT, TROLLEY		DISCONNECT SWITCH, UNFUSED		ELECTRIC POWER HINGE
	DUCT, UNDERFLOOR JUNCTION BOX		STARTER, COMBINATION WITH DISCONNECT SWITCH		DOOR CONTACT
	EARTH GROUND		STARTER OR MOTOR CONTROLLER		MOTION INTRUSION DETECTOR
	JUNCTION BOX		VARIABLE FREQUENCY DRIVE		SECURITY SURVEILLANCE TELEVISION
	LADDER CABLE TRAY		TIME CLOCK		CAMERA
	BRANCH CIRCUIT HOMERUN. LINES INDICATE NUMBER OF CIRCUITS, NEUTRAL, AND SWITCH LEG CONDUCTORS. ONE SEPARATE GREEN GROUNDING CONDUCTOR SHALL BE PROVIDED FOR EACH HOMERUN, NOT SHOWN		RECTIFIER, CATHODIC PROTECTION SANITARY		360 CAMERA
	PULL BOX		VENTILATOR OR FAN COIL UNIT OUTLET		CARD ACCESS READER; LETTER INDICATES AS FOLLOWS:
	RIGID CONDUIT LINE = RC		CONDUIT TERMINATED 6" (152mm) AFF IN STANDARD BOX FOR EXTENSION TO EQUIPMENT AS DIRECTED		M-MOUNT
	DIRECT BURIAL CABLE = DB		CONDUIT TERMINATED W/COOPING (FLUSH W/FINISHED FLOOR) FOR EXTENSION TO EQUIPMENT AS DIRECTED		D-DESK
	POWER DUCT = P		SWITCH, SPST		F-FLUSH
	AUDIO VISUAL LINE = AV		SWITCH, DPST		H-HIDDEN
	CABLE TELEVISION LINE = CATV		SWITCH, THREE WAY		P-PEDESTAL
	CLOSED CIRCUIT TELEVISION LINE = CCTV		SWITCH, THREE WAY DIMMER		R-RACK
	FIBER OPTICS LINE = FO		SWITCH, FOUR WAY OCCUPANCY SENSOR		S-SURFACE
	COMMUNICATIONS LINE = COM		SWITCH, THREE WAY OCCUPANCY SENSOR		T-TECHNOLOGY/TYPE
	NURSE CALL LINE = NC		SWITCH, DIMMER		B-BARCODE
	SUBSTATION		SWITCH, DOOR JAMB		M-MAG STRIP
	HI VOLTAGE SWITCH ON CONCRETE PAD		SWITCH, KEY OPERATED		F-ELEVATOR FLOOR CALL
	LOW VOLTAGE SWITCH ON CONCRETE PAD		SWITCH, LOW VOLTAGE MASTER		H-ELEVATOR HALL CALL
	DUAL POWER AND TELECOMMUNICATIONS MANHOLE		SWITCH, MANUAL MOTOR STARTING		S-SMART CARD
	BUSWAY		SWITCH, MOMENTARY CONTACT		ELECTRONIC LOCK; LETTER INDICATES AS FOLLOWS:
	DISTRIBUTION PANEL		SWITCH, MOTOR SNAP WITH PILOT LIGHT (THERMAL TYPE)		M-MOUNT
	LIGHTING PANEL		SWITCH, OCCUPANCY SENSOR		D-DESK
	PANELBOARD CABINET, FLUSH MOUNTED		SWITCH, OCCUPANCY SENSOR DIMMER		F-FLUSH
	PANELBOARD CABINET, SURFACE MOUNTED		SWITCH, WITH PILOT LIGHT		H-HIDDEN
	RECEPTACLE, CLOCK HANGER		SWITCH, PHOTOCELL		P-PEDESTAL
	RECEPTACLE, DUPLEX		SWITCH, REMOTE CONTROL		R-RACK
	RECEPTACLE, GFCI DUPLEX		SWITCH, WEATHER PROOF		S-SURFACE
	RECEPTACLE, QUADRAPLEX		SWITCH, EXPLOSION PROOF		T-TECHNOLOGY/TYPE
	RECEPTACLE, SPECIAL PURPOSE 120V, 20A, 1 PHASE, 2-POLE, 3W, NEMA 5-20R		COMMUNICATIONS FLOOR RECEPTACLE		B-BARCODE
	RECEPTACLE, SPECIAL PURPOSE 208V, 20A, 1 PHASE, 2-POLE, 3W, NEMA 6-20R		COMMUNICATIONS WALL RECEPTACLE		M-MAG STRIP
	RECEPTACLE, SPECIAL PURPOSE 120V, 30A, 1 PHASE, 2-POLE, 3W, NEMA 5-30R		TELEVISION FLOOR RECEPTACLE		F-ELEVATOR FLOOR CALL
	RECEPTACLE, SPECIAL PURPOSE 208V, 30A, 1 PHASE, 2-POLE, 3W, NEMA 6-30R		TELEVISION WALL RECEPTACLE		H-ELEVATOR HALL CALL
	RECEPTACLE, SPECIAL PURPOSE 208V, 60A, 1 PHASE, 3-POLE, 4W, NEMA 14-60R		TELEVISION CEILING RECEPTACLE		S-SMART CARD
	RECEPTACLE, SPECIAL PURPOSE 208V, 30A, 3 PHASE, 3-POLE, 4W, NEMA 15-30R		C = CAMERA (CCTV SYSTEM)		ELECTRONIC LOCK; LETTER INDICATES AS FOLLOWS:
	RECEPTACLE, SPECIAL PURPOSE 208V, 60A, 3 PHASE, 3-POLE, 4W, NEMA 15-60R		M = MONITOR (CCTV SYSTEM)		M-MOUNT
	RECEPTACLE, SPECIAL PURPOSE 208V, 20A, 3 PHASE, 3-POLE, 4W, NEMA 15-20R		AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		D-DESK
	RECEPTACLE, SWITCHED DUPLEX		TELEVISION FLOOR RECEPTACLE		F-FLUSH
	DROP CORD, SINGLE CONVENIENCE OUTLET, 3-WIRE, GROUNDING TYPE, 20A, WHI2 CONDUCTORS IN FLEXIBLE CORD (CENTER LINE OF OUTLET: 6'-6" (1981mm) AFF. MINIMUM)		TELEVISION WALL RECEPTACLE		H-HIDDEN
	ELECTRICAL STRIP MOLD (OUTLETS ON 2'-0" (610mm) CENTERS OR AS DESIGNATED ON DRAWINGS), MTD 3'-6" (1067mm) AFF OR AS INDICATED		TELEVISION CEILING RECEPTACLE		P-PEDESTAL
			C = CAMERA (CCTV SYSTEM)		R-RACK
			M = MONITOR (CCTV SYSTEM)		S-SURFACE
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		T-TECHNOLOGY/TYPE
			TELEVISION CEILING RECEPTACLE		B-BARCODE
			C = CAMERA (CCTV SYSTEM)		M-MAG STRIP
			M = MONITOR (CCTV SYSTEM)		F-ELEVATOR FLOOR CALL
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		H-ELEVATOR HALL CALL
			TELEVISION CEILING RECEPTACLE		S-SMART CARD
			C = CAMERA (CCTV SYSTEM)		ELECTRONIC LOCK; LETTER INDICATES AS FOLLOWS:
			M = MONITOR (CCTV SYSTEM)		M-MOUNT
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		D-DESK
			TELEVISION CEILING RECEPTACLE		F-FLUSH
			C = CAMERA (CCTV SYSTEM)		H-HIDDEN
			M = MONITOR (CCTV SYSTEM)		P-PEDESTAL
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		R-RACK
			TELEVISION CEILING RECEPTACLE		S-SURFACE
			C = CAMERA (CCTV SYSTEM)		T-TECHNOLOGY/TYPE
			M = MONITOR (CCTV SYSTEM)		B-BARCODE
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		M-MAG STRIP
			TELEVISION CEILING RECEPTACLE		F-ELEVATOR FLOOR CALL
			C = CAMERA (CCTV SYSTEM)		H-ELEVATOR HALL CALL
			M = MONITOR (CCTV SYSTEM)		S-SMART CARD
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		ELECTRONIC LOCK; LETTER INDICATES AS FOLLOWS:
			TELEVISION CEILING RECEPTACLE		M-MOUNT
			C = CAMERA (CCTV SYSTEM)		D-DESK
			M = MONITOR (CCTV SYSTEM)		F-FLUSH
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		H-HIDDEN
			TELEVISION CEILING RECEPTACLE		P-PEDESTAL
			C = CAMERA (CCTV SYSTEM)		R-RACK
			M = MONITOR (CCTV SYSTEM)		S-SURFACE
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		T-TECHNOLOGY/TYPE
			TELEVISION CEILING RECEPTACLE		B-BARCODE
			C = CAMERA (CCTV SYSTEM)		M-MAG STRIP
			M = MONITOR (CCTV SYSTEM)		F-ELEVATOR FLOOR CALL
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		H-ELEVATOR HALL CALL
			TELEVISION CEILING RECEPTACLE		S-SMART CARD
			C = CAMERA (CCTV SYSTEM)		ELECTRONIC LOCK; LETTER INDICATES AS FOLLOWS:
			M = MONITOR (CCTV SYSTEM)		M-MOUNT
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		D-DESK
			TELEVISION CEILING RECEPTACLE		F-FLUSH
			C = CAMERA (CCTV SYSTEM)		H-HIDDEN
			M = MONITOR (CCTV SYSTEM)		P-PEDESTAL
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		R-RACK
			TELEVISION CEILING RECEPTACLE		S-SURFACE
			C = CAMERA (CCTV SYSTEM)		T-TECHNOLOGY/TYPE
			M = MONITOR (CCTV SYSTEM)		B-BARCODE
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		M-MAG STRIP
			TELEVISION CEILING RECEPTACLE		F-ELEVATOR FLOOR CALL
			C = CAMERA (CCTV SYSTEM)		H-ELEVATOR HALL CALL
			M = MONITOR (CCTV SYSTEM)		S-SMART CARD
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		ELECTRONIC LOCK; LETTER INDICATES AS FOLLOWS:
			TELEVISION CEILING RECEPTACLE		M-MOUNT
			C = CAMERA (CCTV SYSTEM)		D-DESK
			M = MONITOR (CCTV SYSTEM)		F-FLUSH
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		H-HIDDEN
			TELEVISION CEILING RECEPTACLE		P-PEDESTAL
			C = CAMERA (CCTV SYSTEM)		R-RACK
			M = MONITOR (CCTV SYSTEM)		S-SURFACE
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		T-TECHNOLOGY/TYPE
			TELEVISION CEILING RECEPTACLE		B-BARCODE
			C = CAMERA (CCTV SYSTEM)		M-MAG STRIP
			M = MONITOR (CCTV SYSTEM)		F-ELEVATOR FLOOR CALL
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		H-ELEVATOR HALL CALL
			TELEVISION CEILING RECEPTACLE		S-SMART CARD
			C = CAMERA (CCTV SYSTEM)		ELECTRONIC LOCK; LETTER INDICATES AS FOLLOWS:
			M = MONITOR (CCTV SYSTEM)		M-MOUNT
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		D-DESK
			TELEVISION CEILING RECEPTACLE		F-FLUSH
			C = CAMERA (CCTV SYSTEM)		H-HIDDEN
			M = MONITOR (CCTV SYSTEM)		P-PEDESTAL
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		R-RACK
			TELEVISION CEILING RECEPTACLE		S-SURFACE
			C = CAMERA (CCTV SYSTEM)		T-TECHNOLOGY/TYPE
			M = MONITOR (CCTV SYSTEM)		B-BARCODE
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		M-MAG STRIP
			TELEVISION CEILING RECEPTACLE		F-ELEVATOR FLOOR CALL
			C = CAMERA (CCTV SYSTEM)		H-ELEVATOR HALL CALL
			M = MONITOR (CCTV SYSTEM)		S-SMART CARD
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		ELECTRONIC LOCK; LETTER INDICATES AS FOLLOWS:
			TELEVISION CEILING RECEPTACLE		M-MOUNT
			C = CAMERA (CCTV SYSTEM)		D-DESK
			M = MONITOR (CCTV SYSTEM)		F-FLUSH
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		H-HIDDEN
			TELEVISION CEILING RECEPTACLE		P-PEDESTAL
			C = CAMERA (CCTV SYSTEM)		R-RACK
			M = MONITOR (CCTV SYSTEM)		S-SURFACE
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		T-TECHNOLOGY/TYPE
			TELEVISION CEILING RECEPTACLE		B-BARCODE
			C = CAMERA (CCTV SYSTEM)		M-MAG STRIP
			M = MONITOR (CCTV SYSTEM)		F-ELEVATOR FLOOR CALL
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		H-ELEVATOR HALL CALL
			TELEVISION CEILING RECEPTACLE		S-SMART CARD
			C = CAMERA (CCTV SYSTEM)		ELECTRONIC LOCK; LETTER INDICATES AS FOLLOWS:
			M = MONITOR (CCTV SYSTEM)		M-MOUNT
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		D-DESK
			TELEVISION CEILING RECEPTACLE		F-FLUSH
			C = CAMERA (CCTV SYSTEM)		H-HIDDEN
			M = MONITOR (CCTV SYSTEM)		P-PEDESTAL
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		R-RACK
			TELEVISION CEILING RECEPTACLE		S-SURFACE
			C = CAMERA (CCTV SYSTEM)		T-TECHNOLOGY/TYPE
			M = MONITOR (CCTV SYSTEM)		B-BARCODE
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		M-MAG STRIP
			TELEVISION CEILING RECEPTACLE		F-ELEVATOR FLOOR CALL
			C = CAMERA (CCTV SYSTEM)		H-ELEVATOR HALL CALL
			M = MONITOR (CCTV SYSTEM)		S-SMART CARD
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		ELECTRONIC LOCK; LETTER INDICATES AS FOLLOWS:
			TELEVISION CEILING RECEPTACLE		M-MOUNT
			C = CAMERA (CCTV SYSTEM)		D-DESK
			M = MONITOR (CCTV SYSTEM)		F-FLUSH
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		H-HIDDEN
			TELEVISION CEILING RECEPTACLE		P-PEDESTAL
			C = CAMERA (CCTV SYSTEM)		R-RACK
			M = MONITOR (CCTV SYSTEM)		S-SURFACE
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		T-TECHNOLOGY/TYPE
			TELEVISION CEILING RECEPTACLE		B-BARCODE
			C = CAMERA (CCTV SYSTEM)		M-MAG STRIP
			M = MONITOR (CCTV SYSTEM)		F-ELEVATOR FLOOR CALL
			AV = AUDIO VISUAL, CONFERENCE ROOM CONNECTION RECEPTABLES		

PANEL 25.2.LLMDP (BASE BID)													
PANEL LOCATION: LEVEL 2 - ELECTRICAL 1802C													
MFR/MODEL: SQUARE D NQ													
AIC: 65,000													
DESCRIPTION	BREAKER TYPE POLE AMP	L-LOAD	R-LOAD	O-LOAD	T/S(O/M) /A(E/H)	PHASE	T/S(O/M) /A(E/H)	O-LOAD	R-LOAD	L-LOAD	BREAKER AMP POLE TYPE	DESCRIPTION	
25.2.LLA	3	200			18764 S	1 A 2	S 23043				200 3	25.2.LLB	
					14964 S	3 B 4	S 22919						
					19212 S	5 C 6	S 19488						
						7 A 8	S 6527						
SPARE	3	200			9 B 10	S 6687					100 3	25.2.LLC	
					11 C 12	S 6620							
					13 A 14								
SPARE	3	100			15 B 16						100 3	SPARE	
					17 C 18								
SPACE					19 A 20							SPACE	
SPACE					21 B 22							SPACE	
SPACE					23 C 24							SPACE	
SPACE					25 A 26							SPACE	
SPACE					27 B 28							SPACE	
SPACE					29 C 30							SPACE	
SPACE					31 A 32							SPACE	
SPACE					33 B 34							SPACE	
SPACE					35 C 36							SPACE	
SPACE					37 A 38							SPACE	
SPACE					39 B 40							SPACE	
SPACE					41 C 42							SPACE	
SUMMARY CONNECTED LOADS		0	0		0 M 0 A 52940 S 0 E 0 H 0 T 0 O	LOAD (VOLT-AMPERES)	0	0				SUMMARY CONNECTED LOADS	
DESCRIPTION	CONN. KVA	D.F.	DEM. KVA	TOTAL CONNECTED LOAD	383.7 AMP	138,224 KVA						LEGENDKEY	
RECEPTACLES (FIRST 10KW)	0.0	1.25	0.0	TOTAL DEMAND LOAD	306.9 AMP	110,579 KVA						T=TRANSFORMER	
RECEPTACLES (REMANIDER)	0.0	0.5	0.0	DESIGN (MAX)	800 AMP	287,872 KVA						S=SUBFEED	
MOTORS	0.0	1.0	0.0	SPARE LOAD	493 AMP	177,293 KVA						O=OTHER	
LARGEST MOTOR	0.0	1.25	0.0									M=MOTOR	
APPLIANCES	0.0	1.0	0.0	CONNECTED LOAD BALANCE SUMMARY								A=APPLIANCE	
SUBFEED	138.2	0.8	110.6	PHASE A	402.8 AMP	48,334 KVA						E=EQUIPMENT	
EQUIPMENT	0.0	1.0	0.0	PHASE B	371.4 AMP	44,57 KVA						R=RECEPTACLES	
HEATING	0.0	1.0	0.0	PHASE C	377.7 AMP	45,32 KVA						L=LIGHTING	
TRANSFORMER	0.0	1.0	0.0	CONN=CONNECTED								CONN=CONNECTED	
OTHER	0.0	1.0	0.0	DEM=DEMAND								DEM=DEMAND	
				A TO B		8 %						SPR=SPARE	
				B TO C		-2 %						SPO=SPACE	
				C TO A		-7 %						D.F.=DEMAND FACTOR	
TOTAL KVA	138.2 KVA		110.6 KVA									GFC=GROUND FAULT CIRCUIT	
TOTAL AMP	383.7 AMP		306.9 AMP									ST=SHUNT TRIP	
DESIGN (MAX)			800 AMP										
SPARE			493.1 AMP										

PANEL 25.2.LHMDP (BASE BID)													
PANEL LOCATION: LEVEL 2 - ELECTRICAL 1802C													
MFR/MODEL: SQUARE D NQ													
AIC: 65,000													
DESCRIPTION	BREAKER TYPE POLE AMP	L-LOAD	R-LOAD	O-LOAD	T/S(O/M) /A(E/H)	PHASE	T/S(O/M) /A(E/H)	O-LOAD	R-LOAD	L-LOAD	BREAKER AMP POLE TYPE	DESCRIPTION	
25.2.LHB	3	600			134590 S	1 A 2					200 3	SPARE	
					134590 S	3 B 4							
						5 C 6							
						7 A 8							
SPACE					9 B 10						200 3	SPARE	
SPACE					11 C 12								
SPACE					13 A 14								
SPACE					15 B 16							SPACE	
SPACE					17 C 18							SPACE	
SPACE					19 A 20							SPACE	
SPACE					21 B 22							SPACE	
SPACE					23 C 24							SPACE	
SPACE					25 A 26							SPACE	
SPACE					27 B 28							SPACE	
SPACE					29 C 30							SPACE	
SPACE					31 A 32							SPACE	
SPACE					33 B 34							SPACE	
SPACE					35 C 36							SPACE	
SPACE					37 A 38							SPACE	
SPACE					39 B 40							SPACE	
SPACE					41 C 42							SPACE	
SUMMARY CONNECTED LOADS		0	0		0 M 0 A 403770 S 0 E 0 H 0 T 0 O	LOAD (VOLT-AMPERES)	0	0				SUMMARY CONNECTED LOADS	
DESCRIPTION	CONN. KVA	D.F.	DEM. KVA	TOTAL CONNECTED LOAD	485.7 AMP	403,770 KVA						LEGENDKEY	
RECEPTACLES (FIRST 10KW)	0.0	1.25	0.0	TOTAL DEMAND LOAD	388.5 AMP	323,016 KVA						T=TRANSFORMER	
RECEPTACLES (REMANIDER)	0.0	0.5	0.0	DESIGN (MAX)	1000 AMP	358,840 KVA						S=SUBFEED	
MOTORS	0.0	1.0	0.0	SPARE LOAD	611 AMP	36,824 KVA						O=OTHER	
LARGEST MOTOR	0.0	1.25	0.0									M=MOTOR	
APPLIANCES	0.0	1.0	0.0	CONNECTED LOAD BALANCE SUMMARY								A=APPLIANCE	
SUBFEED	403.8	0.8	323.0	PHASE A	485.9 AMP	134,59 KVA						E=EQUIPMENT	
EQUIPMENT	0.0	1.0	0.0	PHASE B	485.9 AMP	134,59 KVA						R=RECEPTACLES	
HEATING	0.0	1.0	0.0	PHASE C	485.9 AMP	134,59 KVA						L=LIGHTING	
TRANSFORMER	0.0	1.0	0.0	CONN=CONNECTED								CONN=CONNECTED	
OTHER	0.0	1.0	0.0	DEM=DEMAND								DEM=DEMAND	
				A TO B		0 %						SPR=SPARE	
				B TO C		0 %						SPO=SPACE	
				C TO A		0 %						D.F.=DEMAND FACTOR	
TOTAL KVA	403.8 KVA		323.0 KVA									GFC=GROUND FAULT CIRCUIT	
TOTAL AMP	485.7 AMP		388.5 AMP									ST=SHUNT TRIP	
DESIGN (MAX)			1000 AMP										
SPARE			611.5 AMP										

PANEL 25.2.LHB (BASE BID)																
PANEL LOCATION: ELECTRICAL 1802C				L1 VOLT 480		PHASE 3		MAIN LUG V		BREAKER N						
MFR/MODEL: SQUARE D NQ				L1 VOLT 480		WIRING 4		SQR SIZE (10) 40 THIN+ 20 CU		FED FROM 25.2 LHMUP						
AIC: 65,000				L1 VOLT 480		NEUTRAL 200%		COND. SIZE (2) 3" EMT		MOUNT SURFACE						
DESCRIPTION		BREAKER TYPE	POLE	AMP	L-LOAD	R-LOAD	O-LOAD	T/S(O/M) /A(E/H)	PHASE	T/S(O/M) /A(E/H)	O-LOAD	R-LOAD	L-LOAD	BREAKER AMP	POLE TYPE	DESCRIPTION
Single Chamber Washer (Equipment 2)		*	3	50				4573	E	1 A 2	E	4573		50	3	Single Chamber Washer (Equipment 2)
								4573	E	3 B 4	E	4573				
								4573	E	5 C 6	E	4573				
								4573	E	7 A 8	E	3741				
Single Chamber Washer (Equipment 2)		*	3	50				4573	E	9 B 10	E	3741		20	3	Cart and Utensil Washer (Equipment 5)
								4573	E	11 C 12	E	3741				
								3741	E	13 A 14	E	1940				
								3741	E	15 B 16	E	1940		20	3	Steam Sterilizer (Equipment 15)
Cart and Utensil Washer (Equipment 5)		*	3	20				1940	E	17 C 18	E	1940				
								1940	E	19 A 20	E	1940				
								1940	E	21 B 22	E	1940		20	3	Steam Sterilizer (Equipment 15)
								1940	E	23 C 24	E	1940				
Steam Sterilizer (Equipment 15)		*	3	20				2605	M	25 A 26	M	5127				
								2605	M	27 B 28	M	5127		40	3	AHU-1
								2605	M	29 C 30	M	5127				
								32812	M	31 A 32	M	32812				
AHU-2 supply		*	3	20				32812	M	33 B 34	M	32812		150	3	CHR-1
								32812	M	35 C 36	M	32812				
								4689	M	37 A 38	M	1164				
CHR-2		*	3	150				4689	M	39 B 40	M	1164		15	3	AHU-2 return
								4689	M	41 C 42	M	1164				
								3048	M	43 A 44	M	2600				
								3048	M	45 B 46	M	2600		25	3	CHWP-1
								3048	M	47 C 48	M	2600				
								3880	M	49 A 50	M	2600				
Air Compressor		*	3	45				3880	M	51 B 52	M	2600		25	3	CHWP-2
								3880	M	53 C 54	M	2600				
								3880	M	55 A 56	M	2220				
								3880	M	57 B 58	M	2220				
								3880	M	59 C 60	M	2220				
EF-1		*	3	30				3330	E	61 A 62	M	2220				
								3330	E	63 B 64	M	2220				
								3330	E	65 C 66	M	2220				
CT-1 (FANS)		*	3	35				3330	E	67 A 68	E	832				
								3330	E	69 B 70	E	832				
								3330	E	71 C 72	E	832				
CT-2 (FANS)		*	3	35												
CT-1 HEATER		*	3	25												
CT-2 HEATER		*	3	25												
Space																Space
Space																Space
Space																Space
Space																Space
Space																Space
Space																Space
SUMMARY CONNECTED LOADS					0	0	64461 E		LOAD (VOLT-AMPERES)				0	0	0	SUMMARY CONNECTED LOADS
							0	S								
							0	H								
							0	T								
							0	O								
								153642 M		M	146589					
								A		A	0					
								S		S	0					
								H		H	0					
								T		T	0					
								O		O	0					
LEGEND/KEY																
LIGHTING I=TRANSFORMER																
RECEPTACLES (FIRST 10KW) S=SUBFEED																
RECEPTACLES (REMANIDER) O=OTHER																
LARGEST MOTOR M=HATCH																
APPLIANCES A=APPLANCE																
SURGE E=EQUIPMENT																
EQUIPMENT H=HEATING																
HEATING R=RECEPTACLES																
OTHER L=LIGHTING																
C=COIL=CONNECTED																
D=DEMAND																
S=SPARE																
S=SPACE																
D=D-DEMAND FACTOR																
G=GROUND FAULT CIRCUIT																
S=SHUNT TRIP																
TOTAL KVA 403.8 KVA																
DESIGN (MAX) 495.5 AMP																
SPARE 104.5 AMP																
* PER NEC 210.13 GFCI PROTECTION NOT REQUIRED ON NOTED EQUIPMENT																
NOTE: ONLY 1 CHILLER IS OPERATIONAL AT ANY GIVEN TIME.																
THEREFORE MAXIMUM DEMAND IS 350 AMPS																

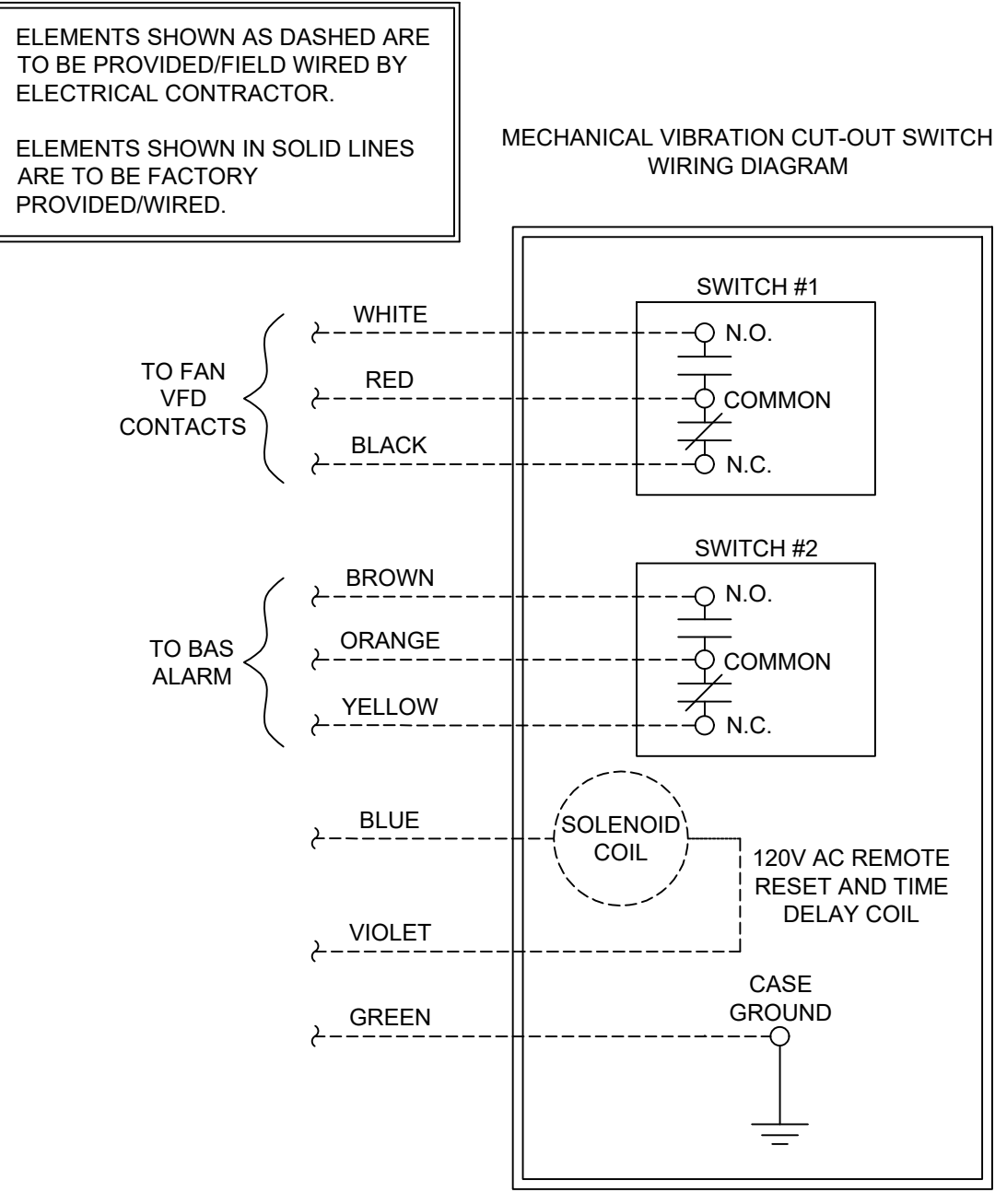
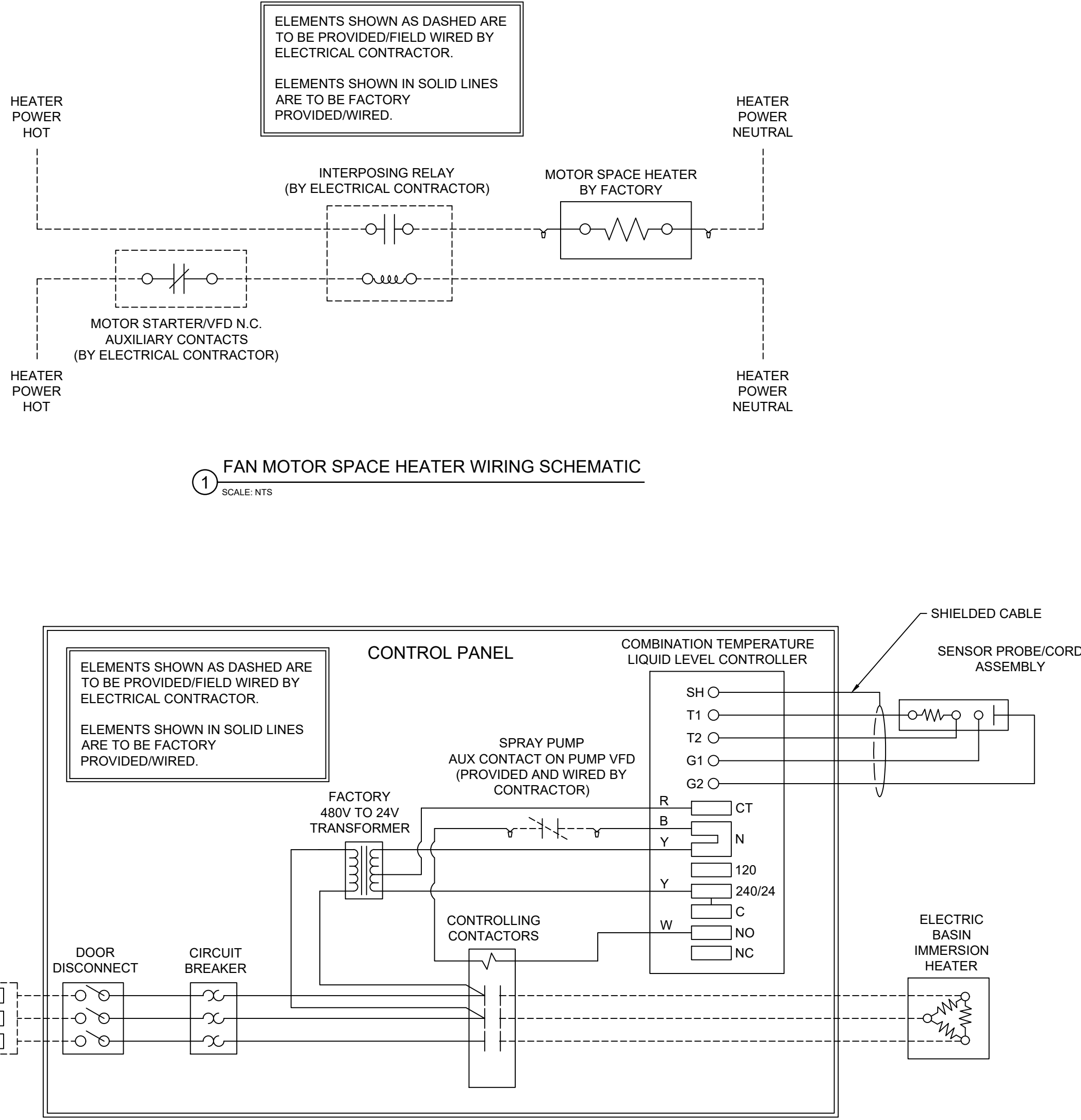
one and one half inches = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot

LIGHTING FIXTURE SCHEDULE													
SYMBOL	LETTER CODE	MANUFACTURER	DESCRIPTION	FIXTURE	CATALOG NO.	LOCATION	TYPE	HEIGHT	LAMP			NOTES	HYPERLINK
									TYPE	NO.	WATTS		
	A	NEW STAR LIGHTING	2X4 RECESSED CLEANROOM TROFFER	SCR24HA/OA-L2351C-E-UN-EL1		CEILING	RECESSED	-	LED	-	50	6000	1 - SPEC
	B	NEW STAR LIGHTING	1X4 STRIP LIGHT	VIC4N-L2351C-RW-UN-WH		CEILING	SURFACE	-	LED	-	50	5400	1 - SPEC
	C	NEW STAR LIGHTING	2X4 TROFFER	AACG24-HC20-IC20/CA12-L2351C-RW		CEILING	SURFACE	-	LED	-	50	5550	1 - SPEC
	D	NEW STAR LIGHTING	2X4 TROFFER	AACG24-HC20-IC20/CA12-CL351C-RW		CEILING	SURFACE	-	LED	-	38	4000	1 - SPEC
	G	NEW STAR LIGHTING	1X4 STRIP LIGHT	VIC4N-L3351C-RW-UN-WH		CEILING	SURFACE	-	LED	-	75	7200	1 - SPEC
	H	NEW STAR LIGHTING	UNDERCABINET LIGHT	MUS2-HC-L135-A-UN		UNDERCABINET	SURFACE	-	LED	-	12	1215	1 - SPEC
	J	NEW STAR LIGHTING	6" DOWNLIGHT	DLM6-D-L135-_-/_-_-3-UN		CEILING	SURFACE	-	LED	-	11	876	1 - SPEC
	K	COMPASS LIGHTING	OUTDOOR LED WALLPACK WITH HEATER	CU50 BK-H		WALL	SURFACE	8"	LED	-	7	1600	1 A,B SPEC
	X	DUAL-LITE	EXIT SIGN	LE-_-_-G-_-_-C-E-I		CEILING	SURFACE	7 6"	LED	-	3.3 - 4.5	-	1,2,3 E SPEC
LUMINAIRE NOTES: 1. PROVIDE ALL NECESSARY HARDWARE OR KITS FOR MOUNTING LUMINAIRE AS NOTED BY LOCATION AND TYPE. 2. CONNECT TO NEAREST UNSWITCHED CIRCUIT. 3. REFER TO PLANS FOR DIRECTIONAL ARROWS, SINGLE OR DOUBLE SIDED, AND MOUNTING TYPE WILL BE WALL MOUNTED UNLESS OTHERWISE NOTED ON PLANS. CONTROL NOTES: A. ON BOARD OCCUPANCY SENSING. B. ON BOARD PHOTO CONTROL. C. 0-10 V DIMMING. D. TRIAC DIMMING. E. EMERGENCY BACKUP BATTERY ON FIXTURES WITH ADDITIONAL E TAG. GENERAL LUMINAIRE NOTES: 1. MANUFACTURERS LISTED ARE CONSIDERED BASIS OF DESIGN PURPOSES. CONTRACTOR TO REFER TO SPECIFICATION, AND SALIENT FEATURES LISTED BOTH ON PLANS AND SPECIFICATIONS WHEN OFFERING EQUAL PRODUCTS.													

LIGHTING CONTROL SCHEDULE													
AUX1 - AUTO ON		AUX2 - AUTO OFF		MAN - MANUAL ON		MAN - MANUAL OFF		MOTO - MANUAL OFF WHILE OCCUPIED		TDD - TIME DELAY OFF		TDD - 15 MIN LIGHT DETECTION	
SYMBOL	DESCRIPTION	MANUFACTURER	MODEL	WATTS	HEIGHT	TYPE	TYPE	NO.	WATTS	TYPE	NO.	WATTS	TYPE
	WALL SWITCH	HUBBELL	CS120	20	20	20	-	-	E	E	-	-	-
	WALL OCCUPANCY SENSOR SWITCH	LUTRON	MS-OPS6M2U-DV	6	3	3	D	E	E	D	30m	D	-
	SPOT OVERRIDE SWITCH W/ CENTER OFF	HUBBELL	4922	20	20	20	-	-	E	E	-	-	-
	CEILING OCCUPANCY SENSOR SWITCH	HUBBELL	OMNI-DT-500	.033	.033	.033	E	E	-	-	30m	-	1
1. SENSOR IS RATED FOR 24VDC INSTEAD OF LINE VOLTAGE. CONTRACTOR TO PROVIDE NECESSARY RELAYS AND WIRING COMPONENTS FOR A COMPLETE INSTALLATION. PROVIDE SWITCHES WITH LOW VOLTAGE POWER PACKS AS REQUIRED.													

SCHEDULE OF VARIABLE FREQUENCY DRIVES AND EQUIPMENT CONTROLLERS											
UNIT	MOTOR			STARTER				VFD HRTS	DEVICES		NOTES
	LOAD	PH	VOLTS	MFR	CATALOG NO.	SIZE	POLES		SWT	PLCT	
CT-1, CT-2 (FANS)	14 FLA	3	480	ABB	ACS880-01	1	3	*	HOA	G	1,2,3
CT-1, CT-2 (PUMPS)	8 FLA	3	480	ABB	ACS880-01	0	3	*	HOA	G	1,2,3
NOTES: 1. PROVIDE NEMA 3R MINIMUM RATED ENCLOSURE FOR VFDs. 2. VFD IS REQUIRED TO HAVE FULL MECHANICAL BYPASS. ELECTRONIC BYPASS WILL NOT BE ACCEPTABLE FOR THIS PROJECT. 3. VFDs FOR COOLING TOWER EQUIPMENT ARE INCLUDED AS PART OF THE BASE BID. BID ALTERNATE #3 REMOVES THE CT-1 AND CT-2 FROM THE PROJECT ALONG WITH THE ASSOCIATED VFDs.											
* HEATERS BY VFD MANUFACTURER.											

SECURITY CAMERA SCHEDULE						
SYMBOL	TYPE	MANUFACTURER	MODEL NO.	LOCATION	NOTES	HYPERLINK
	CORNER	AXIS COMMUNICATIONS	Q9216-SLV	CORRIDOR	-	SPEC
	360	AXIS COMMUNICATIONS	M3067-P	CORRIDOR	1	SPEC
	PAN TILT ZOOM	AXIS COMMUNICATIONS	P5655-E	ACCESS DOORS	-	SPEC
NOTES: CAMERA HAS NO VANDAL RESISTANCE RATING BUT HAS A BUILT IN VANDAL ALARM.						



EQUIPMENT	CONNECTED LOAD					TYPE	DISCONNECT					CATALOG NO.	TYPE	SIZE	POLES	NOTES
	HP	W	FLA	MVA	PH		MFR									
SINGLE CHAMBER WASHER #1 (2)	-	-	16.5	-	3	480	HEAVY DUTY FUSED	SQUARE D				VH361NRB	CARTRIDGE CLASS R	30A	3	1
SINGLE CHAMBER WASHER #2 (2)	-	-	16.5	-	3	480	HEAVY DUTY FUSED	SQUARE D				VH361NRB	CARTRIDGE CLASS R	30A	3	1
SINGLE CHAMBER WASHER #3 (2)	-	-	16.5	-	3	480	HEAVY DUTY FUSED	SQUARE D				VH361NRB	CARTRIDGE CLASS R	30A	3	1
MOTORIZED CONVEYORS #1 (10)	-	1440	-	-	1	208	GENERAL DUTY FUSED	SQUARE D				D321NRB	CARTRIDGE CLASS R	15A	3	1
MOTORIZED CONVEYORS #2 (10)	-	1440	-	-	1	208	GENERAL DUTY FUSED	SQUARE D				D321NRB	CARTRIDGE CLASS R	15A	3	1
MOTORIZED CONVEYORS #3 (10)	-	1440	-	-	1	208	GENERAL DUTY FUSED	SQUARE D				D321NRB	CARTRIDGE CLASS R	15A	3	1
MOTORIZED CONVEYORS #1 (4A)	-	1440	-	-	1	208	GENERAL DUTY FUSED	SQUARE D				D321NRB	CARTRIDGE CLASS R	15A	3	1
CART AND UTENSIL WASH #1 (5)	-	865	13.5	-	3	480	HEAVY DUTY FUSED	SQUARE D				VH361NRB	CARTRIDGE CLASS R	20A	3	1
CART AND UTENSIL WASH #2 (5)	-	865	13.5	-	3	480	HEAVY DUTY FUSED	SQUARE D				VH361NRB	CARTRIDGE CLASS R	20A	3	1
AMSCO 600 STEAM STERIL #1 (15)	-	-	7	-	3	480	HEAVY DUTY FUSED	SQUARE D				VH361NRB	CARTRIDGE CLASS R	20A	3	1
AMSCO 600 STEAM STERIL #2 (15)	-	-	7	-	3	480	HEAVY DUTY FUSED	SQUARE D				VH361NRB	CARTRIDGE CLASS R	20A	3	1
AMSCO 600 STEAM STERIL #3 (15)	-	-	7	-	3	480	HEAVY DUTY FUSED	SQUARE D				VH361NRB	CARTRIDGE CLASS R	20A	3	1
AMSCO 400 STEAM STERIL (14)	-	-	3	-	3	480	HEAVY DUTY FUSED	SQUARE D				VH361NRB	CARTRIDGE CLASS R	4A	3	1
AMSCO 400 STEAM STERIL CNTRL (14)	-	-	2	-	1	120	GENERAL DUTY FUSED	SQUARE D				D321NRB	CARTRIDGE CLASS R	15A	1	1
INNOVAVE PFC IRRIGATOR #1 (3)	-	-	24	-	3	208	GENERAL DUTY FUSED	SQUARE D				D321NRB	CARTRIDGE CLASS R	30A	3	1
INNOVAVE PFC IRRIGATOR #2 (3)	-	-	24	-	3	208	GENERAL DUTY FUSED	SQUARE D				D321NRB	CARTRIDGE CLASS R	30A	3	1
PASS-THROUGH WINDOW #1 (8)	-	-	1	-	3	208	GENERAL DUTY FUSED	SQUARE D				D321NRB	CARTRIDGE CLASS R	15A	3	1
PASS-THROUGH WINDOW #2 (8)	-	-	1	-	3	208	GENERAL DUTY FUSED	SQUARE D				D321NRB	CARTRIDGE CLASS R	15A	3	1
CU-1	1/2	-	-	-	1	208	GENERAL DUTY FUSED	SQUARE D				D321N	CARTRIDGE CLASS R	16A	2	
CU-1, CU-2	-	-	-	98	3	208	HEAVY DUTY FUSED	SQUARE D				VH323NRB	CARTRIDGE CLASS R	100	3	2
(E)CU-1, (E)CU-2	-	-	-	98	3	208	EXISTING HEAVY DUTY FUSED DISCONNECT TO BE REUSED									
CHWP-1, CHWP-2	3	-	-	-	3	480	(2) COMBO STARTER	SQUARE D				8538CASP3	CARTRIDGE CLASS R	15A	3	6
CHR-1, CHR-2	-	-	87.8	84.8	3	480	(2) COMBO STARTER	SQUARE D				8538SFG13V81CFF4T	CARTRIDGE CLASS R	125A	3	3
CTP-1, CTP-2	7.5	-	32	-	1	480	(2) COMBO STARTER	SQUARE D				8538SDG63V02	CARTRIDGE CLASS R	35A	2	4
CHWP-3, CHWP-4	-	-	8.5	-	3	480	(2) COMBO STARTER	SQUARE D				8538BW42V02S	CARTRIDGE CLASS R	15A	3	7
HWP-1	.75	-	-	-	1	208	(2) COMBO STARTER	SQUARE D				8538CASP4	CARTRIDGE CLASS R	25A	2	
UH-1,2,3,4	1/20	-	-	-	1	120	FUSESTAT	COOPER				BP/SSU	EDISON BASE CLASS T	1.5A	1	-
AHU-1	-	-	18.5	23.13	3	480	HEAVY DUTY FUSED	SQUARE D				H361NRB	CARTRIDGE CLASS R	40	3	
AHU-2 SUPPLY	-	-	9.4	11.75	3	480	HEAVY DUTY FUSED	SQUARE D				H361NRB	CARTRIDGE CLASS R	20	3	
AHU-2 RETURN	-	-	4.2	5.25	3	480	HEAVY DUTY FUSED	SQUARE D				H361NRB	CARTRIDGE CLASS R	15	3	
CT-1, CT-2 (FANS)	7.5	-	14	-	3	480	(2) HEAVY DUTY FUSED	SQUARE D				VH361NRB	CARTRIDGE CLASS R	25	3	1.5
CT-1, CT-2 (PUMPS)	5	-	8	-	3	480	(2) HEAVY DUTY FUSED	SQUARE D				VH361NRB	CARTRIDGE CLASS R	15	3	1.5
CT-1, CT-2 (HEATER/CONTOLER)	-	-	9920	-	3	480	(2) HEAVY DUTY FUSED	SQUARE D				VH361NRB	CARTRIDGE CLASS R	15	3	1.5
CT-1, CT-2 (120V HEATERS/SWITCHES)	-	-	4	-	1	120	(2) GEN DUTY FUSED	SQUARE D				D221NRB	CARTRIDGE CLASS R	5	1	1.5
EF-1	7-12	-	11	-	3	480	HEAVY DUTY FUSED	SQUARE D				H361NRB	CARTRIDGE CLASS R	20A	3	1
EF-2	1/4	-	1.1	-	3	208	GENERAL DUTY FUSED	SQUARE D				D321N	CARTRIDGE CLASS R	4A	3	1
VAV-5,6,7,8,9,20,21,22, 23, 24	-	40	-	-	1	120	FUSESTAT	COOPER				BP/SSU	EDISON BASE CLASS T	0.5A	1	8
VV-1E,2E,3E,4E,10E,11E,12E,13E, 14E,15E,16E,17E,18E,19E,24E,1S, 2S,3S,4S,10S,11S,12S,13S,14S,15S, 16S,17S,18S,19S,24S	-	40	-	-	1	120	FUSESTAT	COOPER				BP/SSU	EDISON BASE CLASS T	0.5A	1	-
NOTES: 1. DISCONNECT ENCLOSURE TO BE NEMA 3R MIN RATED. 2. NEW HEAVY DUTY FUSED DISCONNECTS ARE TO BE PROVIDED AS PART OF BASE BID FOR NEW CONDENSING UNITS CU-1 AND CU-2. BID ALTERNATE #1 DOES NOT INCLUDE NEW FUSED DISCONNECTS. EXISTING DISCONNECTS ARE TO BE RELOCATED WITH CONDENSING UNITS CU-1 AND CU-2. 3. NEW MOTOR COMBINATION STARTERS ARE TO BE PROVIDED AS PART OF BASE BID FOR NEW CHILLERS CHR-1 AND CHR-2. BID ALTERNATE #3 REMOVES CHR-1 AND CHR-2 FROM THE PROJECT AND DOES NOT INCLUDE THE ASSOCIATED COMBINATION MOTOR STARTERS. 4. NEW MOTOR COMBINATION STARTERS ARE TO BE PROVIDED AS PART OF BASE BID FOR NEW COOLING TOWER PUMPS CTP-1 AND CTP-2. BID ALTERNATE #3 REMOVES CTP-1 AND CTP-2 FROM THE PROJECT AND DOES NOT INCLUDE THE ASSOCIATED COMBINATION MOTOR STARTERS. 5. NEW HEAVY DUTY DISCONNECTS ARE TO BE PROVIDED AS PART OF BASE BID FOR NEW COOLING TOWERS ACCH-1 AND ACCH-2. BID ALTERNATE #3 REMOVES ACCH-1 AND ACCH-2 FROM THE PROJECT AND DOES NOT INCLUDE THE ASSOCIATED DISCONNECTS. 6. NEW MOTOR COMBINATION STARTERS ARE TO BE PROVIDED AS PART OF BASE BID FOR NEW CHILLED WATER PUMPS CHWP-1 AND CHWP-2. BID ALTERNATE #3 REMOVES CHWP-1 AND CHWP-2 FROM THE PROJECT AND DOES NOT INCLUDE THE ASSOCIATED COMBINATION MOTOR STARTERS. 7. NEW CHILLED WATER PUMPS CHWP-3 AND CHWP-4 ARE NOT TO BE INCLUDED AS PART OF THE BASE BID. BID ALTERNATE #3 ADDS CHWP-3 AND CHWP-4 TO THE PROJECT AND INCLUDES THE ASSOCIATED COMBINATION MOTOR STARTERS. 8. BID ALTERNATE #4 REMOVES VAV-20, VAV-21 AND VAV-22 FROM THE PROJECT AND ADDS VAV-24 IN THE SHELL OFFICE SPACE.																

COMPLIANCE REVIEW INCLUDED	2/23/2024
Revisions:	Date

CONSULTANTS:

TERRASITE DESIGN
1635 DEADWOOD AVENUE
RAPID CITY, SOUTH DAKOTA 57702
PH: (605) 791-1736

ALBERTSON ENGINEERING, INC.
517 7TH STREET
RAPID CITY, SOUTH DAKOTA 57701
PH: (605) 274-0880

FARRIS ENGINEERING
12700 WEST DODGE ROAD
OMAHA, NEBRASKA 68154
PH: (402) 330-5900

ARCHITECT

FOURFRONT DESIGN, INC.
517 7TH STREET
RAPID CITY, SOUTH DAKOTA 57701
PH: (605) 342-9470
FAX: (605) 342-2377
WWW.FOURFRONTDESIGN.COM

Drawing Title

ELECTRICAL SCHEDULES

Approved: Project Director

Omaha VA Medical Center

Date

11/23/2020

Checked

WEW

Drawn

KAB

Project Title

Design/Construct Sterile Processing Service - Omaha VA Medical Center

Location

4101 Woolworth Ave #4199 Omaha, NE 68105

Project Number

16.2330.A08

Building Number

25

Drawing Number

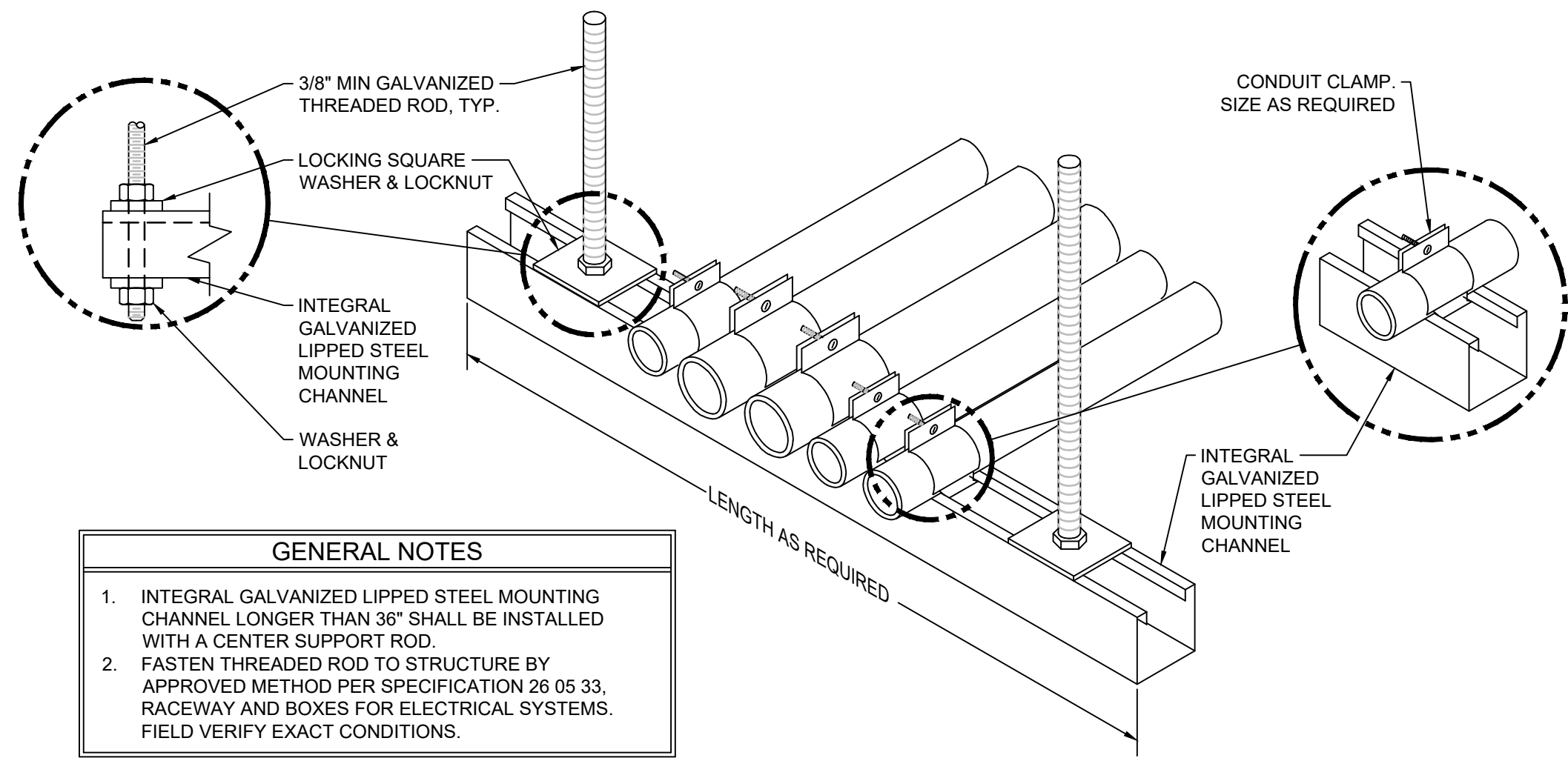
E-003

Dwg. 164 of 193

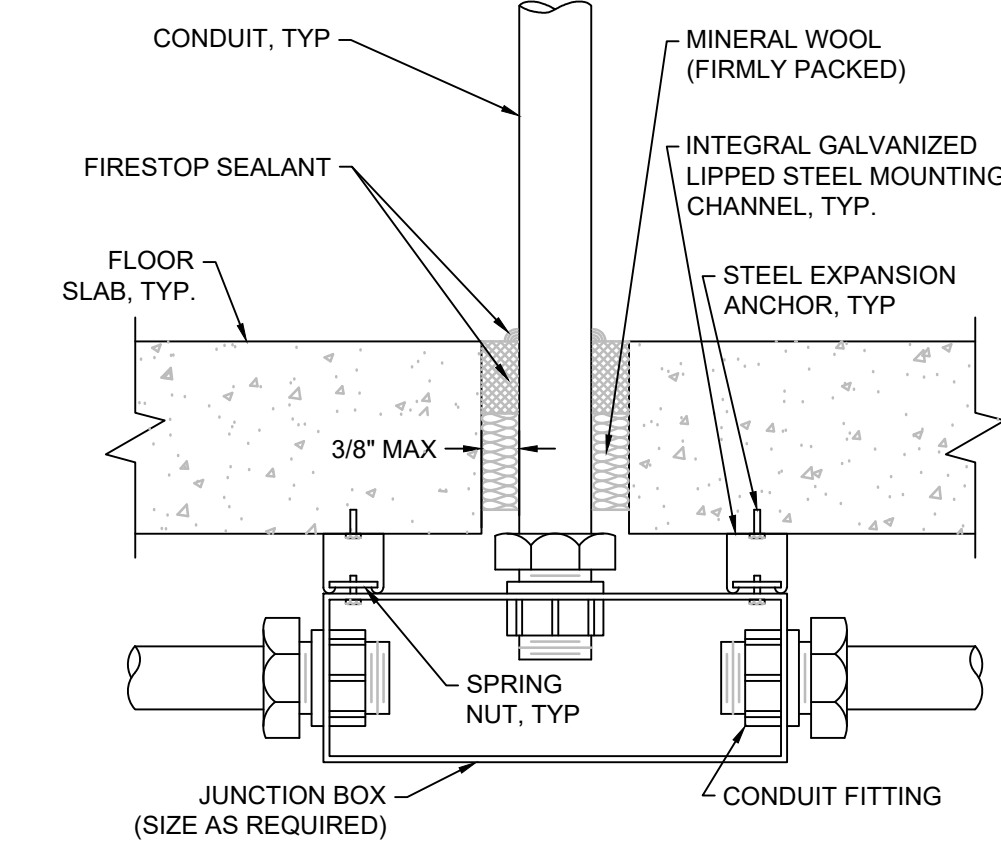
Office of Construction and Facilities Management

Department of Veterans Affairs

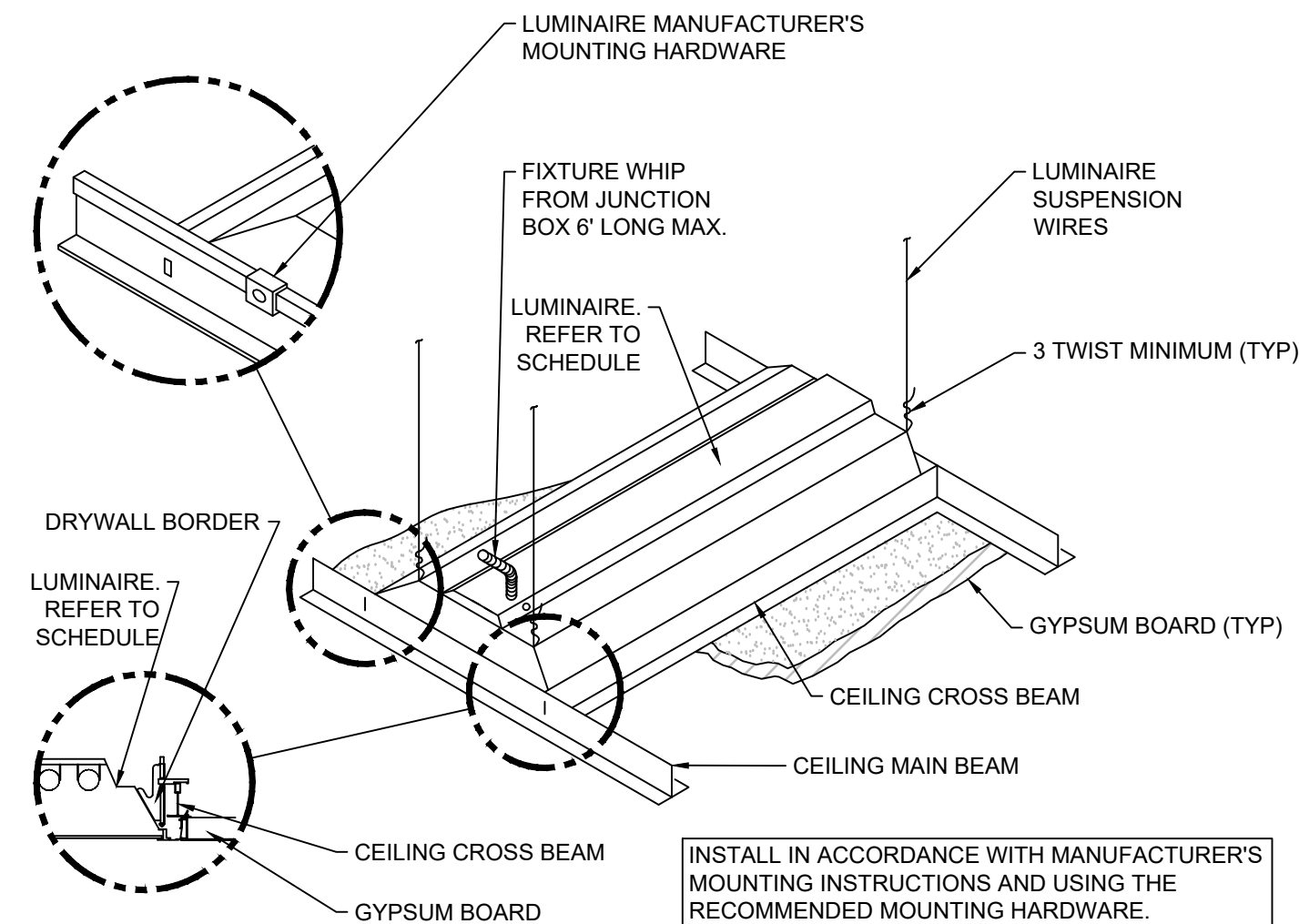
one and one half inches = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot



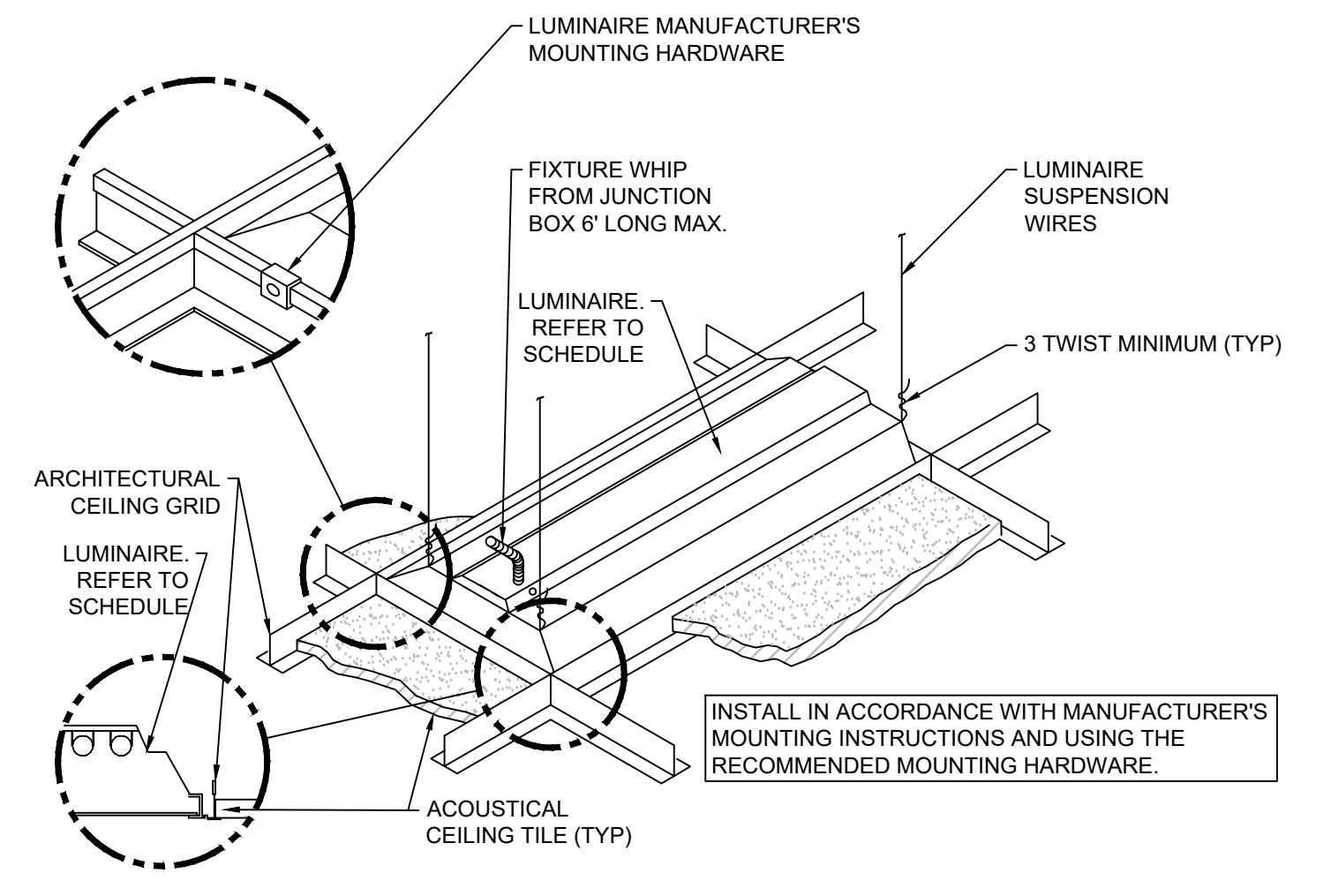
1 CONDUIT TRAPEZE MOUNTING DETAIL
SCALE: NTS



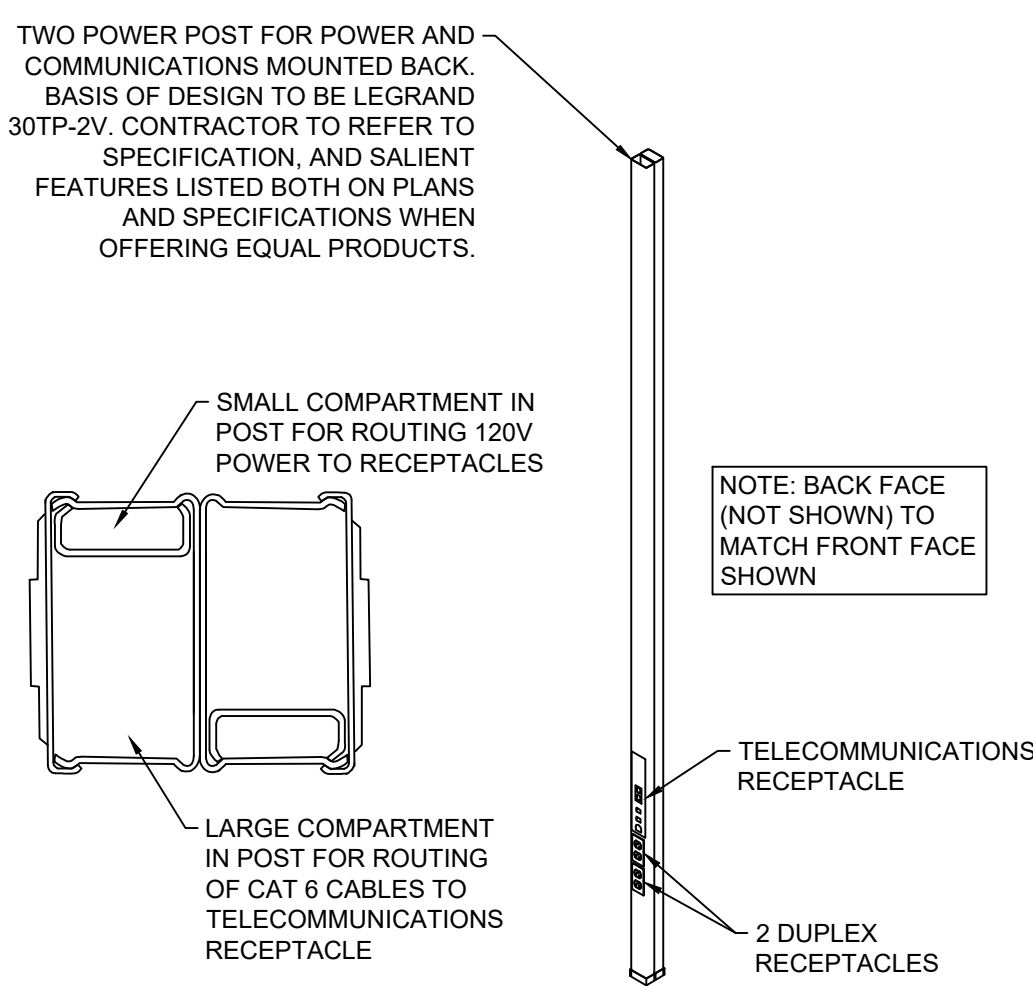
2 FLOOR SLAB PENETRATION DETAIL
SCALE: NTS



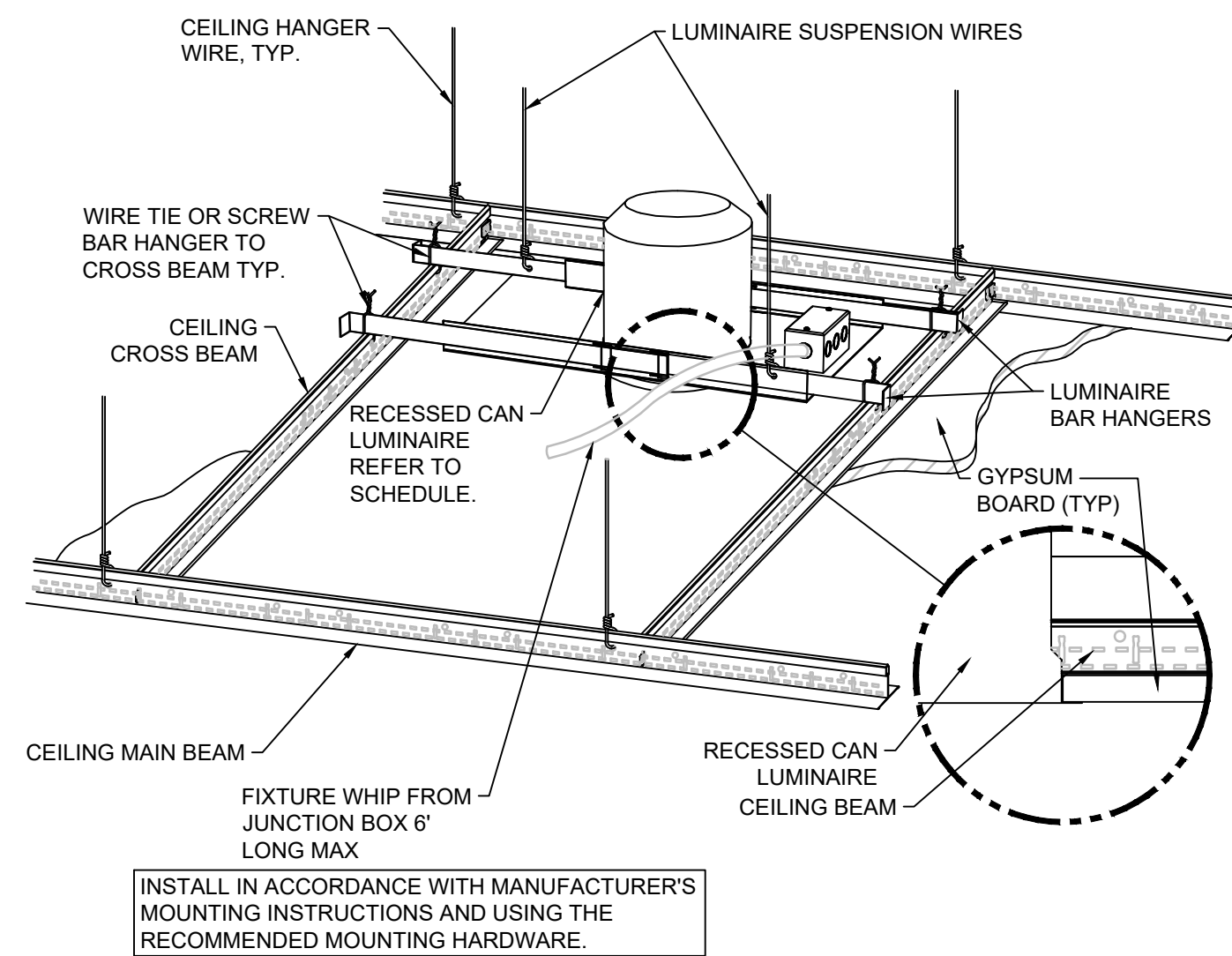
3 LUMINAIRE MOUNTING - GYPBOARD CEILING
SCALE: NTS



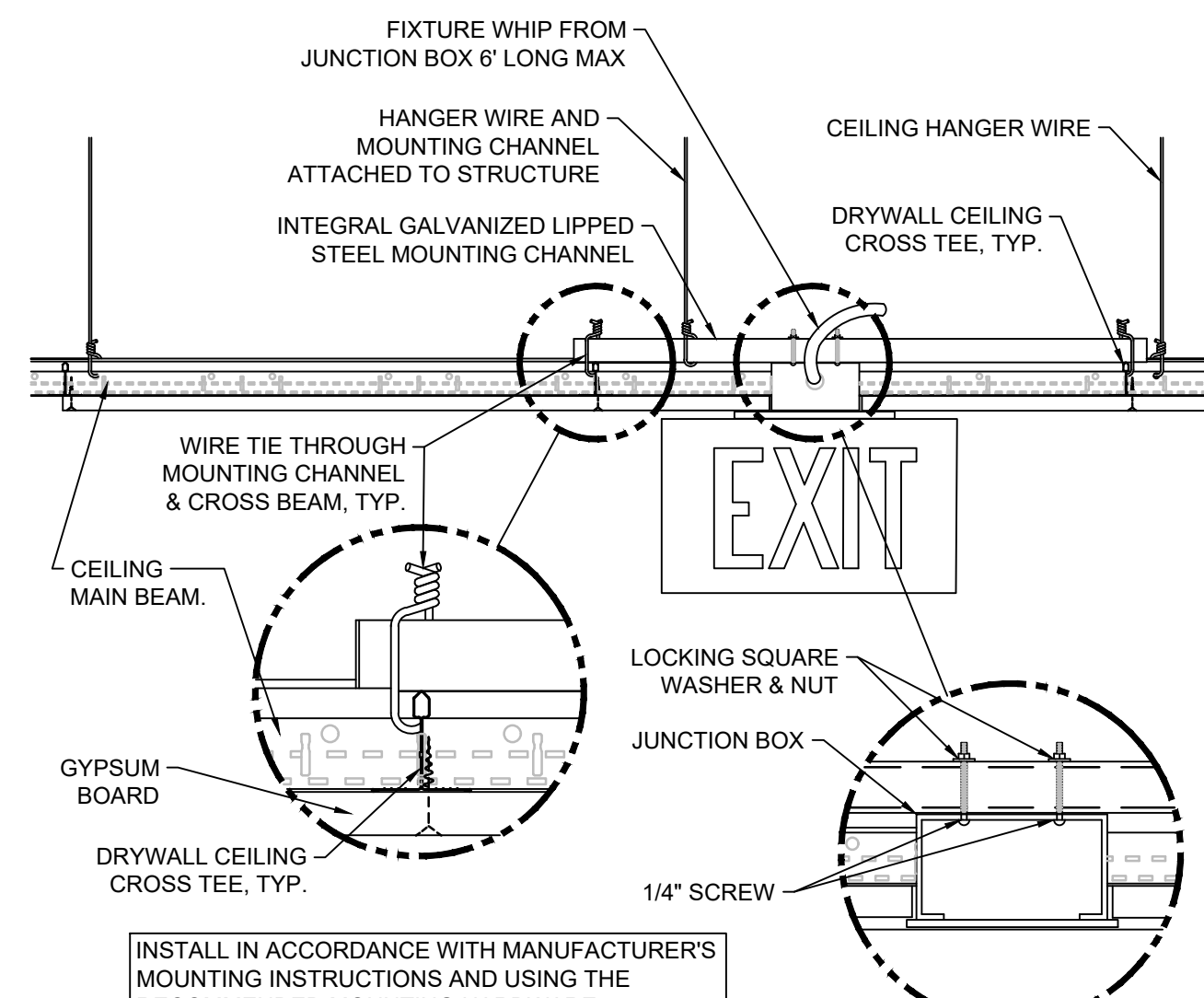
4 LUMINAIRE MOUNTING - LAY-IN CEILING
SCALE: NTS



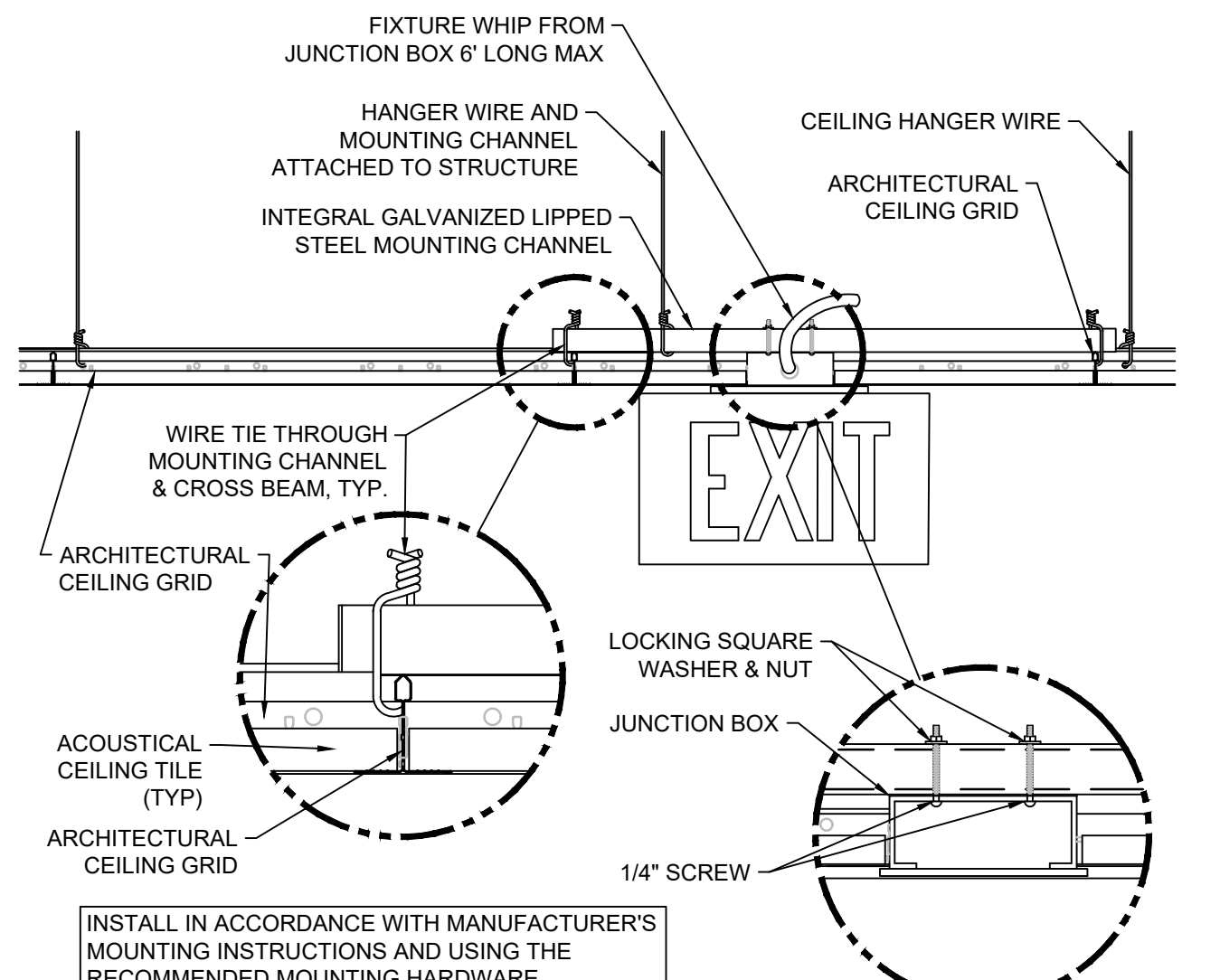
5 POWER POST DETAIL
SCALE: NTS



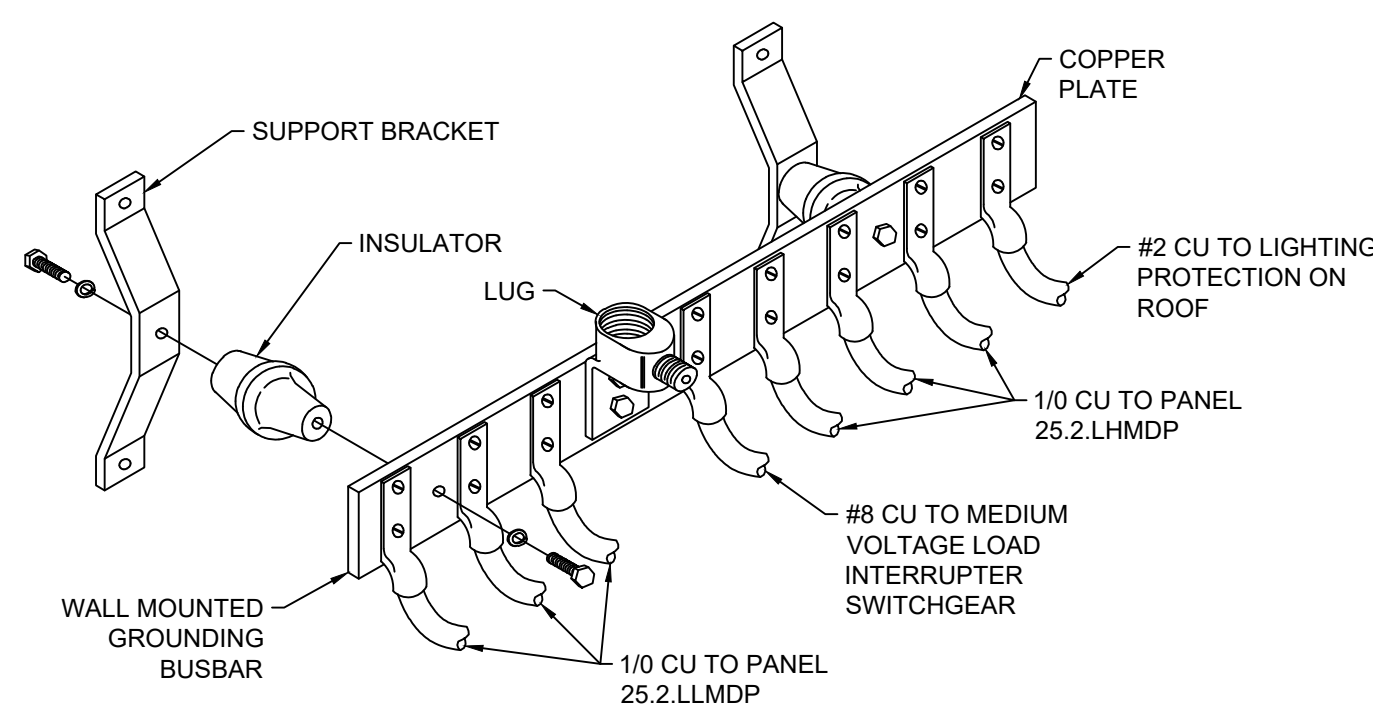
6 DOWNLIGHT MOUNTING - GYPBOARD CEILING
SCALE: NTS



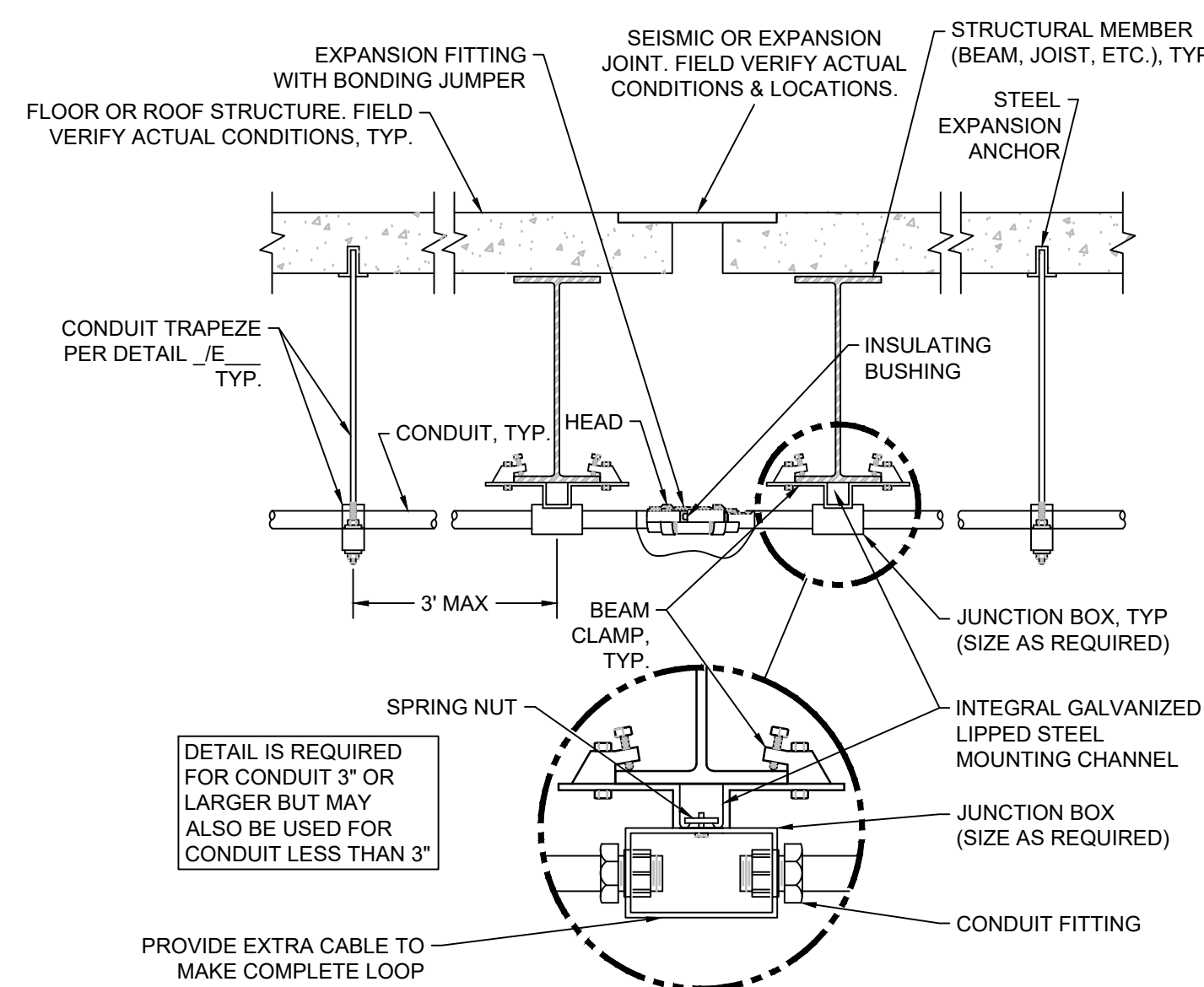
7 EXIT SIGN MOUNTING - GYPBOARD CEILING
SCALE: NTS



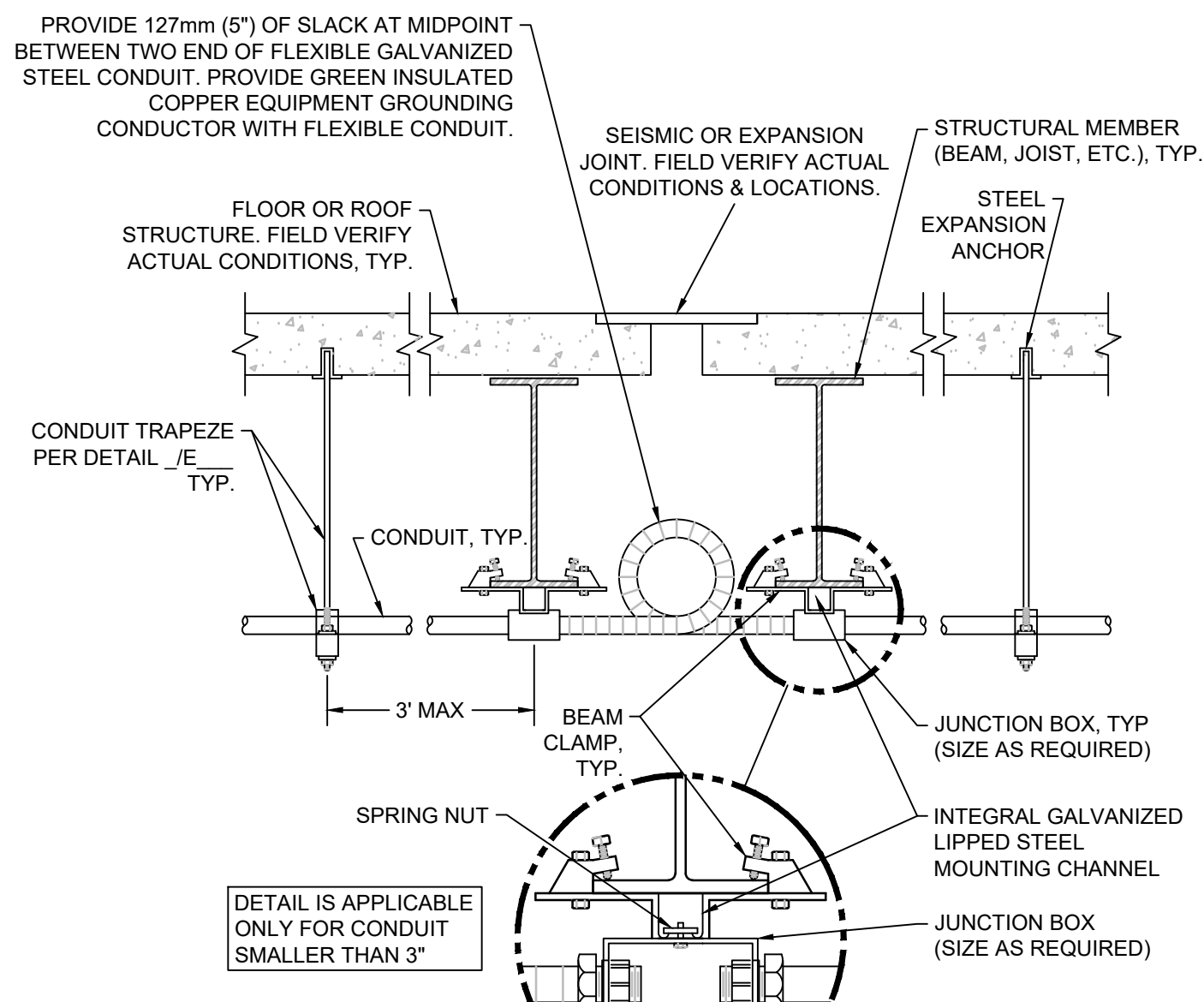
8 EXIT SIGN MOUNTING - LAY-IN CEILING
SCALE: NTS



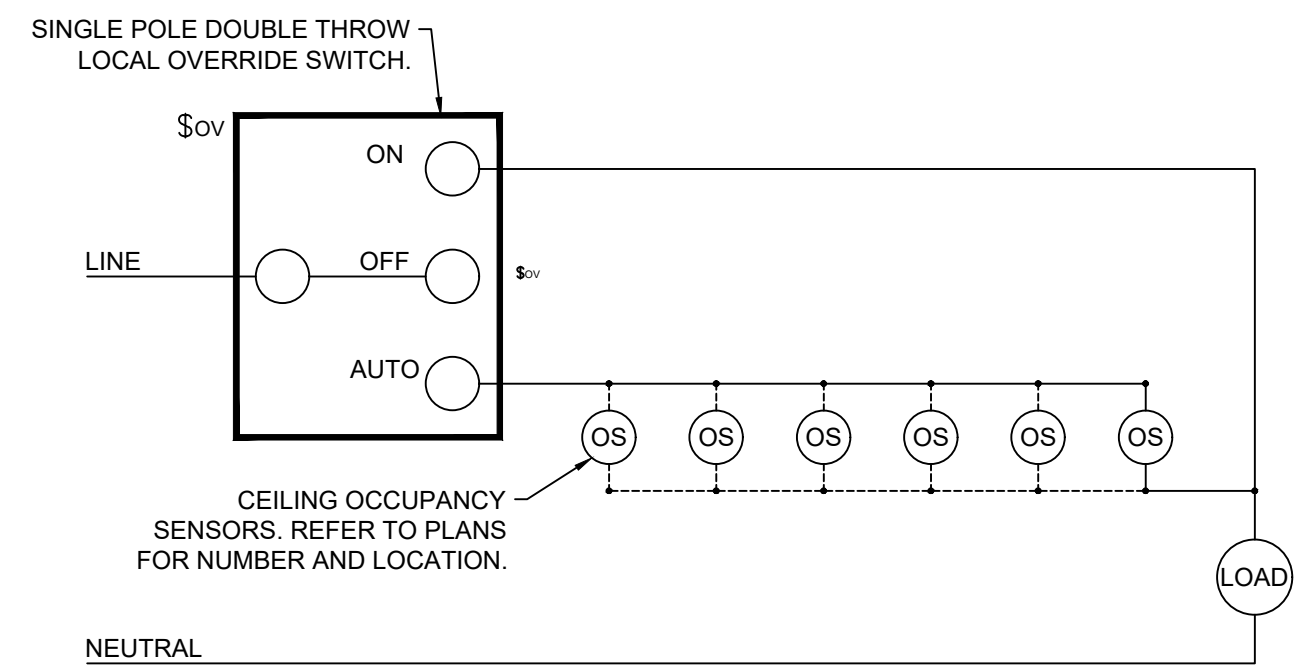
9 ELECTRICAL GROUND BUS BAR DETAIL
SCALE: NTS



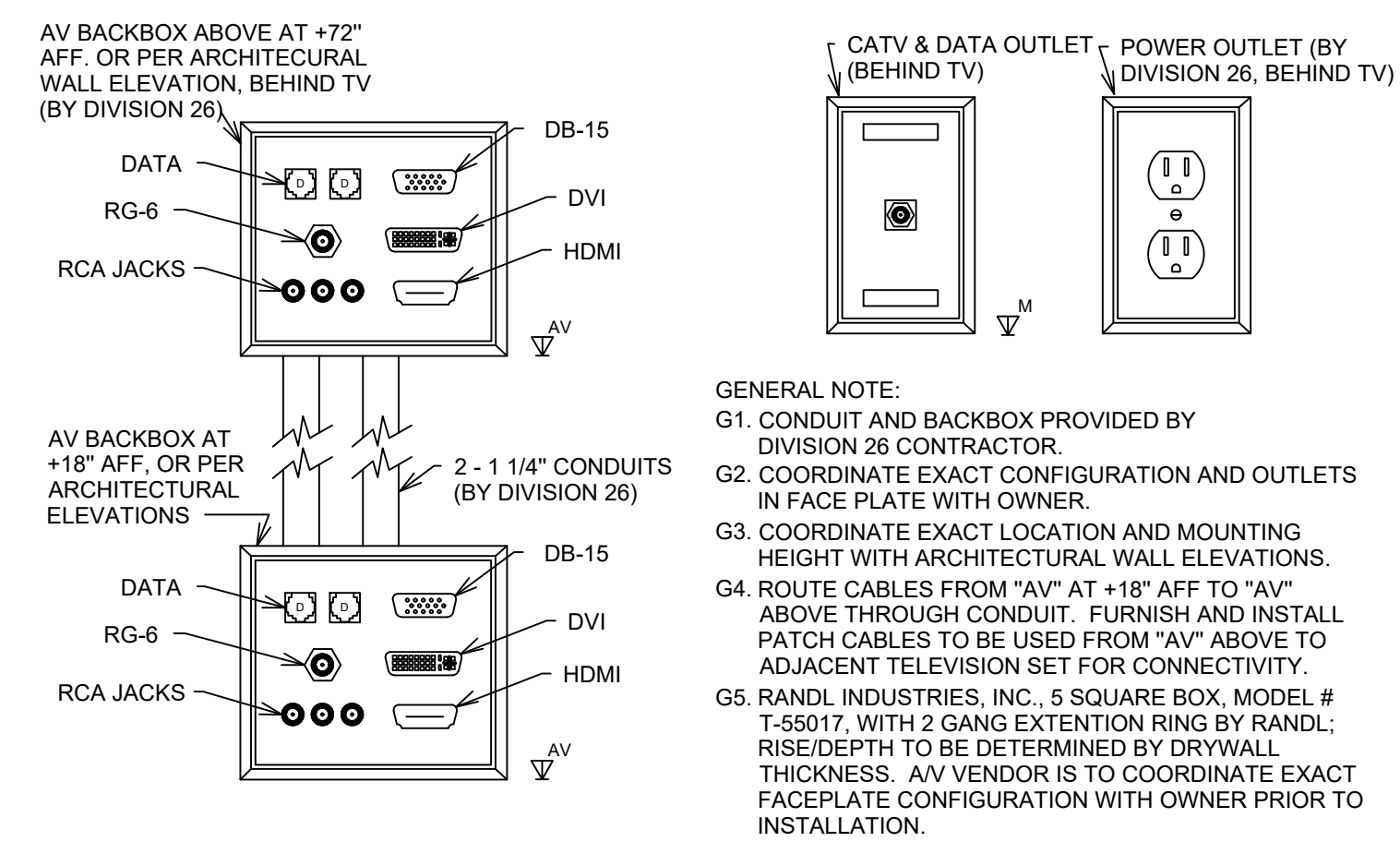
10 CONDUIT EXPANSION JOINT CROSSING DETAIL - EXPANSION FITTING
SCALE: NTS



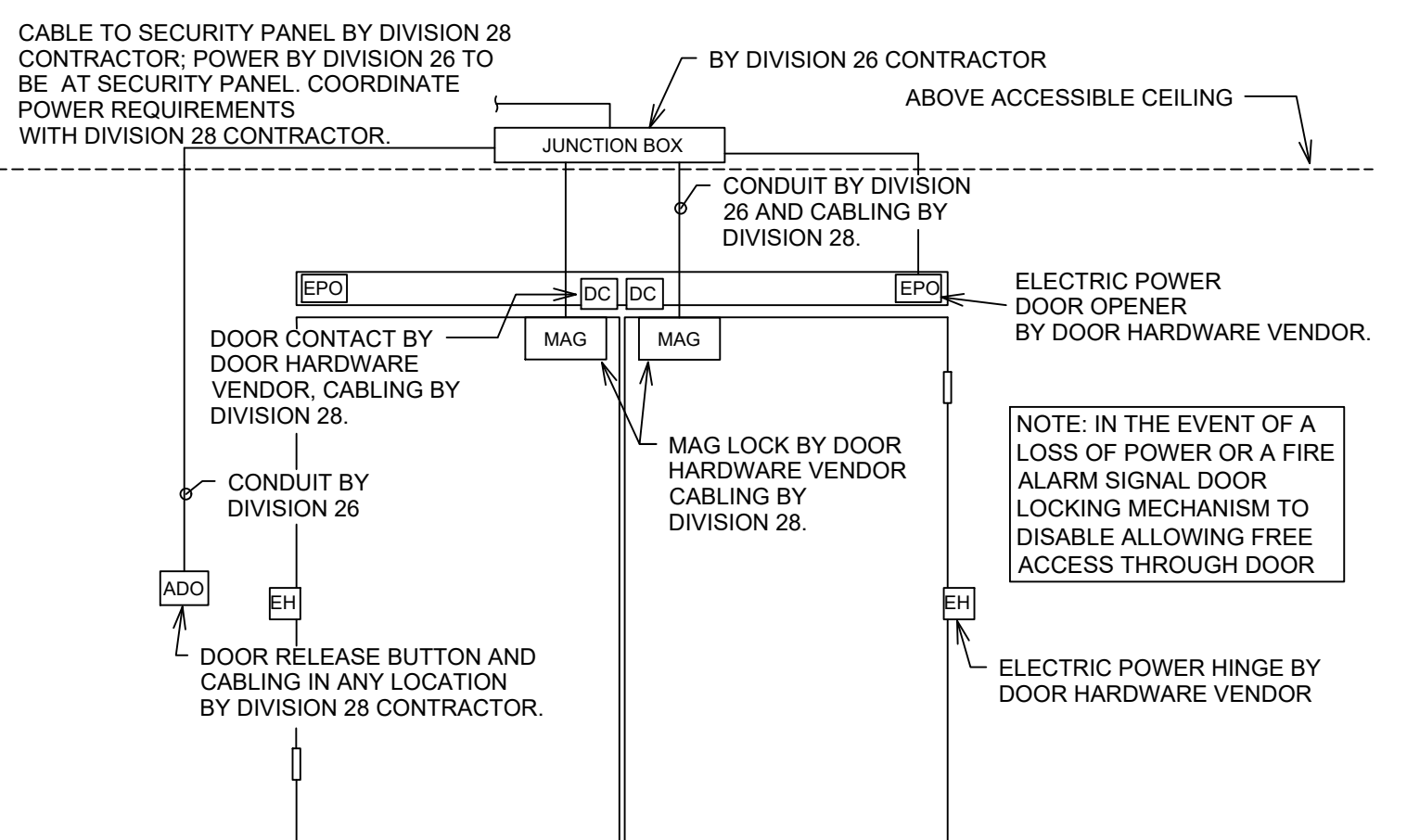
11 CONDUIT EXPANSION JOINT CROSSING DETAIL - FLEXIBLE CONDUIT
SCALE: NTS



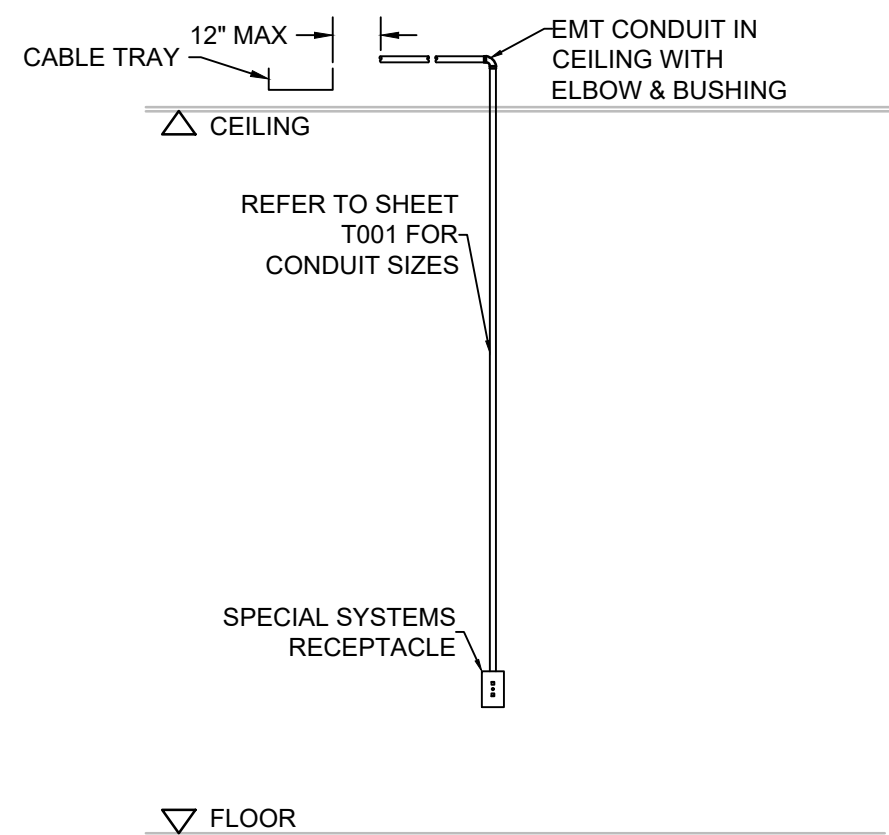
12 OCCUPANCY SENSOR OVERRIDE SWITCH LIGHTING CONTROL DETAIL
SCALE: NTS



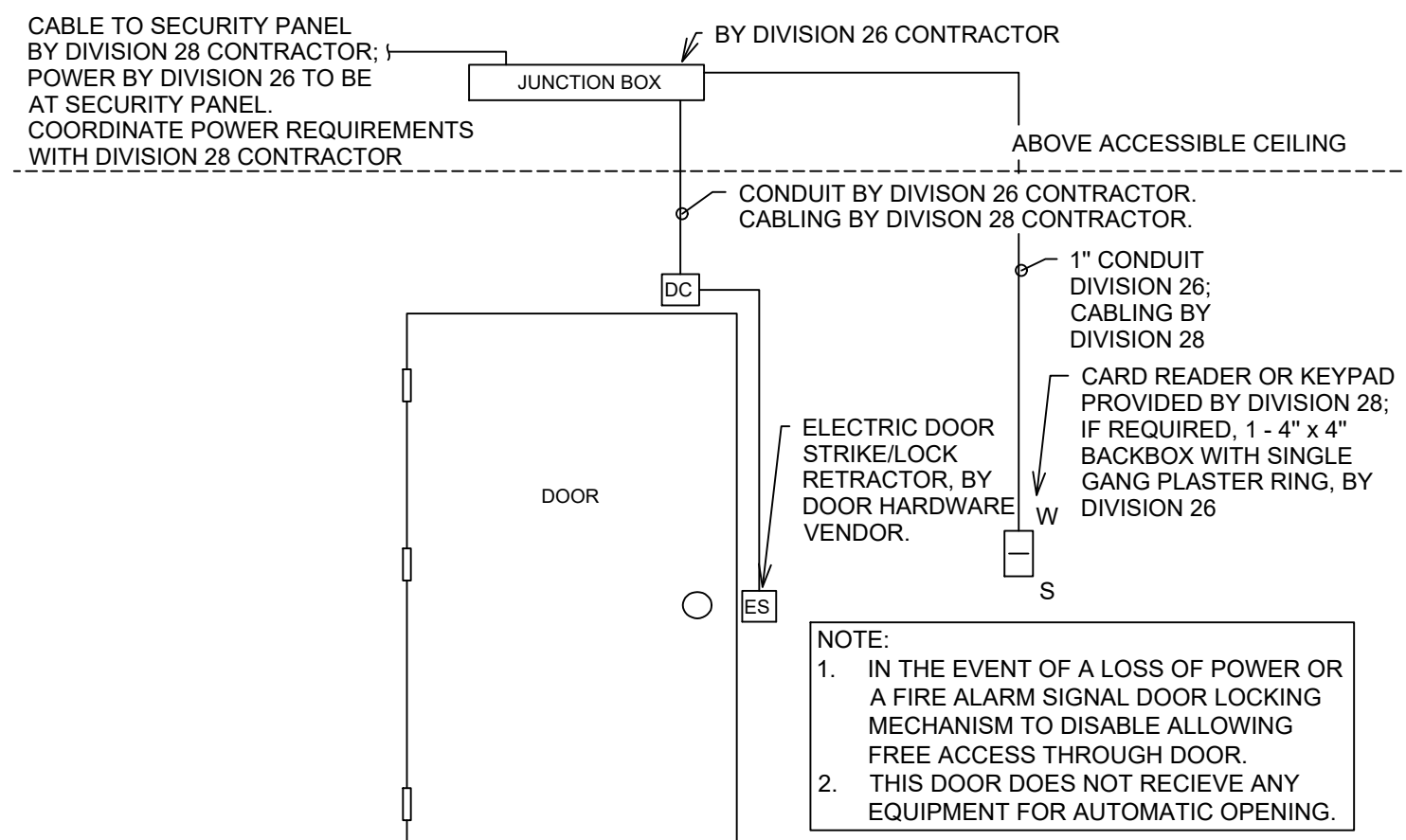
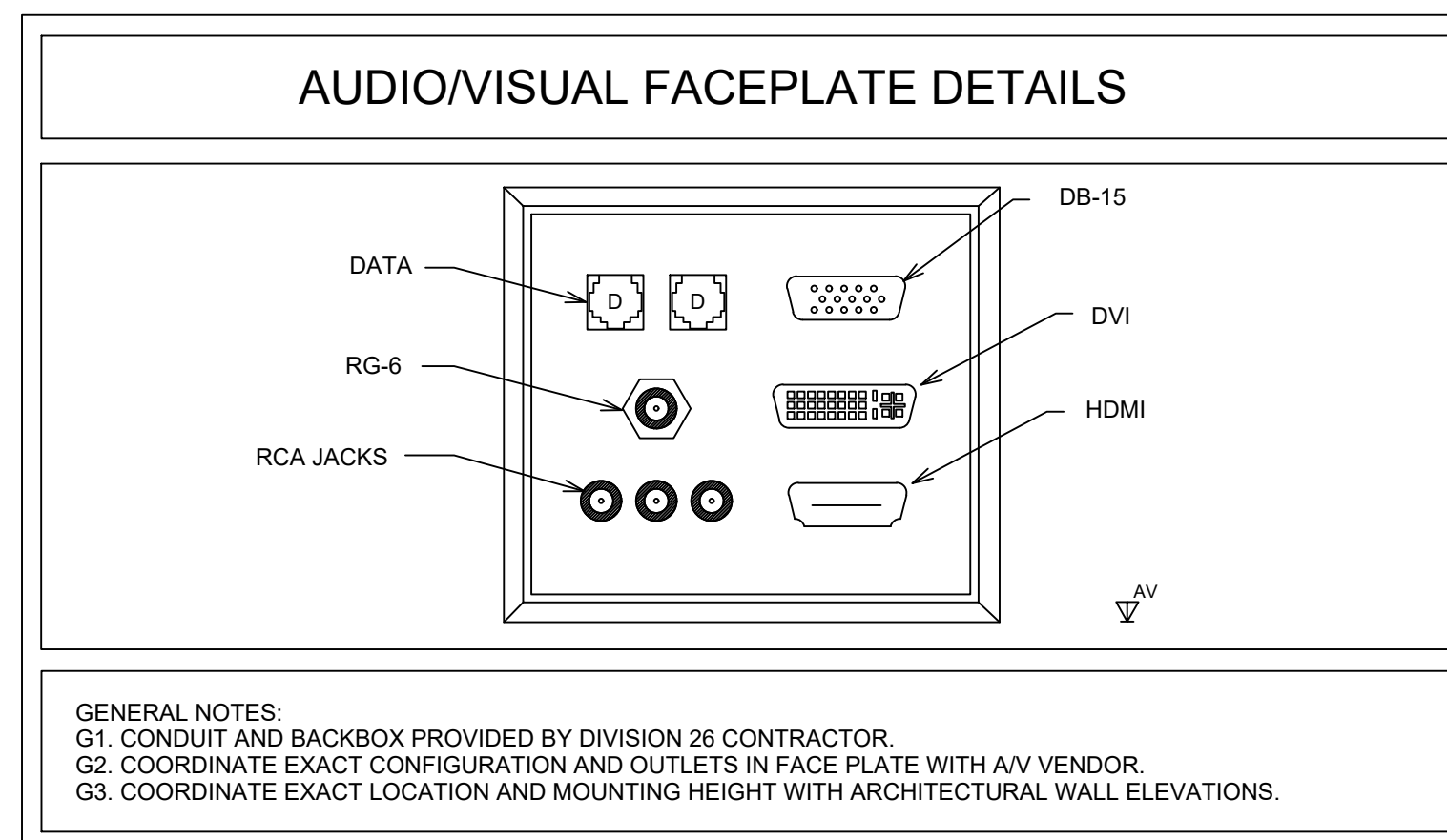
1 AUDIO/VISUAL FACE PLATE CONFIGURATION DETAIL
SCALE: NTS



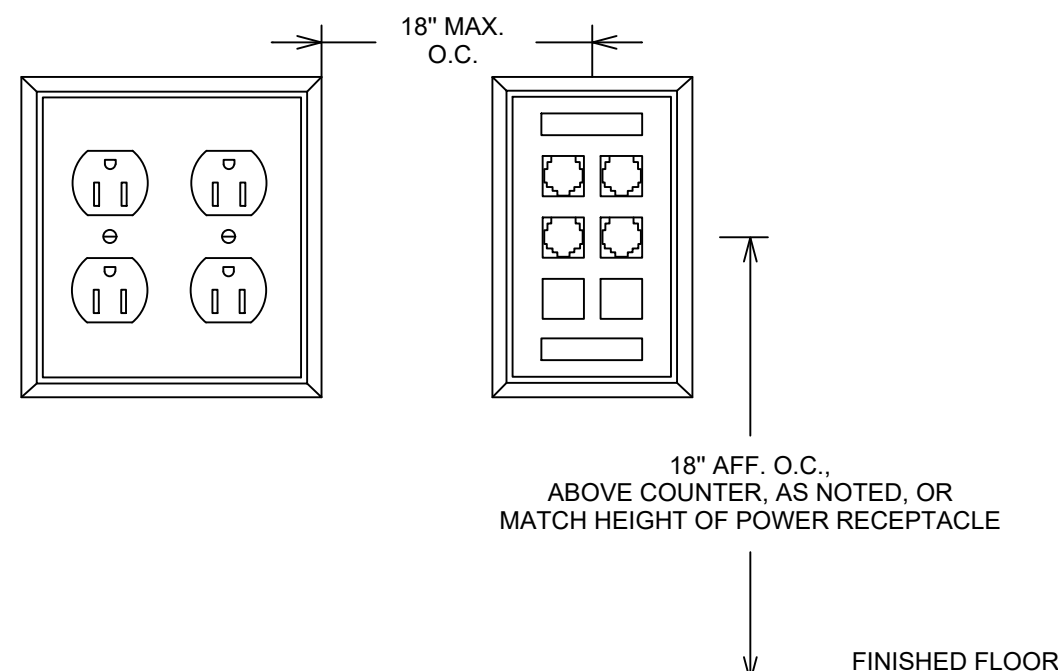
5 AUTOMATIC DOOR DETAIL - DOUBLE DOOR
SCALE: NTS



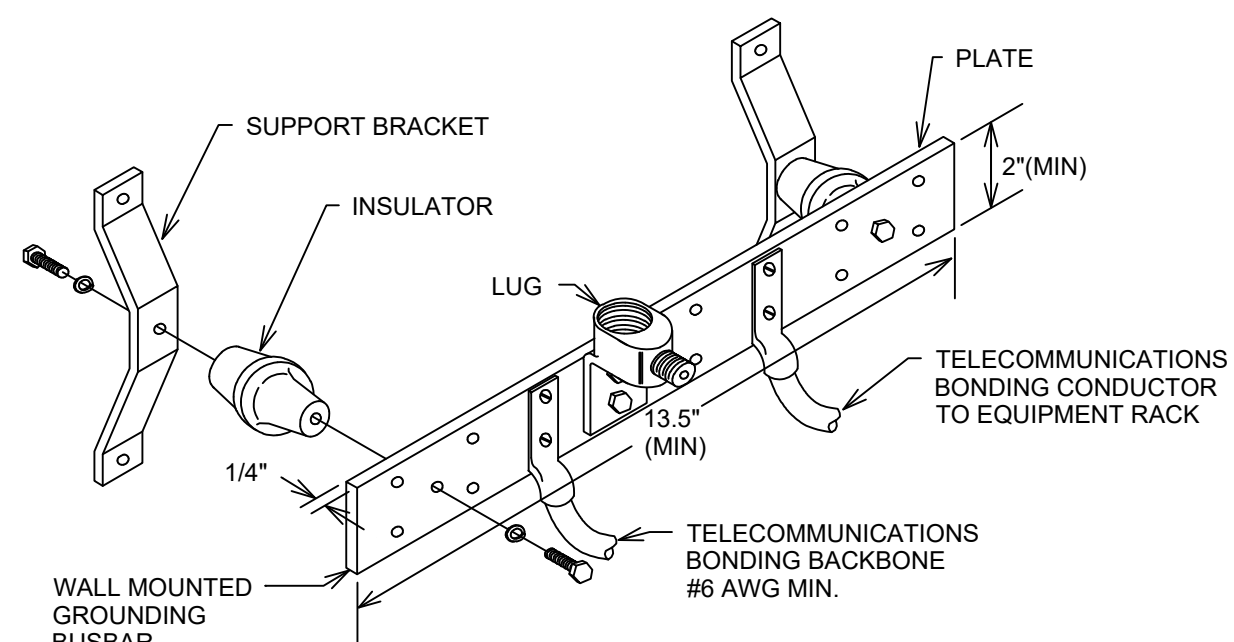
9 CONDUIT TO CABLE TRAY
SCALE: NTS



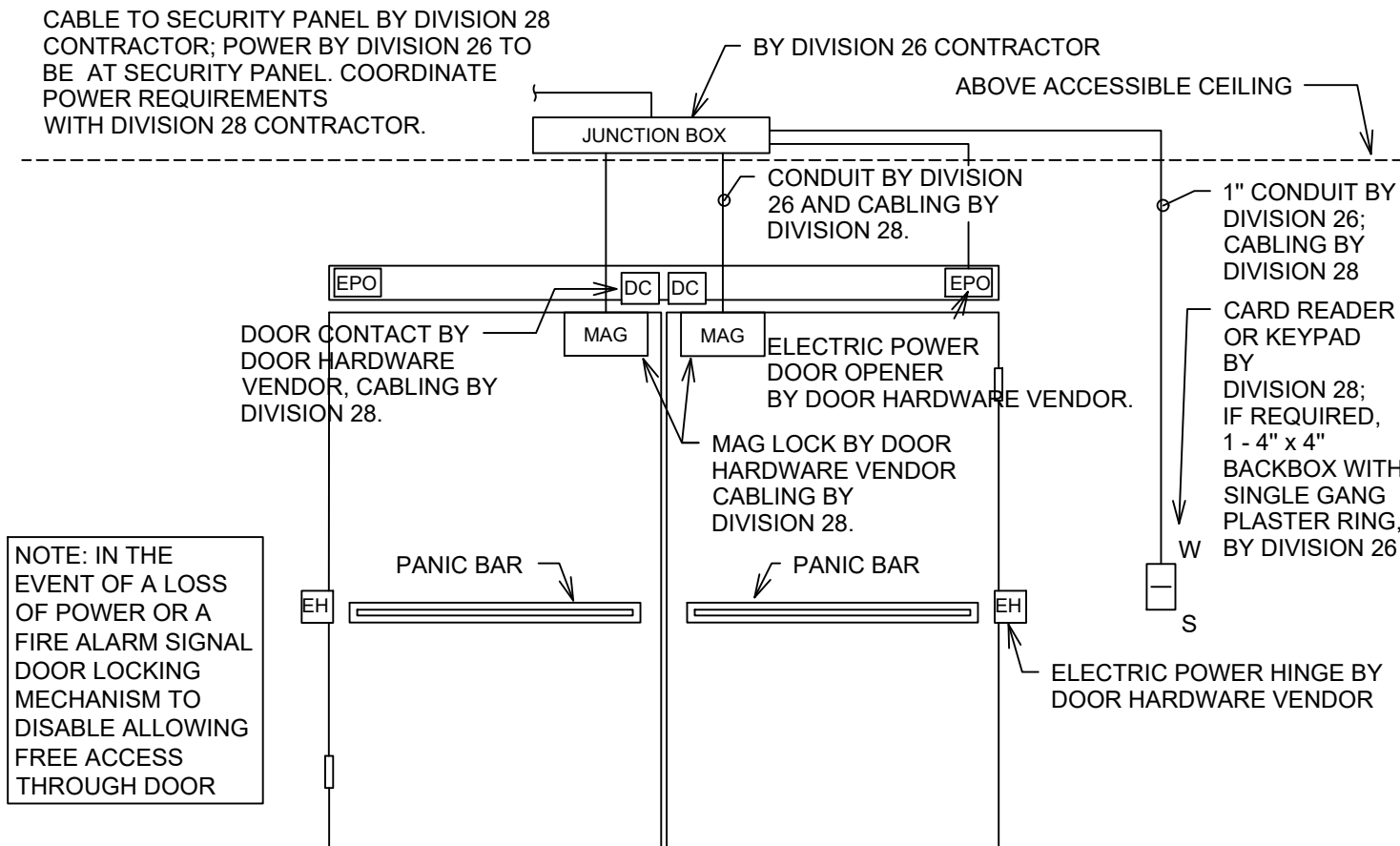
2 DOOR ACCESS CONTROL DETAIL - SINGLE DOOR
SCALE: NTS



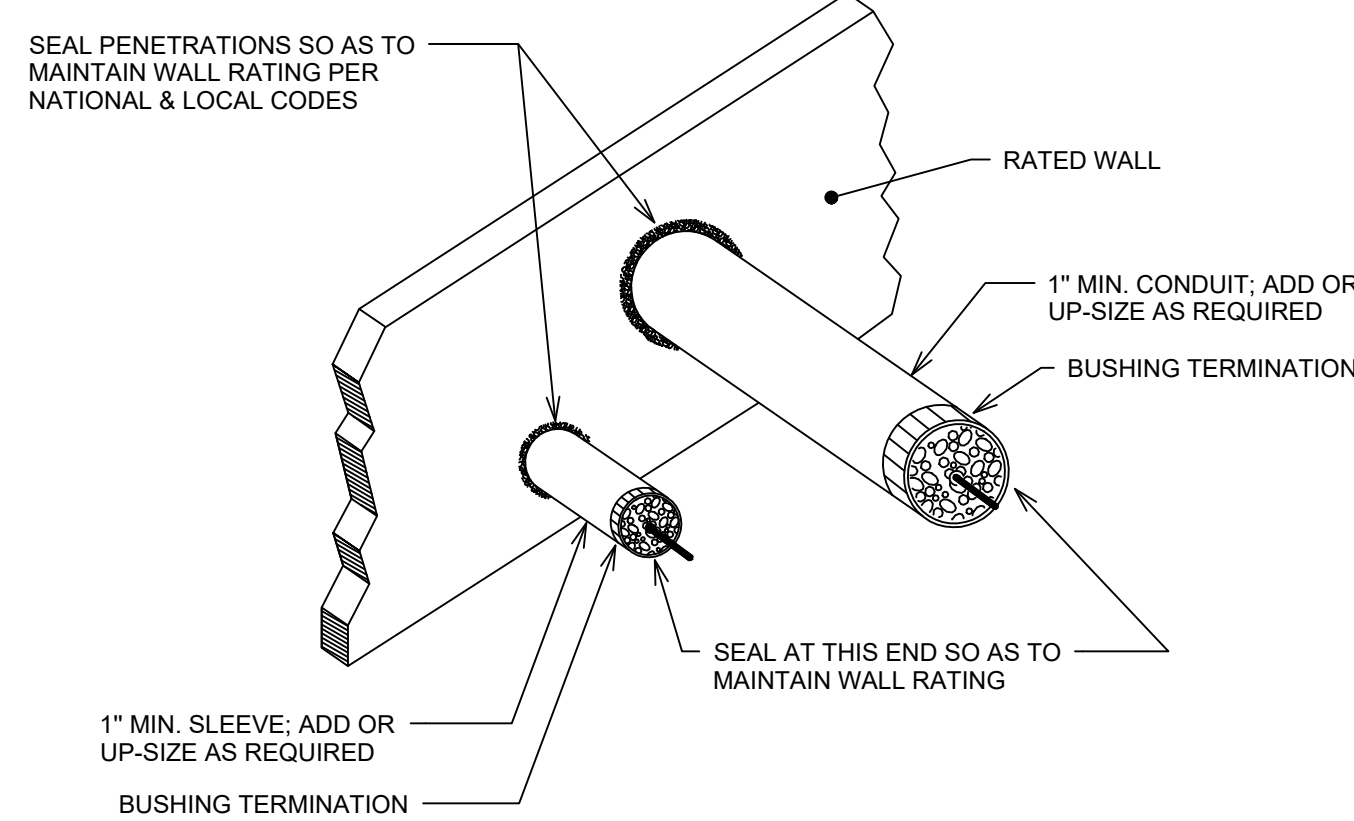
6 POWER OUTLET COORDINATION REQUIREMENTS
SCALE: NTS



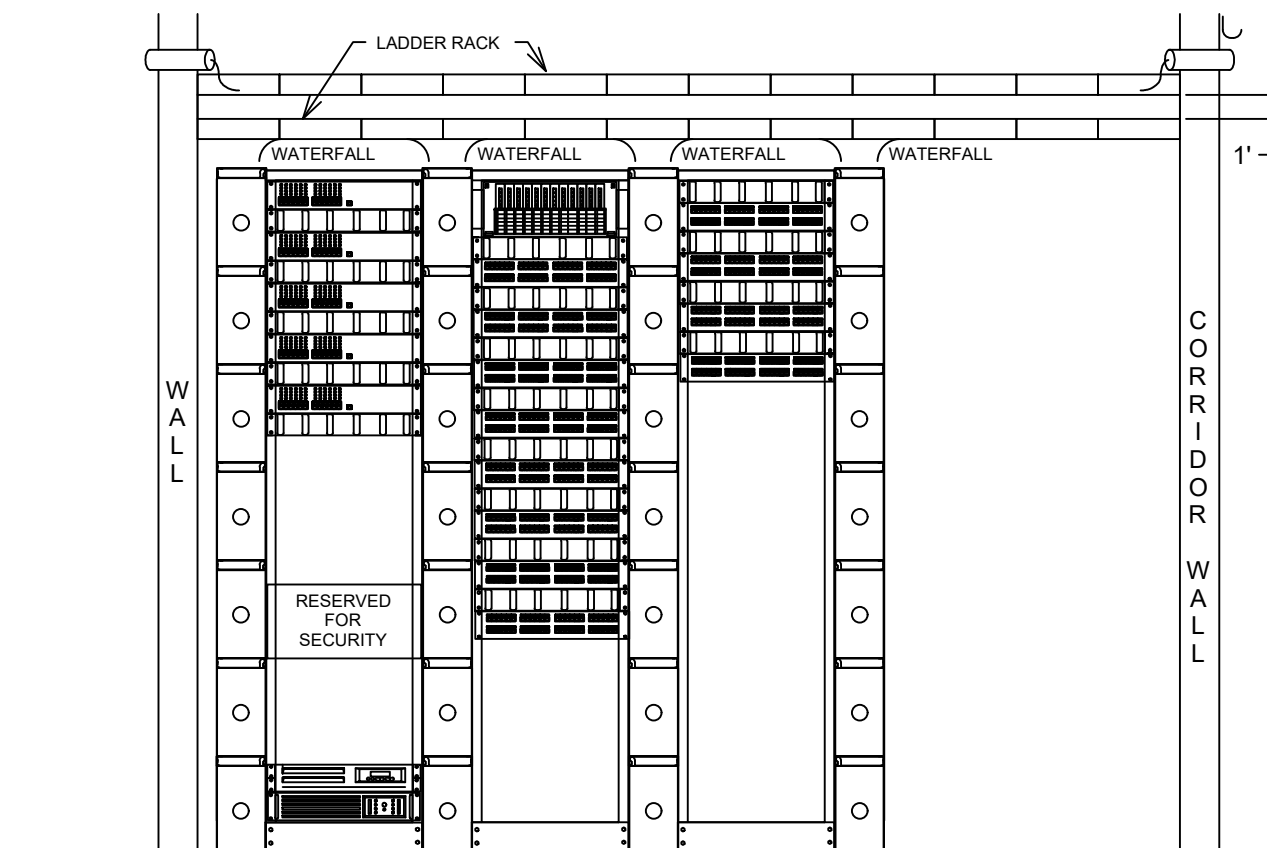
11 TELECOMMUNICATIONS GROUNDING BUS BAR (TGB)
SCALE: NTS



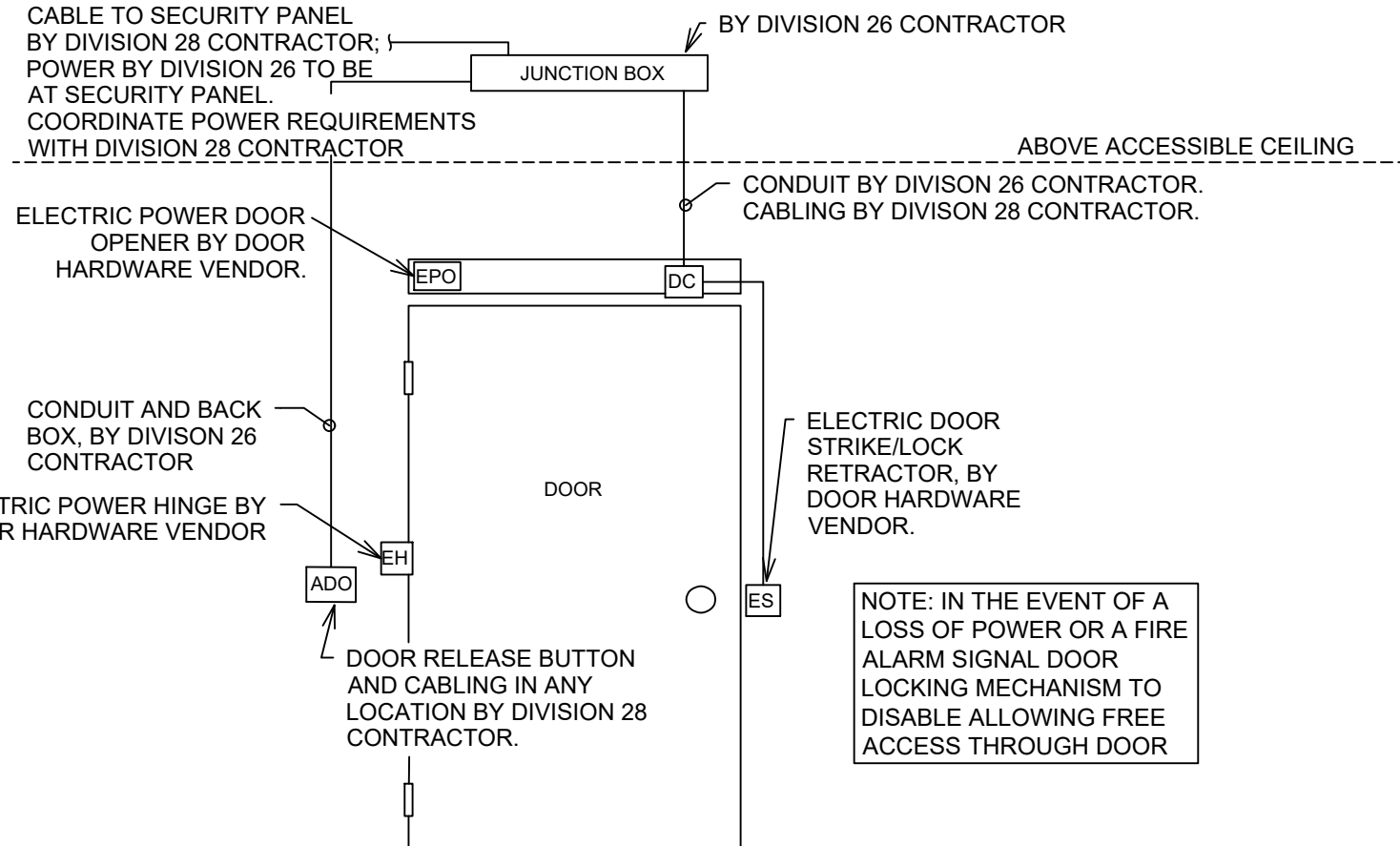
3 DOOR ACCESS CONTROL DETAIL - DOUBLE DOOR
SCALE: NTS



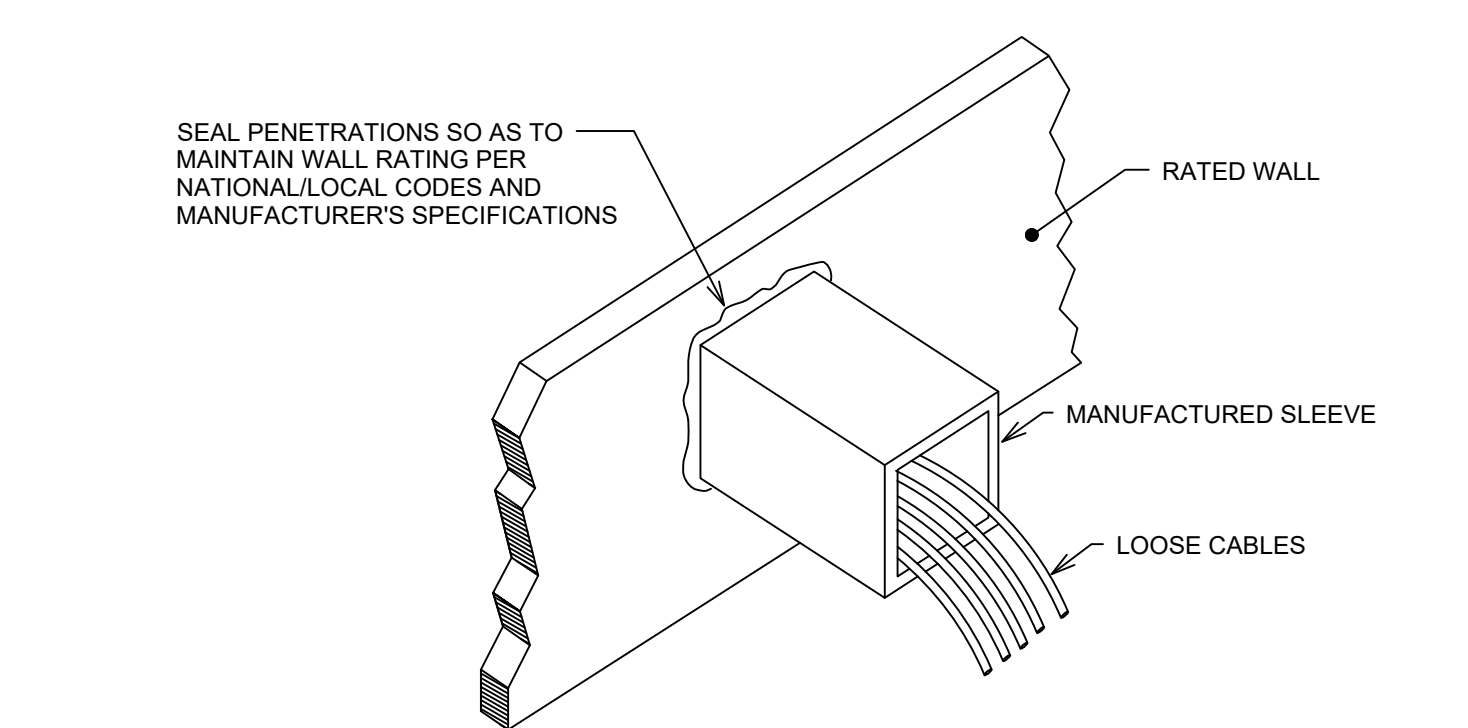
7 RATED WALL CONDUIT AND SLEEVE PENETRATIONS
SCALE: NTS



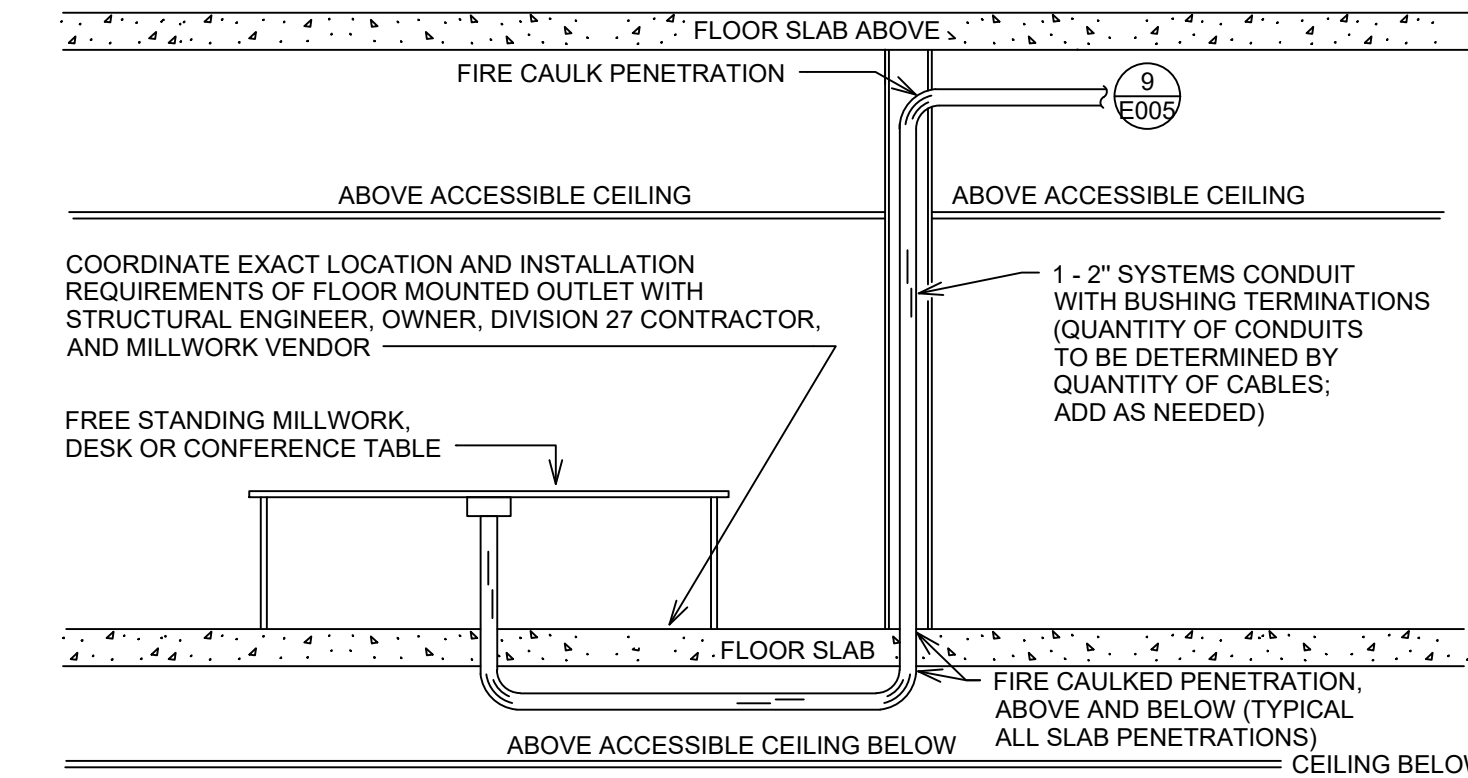
11 TYPICAL IDF RACK ELEVATION - 3 RACKS
SCALE: NTS



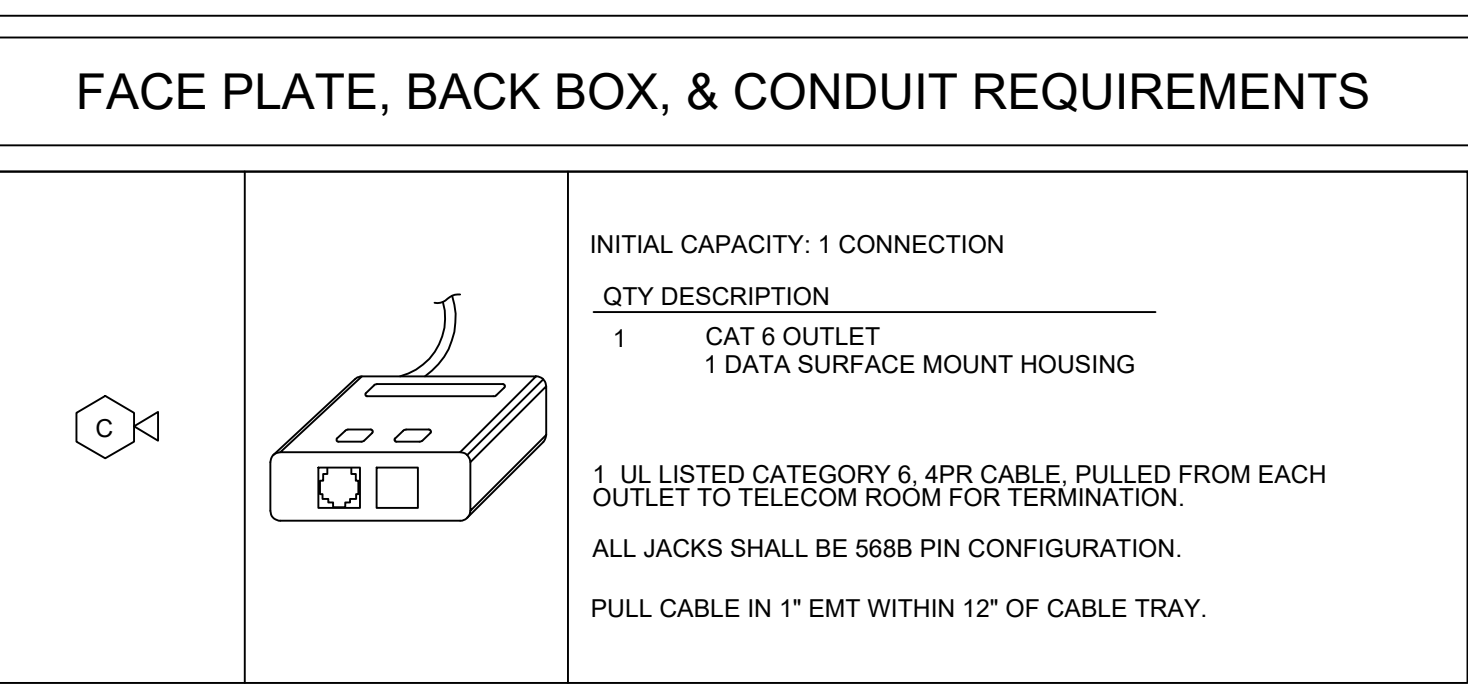
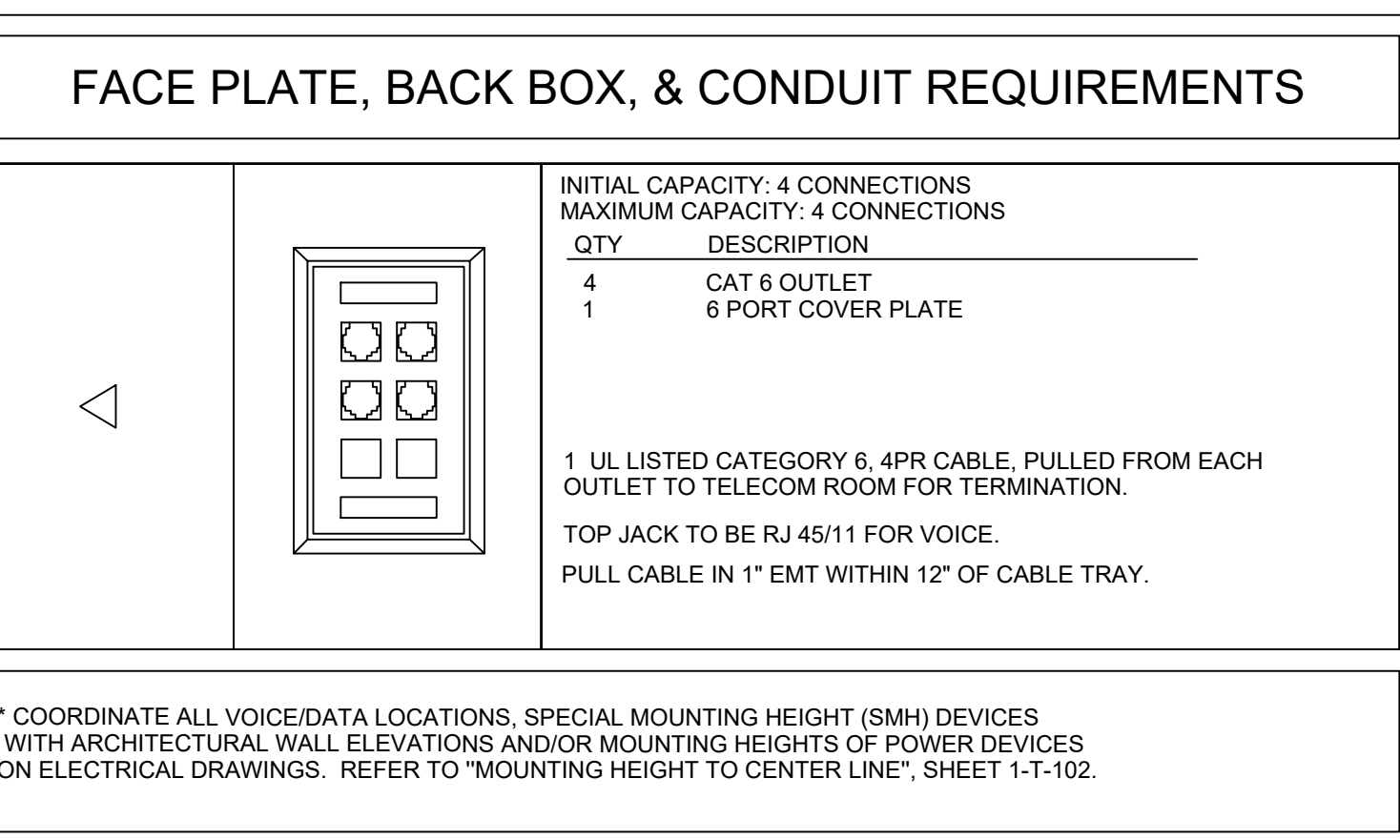
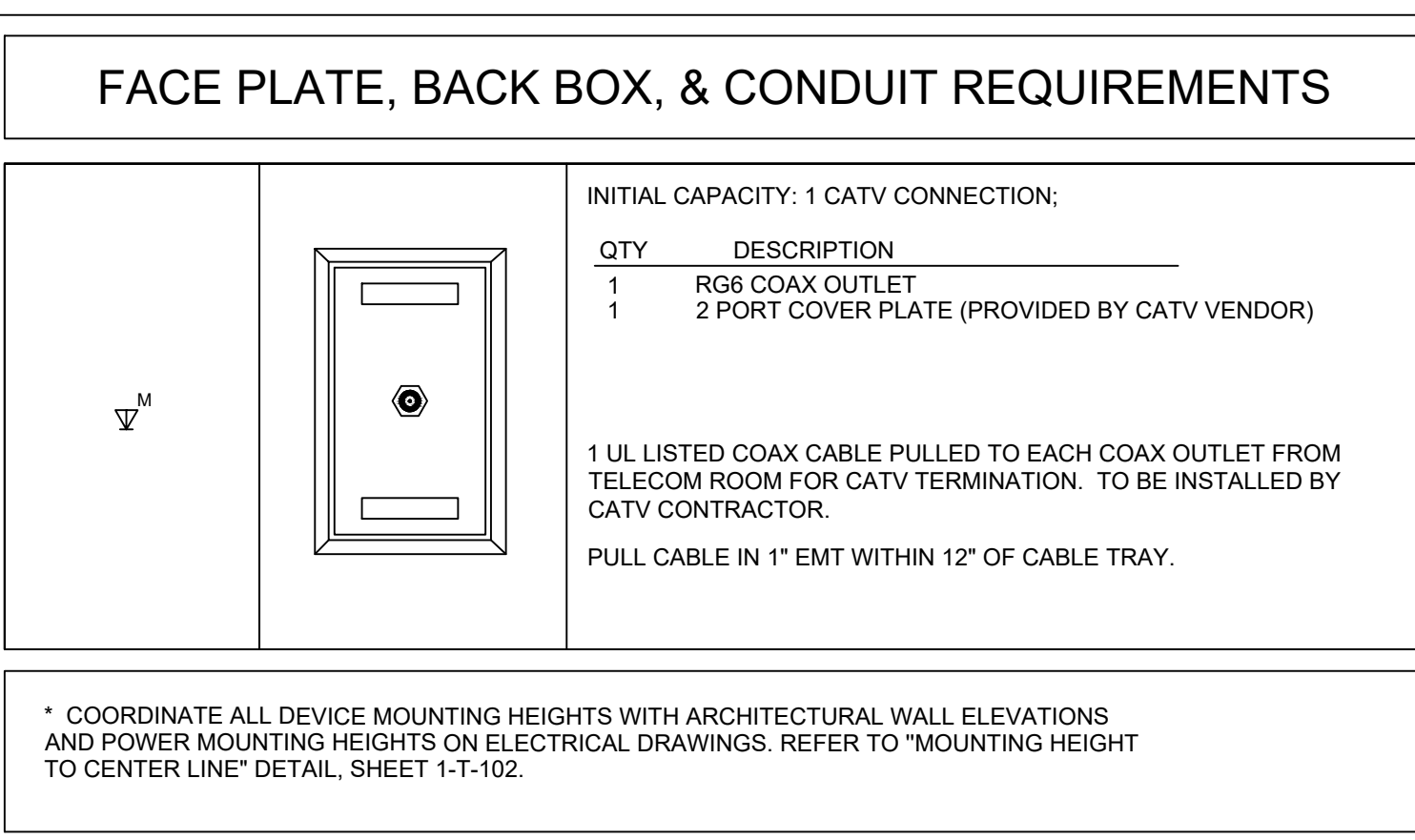
4 AUTOMATIC DOOR OPENER DETAIL - SINGLE DOOR
SCALE: NTS



8 MANUFACTURED SLEEVE WALL PENETRATION
SCALE: NTS



12 UNDER SLAB TO FLUSH MOUNTED FLOOR BOX
SCALE: NTS



CABLE JACKET COLOR LEGEND			
VOICE	- WHITE	VIDEO SURVEILLANCE	- VIOLET
DATA	- YELLOW	NURSE CALL	- BLUE
DATA	- GREEN	FIRE ALARM	- RED
DATA	- GREY	BAS & DAS	- BLACK
WIRELESS	- ORANGE		

COMPLIANCE REVIEW INCLUDED	2/23/2024
Revisions:	Date

CONSULTANTS:	
 TERRASITE DESIGN 1635 DEADWOOD AVENUE RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 791-1736	 Albertson Engineering Inc. 315 NORTH MAIN AVENUE, SUITE 200 SIOUX FALLS, SOUTH DAKOTA 57104 PH: (605) 274-0880
 FARRIS ENGINEERING 12700 WEST DODGE ROAD OMAHA, NEBRASKA 68154 PH: (402) 330-5900	 ALBERTSON ENGINEERING, INC. 315 NORTH MAIN AVENUE, SUITE 200 SIOUX FALLS, SOUTH DAKOTA 57104 PH: (605) 274-0880

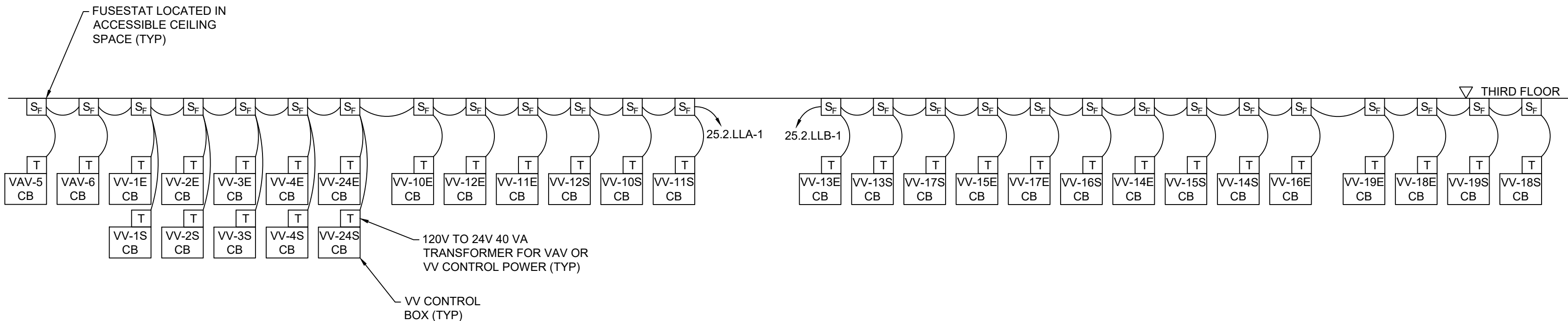
ARCHITECT	
 FOURFRONT DESIGN, INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM	

Drawing Title	TELECOMMUNICATIONS DETAILS
Approved: Project Director	Omaha VA Medical Center

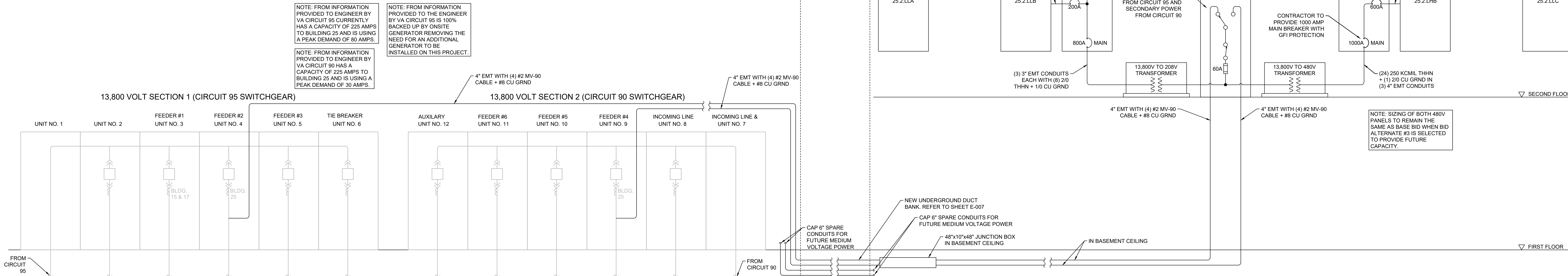
Project Title	Design/Construct Sterile Processing Service - Omaha VA Medical Center
Location	4101 Woolworth Ave #4199 Omaha, Ne 68105
Date	11/23/2020
Checked	WEW
Drawn	KAB
Project Number	16.2330.A08
Building Number	25
Drawing Number	E-005
Dwg. 166 of 193	

Office of Construction and Facilities Management
Department of Veterans Affairs

CONSTRUCTION DOCUMENTS

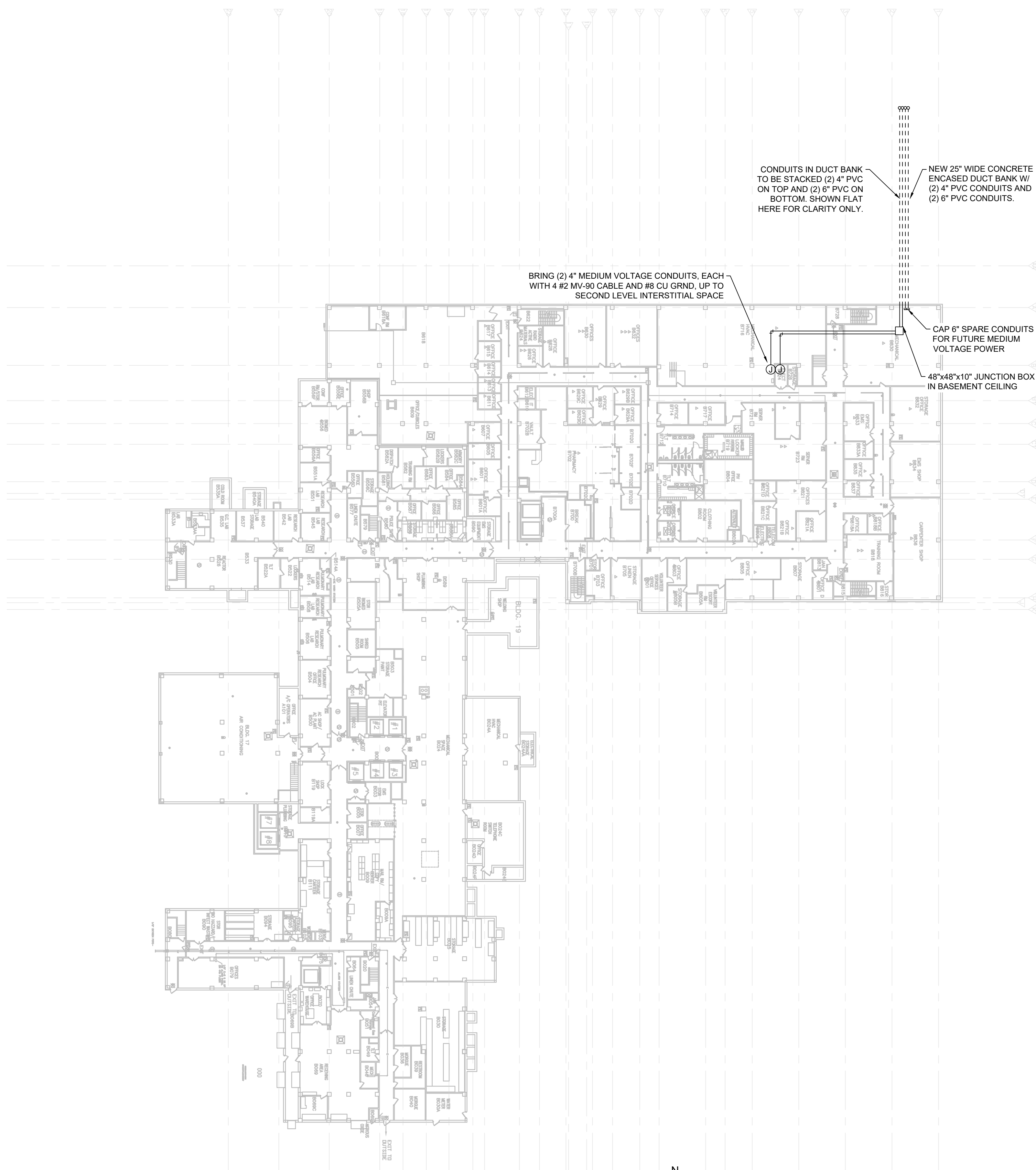


1 VAV A
SCALE: NTS

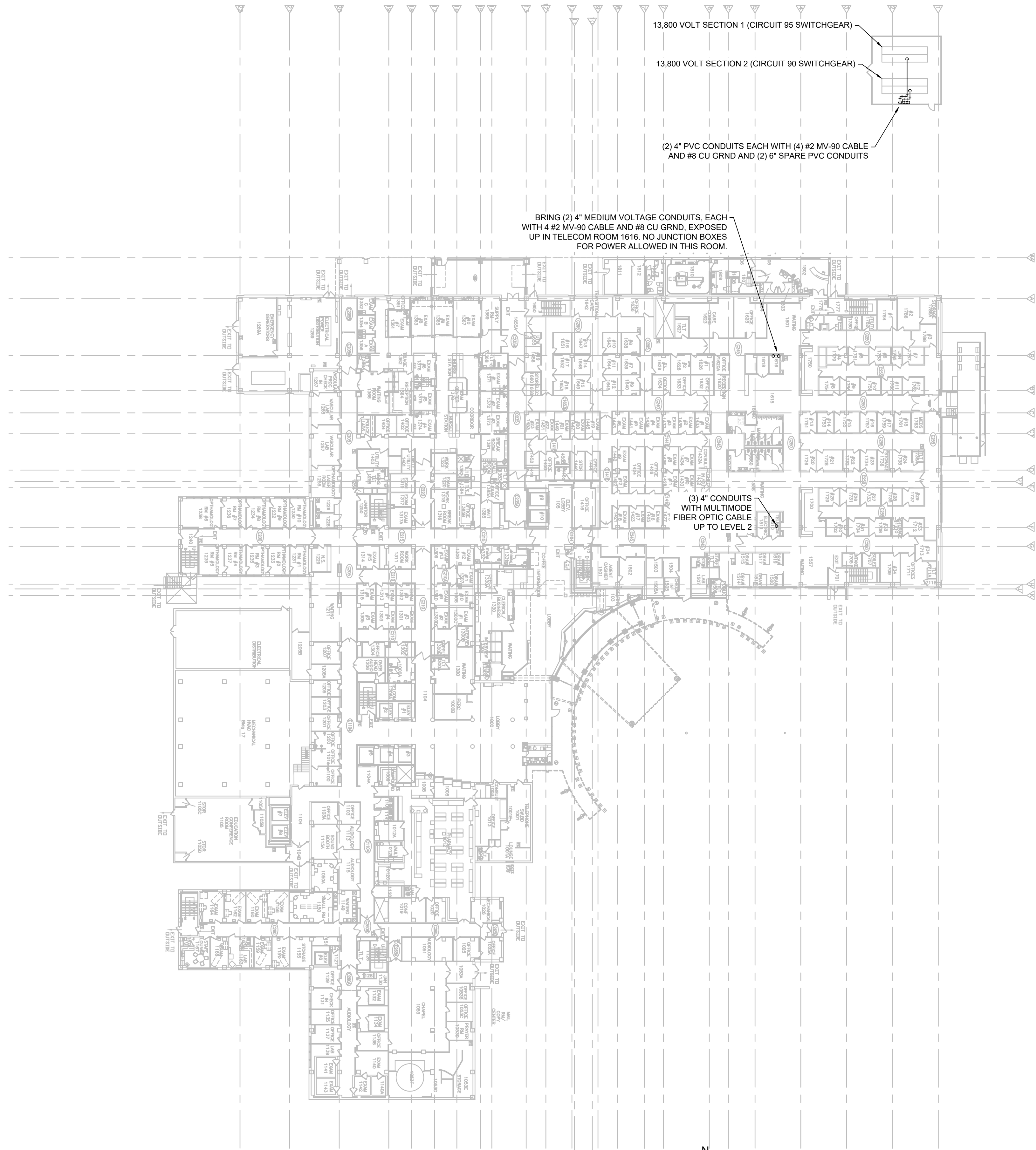
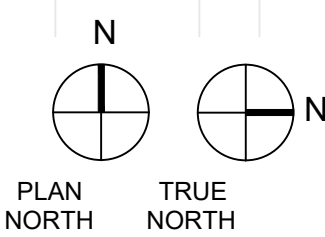


		CONSULTANTS:				ARCHITECT		Drawing Title ELECTRICAL SERVICE DETAILS		Project Title Design/Construct Sterile Processing Service - Omaha VA Medical Center		Project Number 16.2330.A08		Office of Construction and Facilities Management	
		 TERRASITE DESIGN 1635 DEADWOOD AVENUE RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 791-1736		 Albertson Engineering Inc. ALBERTSON ENGINEERING, INC. 315 NORTH MAIN AVENUE, SUITE 200 SIOUX FALLS, SOUTH DAKOTA 57104 PH: (605) 274-0880				 FOURFRONT DESIGN, INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM		Location 4101 Woolworth Ave #4199 Omaha, Ne 68105		Drawing Number 25			
COMPLIANCE REVIEW INCLUDED		 FARRIS ENGINEERING 12700 WEST DODGE ROAD OMAHA, NEBRASKA 68154 PH: (402) 768-5900 FAX: (402) 768-5900						Approved: Project Director Omaha VA Medical Center		Date 11/23/2020		Checked WEW		Drawn KAB	
2/23/2024		FARRIS ENGINEERING 12700 WEST DODGE ROAD OMAHA, NEBRASKA 68154 PH: (402) 768-5900 FAX: (402) 768-5900								E-006		Dwa. 167 of 193		 Department of Veterans Affairs	
2/23/2024															

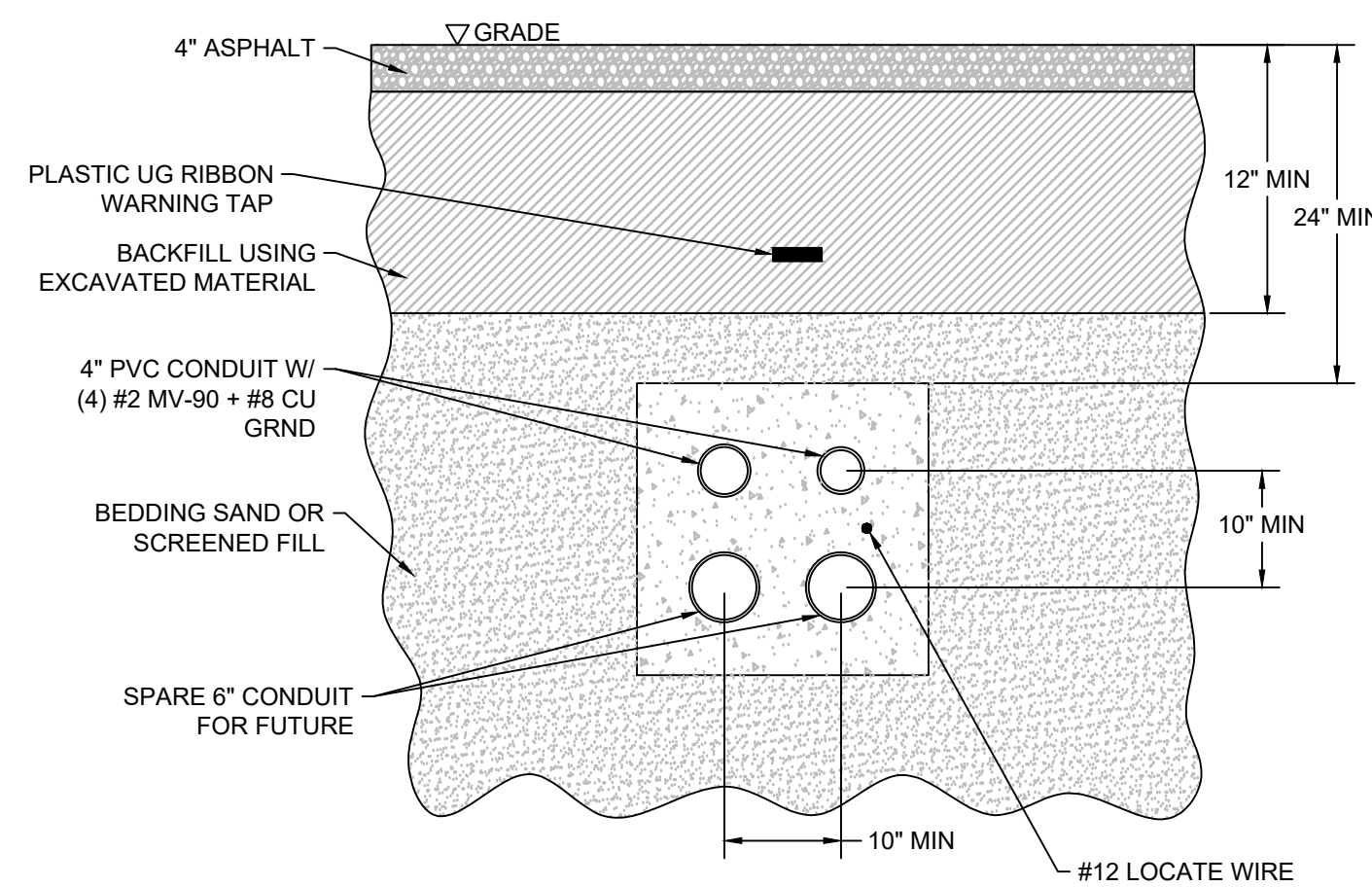
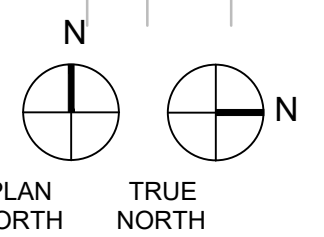
one eighth inch = one foot
one quarter inch = one foot
three eighths inch = one foot
three quarters inch = one foot
one inch = one foot
one and one half inches = one foot
two inches = one foot
three inches = one foot
four inches = one foot
five inches = one foot
six inches = one foot
seven inches = one foot
eight inches = one foot
nine inches = one foot
ten inches = one foot
eleven inches = one foot
twelve inches = one foot



1 BASEMENT FLOORPLAN - SERVICE PATHWAY
SCALE: 1/32" = 1'



2 FIRST LEVEL FLOORPLAN - SERVICE PATHWAY
SCALE: 1/32" = 1'

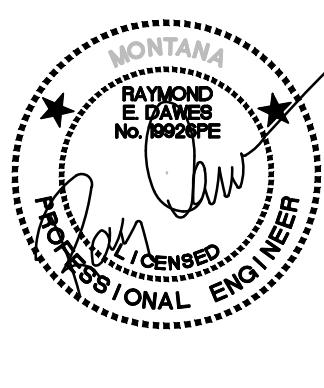


3 DUCT BANK DETAIL
SCALE: NTS

CONSTRUCTION DOCUMENTS

COMPLIANCE REVIEW INCLUDED	2/23/2024
Revisions:	Date

CONSULTANTS:	
 TERRASITE DESIGN 1635 DEADWOOD AVENUE RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 791-1736	 ALBERTSON ENGINEERING, INC. 315 NORTH MAIN AVENUE, SUITE 200 SIOUX FALLS, SOUTH DAKOTA 57104 PH: (605) 274-0880
 FARRIS ENGINEERING 12700 WEST DODGE ROAD OMAHA, NEBRASKA 68154 PH: (402) 330-5900	

ARCHITECT	
 FOURFRONT DESIGN, INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM	

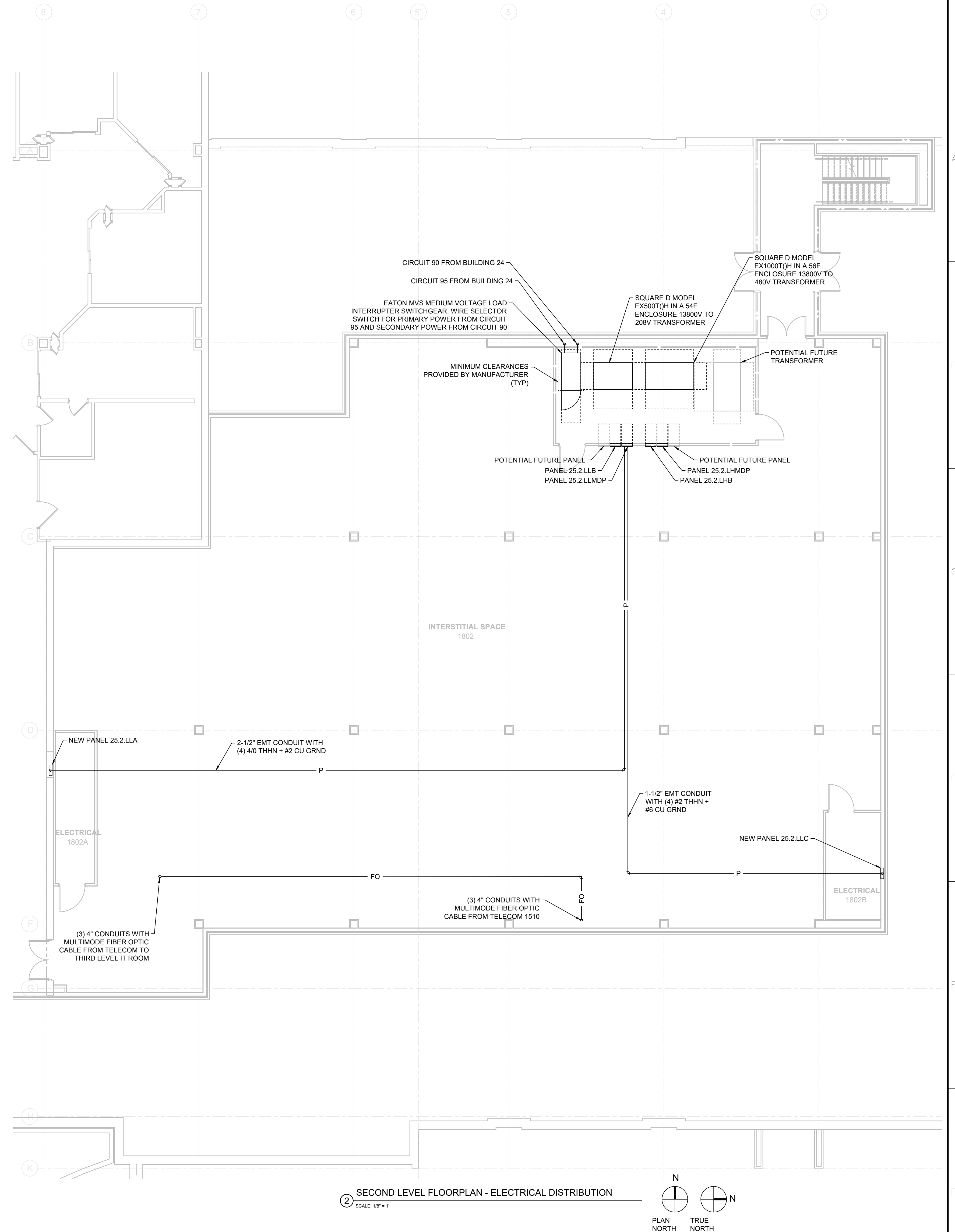
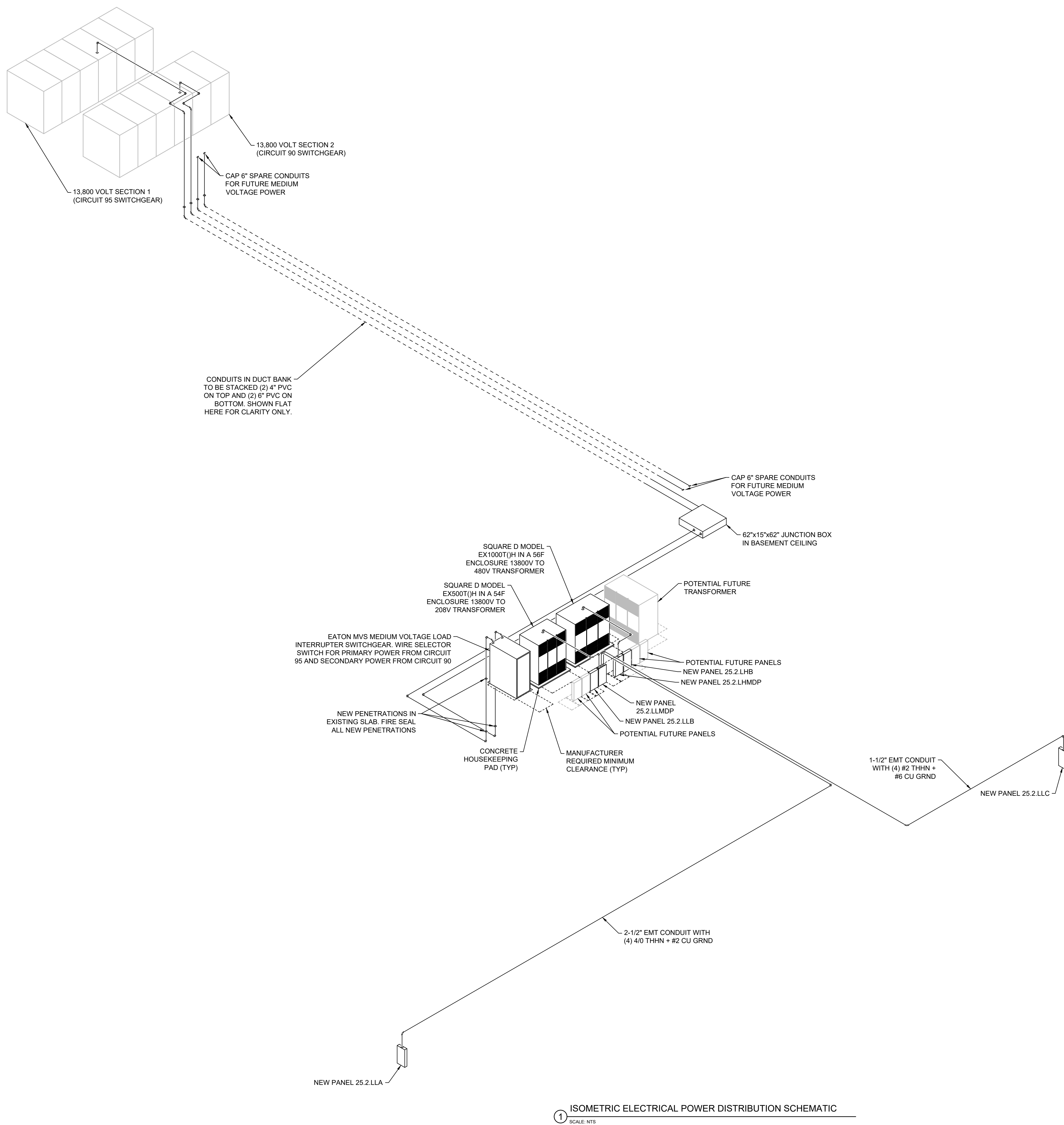
Drawing Title	ELECTRICAL SITE PLANS
Approved: Project Director	Omaha VA Medical Center

Project Title	Design/Construct Sterile Processing Service - Omaha VA Medical Center
Location	4101 Woolworth Ave #4199 Omaha, Ne 68105
Date	11/23/2020
Checked	WEW
Drawn	KAB

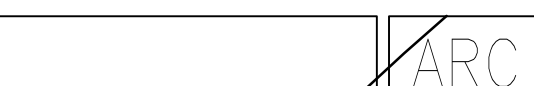
Project Number	16.2330.A08
Building Number	25
Drawing Number	E-007
Dwg. 168 of 193	

Office of Construction and Facilities Management
Department of Veterans Affairs

one eighth inch = one foot
one quarter inch = one foot
three eighths inch = one foot
one half inch = one foot
three quarters inch = one foot
one inch = one foot
one and one half inches = one foot
two inches = one foot
three inches = one foot
four inches = one foot
five inches = one foot
six inches = one foot
seven inches = one foot
eight inches = one foot
nine inches = one foot
ten inches = one foot
eleven inches = one foot
twelve inches = one foot



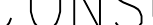
CONSTRUCTION DOCUMENTS

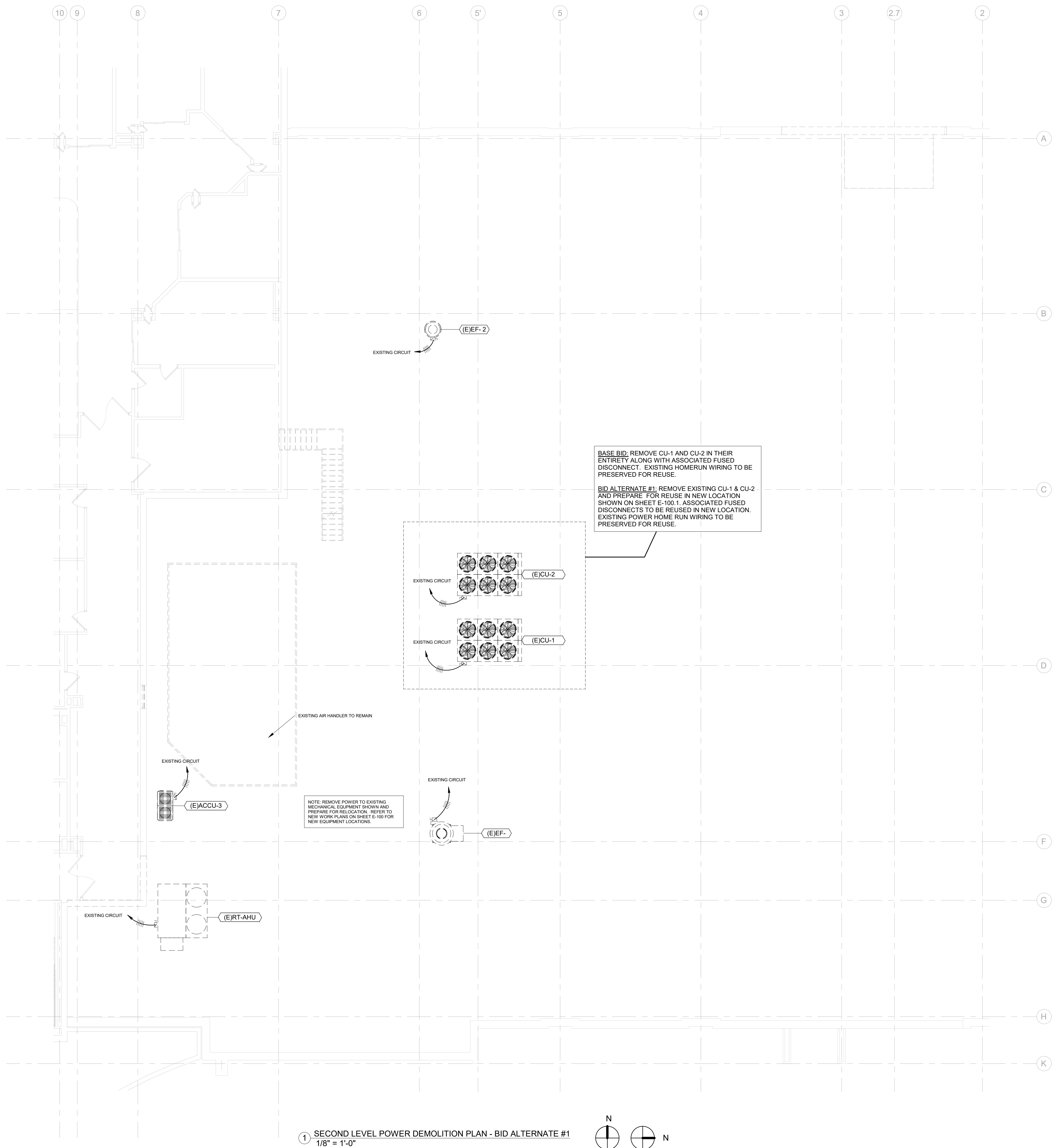
		CONSULTANTS:  TERRASITE DESIGN 1635 DEADWOOD AVENUE RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 791-1736  ALBERTSON ENGINEERING, INC. 315 NORTH MAIN AVENUE, SUITE 200 SIOUX FALLS, SOUTH DAKOTA 57104 PH: (605) 274-0880  FARRIS ENGINEERING 12700 WEST DODGE ROAD OMAHA, NEBRASKA 68154 PH: (402) 330-5900		  FOURFRONT DESIGN, INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM		
COMPLIANCE REVIEW INCLUDED 2/23/2024 Revisions: Date				ARCHITECT  FOURFRONT DESIGN, INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM		
		Drawing Title INTERSTITIAL SPACE FLOORPLANS Approved: Project Director Omaha VA Medical Center		Project Title Design/Construct Sterile Processing Service - Omaha VA Medical Center Location 4101 Woolworth Ave #4199 Omaha, Ne 68105 Date 11/23/2020 Checked WEW Drawn KAB	Project Number 16.2330.A08 Building Number 25 Drawing Number E-008 Dwg. 169 of 193	Office of Construction and Facilities Management Department of Veterans Affairs

Office of
Construction
and Facilities
Management



Department of
Veterans Affairs

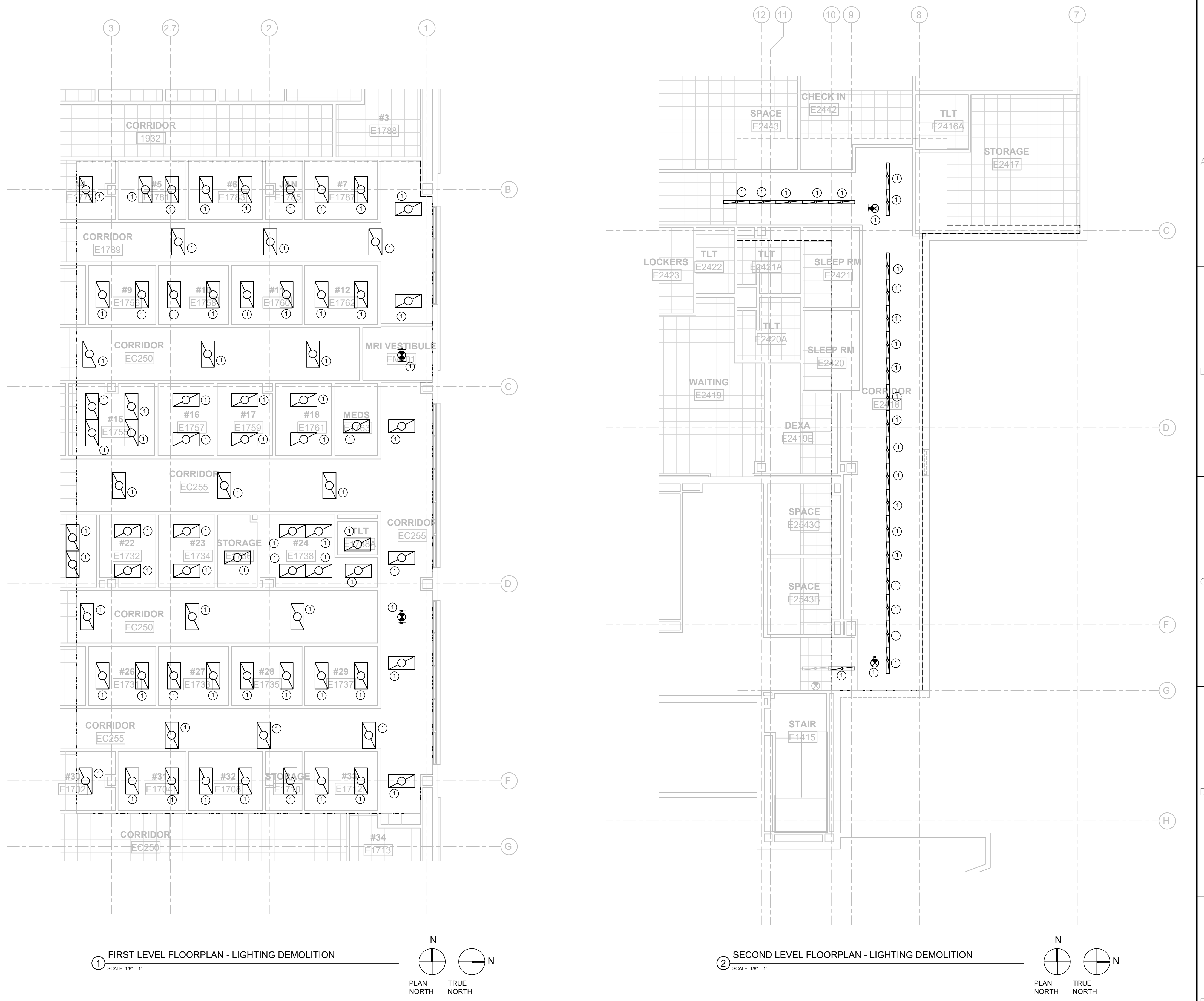
		CONSULTANTS:  TERRASITE DESIGN 1635 DEADWOOD AVENUE RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 791-1736  ALBERTSON ENGINEERING, INC. 315 NORTH MAIN AVENUE, SUITE 200 SIOUX FALLS, SOUTH DAKOTA 57104 PH: (605) 274-0880  FARRIS ENGINEERING 12700 WEST DODGE ROAD OMAHA, NEBRASKA 68154 PH: (402) 330-5900				ARCHITECT  FOURFRONT DESIGN, INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM		16.2330.A08					
COMPLIANCE REVIEW INCLUDED		2/23/2024				Drawing Title		Project Title		Project Number		Office of Construction and Facilities Management	
Revisions:		Date				SECOND LEVEL ELECTRICAL DEMOLITION PLAN		Design/Construct Sterile Processing Service - Omaha VA Medical Center		16.2330.A08		Department of Veterans Affairs	
						Approved: Project Director		Location		Drawing Number			
						Omaha VA Medical Center		4101 Woolworth Ave #4199 Omaha, Ne 68105		ED-100			
								Date		Checked		Drawn	
								11/23/2020		WEW		KAB	
										Dwg. 170 of 193			



CONSTRUCTION DOCUMENTS

		CONSULTANTS:				ARCHITECT				Drawing Title SECOND LEVEL ELECTRICAL DEMOLITION PLAN - BID ALTERNATE #1		Project Title Design/Construct Sterile Processing Service - Omaha VA Medical Center		Project Number 16.2330.A08		Office of Construction and Facilities Management	
		 Terrasite Design 1635 DEADWOOD AVENUE RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 791-1736		 Albertson Engineering Inc. 315 NORTH MAIN AVENUE, SUITE 200 SIOUX FALLS, SOUTH DAKOTA 57104 PH: (605) 274-0880		 FOURFRONT DESIGN, INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM				Approved: Project Director Omaha VA Medical Center		Location 4101 Woolworth Ave #4199 Omaha, Ne 68105		Drawing Number ED-100.1			
COMPLIANCE REVIEW INCLUDED		2/23/2024		 FARRIS ENGINEERING 12700 WEST DODGE ROAD OMAHA, NEBRASKA 68154 PH: (402) 330-5900				16.2330.A08				Date 11/24/2020		Checked WEW		Drawn JMS	
Revisions:		Date												Dwg. 171 of 193		Department of Veterans Affairs	

one eighth inch = one foot
one quarter inch = one foot
three eighths inch = one foot
one half inch = one foot
three quarters inch = one foot
one inch = one foot
one and one half inches = one foot
two inches = one foot
three inches = one foot



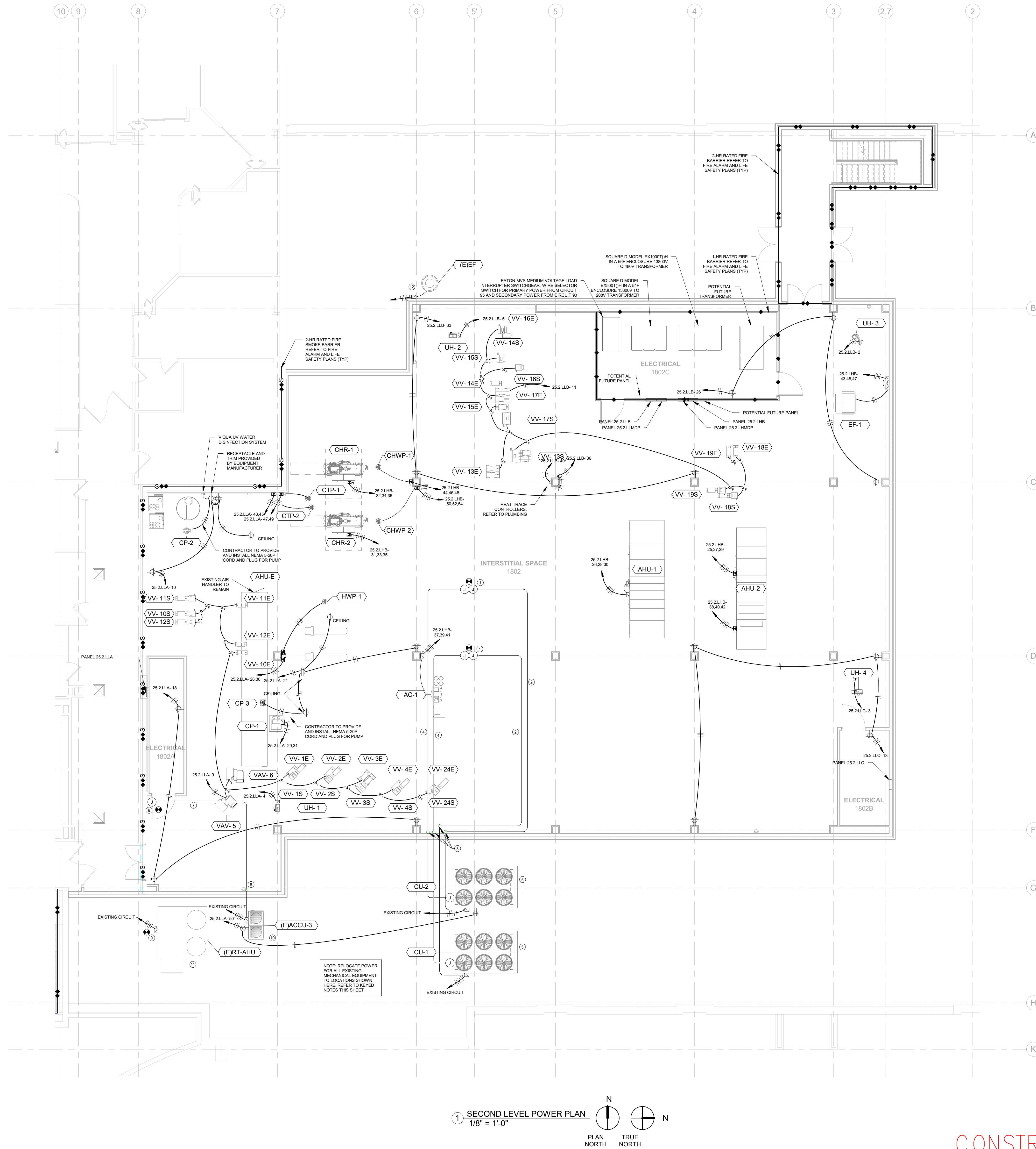
KEYED ELECTRICAL NOTES

① REMOVE EXISTING CEILING MOUNTED LUMINAIRE FOR CONSTRUCTION OF NEW STRUCTURAL. REINSTALL EXISTING LUMINAIRE IN SAME LOCATION IN NEW CEILING.

CONSTRUCTION DOCUMENTS

CONSULTANTS:		ARCHITECT		Drawing Title		Project Title		Project Number		Office of Construction and Facilities Management	
TERRASITE DESIGN 1635 DEADWOOD AVENUE RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 791-1736		ALBERTSON ENGINEERING, INC. 315 NORTH MAIN AVENUE, SUITE 200 SIOUX FALLS, SOUTH DAKOTA 57104 PH: (605) 274-0880		FOURFRONT DESIGN, INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM		Design/Construct Sterile Processing Service - Omaha VA Medical Center		16.2330.A08			
FARRIS ENGINEERING 12700 WEST DODGE ROAD OMAHA, NEBRASKA 68154 PH: (402) 330-5900						Approved: Project Director Omaha VA Medical Center		Location 4101 Woolworth Ave #4199 Omaha, Ne 68105		Building Number 25	
COMPLIANCY REVIEW INCLUDED Revisions:		2/23/2024 Date				Date 11/23/2020		Checked WEW		Drawn KAB	
								ED-101 Dwg. 172 of 193			

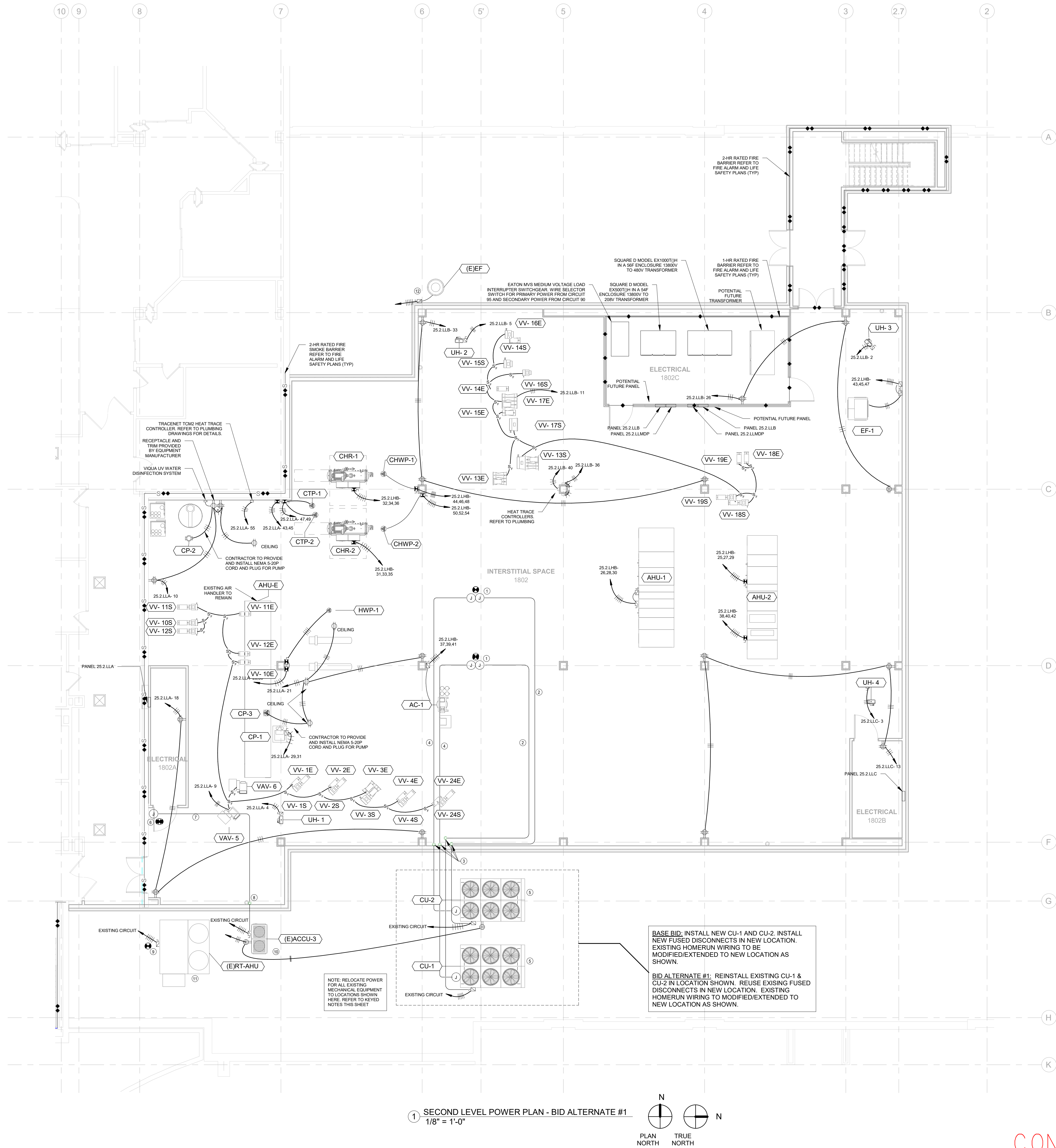
- KEYED ELECTRICAL NOTES**
- 1 NEW JUNCTION BOX AT EXISTING POWER LOCATION OF EXISTING DATA ROOM COOLING UNITS. INSTALL TO EXTEND POWER TO NEW OUTDOOR UNIT LOCATION.
 - 2 NEW 1-1/2" EMT CONDUIT AND CONDUCTOR TO EXTEND POWER FROM EXISTING DATA ROOM OUTDOOR COOLING UNIT TO NEW LOCATION. INSTALL AT CEILING OF 2ND FLOOR.
 - 3 CONDUIT DOWN TO ROOF LEVEL BEFORE PENETRATING NEW WALL.
 - 4 NEW CONDUIT AND BOXES TO EXTEND EXISTING CONTROL WIRE FROM EXISTING OUTDOOR CONDENSING UNIT LOCATION TO NEW LOCATION. FOLLOW HEIGHT AND PATH OF NEW POWER SHOWN.
 - 5 NEW OUTDOOR CONDENSING UNITS LOCATION FOR EXISTING DATA ROOM. REFER TO MECHANICAL PLANS PROVIDE NEW FUSED DISCONNECTS. FOR PHASING AND SHUT DOWN RULES.
 - 6 ADD NEW JUNCTION BOX TO INTERCEPT EXISTING POWER AT EXISTING ACCU-3 LOCATION. ADD BOX FOR CONTROL WIRE ALSO.
 - 7 NEW 1" EMT AND 3/4" EMT NEAR CEILING TO EXTEND POWER AND CONTROL TO NEW ACCU-3 LOCATION.
 - 8 DROP DOWN TO ROOF HEIGHT AND PENETRATE WALL.
 - 9 EXTEND POWER AND CONTROL TO MODIFIED LOCATION OF EXISTING RT-AHU. ADD BOXES, CONDUIT AND CONDUCTOR AS APPROPRIATE TO RELOCATE. REUSE DISCONNECT.
 - 10 NEW ACCU-3 LOCATION. REFER TO DEMOLITION PLANS FOR EXISTING LOCATION. REUSE DISCONNECT.
 - 11 NEW RT-AHU LOCATION. REFER TO DEMOLITION PLANS FOR EXISTING LOCATION.
 - 12 NEW LOCATION OF EXISTING FAN. MODIFY POWER AND EXTEND TO NEW LOCATION. PROVIDE NEW FUSED DISCONNECT. REFER TO DEMOLITION PLANS FOR EXISTING LOCATION.



CONSTRUCTION DOCUMENTS

				CONSULTANTS:				ARCHITECT		Drawing Title		Project Title		Project Number		Office of Construction and Facilities Management			
				 TerraSite Design Copyright © TerraSite Design, Inc. All Rights Reserved. TERRASITE DESIGN 1635 DEADWOOD AVENUE RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 791-1736  Albertson Engineering Inc. ALBERTSON ENGINEERING, INC. 315 NORTH MAIN AVENUE, SUITE 200 SIOUX FALLS, SOUTH DAKOTA 57104 PH: (605) 274-0880		 FOURFRONT DESIGN INC. FOURFRONT DESIGN, INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM		SECOND LEVEL POWER PLAN		Design/Construct Sterile Processing Service - Omaha VA Medical Center		16.2330.A08							
				 FARRIS ENGINEERING GRAPHIC ARCHITECTURE • INTERIOR DESIGN • CONSTRUCTION SERVICES PH: 800.241.1824 FARRIS ENGINEERING 12700 WEST DODGE ROAD OMAHA, NEBRASKA 68154 PH: (402) 330-5900		 FOURFRONT DESIGN, INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM		Approved: Project Director Omaha VA Medical Center		Location 4101 Woolworth Ave #4199 Omaha, Ne 68105		Drawing Number E-100							
COMPLIANCE REVIEW INCLUDED		2/23/2024										Date 11/23/2020		Checked WEW		Drawing JMS		Dwg. 173 of 193	
Revisions:		Date																Department of Veterans Affairs	

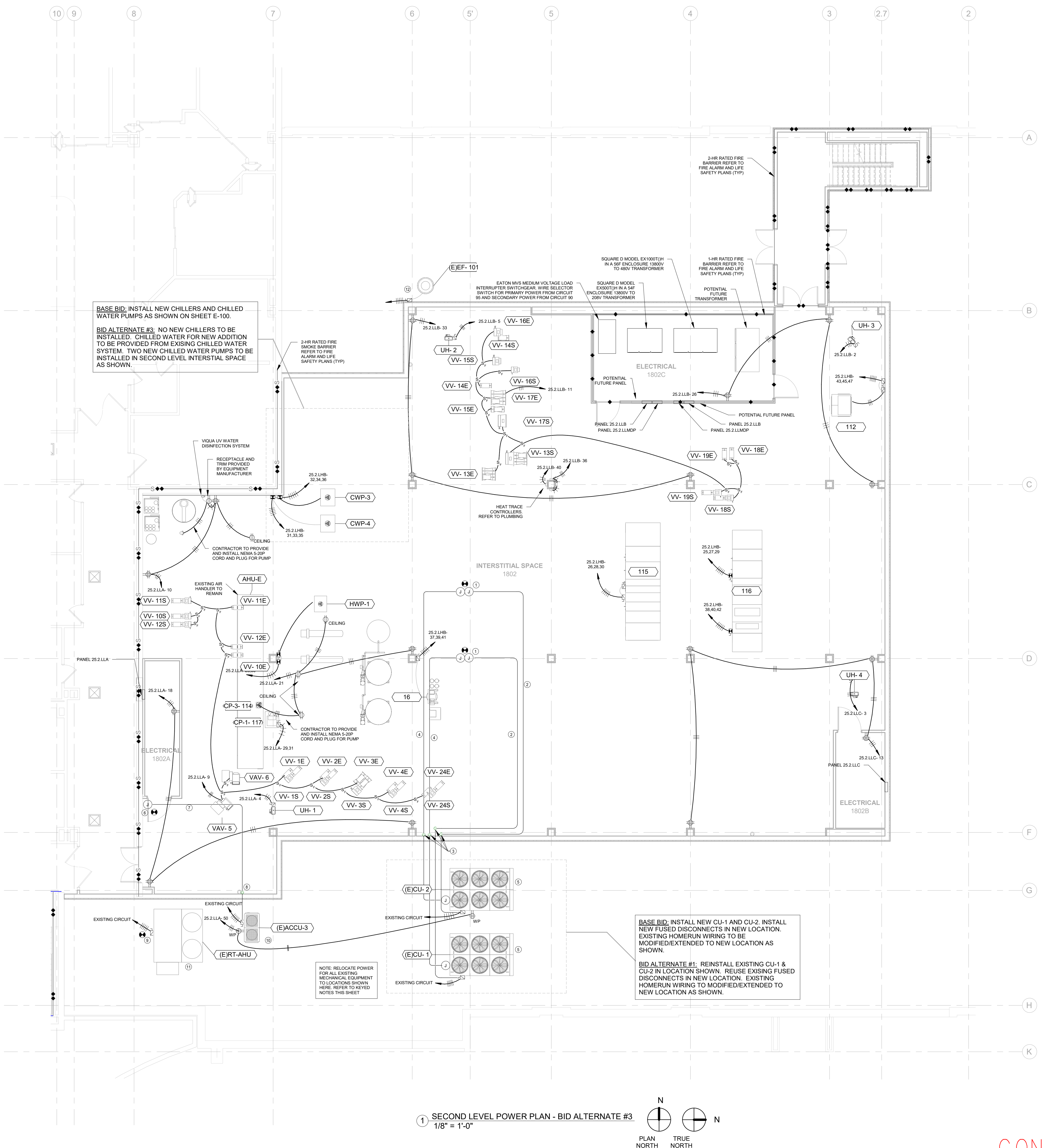
- KEYED ELECTRICAL NOTES
- NEW JUNCTION BOX AT EXISTING POWER LOCATION OF EXISTING DATA ROOM COOLING UNITS. INSTALL TO EXTEND POWER TO NEW OUTDOOR UNIT LOCATION.
 - NEW 1-1/2" EMT CONDUIT AND CONDUCTOR TO EXTEND POWER FROM EXISTING DATA ROOM OUTDOOR COOLING UNIT TO NEW LOCATION. INSTALL AT CEILING OF 2ND FLOOR.
 - CONDUIT DOWN TO ROOF LEVEL BEFORE PENETRATING NEW WALL.
 - NEW CONDUIT AND BOXES TO EXTEND EXISTING CONTROL WIRE FROM EXISTING OUTDOOR CONDENSING UNIT LOCATION TO NEW LOCATION. FOLLOW HEIGHT AND PATH OF NEW POWER SHOWN.
 - NEW OUTDOOR CONDENSING UNITS LOCATION FOR EXISTING DATA ROOM. REFER TO MECHANICAL PLANS PROVIDE NEW FUSED DISCONNECTS. FOR PHASING AND SHUT DOWN RULES.
 - ADD NEW JUNCTION BOX TO INTERCEPT EXISTING POWER AT EXISTING ACCU-3 LOCATION. ADD BOX FOR CONTROL WIRE ALSO.
 - NEW 1" EMT AND 3/4" EMT NEAR CEILING TO EXTEND POWER AND CONTROL TO NEW ACCU-3 LOCATION.
 - DROP DOWN TO ROOF HEIGHT AND PENETRATE WALL.
 - EXTEND POWER AND CONTROL TO MODIFIED LOCATION OF EXISTING RT-AHU. ADD BOXES, CONDUIT AND CONDUCTOR AS APPROPRIATE TO RELOCATE. REUSE DISCONNECT.
 - NEW ACCU-3 LOCATION. REFER TO DEMOLITION PLANS FOR EXISTING LOCATION. REUSE DISCONNECT.
 - NEW RT-AHU LOCATION. REFER TO DEMOLITION PLANS FOR EXISTING LOCATION.
 - NEW LOCATION OF EXISTING FAN. MODIFY POWER AND EXTEND TO NEW LOCATION. PROVIDE NEW FUSED DISCONNECT. REFER TO DEMOLITION PLANS FOR EXISTING LOCATION.



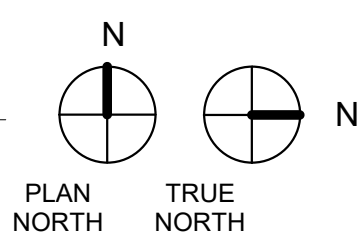
CONSTRUCTION DOCUMENTS

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

- KEYED ELECTRICAL NOTES
- 1 NEW JUNCTION BOX AT EXISTING POWER LOCATION OF EXISTING DATA ROOM COOLING UNITS. INSTALL TO EXTEND POWER TO NEW OUTDOOR UNIT LOCATION.
 - 2 NEW 1-1/2" EMT CONDUIT AND CONDUCTOR TO EXTEND POWER FROM EXISTING DATA ROOM OUTDOOR COOLING UNIT TO NEW LOCATION. INSTALL AT CEILING OF 2ND FLOOR.
 - 3 CONDUIT DOWN TO ROOF LEVEL BEFORE PENETRATING NEW WALL.
 - 4 NEW CONDUIT AND BOXES TO EXTEND EXISTING CONTROL WIRE FROM EXISTING OUTDOOR CONDENSING UNIT LOCATION TO NEW LOCATION. FOLLOW HEIGHT AND PATH OF NEW POWER SHOWN.
 - 5 NEW OUTDOOR CONDENSING UNITS LOCATION FOR EXISTING DATA ROOM. REFER TO MECHANICAL PLANS. PROVIDE NEW FUSED DISCONNECTS. FOR PHASING AND SHUT DOWN RULES.
 - 6 ADD NEW JUNCTION BOX TO INTERCEPT EXISTING POWER AT EXISTING ACCU-3 LOCATION. ADD BOX FOR CONTROL WIRE ALSO.
 - 7 NEW 1" EMT AND 3/4" EMT NEAR CEILING TO EXTEND POWER AND CONTROL TO NEW ACCU-3 LOCATION.
 - 8 DROP DOWN TO ROOF HEIGHT AND PENETRATE WALL.
 - 9 EXTEND POWER AND CONTROL TO MODIFIED LOCATION OF EXISTING RT-AHU. ADD BOXES, CONDUIT AND CONDUCTOR AS APPROPRIATE TO RELOCATE. REUSE DISCONNECT.
 - 10 NEW ACCU-3 LOCATION. REFER TO DEMOLITION PLANS FOR EXISTING LOCATION. REUSE DISCONNECT.
 - 11 NEW RT-AHU LOCATION. REFER TO DEMOLITION PLANS FOR EXISTING LOCATION.
 - 12 NEW LOCATION OF EXISTING FAN. MODIFY POWER AND EXTEND TO NEW LOCATION. PROVIDE NEW FUSED DISCONNECT. REFER TO DEMOLITION PLANS FOR EXISTING LOCATION.



1 SECOND LEVEL POWER PLAN - BID ALTERNATE #3
1/8" = 1'-0"



CONSTRUCTION DOCUMENTS

COMPLIANCE REVIEW INCLUDED Revisions: 2/23/2024 Date		CONSULTANTS: TERRASITE DESIGN 1635 DEADWOOD AVENUE RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 791-1736 ALBERTSON ENGINEERING, INC. 315 NORTH MAIN AVENUE, SUITE 200 SIOUX FALLS, SOUTH DAKOTA 57104 PH: (605) 274-0880 FARRIS ENGINEERING 12700 WEST DODGE ROAD OMAHA, NEBRASKA 68154 PH: (402) 330-5900		ARCHITECT FOURFRONT DESIGN, INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM		Drawing Title SECOND LEVEL POWER PLAN BID ALTERNATE #3 Approved: Project Director Omaha VA Medical Center 16.2330.A08	Project Title Design/Construct Sterile Processing Service - Omaha VA Medical Center Location 4101 Woolworth Ave #4199 Omaha, Ne 68105 Date 11/24/2020 Checked WEW Drawn JMS	Project Number 16.2330.A08 Building Number 25 Drawing Number E-100.2 Dwg. 175 of 193	Office of Construction and Facilities Management
--	--	---	--	--	--	--	---	--	---

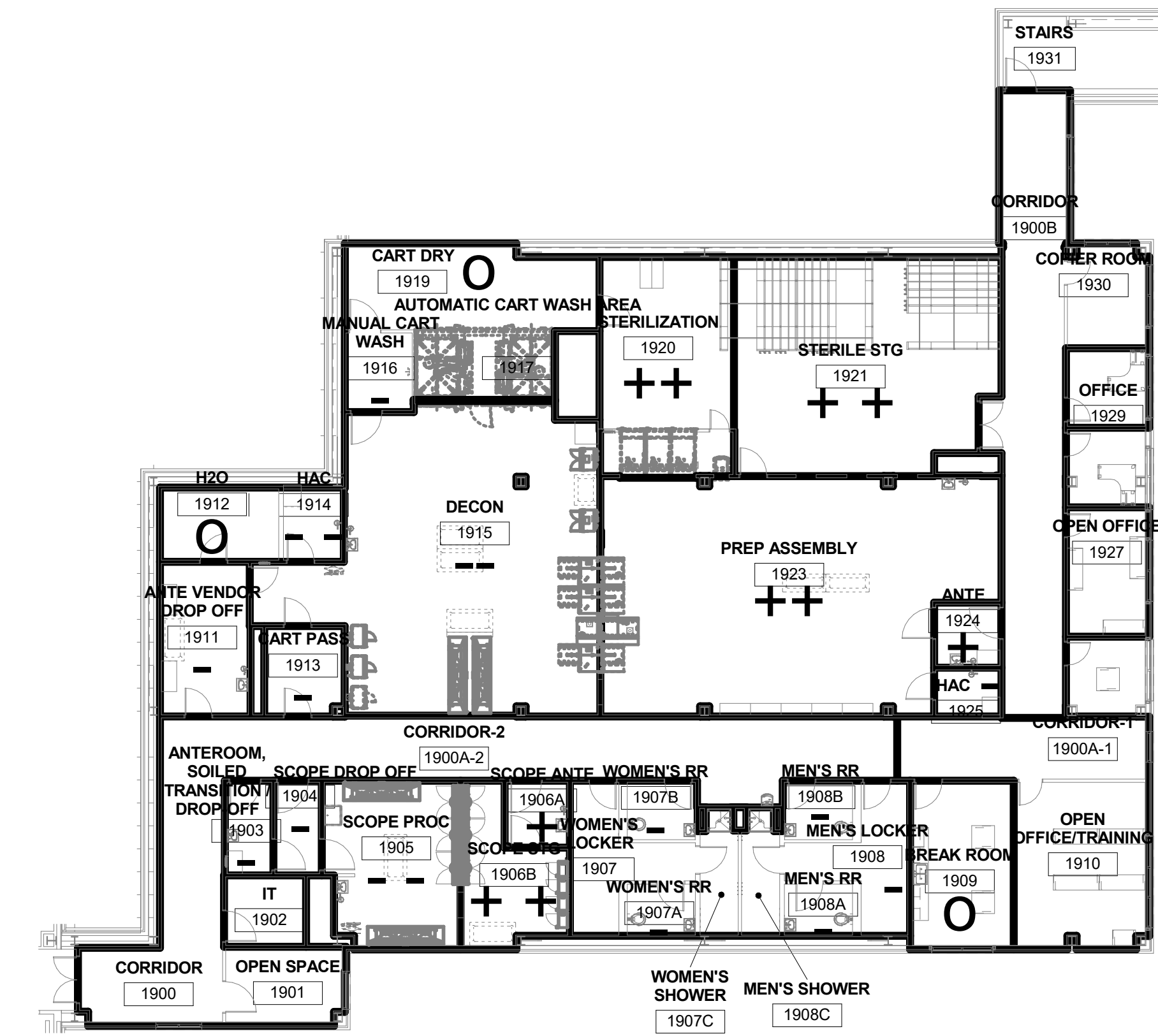
MEDICAL EQUIPMENT UTILITY CONNECTION SCHEDULE										
EQUIPMENT TAG	MANUFACTURER	MODEL/ DESCRIPTION	QUANTITY	ELECTRICAL CONNECTIONS					NOTES	
				VOLT	PHASE	MOPP	FLA	WATTS		PLUG SIZE
1	AMSCO	COUNTER, CLEANUP, WITH 3 SINKS	4	120	1	20	3	-	5-20R GFI	20 AMP HOSPITAL GRADE GFCI RECEPTACLE
2	AMSCO	WASHER, DISSINFECTOR, STM, 1DO, RSCD1WLL, 26X24X24 SHAM	3	480	3	30	16.5	-	N/A	REQUIRES CAT 6A DATA CONNECTION
3	INNOWAVE	INNOWAVE PCF SONIC IRRIGATOR	2	208	3	30	24	-	N/A	
3A	GETINGE	ULTRASONIC CLEANER TRITON 72	3	208	3	20	-	-	6-20R	
4	AMSCO	RACK RETURN	1	120	1	20	4	-	5-20R	
4A, 10	AMSCO	SCS LOAD-UNLOAD	4	120	1	20	3	-	N/A	
5	VISION	WASHER, CART & UTENSIL, 2 DO, PIT MMTD, RSCD 2 WLL	2	480	3	20	13.5	-	N/A	REQUIRES CAT 6A DATA CONNECTION
7	ADVANTAGE PLUS	WASHER, FIBER SCOPE, PASS-THROUGH	3	120	1	-	-	865	5-20R GFI	REQUIRES CAT 6A DATA CONNECTION
8	AMSCO	40" AUTOMATED PASS-THROUGH WINDOW	2	120	1	20	1	-	N/A	
9	ADVANTAGE PLUS	CABINET, STORAGE, HANGING SCOPES	4	120	1	20	-	75	5-20R GFI	REQUIRES CAT 6A DATA CONNECTION
12	AMSCO	LOW TEMPERATURE STERILIZER	3	208	3	20	16	-	L15-20R	REQUIRES CAT 6A DATA CONNECTION
13	AMSCO	ADJUSTABLE DELUXEWORKSTATION	8	120	1	20	-	-	5-20R QUAD	
14	AMSCO	AMSCO 400 SERIES SMALL STEAM STERILIZER	1	480/120	3/1	4/15	3/2	-	-	TWO POWER SUPPLIES REQUIRED. 480V POWER SUPPLY FOR EQUIPMENT POWER AND 120 V POWER SUPPLY FOR EQUIPMENT CONTROL POWER. REQUIRES CAT 6A DATA CONNECTION
15	AMSCO	AMSCO 600 MEDIUM STEAM STERILIZER	3	480	3	20	7	-	-	REQUIRES CAT 6A DATA CONNECTION
GENERAL NOTE: ALL MEDICAL EQUIPMENT TO BE PROVIDED UNDER THIS CONTRACT BY THE GENERAL CONTRACTOR. PLUMBING AND MECHANICAL CONTRACTORS TO PROVIDE ALL PROPER UTILITY CONNECTIONS AND ACCESSORIES PER THIS SCHEDULE AND EQUIPMENT MANUFACTURE WRITTEN INSTRUCTIONS.										

PRESSURE LEGEND

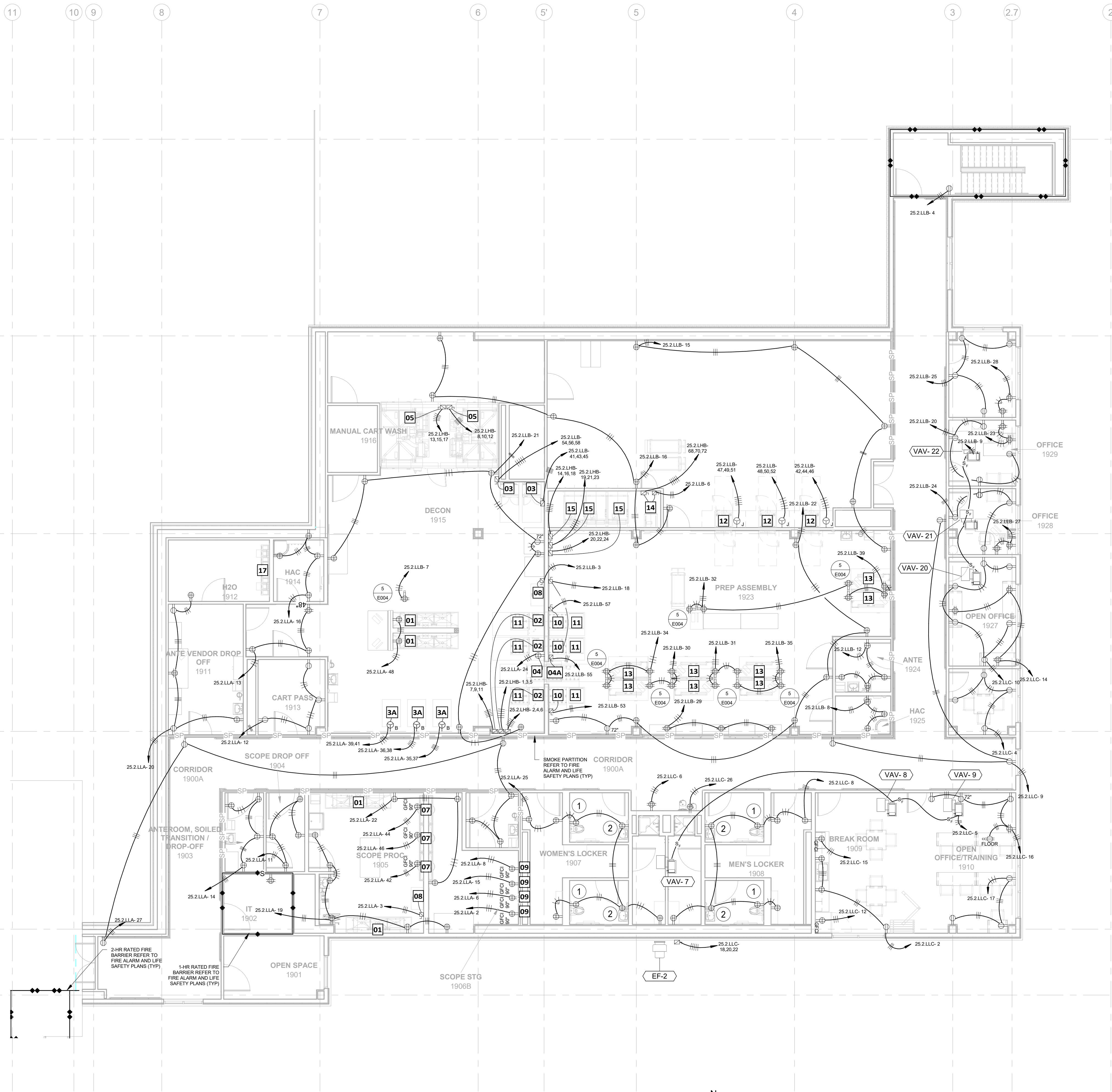
H2O ROOM NAME
1912 ROOM NUMBER
O ROOM PRESSURIZATION

PRESSURIZATION SYMBOL

++ MOST POSITIVE
+ SLIGHTLY POSITIVE
O NEUTRAL
- SLIGHTLY NEGATIVE
-- MOST NEGATIVE



② Pressure Key Plan
1/16" = 1'-0"

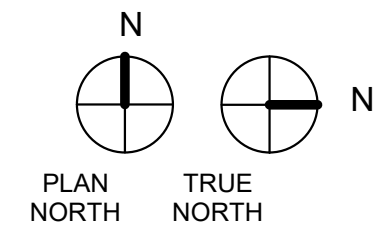


KEYED ELECTRICAL NOTES

① PLUG SLOAN TRANSFORMER FOR WATER CLOSET FLUSH VALVE POWER INTO GFCI RECEPTACLE SHOWN

② PLUG SLOAN TRANSFORMER FOR LAVATORY FAUCET INTO GFCI RECEPTACLE SHOWN

① THIRD LEVEL POWER PLAN
1/8" = 1'-0"



GENERAL CONSTRUCTION NOTES

CONTRACTOR TO PROVIDE AND INSTALL GASKETED COVERPLATES ON ALL DEVICES AND DUCT SEAL ALL BOXES AND THE CONDUITS ATTACHING TO THE BOXES. APPLIES TO ALL PRESSURE CONTROLLED AREAS.

CONSTRUCTION DOCUMENTS

COMPLIANCE REVIEW INCLUDED Revisions: 2/23/2024 Date		CONSULTANTS: TERRASITE DESIGN 1635 DEADWOOD AVENUE RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 791-1736 ALBERTSON ENGINEERING, INC. 315 NORTH MAIN AVENUE, SUITE 200 SIOUX FALLS, SOUTH DAKOTA 57104 PH: (605) 274-0880 FARRIS ENGINEERING 12700 WEST DODGE ROAD OMAHA, NEBRASKA 68154 PH: (402) 330-5900		 ARCHITECT FOURFRONT DESIGN, INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM 16.2330.A08		Drawing Title THIRD LEVEL POWER PLAN Approved: Project Director Omaha VA Medical Center 16.2330.A08		Project Title Design/Construct Sterile Processing Service - Omaha VA Medical Center Location 4101 Woolworth Ave #4199 Omaha, Ne 68105 Date 11/23/2020 Checked WEW Drawn KAB		Project Number 16.2330.A08 Building Number 25 Drawing Number E-101 Dwg. 176 of 193		Office of Construction and Facilities Management Department of Veterans Affairs	
--	--	---	--	---	--	--	--	---	--	---	--	---	--

MEDICAL EQUIPMENT UTILITY CONNECTION SCHEDULE										
EQUIPMENT TAG	MANUFACTURER	MODEL/ DESCRIPTION	QUANTITY	ELECTRICAL CONNECTIONS					NOTES	
				VOLT	PHASE	MOCP	FLA	WATTS		PLUG SIZE
1	AMSCO	COUNTER, CLEANUP, WITH 3 SINKS	4	120	1	20	3	-	5-20R GFI	20 AMP HOSPITAL GRADE GFCI RECEPTACLE
2	AMSCO	WASHER, DISSINFECTOR, STM, 1DO, RSCD1WLL, 26X24X24 SHAM	3	480	3	30	16.5	-	N/A	REQUIRES CAT 6A DATA CONNECTION
3	INNOWAVE	INNOWAVE PCF SONIC IRRIGATOR	2	208	3	30	24	-	N/A	
3A	GETINGE	ULTRASONIC CLEANER TRITON 72	3	208	3	20		-	6-20R	
4	AMSCO	RACK RETURN	1	120	1	20	4	-	5-20R	
4A, 10	AMSCO	SCS LOAD-UNLOAD	4	120	1	20	3	-	N/A	
5	VISION	WASHER, CART & UTENSIL, 2 DO, PIT MMTD, RSCD 2 WLL	2	480	3	20	13.5	-	N/A	REQUIRES CAT 6A DATA CONNECTION
7	ADVANTAGE PLUS	WASHER, FIBER SCOPE, PASS-THROUGH	3	120	1	-	-	865	5-20R GFI	REQUIRES CAT 6A DATA CONNECTION
8	AMSCO	40" AUTOMATED PASS-THROUGH WINDOW	2	120	1	20	1	-	N/A	
9	ADVANTAGE PLUS	CABINET, STORAGE, HANGING SCOPES	4	120	1	20	-	75	5-20R GFI	REQUIRES CAT 6A DATA CONNECTION
12	AMSCO	LOW TEMPERATURE STERILIZER	3	208	3	20	16	-	L15-20R	REQUIRES CAT 6A DATA CONNECTION
13	AMSCO	ADJUSTABLE DELUXE WORKSTATION	8	120	1	20	-	-	5-20R QUAD	REQUIRES CAT 6A DATA CONNECTION
14	AMSCO	AMSCO 400 SERIES SMALL STEAM STERILIZER	1	480/120	3/1	4/15	3/2	-	-	TWO POWER SUPPLIES REQUIRED. 480V POWER SUPPLY FOR EQUIPMENT POWER AND 120 V POWER SUPPLY FOR EQUIPMENT CONTROL POWER. REQUIRES CAT 6A DATA CONNECTION
15	AMSCO	AMSCO 600 MEDIUM STEAM STERILIZER	3	480	3	20	7	-	-	REQUIRES CAT 6A DATA CONNECTION
GENERAL NOTE: ALL MEDICAL EQUIPMENT TO BE PROVIDED UNDER THIS CONTRACT BY THE GENERAL CONTRACTOR. PLUMBING AND MECHANICAL CONTRACTORS TO PROVIDE ALL PROPER UTILITY CONNECTIONS AND ACCESSORIES PER THIS SCHEDULE AND EQUIPMENT MANUFACTURE WRITTEN INSTRUCTIONS.										

PRESSURE LEGEND

H2O ROOM NAME

1912 ROOM NUMBER

O ROOM PRESSURIZATION

PRESSURIZATION SYMBOL

++ MOST POSITIVE

+ SLIGHTLY POSITIVE

O NEUTRAL

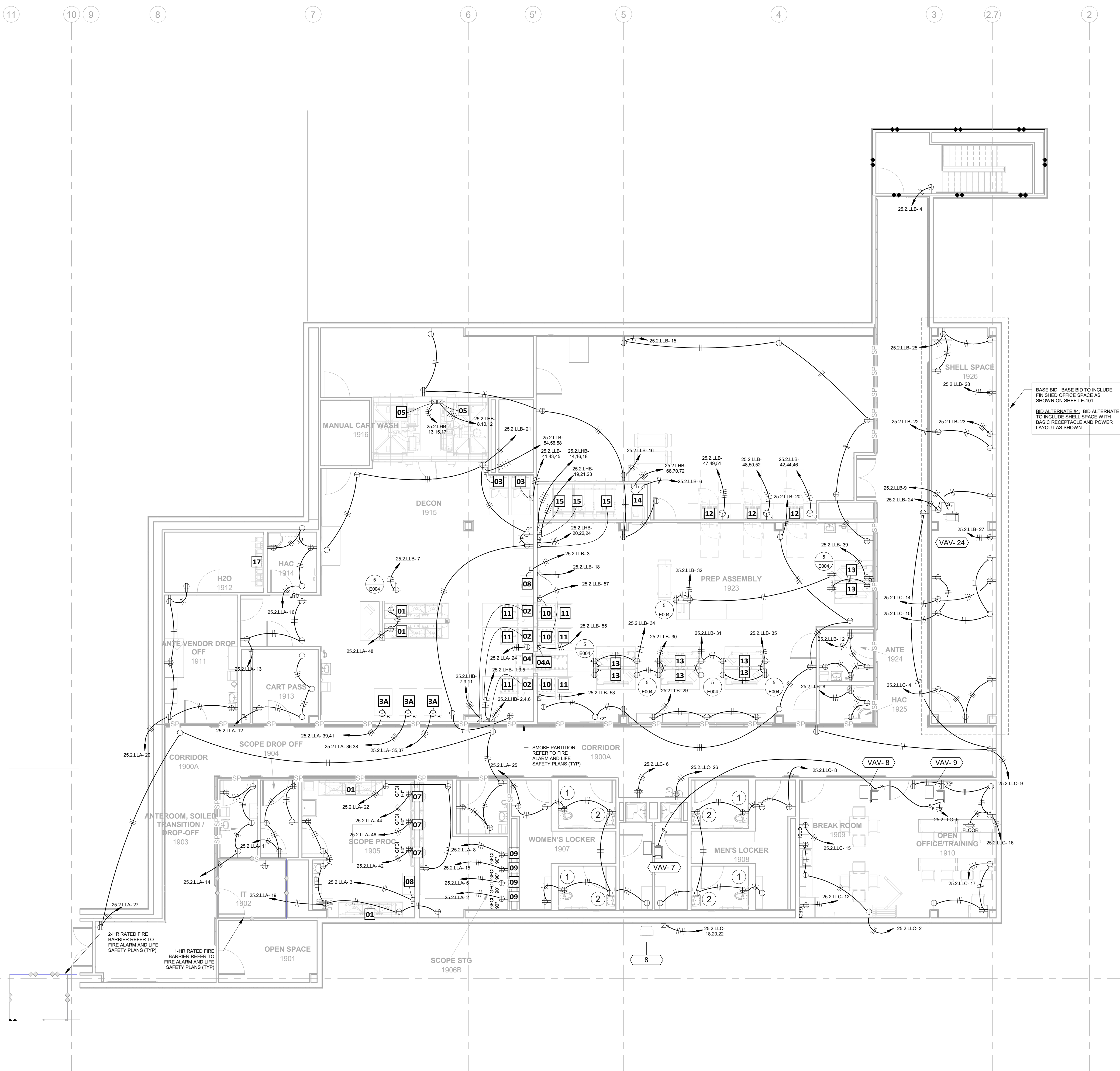
- SLIGHTLY NEGATIVE

-- MOST NEGATIVE



2 PRESSURE KEY PLAN
1/16" = 1'-0"

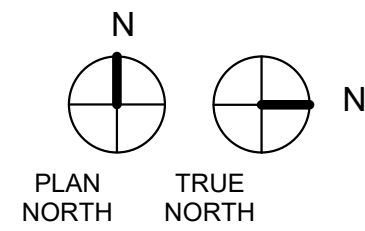
1 THIRD LEVEL POWER PLAN - BID ALTERNATE #4
1/8" = 1'-0"



KEYED ELECTRICAL NOTES

1 PLUG SLOAN TRANSFORMER FOR WATER CLOSET FLUSH VALVE POWER INTO GFCI RECEPTACLE SHOWN

2 PLUG SLOAN TRANSFORMER FOR LAVATORY FAUCET INTO GFCI RECEPTACLE SHOWN



GENERAL CONSTRUCTION NOTES

CONTRACTOR TO PROVIDE AND INSTALL GASKETTED COVERPLATES ON ALL DEVICES AND DUCT SEAL ALL BOXES AND THE CONDUITS ATTACHING TO THE BOXES. APPLIES TO ALL PRESSURE CONTROLLED AREAS.

CONSTRUCTION DOCUMENTS

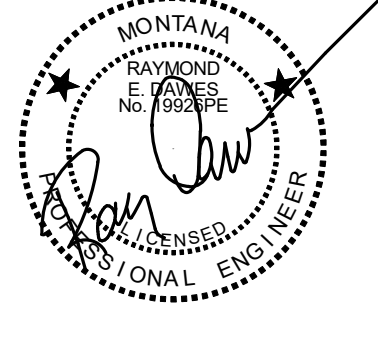
CONSULTANTS:		ARCHITECT		Drawing Title		Project Title		Project Number		Office of Construction and Facilities Management	
TERRASITE DESIGN 1635 DEADWOOD AVENUE RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 791-1736		ALBERTSON ENGINEERING, INC. 315 NORTH MAIN AVENUE, SUITE 200 SIOUX FALLS, SOUTH DAKOTA 57104 PH: (605) 274-0880		THIRD LEVEL POWER PLAN BID ALTERNATE #4		Design/Construct Sterile Processing Service - Omaha VA Medical Center		16.2330.A08			
FARRIS ENGINEERING 12700 WEST DODGE ROAD OMAHA, NEBRASKA 68154 PH: (402) 330-5900		FOURFRONT DESIGN, INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM		Approved: Project Director Omaha VA Medical Center		Location 4101 Woolworth Ave #4199 Omaha, Ne 68105		Building Number 25		Drawing Number E-101.1 Dwg. 177 of 193	
COMPLIANCE REVIEW INCLUDED Revisions:		11/24/2020 Date		16.2330.A08		Date 11/24/2020 Checked WEW Drawn JMS					

2/23/2024 4:59:23 PM

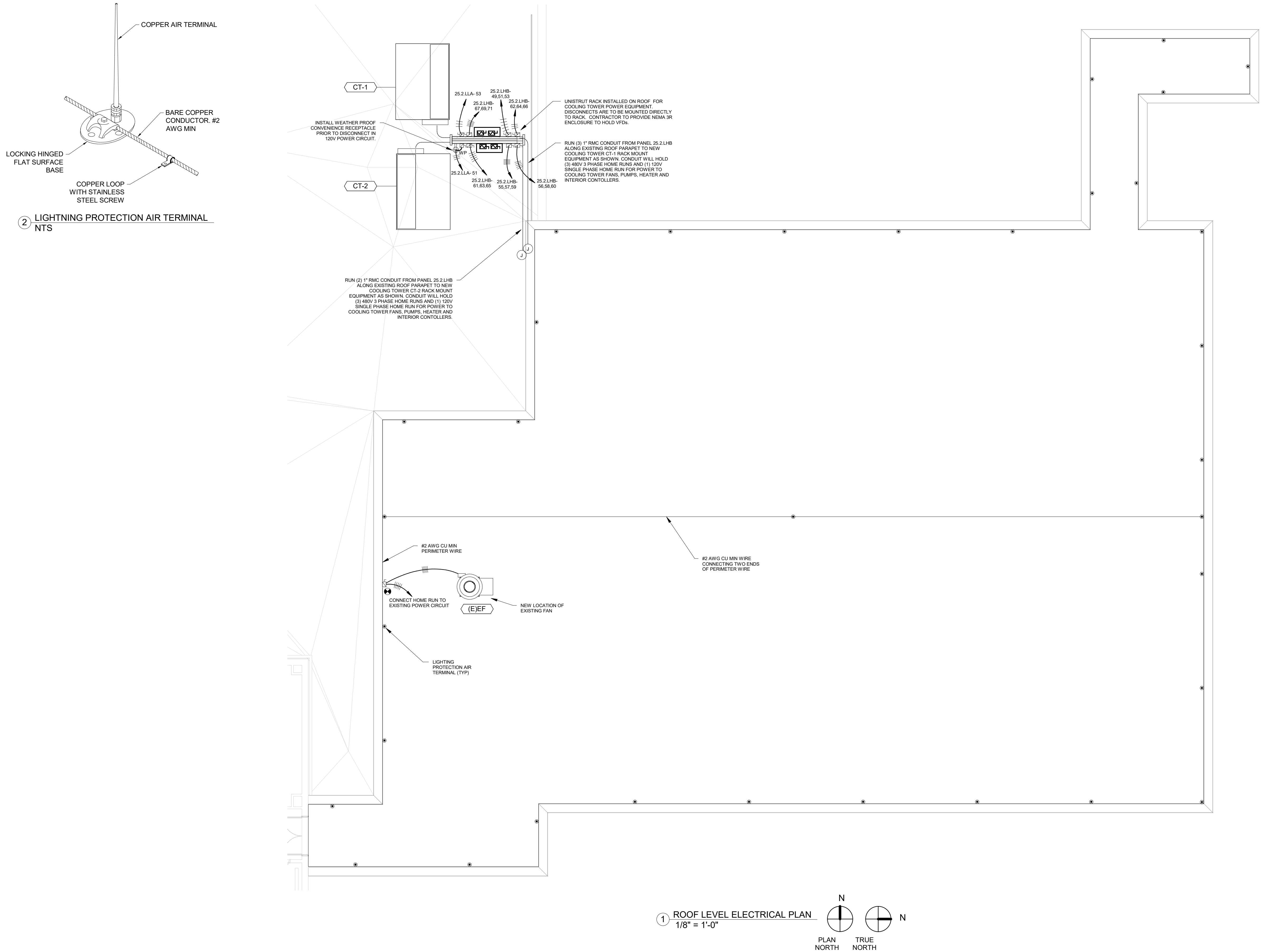
one eighth inch = one foot
one quarter inch = one foot
one half inch = one foot
three eighths inch = one foot
three quarters inch = one foot
one foot one inch = one foot
one and one half inches = one foot
one and one half inches = one foot
one and one half inches = one foot

COMPLIANCY REVIEW INCLUDED	2/23/2024
Revisions:	Date

CONSULTANTS:	
 TERRASITE DESIGN 1635 DEADWOOD AVENUE RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 791-1736	 ALBERTSON ENGINEERING, INC. 315 NORTH MAIN AVENUE, SUITE 200 SIOUX FALLS, SOUTH DAKOTA 57104 PH: (605) 274-0880
 FARRIS ENGINEERING 12700 WEST DODGE ROAD OMAHA, NEBRASKA 68154 PH: (402) 330-5900	

	ARCHITECT  FOURFRONT DESIGN, INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM
	16.2330.A08

Drawing Title ROOF LEVEL ELECTRICAL PLAN	Project Title Design/Construct Sterile Processing Service - Omaha VA Medical Center	Project Number 16.2330.A08 Building Number 25	Office of Construction and Facilities Management 
Approved: Project Director Omaha VA Medical Center	Location 4101 Woolworth Ave #4199 Omaha, Ne 68105	Drawing Number E-102 Dwg. 178 of 193	
	Date 11/23/2020	Checked WEW Drawn KAB	



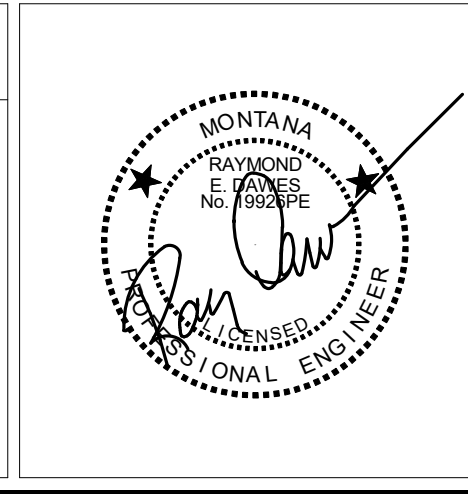
CONSTRUCTION DOCUMENTS

2/23/2024 4:15:26 PM

one eighth inch = one foot
one quarter inch = one foot
one half inch = one foot
three eighths inch = one foot
three quarters inch = one foot
one foot one inch = one foot
one and one half inches = one foot
one and one half inches = one foot
one and one half inches = one foot

COMPLIANCE REVIEW INCLUDED	2/23/2024
Revisions:	Date

CONSULTANTS:	
 TERRASITE DESIGN 1635 DEADWOOD AVENUE RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 791-1736	 ALBERTSON ENGINEERING, INC. 315 NORTH MAIN AVENUE, SUITE 200 SIOUX FALLS, SOUTH DAKOTA 57104 PH: (605) 274-0880
 FARRIS ENGINEERING 12700 WEST DODGE ROAD OMAHA, NEBRASKA 68154 PH: (402) 330-5900	

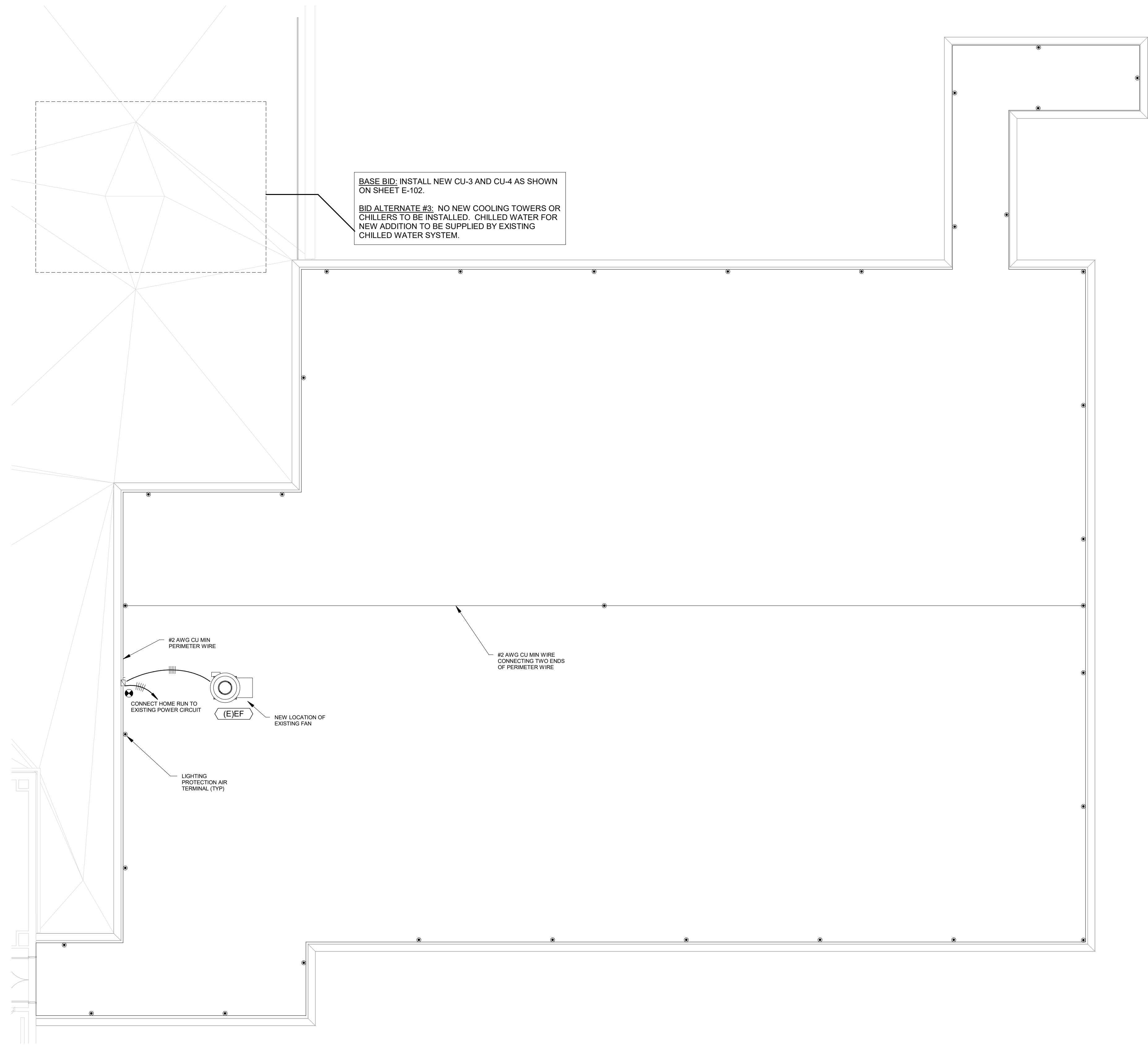
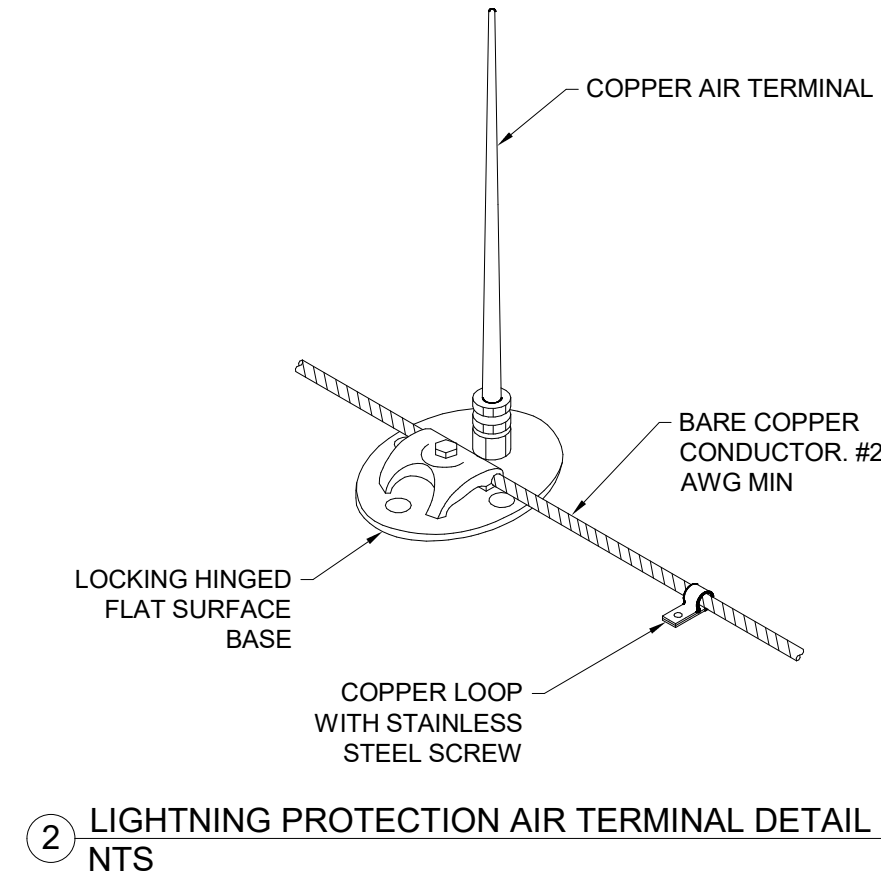


ARCHITECT	16.2330.A08
 FOURFRONT DESIGN, INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM	

Drawing Title	ROOF LEVEL ELECTRICAL PLAN BID ALTERNATE #3
Approved: Project Director	Omaha VA Medical Center

Project Title	Design/Construct Sterile Processing Service - Omaha VA Medical Center
Location	4101 Woolworth Ave #4199 Omaha, Ne 68105
Date	11/24/2020
Checked	WEW
Drawn	JMS

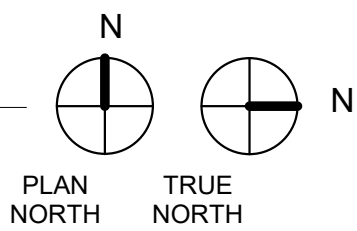
Project Number	16.2330.A08
Building Number	25
Drawing Number	E-102.1
Dwg. 179 of 193	



BASE BID: INSTALL NEW CU-3 AND CU-4 AS SHOWN ON SHEET E-102.

BID ALTERNATE #3: NO NEW COOLING TOWERS OR CHILLERS TO BE INSTALLED. CHILLED WATER FOR NEW ADDITION TO BE SUPPLIED BY EXISTING CHILLED WATER SYSTEM.

1 ROOF LEVEL ELECTRICAL PLAN - BID ALTERNATE #3
1/8" = 1'-0"



CONSTRUCTION DOCUMENTS

2/23/2024 4:02:24 PM

one eighth inch = one foot
one quarter inch = one foot
one half inch = one foot
three eighths inch = one foot
three quarters inch = one foot
one foot one inch = one foot
one foot one half inch = one foot
one and one half inches = one foot
one and one half inches = one foot

COMPLIANCE REVIEW INCLUDED	2/23/2024
Revisions:	Date

CONSULTANTS:



TERRASITE DESIGN
1635 DEADWOOD AVENUE
RAPID CITY, SOUTH DAKOTA 57702
PH: (605) 791-1736



ALBERTSON ENGINEERING, INC.
315 NORTH MAIN AVENUE, SUITE 200
SIOUX FALLS, SOUTH DAKOTA 57104
PH: (605) 274-0880

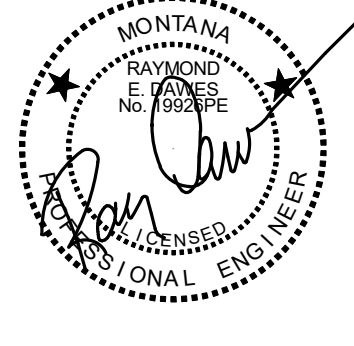


FARRIS ENGINEERING
12700 WEST DODGE ROAD
OMAHA, NEBRASKA 68154
PH: (402) 330-5900

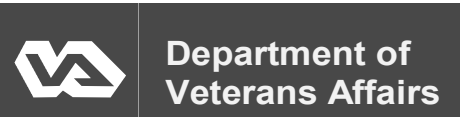
ARCHITECT

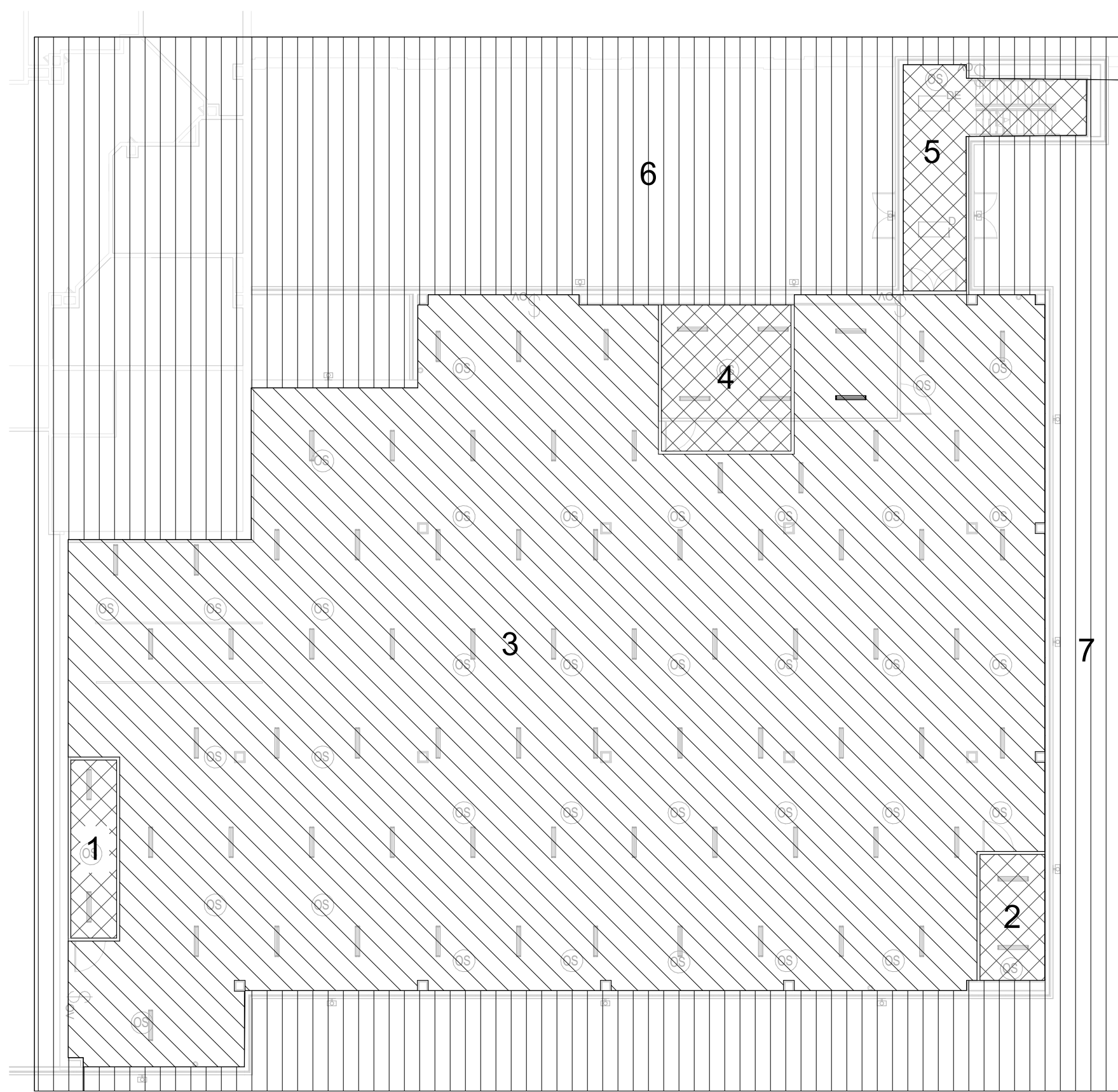


FOURFRONT DESIGN, INC.
517 7TH STREET
RAPID CITY, SOUTH DAKOTA 57701
PH: (605) 342-9470
FAX: (605) 342-2377
WWW.FOURFRONTDESIGN.COM



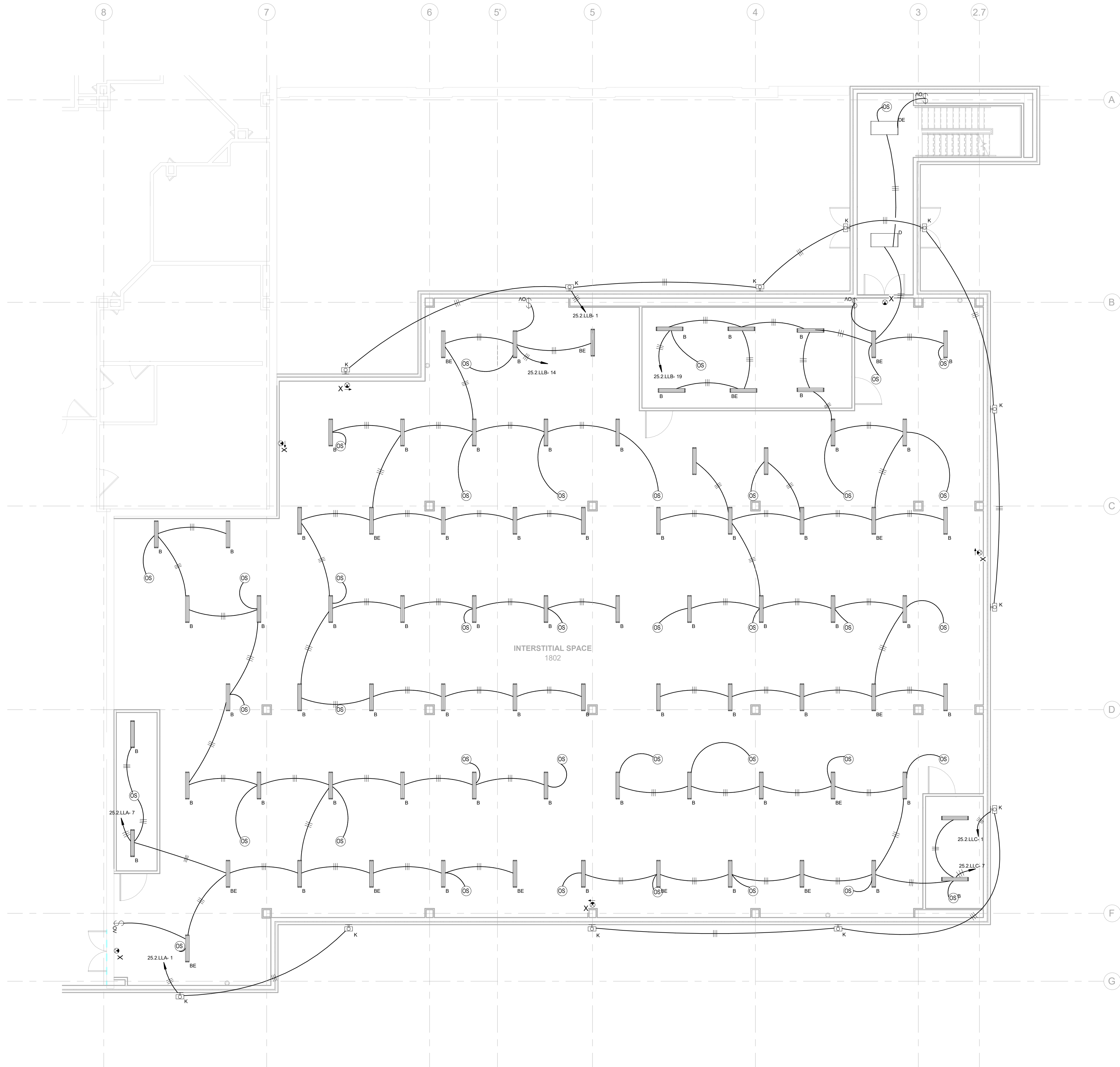
16.2330.A08

Drawing Title	Project Title	Project Number	Office of Construction and Facilities Management 
SECOND LEVEL LIGHTING PLAN	Design/Construct Sterile Processing Service - Omaha VA Medical Center	16.2330.A08 Building Number 25	
Approved: Project Director Omaha VA Medical Center	Location 4101 Woolworth Ave #4199 Omaha, Ne 68105	Drawing Number E-200 Dwg. 180 of 193	
	Date 11/23/2020	Checked WEW Drawn KAB	

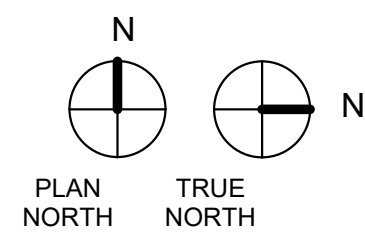


2 SECOND LEVEL LIGHTING ZONE PLAN
1/16" = 1'-0"

- FLOOR 2 LIGHTING CONTROL ZONE NOTES
- ZONE 1
1.1. LUMINAIRE B (1X4 STRIP LIGHTS)
1.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
1.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
 - ZONE 2
2.1. LUMINAIRE B (1X4 STRIP LIGHTS)
2.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
2.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
 - ZONE 3
3.1. LUMINAIRE B (1X4 STRIP LIGHTS)
3.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
3.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
3.1.3. MANUAL ON (OVERRIDE SWITCHES)
3.1.4. MANUAL OFF (OVERRIDE SWITCHES)
 - ZONE 4
4.1. LUMINAIRE B (1X4 STRIP LIGHTS)
4.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
4.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
 - ZONE 5
5.1. LUMINAIRE D (2X4 TROFFERS)
5.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
5.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
5.1.3. MANUAL ON (OVERRIDE SWITCHES)
5.1.4. MANUAL OFF (OVERRIDE SWITCHES)
 - ZONE 6
6.1. LUMINAIRE K (OUTDOOR)
6.1.1. AUTO ON
6.1.2. AUTO OFF
 - ZONE 7
7.1. LUMINAIRE K (OUTDOOR)
7.1.1. AUTO ON
7.1.2. AUTO OFF



1 SECOND LEVEL LIGHTING PLAN
1/8" = 1'-0"



CONSTRUCTION DOCUMENTS

2/23/2024 4:02:29 PM

one eighth inch = one foot
one quarter inch = one foot
three eighths inch = one foot
one half inch = one foot
three quarters inch = one foot
one and one half inches = one foot
one and three quarters inches = one foot

COMPLIANCE REVIEW INCLUDED	2/23/2024
Revisions:	Date

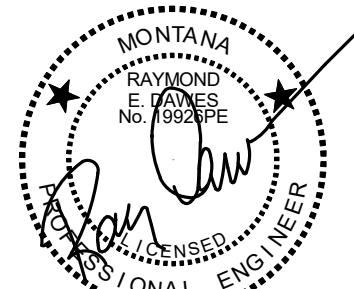
CONSULTANTS:

TERRASITE DESIGN
1635 DEADWOOD AVENUE
RAPID CITY, SOUTH DAKOTA 57702
PH: (605) 791-1736

Albertson Engineering Inc.

ALBERTSON ENGINEERING, INC.
315 NORTH MAIN AVENUE, SUITE 200
SIOUX FALLS, SOUTH DAKOTA 57104
PH: (605) 274-0880

FARRIS ENGINEERING
OMAHA (605) 241-1000
FARRIS ENGINEERING
12700 WEST DODGE ROAD
OMAHA, NEBRASKA 68154
PH: (402) 330-5900



ARCHITECT

FOURFRONT DESIGN, INC.
517 7TH STREET
RAPID CITY, SOUTH DAKOTA 57701
PH: (605) 342-9470
FAX: (605) 342-2377
WWW.FOURFRONTDESIGN.COM

16.2330.A08

Drawing Title
THIRD LEVEL LIGHTING PLAN

Approved: Project Director
Omaha VA Medical Center

Project Title
**Design/Construct Sterile
Processing Service - Omaha VA
Medical Center**

Location
**4101 Woolworth Ave #4199
Omaha, Ne 68105**

Date
11/23/2020

Checked
WEW

Drawn
KAB

Project Number
16.2330.A08

Building Number
25

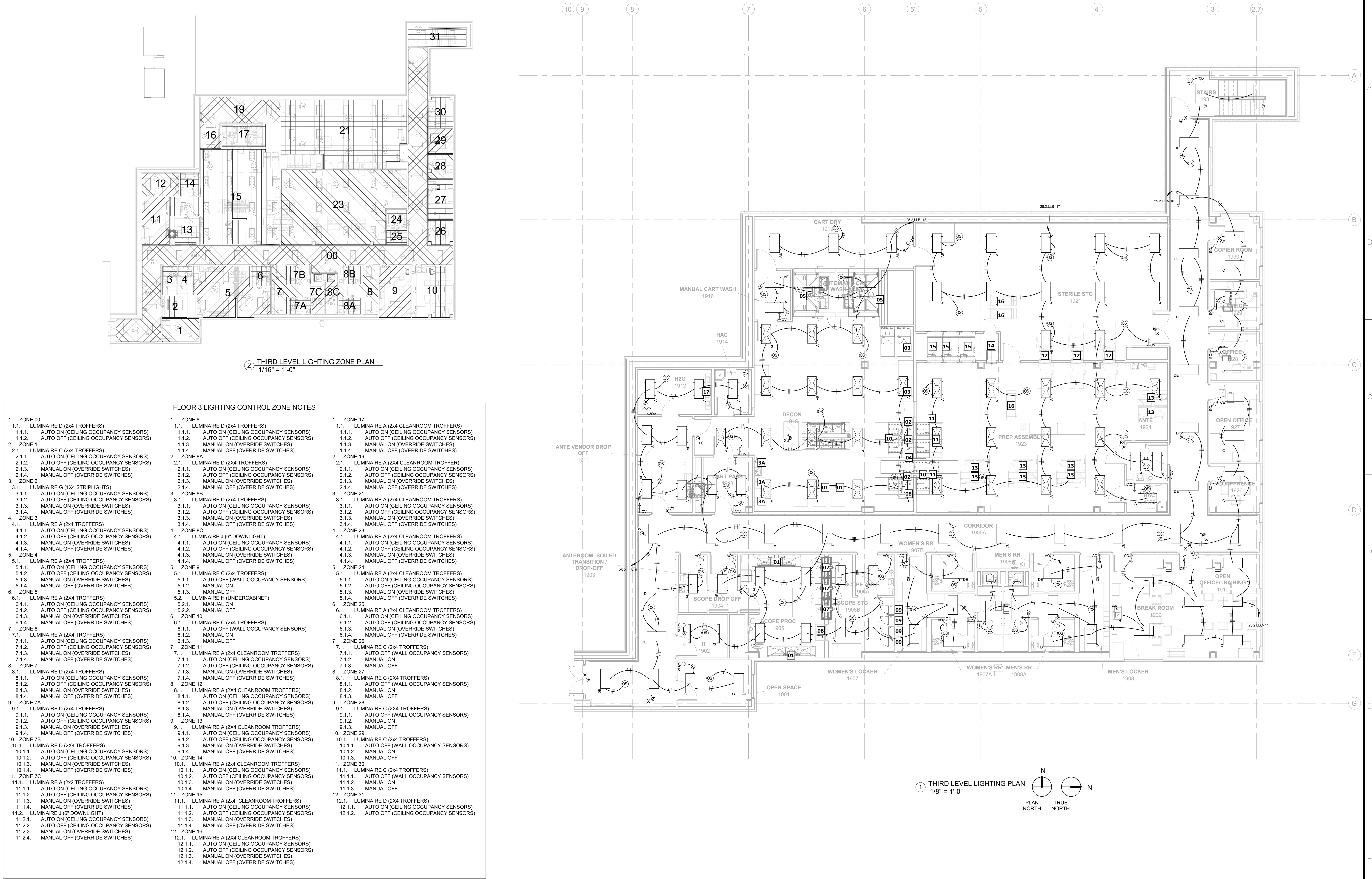
Drawing Number
E-201

Dwg. 181 of 193

Office of
Construction
and Facilities
Management

Department of
Veterans Affairs

CONSTRUCTION DOCUMENTS



② THIRD LEVEL LIGHTING ZONE PLAN
1/16" = 1'-0"

FLOOR 3 LIGHTING CONTROL ZONE NOTES

1. ZONE 00
1.1. LUMINAIRE D (2x4 TROFFERS)
1.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
1.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
2. ZONE 1
2.1. LUMINAIRE C (2x4 TROFFERS)
2.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
2.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
2.1.3. MANUAL ON (OVERRIDE SWITCHES)
2.1.4. MANUAL OFF (OVERRIDE SWITCHES)
3. ZONE 2
3.1. LUMINAIRE G (1x4 STRIPLIGHTS)
3.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
3.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
3.1.3. MANUAL ON (OVERRIDE SWITCHES)
3.1.4. MANUAL OFF (OVERRIDE SWITCHES)
4. ZONE 3
4.1. LUMINAIRE A (2x4 TROFFERS)
4.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
4.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
4.1.3. MANUAL ON (OVERRIDE SWITCHES)
4.1.4. MANUAL OFF (OVERRIDE SWITCHES)
5. ZONE 4
5.1. LUMINAIRE A (2x4 TROFFERS)
5.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
5.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
5.1.3. MANUAL ON (OVERRIDE SWITCHES)
5.1.4. MANUAL OFF (OVERRIDE SWITCHES)
6. ZONE 5
6.1. LUMINAIRE A (2x4 TROFFERS)
6.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
6.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
6.1.3. MANUAL ON (OVERRIDE SWITCHES)
6.1.4. MANUAL OFF (OVERRIDE SWITCHES)
7. ZONE 6
7.1. LUMINAIRE A (2x4 TROFFERS)
7.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
7.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
7.1.3. MANUAL ON (OVERRIDE SWITCHES)
7.1.4. MANUAL OFF (OVERRIDE SWITCHES)
8. ZONE 7
8.1. LUMINAIRE D (2x4 TROFFERS)
8.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
8.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
8.1.3. MANUAL ON (OVERRIDE SWITCHES)
8.1.4. MANUAL OFF (OVERRIDE SWITCHES)
9. ZONE 7A
9.1. LUMINAIRE D (2x4 TROFFERS)
9.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
9.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
9.1.3. MANUAL ON (OVERRIDE SWITCHES)
9.1.4. MANUAL OFF (OVERRIDE SWITCHES)
10. ZONE 7B
10.1. LUMINAIRE D (2x4 TROFFERS)
10.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
10.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
10.1.3. MANUAL ON (OVERRIDE SWITCHES)
10.1.4. MANUAL OFF (OVERRIDE SWITCHES)
11. ZONE 7C
11.1. LUMINAIRE A (2x2 TROFFERS)
11.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
11.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
11.1.3. MANUAL ON (OVERRIDE SWITCHES)
11.1.4. MANUAL OFF (OVERRIDE SWITCHES)
11.2. LUMINAIRE J (6" DOWNLIGHT)
11.2.1. AUTO ON (CEILING OCCUPANCY SENSORS)
11.2.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
11.2.3. MANUAL ON (OVERRIDE SWITCHES)
11.2.4. MANUAL OFF (OVERRIDE SWITCHES)
1. ZONE 8
1.1. LUMINAIRE D (2x4 TROFFERS)
1.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
1.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
1.1.3. MANUAL ON (OVERRIDE SWITCHES)
1.1.4. MANUAL OFF (OVERRIDE SWITCHES)
2. ZONE 8A
2.1. LUMINAIRE D (2x4 TROFFERS)
2.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
2.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
2.1.3. MANUAL ON (OVERRIDE SWITCHES)
2.1.4. MANUAL OFF (OVERRIDE SWITCHES)
3. ZONE 8B
3.1. LUMINAIRE D (2x4 TROFFERS)
3.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
3.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
3.1.3. MANUAL ON (OVERRIDE SWITCHES)
3.1.4. MANUAL OFF (OVERRIDE SWITCHES)
4. ZONE 8C
4.1. LUMINAIRE J (6" DOWNLIGHT)
4.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
4.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
4.1.3. MANUAL ON (OVERRIDE SWITCHES)
4.1.4. MANUAL OFF (OVERRIDE SWITCHES)
5. ZONE 8D
5.1. LUMINAIRE C (2x4 TROFFERS)
5.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
5.1.2. MANUAL ON
5.1.3. MANUAL OFF
5.1.4. MANUAL OFF (OVERRIDE SWITCHES)
6. ZONE 10
6.1. LUMINAIRE C (2x4 TROFFERS)
6.1.1. AUTO OFF (WALL OCCUPANCY SENSORS)
6.1.2. MANUAL ON
6.1.3. MANUAL OFF
7. ZONE 11
7.1. LUMINAIRE A (2x4 CLEANROOM TROFFERS)
7.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
7.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
7.1.3. MANUAL ON (OVERRIDE SWITCHES)
7.1.4. MANUAL OFF (OVERRIDE SWITCHES)
8. ZONE 12
8.1. LUMINAIRE A (2x4 CLEANROOM TROFFERS)
8.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
8.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
8.1.3. MANUAL ON (OVERRIDE SWITCHES)
8.1.4. MANUAL OFF (OVERRIDE SWITCHES)
9. ZONE 13
9.1. LUMINAIRE A (2x4 CLEANROOM TROFFERS)
9.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
9.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
9.1.3. MANUAL ON (OVERRIDE SWITCHES)
9.1.4. MANUAL OFF (OVERRIDE SWITCHES)
10. ZONE 14
10.1. LUMINAIRE A (2x4 CLEANROOM TROFFERS)
10.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
10.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
10.1.3. MANUAL ON (OVERRIDE SWITCHES)
10.1.4. MANUAL OFF (OVERRIDE SWITCHES)
11. ZONE 15
11.1. LUMINAIRE A (2x4 CLEANROOM TROFFERS)
11.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
11.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
11.1.3. MANUAL ON (OVERRIDE SWITCHES)
11.1.4. MANUAL OFF (OVERRIDE SWITCHES)
12. ZONE 16
12.1. LUMINAIRE A (2x4 CLEANROOM TROFFERS)
12.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
12.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
12.1.3. MANUAL ON (OVERRIDE SWITCHES)
12.1.4. MANUAL OFF (OVERRIDE SWITCHES)
1. ZONE 17
1.1. LUMINAIRE A (2x4 CLEANROOM TROFFERS)
1.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
1.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
1.1.3. MANUAL ON (OVERRIDE SWITCHES)
1.1.4. MANUAL OFF (OVERRIDE SWITCHES)
2. ZONE 19
2.1. LUMINAIRE A (2x4 CLEANROOM TROFFERS)
2.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
2.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
2.1.3. MANUAL ON (OVERRIDE SWITCHES)
2.1.4. MANUAL OFF (OVERRIDE SWITCHES)
3. ZONE 21
3.1. LUMINAIRE A (2x4 CLEANROOM TROFFERS)
3.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
3.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
3.1.3. MANUAL ON (OVERRIDE SWITCHES)
3.1.4. MANUAL OFF (OVERRIDE SWITCHES)
4. ZONE 23
4.1. LUMINAIRE A (2x4 CLEANROOM TROFFERS)
4.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
4.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
4.1.3. MANUAL ON (OVERRIDE SWITCHES)
4.1.4. MANUAL OFF (OVERRIDE SWITCHES)
5. ZONE 24
5.1. LUMINAIRE A (2x4 CLEANROOM TROFFERS)
5.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
5.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
5.1.3. MANUAL ON (OVERRIDE SWITCHES)
5.1.4. MANUAL OFF (OVERRIDE SWITCHES)
6. ZONE 25
6.1. LUMINAIRE A (2x4 CLEANROOM TROFFERS)
6.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
6.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
6.1.3. MANUAL ON (OVERRIDE SWITCHES)
6.1.4. MANUAL OFF (OVERRIDE SWITCHES)
7. ZONE 26
7.1. LUMINAIRE C (2x4 TROFFERS)
7.1.1. AUTO OFF (WALL OCCUPANCY SENSORS)
7.1.2. MANUAL ON
7.1.3. MANUAL OFF
8. ZONE 27
8.1. LUMINAIRE C (2x4 TROFFERS)
8.1.1. AUTO OFF (WALL OCCUPANCY SENSORS)
8.1.2. MANUAL ON
8.1.3. MANUAL OFF
9. ZONE 28
9.1. LUMINAIRE C (2x4 TROFFERS)
9.1.1. AUTO OFF (WALL OCCUPANCY SENSORS)
9.1.2. MANUAL ON
9.1.3. MANUAL OFF
10. ZONE 29
10.1. LUMINAIRE C (2x4 TROFFERS)
10.1.1. AUTO OFF (WALL OCCUPANCY SENSORS)
10.1.2. MANUAL ON
10.1.3. MANUAL OFF
11. ZONE 30
11.1. LUMINAIRE C (2x4 TROFFERS)
11.1.1. AUTO OFF (WALL OCCUPANCY SENSORS)
11.1.2. MANUAL ON
11.1.3. MANUAL OFF
12. ZONE 31
12.1. LUMINAIRE D (2x4 TROFFERS)
12.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)
12.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)
12.1.3. MANUAL ON (OVERRIDE SWITCHES)
12.1.4. MANUAL OFF (OVERRIDE SWITCHES)

2/23/2024 4:13:22 PM

one eighth inch = one foot

three eighths inch = one foot

one half inch = one foot

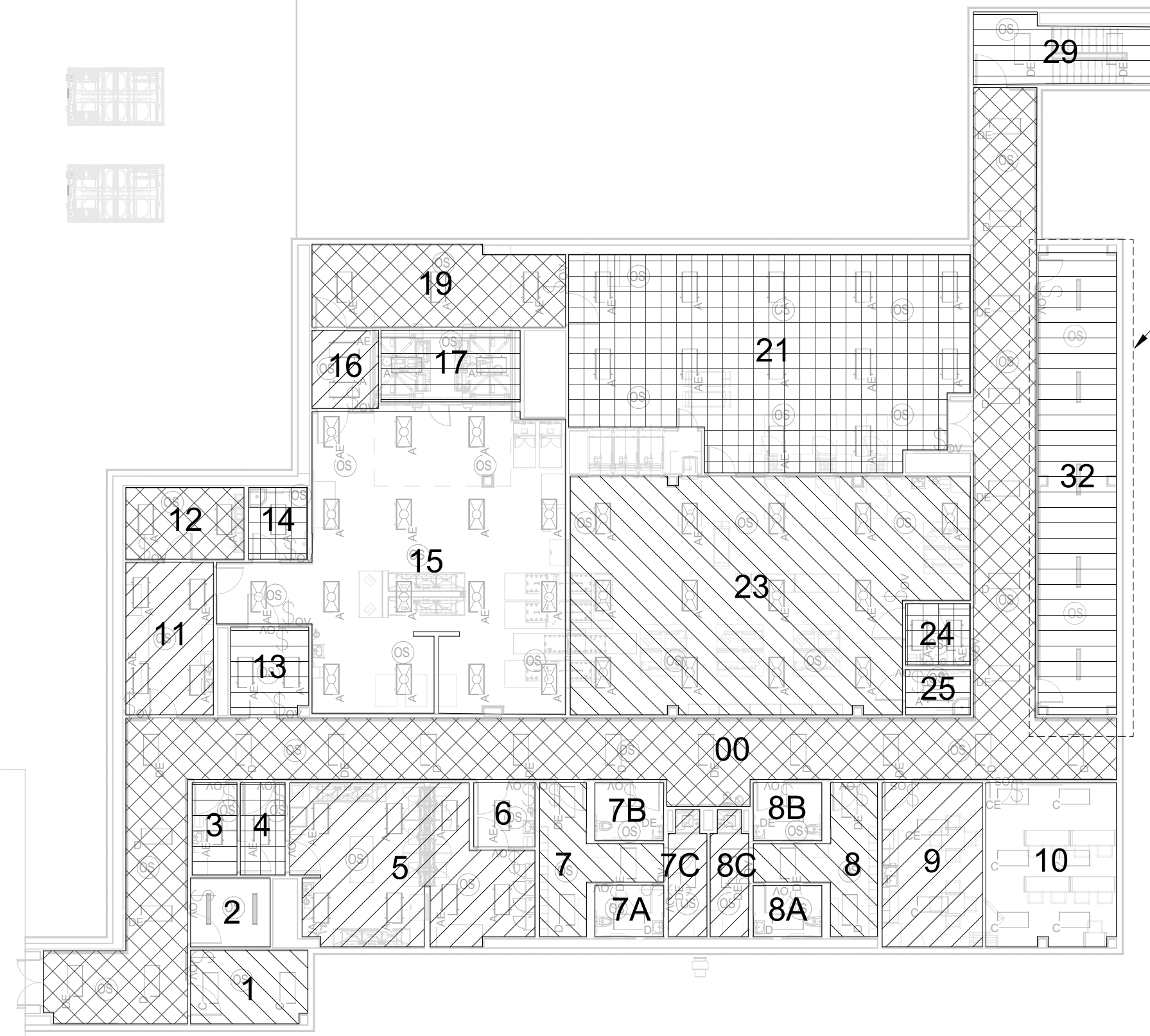
three quarters inch = one foot

one foot one inch = one foot

one and one half inches = one foot

one and one half inches = one foot

one and one half inches = one foot



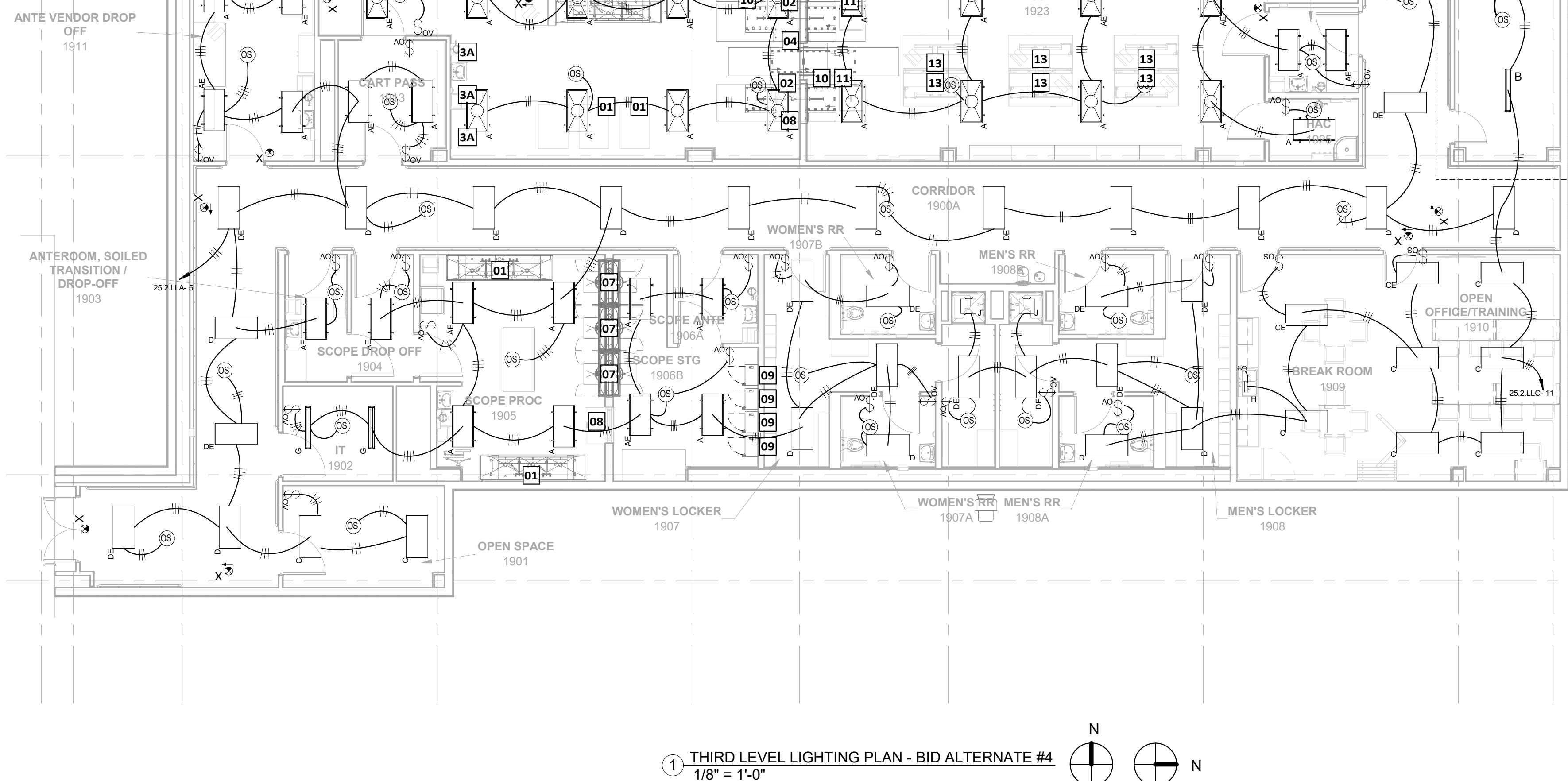
4 PRESSURE KEY PLAN
1/16" = 1'-0"

2 THIRD LEVEL LIGHTING ZONE PLAN
1/16" = 1'-0"

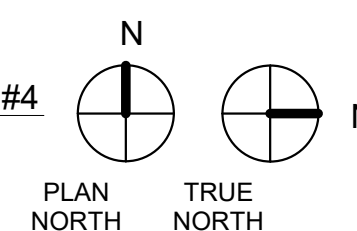
FLOOR 3 LIGHTING CONTROL ZONE NOTES

- | | | |
|---|---|--|
| <p>1. ZONE 00</p> <p>1.1. LUMINAIRE D (2x4 TROFFERS)</p> <p>1.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>1.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>2. ZONE 1</p> <p>2.1. LUMINAIRE C (2x4 TROFFERS)</p> <p>2.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>2.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>2.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>2.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>3. ZONE 2</p> <p>3.1. LUMINAIRE G (1x4 STRIPLIGHTS)</p> <p>3.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>3.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>3.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>3.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>4. ZONE 3</p> <p>4.1. LUMINAIRE A (2x4 TROFFERS)</p> <p>4.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>4.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>4.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>4.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>5. ZONE 4</p> <p>5.1. LUMINAIRE A (2x4 TROFFERS)</p> <p>5.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>5.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>5.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>5.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>6. ZONE 5</p> <p>6.1. LUMINAIRE A (2x4 TROFFERS)</p> <p>6.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>6.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>6.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>6.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>7. ZONE 6</p> <p>7.1. LUMINAIRE A (2x4 TROFFERS)</p> <p>7.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>7.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>7.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>7.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>8. ZONE 7</p> <p>8.1. LUMINAIRE D (2x4 TROFFERS)</p> <p>8.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>8.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>8.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>8.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>9. ZONE 7A</p> <p>9.1. LUMINAIRE D (2x4 TROFFERS)</p> <p>9.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>9.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>9.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>9.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>10. ZONE 7B</p> <p>10.1. LUMINAIRE D (2x4 TROFFERS)</p> <p>10.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>10.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>10.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>10.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>11. ZONE 7C</p> <p>11.1. LUMINAIRE A (2x4 TROFFERS)</p> <p>11.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>11.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>11.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>11.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>11.2. LUMINAIRE J (6" DOWNLIGHT)</p> <p>11.2.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>11.2.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>11.2.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>11.2.4. MANUAL OFF (OVERRIDE SWITCHES)</p> | <p>1. ZONE 8</p> <p>1.1. LUMINAIRE D (2x4 TROFFERS)</p> <p>1.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>1.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>1.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>1.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>2. ZONE 8A</p> <p>2.1. LUMINAIRE D (2x4 TROFFERS)</p> <p>2.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>2.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>2.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>2.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>3. ZONE 8B</p> <p>3.1. LUMINAIRE D (2x4 TROFFERS)</p> <p>3.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>3.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>3.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>3.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>4. ZONE 8C</p> <p>4.1. LUMINAIRE J (6" DOWNLIGHT)</p> <p>4.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>4.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>4.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>4.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>5. ZONE 9</p> <p>5.1. LUMINAIRE C (2x4 TROFFERS)</p> <p>5.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>5.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>5.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>5.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>6. ZONE 10</p> <p>6.1. LUMINAIRE C (2x4 TROFFERS)</p> <p>6.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>6.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>6.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>6.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>7. ZONE 11</p> <p>7.1. LUMINAIRE A (2x4 CLEANROOM TROFFERS)</p> <p>7.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>7.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>7.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>7.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>8. ZONE 12</p> <p>8.1. LUMINAIRE A (2x4 CLEANROOM TROFFERS)</p> <p>8.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>8.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>8.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>8.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>9. ZONE 13</p> <p>9.1. LUMINAIRE A (2x4 CLEANROOM TROFFERS)</p> <p>9.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>9.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>9.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>9.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>10. ZONE 14</p> <p>10.1. LUMINAIRE A (2x4 CLEANROOM TROFFERS)</p> <p>10.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>10.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>10.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>10.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>11. ZONE 15</p> <p>11.1. LUMINAIRE A (2x4 CLEANROOM TROFFERS)</p> <p>11.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>11.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>11.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>11.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>12. ZONE 16</p> <p>12.1. LUMINAIRE A (2x4 CLEANROOM TROFFERS)</p> <p>12.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>12.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>12.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>12.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> | <p>1. ZONE 17</p> <p>1.1. LUMINAIRE A (2x4 CLEANROOM TROFFERS)</p> <p>1.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>1.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>1.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>1.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>2. ZONE 19</p> <p>2.1. LUMINAIRE A (2x4 CLEANROOM TROFFERS)</p> <p>2.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>2.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>2.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>2.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>3. ZONE 21</p> <p>3.1. LUMINAIRE A (2x4 CLEANROOM TROFFERS)</p> <p>3.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>3.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>3.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>3.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>4. ZONE 23</p> <p>4.1. LUMINAIRE A (2x4 CLEANROOM TROFFERS)</p> <p>4.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>4.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>4.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>4.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>5. ZONE 24</p> <p>5.1. LUMINAIRE A (2x4 CLEANROOM TROFFERS)</p> <p>5.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>5.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>5.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>5.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>6. ZONE 25</p> <p>6.1. LUMINAIRE A (2x4 CLEANROOM TROFFERS)</p> <p>6.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>6.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>6.1.3. MANUAL ON (OVERRIDE SWITCHES)</p> <p>6.1.4. MANUAL OFF (OVERRIDE SWITCHES)</p> <p>7. ZONE 26</p> <p>7.1. LUMINAIRE C (2x4 TROFFERS)</p> <p>7.1.1. AUTO OFF (WALL OCCUPANCY SENSORS)</p> <p>7.1.2. MANUAL ON</p> <p>7.1.3. MANUAL OFF</p> <p>8. ZONE 27</p> <p>8.1. LUMINAIRE C (2x4 TROFFERS)</p> <p>8.1.1. AUTO OFF (WALL OCCUPANCY SENSORS)</p> <p>8.1.2. MANUAL ON</p> <p>8.1.3. MANUAL OFF</p> <p>9. ZONE 28</p> <p>9.1. LUMINAIRE C (2x4 TROFFERS)</p> <p>9.1.1. AUTO OFF (WALL OCCUPANCY SENSORS)</p> <p>9.1.2. MANUAL ON</p> <p>9.1.3. MANUAL OFF</p> <p>10. ZONE 29</p> <p>10.1. LUMINAIRE C (2x4 TROFFERS)</p> <p>10.1.1. AUTO OFF (WALL OCCUPANCY SENSORS)</p> <p>10.1.2. MANUAL ON</p> <p>10.1.3. MANUAL OFF</p> <p>11. ZONE 30</p> <p>11.1. LUMINAIRE C (2x4 TROFFERS)</p> <p>11.1.1. AUTO OFF (WALL OCCUPANCY SENSORS)</p> <p>11.1.2. MANUAL ON</p> <p>11.1.3. MANUAL OFF</p> <p>12. ZONE 31</p> <p>12.1. LUMINAIRE D (2x4 TROFFERS)</p> <p>12.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>12.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> <p>12.1.3. MANUAL ON</p> <p>12.1.4. MANUAL OFF</p> <p>13. ZONE 32</p> <p>13.1. LUMINAIRE B (1x4 STRIP LIGHTS)</p> <p>13.1.1. AUTO ON (CEILING OCCUPANCY SENSORS)</p> <p>13.1.2. AUTO OFF (CEILING OCCUPANCY SENSORS)</p> |
|---|---|--|

BASE BID: BASE BID TO INCLUDE TO INCLUDE FINISHED OFFICE SPACE AS SHOWN ON SHEET E-201. BID ALTERNATE #4: BID ALTERNATE TO INCLUDE SHELL SPACE WITH BASIC UTILITY STRIP LIGHTING AND CEILING OCCUPANCY SENSOR CONTROL.



1 THIRD LEVEL LIGHTING PLAN - BID ALTERNATE #4
1/8" = 1'-0"



CONSULTANTS:

TERRASITE DESIGN
1635 DEADWOOD AVENUE
RAPID CITY, SOUTH DAKOTA 57702
PH: (605) 791-1736

Albertson Engineering Inc.

ALBERTSON ENGINEERING, INC.
315 NORTH MAIN AVENUE, SUITE 200
SIOUX FALLS, SOUTH DAKOTA 57104
PH: (605) 274-0880

FARRIS ENGINEERING
12700 WEST DODGE ROAD
OMAHA, NEBRASKA 68154
PH: (402) 330-5900

ARCHITECT

FOURFRONT DESIGN, INC.
517 7TH STREET
RAPID CITY, SOUTH DAKOTA 57701
PH: (605) 342-9470
FAX: (605) 342-2377
WWW.FOURFRONTDESIGN.COM

Drawing Title
**THIRD LEVEL LIGHTING PLAN
BID ALTERNATE #4**

Approved: Project Director
Omaha VA Medical Center

16.2330.A08

Project Title
**Design/Construct Sterile
Processing Service - Omaha VA
Medical Center**

Location
**4101 Woolworth Ave #4199
Omaha, Ne 68105**

Date
11/24/2020

Checked
WEW

Drawn
JMS

Project Number
16.2330.A08

Building Number
25

Drawing Number
E-201.1

Dwg. 182 of 193

Office of
Construction
and Facilities
Management

Department of
Veterans Affairs

CONSTRUCTION DOCUMENTS

VA FORM 08-6231

1910
1911
1912
1913
1914
1915
1916
1917
1918
1919
1920
1921
1922
1923
1924
1925
1926
1927
1928
1929
1930
1931
1932
1933
1934
1935
1936
1937
1938
1939
1940
1941
1942
1943
1944
1945
1946
1947
1948
1949
1950
1951
1952
1953
1954
1955
1956
1957
1958
1959
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971
1972
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
2031
2032
2033
2034
2035
2036
2037
2038
2039
2040
2041
2042
2043
2044
2045
2046
2047
2048
2049
2050
2051
2052
2053
2054
2055
2056
2057
2058
2059
2060
2061
2062
2063
2064
2065
2066
2067
2068
2069
2070
2071
2072
2073
2074
2075
2076
2077
2078
2079
2080
2081
2082
2083
2084
2085
2086
2087
2088
2089
2090
2091
2092
2093
2094
2095
2096
2097
2098
2099
2100
2101
2102
2103
2104
2105
2106
2107
2108
2109
2110
2111
2112
2113
2114
2115
2116
2117
2118
2119
2120
2121
2122
2123
2124
2125
2126
2127
2128
2129
2130
2131
2132
2133
2134
2135
2136
2137
2138
2139
2140
2141
2142
2143
2144
2145
2146
2147
2148
2149
2150
2151
2152
2153
2154
2155
2156
2157
2158
2159
2160
2161
2162
2163
2164
2165
2166
2167
2168
2169
2170
2171
2172
2173
2174
2175
2176
2177
2178
2179
2180
2181
2182
2183
2184
2185
2186
2187
2188
2189
2190
2191
2192
2193
2194
2195
2196
2197
2198
2199
2200
2201
2202
2203
2204
2205
2206
2207
2208
2209
2210
2211
2212
2213
2214
2215
2216
2217
2218
2219
2220
2221
2222
2223
2224
2225
2226
2227
2228
2229
2230
2231
2232
2233
2234
2235
2236
2237
2238
2239
2240
2241
2242
2243
2244
2245
2246
2247
2248
2249
2250
2251
2252
2253
2254
2255
2256
2257
2258
2259
2260
2261
2262
2263
2264
2265
2266
2267
2268
2269
2270
2271
2272
2273
2274
2275
2276
2277
2278
2279
2280
2281
2282
2283
2284
2285
2286
2287
2288
2289
2290
2291
2292
2293
2294
2295
2296
2297
2298
2299
2300
2301
2302
2303
2304
2305
2306
2307
2308
2309
2310
2311
2312
2313
2314
2315
2316
2317
2318
2319
2320
2321
2322
2323
2324
2325
2326
2327
2328
2329
2330
2331
2332
2333
2334
2335
2336
2337
2338
2339
2340
2341
2342
2343
2344
2345
2346
2347
2348
2349
2350
2351
2352
2353
2354
2355
2356
2357
2358
2359
2360
2361
2362
2363
2364
2365
2366
2367
2368
2369
2370
2371
2372
2373
2374
2375
2376
2377
2378
2379
2380
2381
2382
2383
2384
2385
2386
2387
2388
2389
2390
2391
2392
2393
2394
2395
2396
2397
2398
2399
2400
2401
2402
2403
2404
2405
2406
2407
2408
2409
2410
2411
2412
2413
2414
2415
2416
2417
2418
2419
2420
2421
2422
2423
2424
2425
2426
2427
2

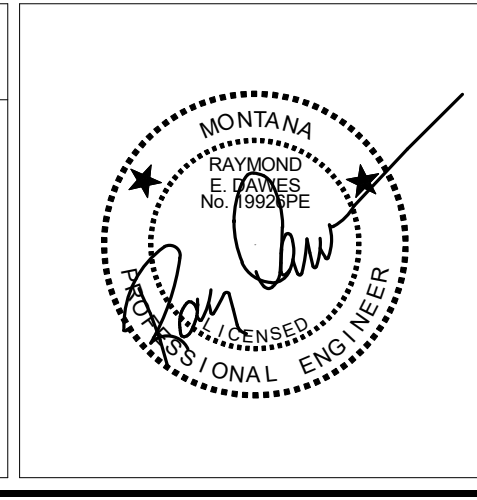
Department of
Veterans Affairs

2/23/2024 4:39:40 PM

one eighth inch = one foot
one quarter inch = one foot
one half inch = one foot
three eighths inch = one foot
three quarters inch = one foot
one and one half inches = one foot
one and one half inches = one foot
one and one half inches = one foot

COMPLIANCY REVIEW INCLUDED	2/23/2024
Revisions:	Date

CONSULTANTS:	
 TERRASITE DESIGN 1635 DEADWOOD AVENUE RAPID CITY, SOUTH DAKOTA 57702 PH: (605) 791-1736	 ALBERTSON ENGINEERING, INC. 315 NORTH MAIN AVENUE, SUITE 200 SIOUX FALLS, SOUTH DAKOTA 57104 PH: (605) 274-0880
 FARRIS ENGINEERING 12700 WEST DODGE ROAD OMAHA, NEBRASKA 68154 PH: (402) 330-5900	



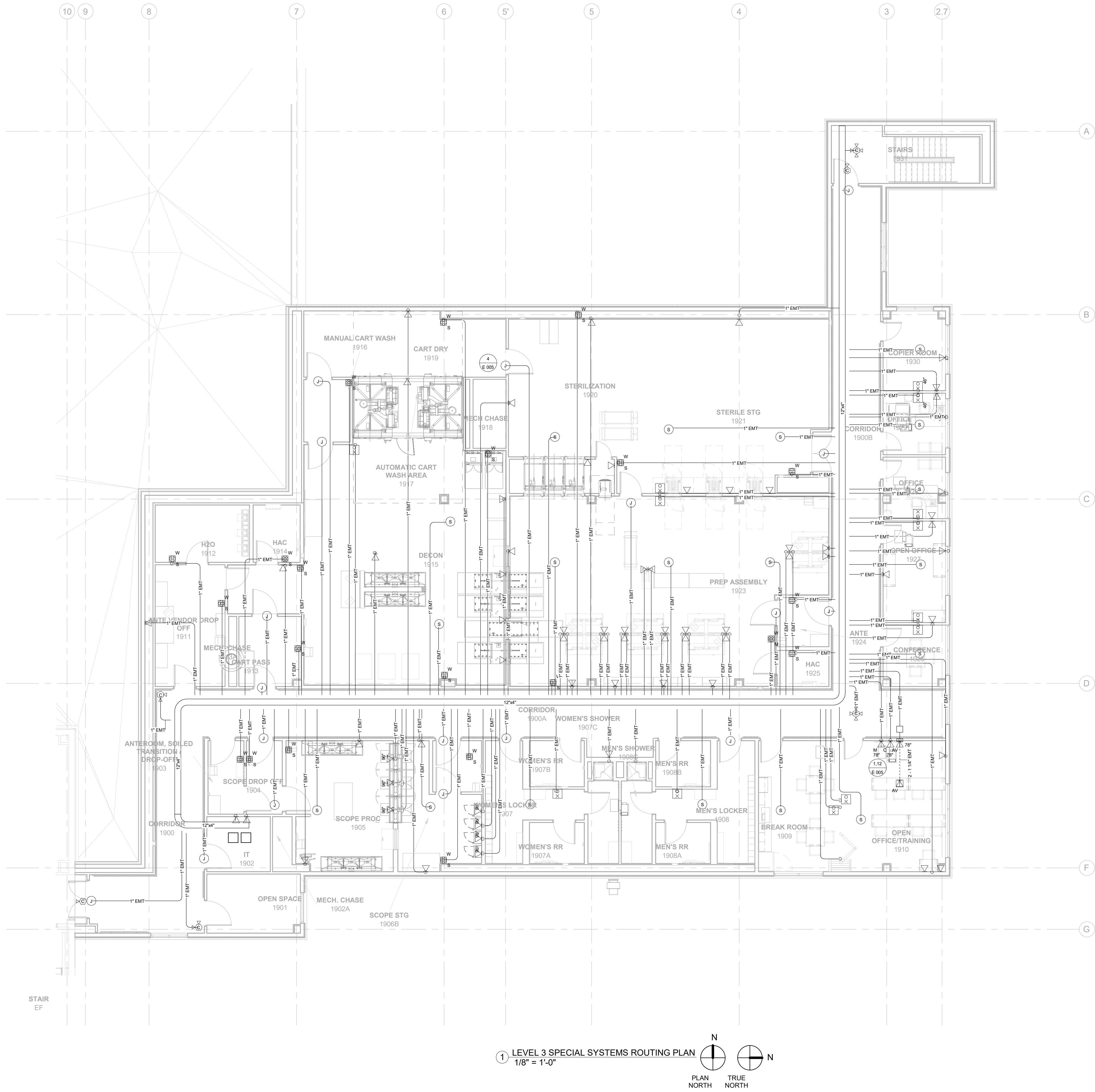
ARCHITECT	
 FOURFRONT DESIGN INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM	16.2330.A08

Drawing Title	LEVEL 3 SPECIAL SYSTEMS ROUTING PLAN
Approved: Project Director	Omaha VA Medical Center

Project Title	Design/Construct Sterile Processing Service - Omaha VA Medical Center
Location	4101 Woolworth Ave #4199 Omaha, Ne 68105
Date	11/23/2020
Checked	WEW
Drawn	KAB

Project Number	16.2330.A08
Building Number	25
Drawing Number	E-302
Dwg. 185 of 193	

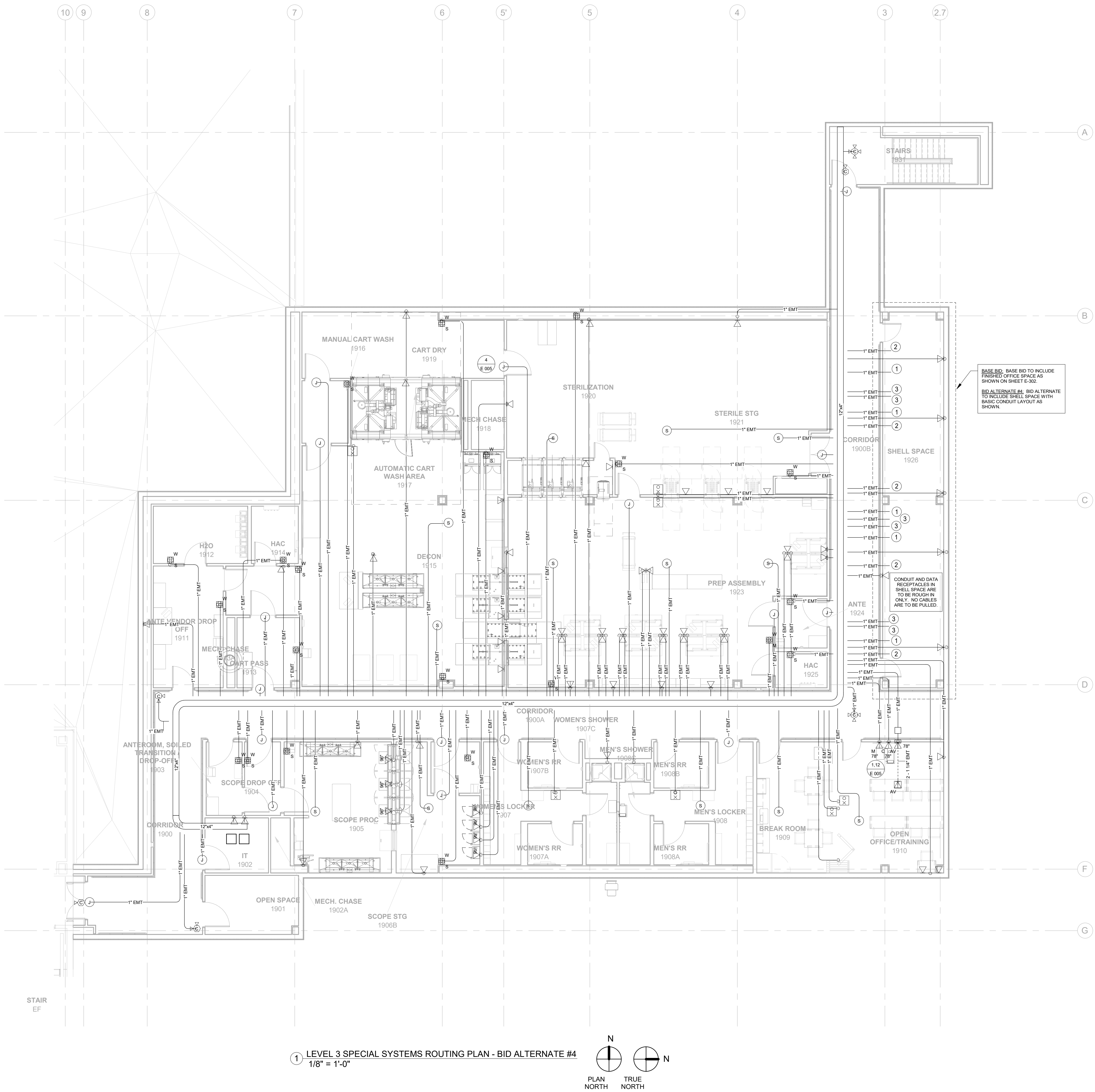
Office of Construction and Facilities Management	Department of Veterans Affairs
--	--------------------------------



1 LEVEL 3 SPECIAL SYSTEMS ROUTING PLAN
1/8" = 1'-0"

N
PLAN NORTH
TRUE NORTH

- KEYED ELECTRICAL NOTES
- 1 STUB CONDUIT INTO SHELL SPACE FOR FUTURE DATA RECEPTACLE.
 - 2 STUB CONDUIT INTO SHELL SPACE FOR FUTURE PAGING SPEAKER.
 - 3 STUB CONDUIT INTO SHELL SPACE FOR FUTURE DURESS/PANIC ALARM BUTTON.



CONSTRUCTION DOCUMENTS

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

