

ABBREVIATIONS (SOME ABBREVIATIONS MAY NOT BE USED ON DRAWINGS)				ELECTRICAL SYMBOL LEGEND (SOME SYMBOLS MAY NOT BE USED ON DRAWINGS)				OUTLET MOUNTING HEIGHTS (MEASURE TO CENTER OF BOX, UNLESS OTHERWISE INDICATED)			
ABBREV		DESCRIPTION		SYMBOL		DESCRIPTION		SYMBOL		DESCRIPTION	
A or AMP	AMPERES	MH	MANHOLE		GENERAL		FIRE ALARM CONTROL PANEL		COUNTER HEIGHT (*)	+3 INCHES ABOVE SPLASH	FIRE ALARM
AC	ALTERNATING CURRENT	MIN	MINIMUM		SCHEDULED LIGHT FIXTURE TYPE		SPRINKLER TAMPER SWITCH		CASEWORK OUTLETS	AS DIRECTED	MANUAL STATIONS
A/C	AIR CONDITIONING	MLO	MAIN LUGS ONLY		SCHEDULED EQUIPMENT CONNECTION (INCLUDE ALL WIRING, DISCONNECTING MEANS, CONTROL AND OTHER REQUIREMENTS SCHEDULED)		SPRINKLER FLOW SWITCH		SWITCHES & DIMMERS	48 INCHES	SIGNALING DEVICES
AIC	AMPERE INTERRUPTING CAPACITY	MOP, MOCP	MAXIMUM OVERCURRENT PROTECTION				SMOKE DETECTOR		RECEPTACLES	18 INCHES	REMOTE ALARM LIGHTS
AL	ALUMINUM	MTD	MOUNTED				DETECTOR IN HVAC DUCT		THERMOSTATS	48 INCHES	REMOTE ANNUNCIATOR
ARCH	ARCHITECTURAL	MTG	MOUNTING		DETAIL SYMBOL: # – IDENTIFYING NUMBER B – SHEET WHERE DETAIL TAKEN C – SHEET WHERE DETAIL SHOWN		HEAT DETECTOR		OCCUPANCY SENSORS	12 FEET MAXIMUM	GRAPHIC PLAQUES
ATC	AUTOMATIC TEMPERATURE CONTROL	NC	NORMALLY CLOSED				MANUAL STATION		VOICE (TELEPHONE)	18 INCHES	
ATS	AUTOMATIC TRANSFER SWITCH	N, NEUT	NEUTRAL				HORN [SPEAKER] WITH VISUAL SIGNAL (STROBE)		DATA (COMPUTER)	18 INCHES	SECURITY
AWG	AMERICAN WIRE GAUGE	NIC	NOT IN CONTRACT		REVISION CALLOUT		VISUAL SIGNAL (STROBE)		WALL PHONE	48 INCHES	KEY PAD
BIL	BASIC IMPULSE LEVEL	NO	NORMALLY OPEN				FIRE ALARM SPRINKLER ALARM BELL		TV (TELEVISION)	18 INCHES	CARD READER
BKR	BREAKER	NTS	NOT TO SCALE		ELECTRICAL PLAN NOTE		LOW VOLTAGE ROUGH–IN		TV WALL MOUNTED	CENTER OF TV BRACKET	CCTV
BLDG	BUILDING	OC	ON CENTER		SCHEDULED CONDUIT CALLOUT		HDMI JACK		SPEAKERS	90 INCHES	CCTV POLE MOUNTED
C	CONDUIT	OD	OUTSIDE DIAMETER		PAD MOUNTED TRANSFORMER		PHONE JACK		CLOCKS	90 INCHES	
C.O.	CONDUIT ONLY	OH	OVERHEAD		LIGHTING OUTLET – CEILING				CLOCK/SPEAKER	90 INCHES	
°C	DEGREES CELSIUS	PA	PUBLIC ADDRESS		STRIP LUMINAIRE (LENGTH TO SCALE)		DIGITAL KEY PAD (ALARM/DISARM ONLY)				
CB	CIRCUIT BREAKER	PB	PULLBOX		LUMINAIRE (TO SCALE ON DRAWINGS)		MOTION DETECTOR				
CCTV	CLOSED CIRCUIT TELEVISION	PF	POWER FACTOR		SURFACE FIXTURE – ROUND		JUNCTION BOX				
CFM	CUBIC FEET PER MINUTE	ø or PH	PHASE		SURFACE FIXTURE – WALL		CLOSED CIRCUIT TELEVISION CAMERA				
CKT	CIRCUIT	PNL	PANEL		EXIT FIXTURE WITH BATTERY BACKUP – CEILING		DOOR POSITION SWITCH				
CL	CENTER LINE	PR	PAIR		EXIT FIXTURE WITH BATTERY BACKUP – WALL		MAGNETIC DOOR HOLDER				
CLG	CEILING	PRI	PRIMARY		EXIT FIXTURE WITH DIRECTION ARROWS & BATT PAC						
CONC	CONCRETE	PT	POTENTIAL TRANSFORMER		PHOTOCELL						
CT	CURRENT TRANSFORMER	PVC	POLYVINYL CHLORIDE		COMBINATION EXIT SIGN AND TWIN HEAD EMERGENCY LIGHTING UNIT						
CU	COPPER	RECPT	RECEPTACLE		DISCONNECT SWITCH						
CW	COLD WATER	REQ	REQUIRED		FUSED DISCONNECT SWITCH						
BD	DECIBELS	RF	RADIO FREQUENCY		OCCUPANCY SENSOR – CEILING MOUNT						
DC	DIRECT CURRENT	RH / MWO	RANGE HOOD / MICROWAVE OVEN		SINGLE POLE TOGGLE SWITCH						
DIA	DIAMETER	RMS	ROOT MEAN SQUARE		THREE–WAY TOGGLE						
DIV	DIVISION	SEC	SECONDARY		SPLIT WIRED RECEPTACLE, 1/2 OF OUTLET IS CONTROLLED BY OCCUPANCY SENSOR OR TIME SWITCH						
DPDT	DOUBLE POLE, DOUBLE THROW	SHT	SHEET		CONTINUOUS DIMMING DAYLIGHT SENSOR						
DPST	DOUBLE POLE, SINGLE THROW	SMR	SURFACE METAL RACEWAY		OCCUPANCY SENSOR – WALL SWITCH						
DWG	DRAWING	SN	SOLID NEUTRAL		DIGITAL SWITCH STATION						
EGC	EQUIPMENT GROUND CONDUCTOR	SP	SINGLE POLE		DIMMER						
ELEC	ELECTRIC	SPD	SURGE PROTECTIVE DEVICE		DIGITAL PLUG CONTROLLER						
EMT	ELECTRICAL METALLIC TUBING	SPDT	SINGLE POLE, DOUBLE THROW		DIGITAL ROOM CONTROLLER						
EXST, (E)	EXISTING	SPST	SINGLE POLE, SINGLE THROW		DUPLEX RECEPTACLE (NEMA 5–20R)						
°F	DEGREES FAHRENHEIT	SS	STAINLESS STEEL		SUBSCRIPT: IG ISOLATED GROUND						
FA	FIRE ALARM	STD	STANDARD		WC WATER COOLER						
FC	FOOTCANDLE	SW	SWITCH		REF REFRIGERATOR						
FLA	FULL LOAD AMPS	SWBD	SWITCHBOARD		COP COPIER						
FLEX	FLEXIBLE CONDUIT	TEL	TELEPHONE		HWD HOT WATER DISPENSER						
GALV	GALVANIZED	TR	TAMPER RESISTANT		MWO MICROWAVE OVEN						
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	TV	TELEVISION		P PEDESTAL						
GND	GROUND	TTB	TELECOMMUNICATIONS TERMINAL BOARD		WP WEATHERPROOF						
H–O–A	HAND – OFF – AUTO	TYP	TYPICAL		C CEILING						
HP	HORSEPOWER	UL	UNDERWRITERS LABORATORY		DW DISHWASHER						
HPF	HIGH POWER FACTOR	UF	UNDERFLOOR		TR TAMPER RESISTANT						
H & V	HEATING AND VENTILATION	UG	UNDERGROUND		TV VIDEO DISPLAY OUTLET. REFER TO ARCHITECTURAL DETAILS FOR MOUNTING HEIGHT						
HVAC	HEATING, VENTILATION & AIR CONDITIONING	V	VOLTS		GFCI DUPLEX RECEPTACLE (NEMA 5–20R)						
HZ	HERTZ	VA	VOLT AMPERES		SUBSCRIPT: REF REFRIGERATOR						
IDF	INTERMEDIATE DISTRIBUTION FRAME	VAC	VOLTS ALTERNATING CURRENT		DW DISHWASHER						
J–BOX	JUNCTION BOX	VAR	REACTIVE VOLT AMPERES		WD WASTE DISPOSER						
KV	KILOVOLTS	VAV	VARIABLE AIR VOLUME		MWO MICROWAVE OVEN						
KVA	KILOVOLT AMPERES	VD	VOLTAGE DROP		TAMPER RESISTANT DUPLEX RECEPTACLE						
KVAR	REACTIVE KILOVOLT AMPERES	VDC	VOLTS DIRECT CURRENT		COMBINATION POWER AND LOW VOLTAGE SYSTEM FLOORBOX						
KW	KILOWATTS	VFD	VARIABLE FREQUENCY DRIVE								
KWH	KILOWATT HOURS	VT	VAPORTIGHT		SPLIT WIRED FOURPLEX (1) DUPLEX RECEPTACLE UNSWITCHED, (1) DUPLEX RECEPTACLE CONTROLLED BY OCCUPANCY SENSOR OR TIME SWITCH						
LT	LIGHT	W	WATTS								
LTG	LIGHTING	WP	WEATHERPROOF								
MAX	MAXIMUM	/W	WITH								
MCA	MINIMUM CIRCUIT AMPS	W/O	WITHOUT								
MCB	MAIN CIRCUIT BREAKER	XFER	TRANSFER								
MCC	MOTOR CONTROL CENTER	XFMR	TRANSFORMER								
MCM, KCM	THOUSAND CIRCULAR MILS	XLP	CROSS–LINKED POLYETHYLENE								
MDF	MAIN DISTRIBUTION FRAME	XP	EXPLOSION PROOF								
MECH	MECHANICAL	Z	IMPEDANCE								

GENERAL ELECTRICAL NOTES:

GENERAL ELECTRICAL NOTES:

1. SEE ARCHITECTURAL PLANS FOR LOCATION OF FIRE RATED CONSTRUCTION.

2. BRANCH CIRCUIT NOTES:

A. VERIFY BRANCH CIRCUIT WIRE COUNT BEFORE PULLING CONDUCTORS. PROVIDE REQUIRED CONDUCTORS TO EACH OUTLET AND DEVICE FOR PHASE, NEUTRAL AND EQUIPMENT GROUND BASED ON CIRCUIT DESIGNATIONS SHOWN AND AS OTHERWISE INDICATED ON PLANS OR NOTE BELOW.

B. FOR SWITCHED OUTLETS, PROVIDE ADDITIONAL CONDUCTOR COUNT REQUIRED FOR SWITCH LEGS TO ACCOMMODATE SWITCH CONTROL INDICATED. MAINTAIN UNSWITCHED LEG IN LIGHTING BRANCH CIRCUITS TO EXIT, EMERGENCY, AND NIGHT LIGHTING SHOWN.

C. MINIMUM BRANCH CIRCUIT CONDUCTOR SIZE FOR OUTDOOR AND EXTERIOR BUILDING LIGHTING SHALL BE #10 AWG.

D. PROVIDE SEPARATE NEUTRAL CONDUCTOR FOR ALL 120 AND 277 VAC BRANCH CIRCUITS UNLESS OTHERWISE INDICATED.

E. PROVIDE MANUFACTURER APPROVED PIN INSERT STYLE HANDLE TIES BETWEEN SINGLE POLE CIRCUIT BREAKERS SERVING BRANCH CIRCUITS SHARING A COMMON NEUTRAL.

3. MINIMUM CONDUIT SIZE FOR HOMERUNS AND FOR CONDUIT INSTALLED BELOW GRADE OUTDOORS SHALL BE 3/4 INCH.

4. REFER TO ARCHITECTURAL PLANS FOR LIGHT FIXTURE LOCATIONS AND FOR MOUNTING HEIGHT OF SUSPENDED AND WALL MOUNTED LIGHT FIXTURES. REFER TO REFLECTED CEILING PLANS, INTERIOR ELEVATIONS, EXTERIOR ELEVATIONS, ROOM SECTIONS, AND DETAILS SHOWN ON ARCHITECTURAL CONTRACT DOCUMENTS PRIOR TO ROUGH–IN. REPORT CONFLICTS TO ARCHITECT/ENGINEER FOR RESOLUTION.

5. REFER TO ARCHITECTURAL ELEVATIONS FOR LOCATION AND MOUNTING HEIGHT OF WIRING DEVICES. REPORT CONFLICTS TO ARCHITECT/ENGINEER FOR RESOLUTION.

6. VERIFY BACK BOX REQUIREMENTS OF EQUIPMENT FURNISHED UNDER OTHER THAN DIVISION 26 SECTIONS AND EQUIPMENT FURNISHED BY OWNER.

7. SEE MECHANICAL PLANS FOR QUANTITY AND LOCATION OF SMOKE DAMPERS. PROVIDE 120 VOLT CONNECTION TO EACH DAMPER.

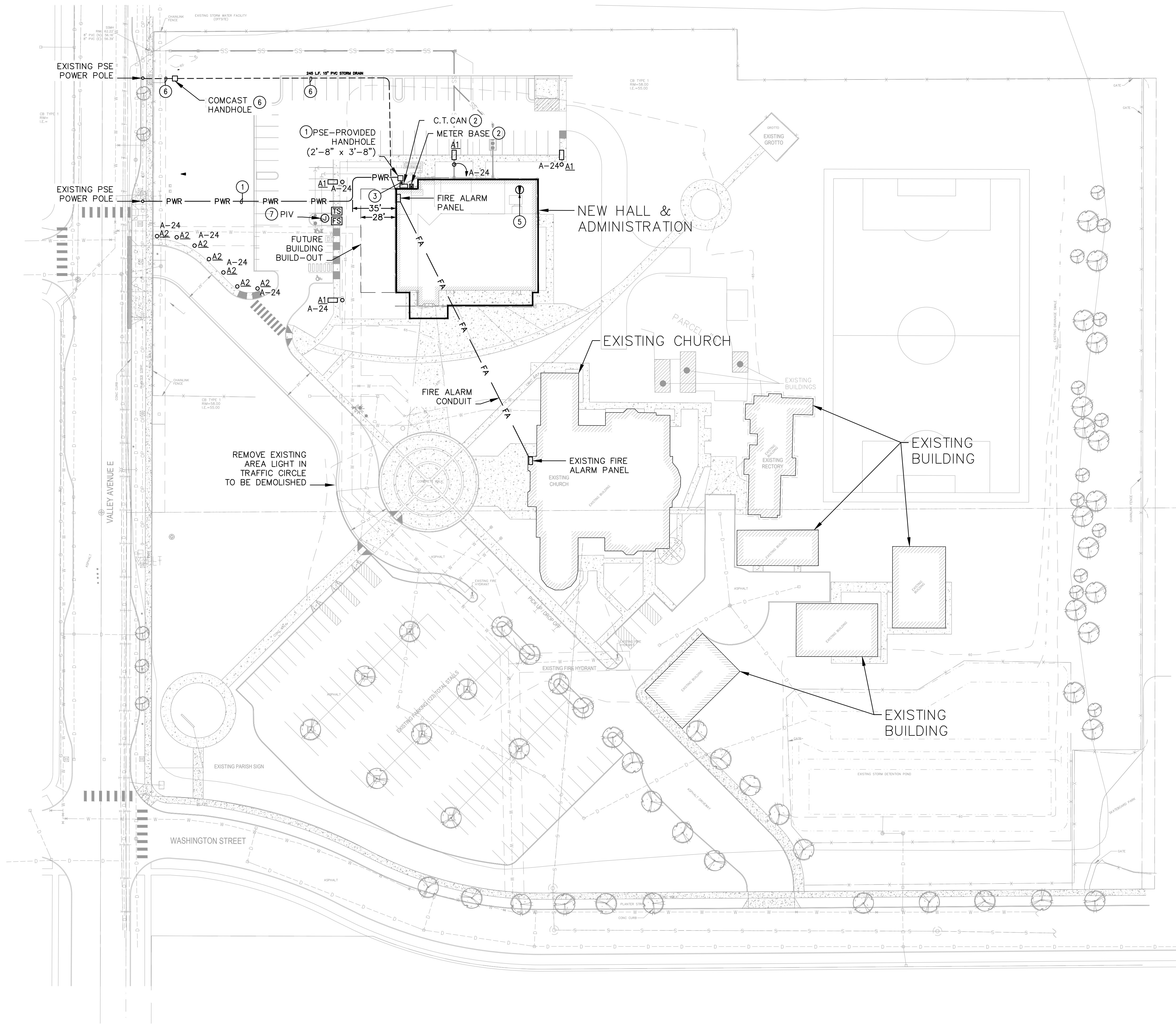
8. THIS BUILDING IS A MULTIFAMILY DWELLING THAT DOES NOT EXCEED THREE FLOORS ABOVE GRADE.

9. PROVIDE A COPY OF WSEC LIGHTING COMPLIANCE FORMS TO OWNER AS PART OF RECORD DRAWINGS.

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HULTZ & BERNHARDT

engineers i



TYPE A1
PARKING LOT
17 1/2" SQUARE LED, 4000°K
TYPE III DISTRIBUTION
INCLUDES: INTEGRAL MOTION/LIGHTING SENSOR
BASIS OF DESIGN: LITHONIA KAD LED



TYPE A2
PATHWAY
42" X 8" ROUND LED, 4000°K
0-10V DIMMING DRIVER
BASIS OF DESIGN: LITHONIA D-SERIES

PLAN NOTES:

- 1 PROVIDE TRENCHING, EXCAVATION, BED & BACKFILL ONLY FOR PUGET SOUND ENERGY (PSE). AVOID FUTURE BUILD-OUT OF BUILDING BY ROUTING CONDUIT 35' OF EXISTING BUILDING AS SHOWN. PRIMARY WIRE/CONDUIT BY PSE. HANDHOLE (BY BUILDING) PROVIDED BY PSE - INSTALLED BY CONTRACTOR. TRENCHING WILL REQUIRE PARTIAL REMOVAL OF EXISTING SIDEWALK ALONG VALLEY AVENUE. PROVIDE TEMPORARY STEEL PLATE OVER TRENCH FOR PEDESTRIAN SIDEWALK ACCESS. RE-FILL TRENCH TO PSE STANDARDS AND RE-CAST SIDEWALK SECTION.
- 2 PROVIDE C.T. CAN & METER BASE WITH 1-1/4" CONDUIT ONLY FOR PSE C.T. METERING CABLE.
- 3 PROVIDE TRENCHING & FEEDER CONDUIT. SEE SHEET E501 FOR FEEDER AND CONDUIT SIZES.
- 4 PROVIDE 1" CONDUIT TO EXISTING CHURCH FIRE ALARM PANEL LOCATION.
- 5 PROVIDE PHOTOCELL ON NORTH FACING SIDE OF ROOF. PHOTOCELL TO CONTROL ON/OFF FUNCTION OF ALL EXTERIOR LIGHT FIXTURES.
- 6 PROVIDE 2" PVC CONDUIT WITH PULLSTRING & COMCAST WASHDOT TYPE #1 HANDHOLE TO EXISTING STREET POLE. COORDINATE LOCATIONS AND HANDHOLE WITH COMCAST AND STORM DRAIN CONTRACTOR.. COORDINATE TRENCHING WITH SIDEWALK REMOVAL ASSOCIATED WITH PLAN NOTE #1.
- 7 PROVIDE FA CONNECTION TO PIV.

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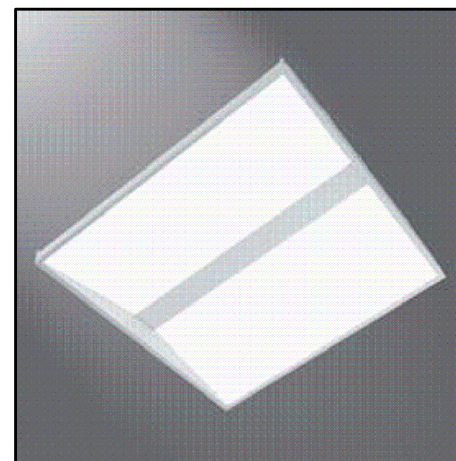
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File No: 1851 St. Andrew Parish Hall
Drawn By: BHU
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Issued for: PERMIT SET

ELECTRICAL SITE PLAN

E101



TYPE L1
MEETING ROOMS
2X2 LAY-IN LED, 3500°K
0-10V DIMMING DRIVER
BASIS OF DESIGN: METALUX ENCOUNTER



TYPE S1
KITCHEN
8"X4" SURFACE MOUNT LED, 3500°K
OPAL LENS, 0-10V DIMMING DRIVER
BASIS OF DESIGN: FAILSAFE HVL8



TYPE S2
PARISH HALL
2X2 SURFACE MOUNT LED, 3500°K
0-10V DIMMING DRIVER, IMPACT RESISTANT
BASIS OF DESIGN: NEWSTAR AGM SERIES WITH
SURFACE MOUNTING TRIM



TYPE RS & R6
TOILET ROOMS & PARISH HALL
6" ROUND LED, 3500°K
0-10V DIMMING DRIVER
BASIS OF DESIGN: HALO SLD



TYPE SL
STORAGE & EQUIPMENT AREAS
LENSED LED STRIPLIGHT, 3500°K
BASIS OF DESIGN: METALUX SNLED



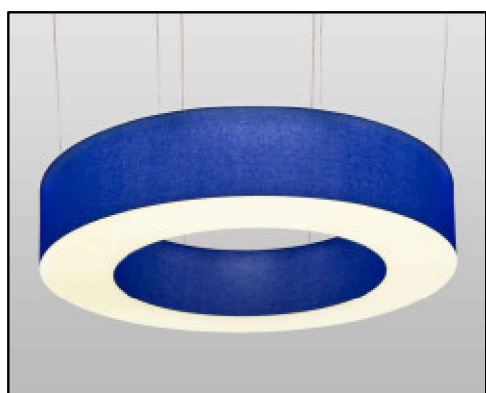
TYPE D1
TOILET ROOMS
DIRECT/INDIRECT WALL MOUNT LED
EXTRUDED ALUMINUM HOUSING
BASIS OF DESIGN: NEORAY DEFINE



TYPE SP
PARISH HALL
LED SPOTLIGHT, 8000 LUMENS
BASIS OF DESIGN: TIMES SQUARE CR80



TYPE RW
MEETING ROOMS, CORRIDOR ALCOVES
RECESSED, ADJUSTABLE LED ACCENT LIGHT,
1100 LUMENS
0-10V DIMMING DRIVER
BASIS OF DESIGN: LITELINE SIGMA 2



TYPE P1
VESTIBULES
36" DIAMETER LED PENDANT
BASIS OF DESIGN: BARBICAN DONUT



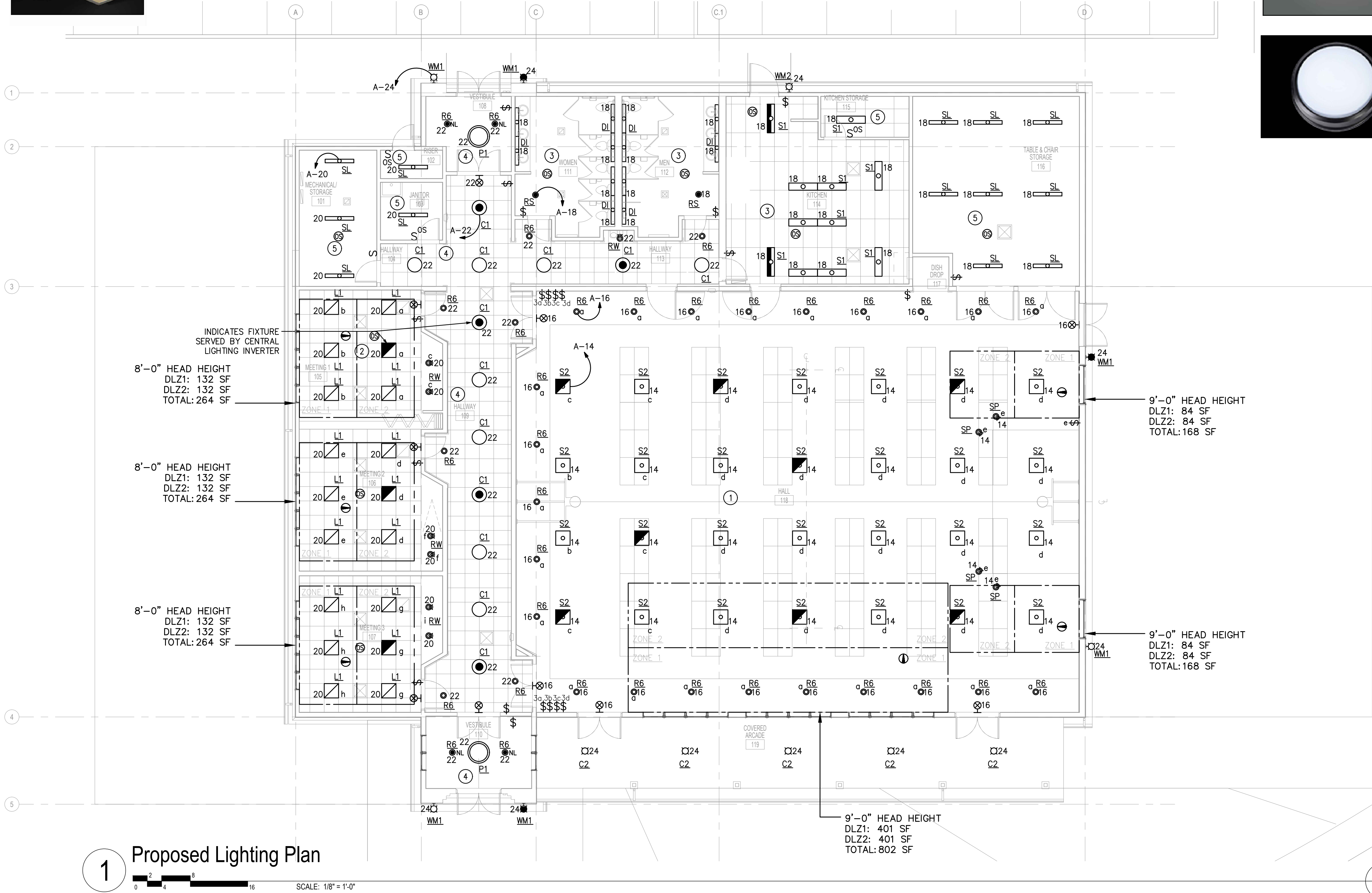
TYPE C1
CORRIDOR
24" DIAMETER LED DRUM
BASIS OF DESIGN: BARBICAN SURFACE DRUM



TYPE WM1
BUILDING WALL MOUNT LED,
FORWARD THROW OPTICS, 3000°K
BASIS OF DESIGN: MCGRAW EDISON IMPACT



TYPE C2
CEILING MOUNT LED,
VANDAL RESISTANT LENS, 3000°K
BASIS OF DESIGN: LUMINAIRE ARV



LIGHTING CONTROL NOTES:

1. PROVIDE UNSWITCHED HOT CONDUCTOR TO ALL EMERGENCY LIGHT FIXTURES.
2. ALL LIGHTING FIXTURES CIRCUITED TO PANEL 'A'. SEE PANEL SCHEDULES.

LIGHTING CONTROL NOTES:

1. SPACE CONTROLLED BY COMBINATION OF MANUAL CONTROLS WITH SCENE SELECTION & LOW VOLTAGE RELAY PANEL WITH 0-10V DIMMING RELAYS & TIMECLOCK FOR AUTOMATIC OFF. EACH CONTROL ZONE IDENTIFIED BY LOWER CASE LETTER TO BE CAPABLE OF ON/RAISE/LOWER/OFF SETTINGS INDEPENDENTLY. WITH UL924 EMERGENCY TRANSFER RELAY TO OVERRIDE CONTROLLED STATE OF FIXTURES SERVED FROM CENTRAL LIGHTING INVERTER.
2. SPACE CONTROLLED BY 0-10V ROOM CONTROLLER WITH MANUAL ON/RAISE/LOWER/OFF CONTROLS WITH OCCUPANCY SENSOR FOR AUTOMATIC OFF & DAYLIGHT SENSOR FOR DAYLIGHT HARVESTING. WITH UL924 EMERGENCY TRANSFER RELAY TO OVERRIDE CONTROLLED STATE OF FIXTURES SERVED FROM CENTRAL LIGHTING INVERTER.
3. SPACE CONTROLLED BY 0-10V ROOM CONTROLLER WITH MANUAL ON/RAISE/LOWER/OFF CONTROLS WITH OCCUPANCY SENSOR TO AUTOMATIC OFF, WITH UL924 EMERGENCY TRANSFER RELAY TO OVERRIDE CONTROLLED STATE OF FIXTURES SERVED FROM CENTRAL LIGHTING INVERTER.
4. SPACE CONTROLLED BY LOW VOLTAGE RELAY PANEL TIMECLOCK WITH MANUAL OVERRIDE. WITH UL924 EMERGENCY TRANSFER RELAY TO OVERRIDE CONTROLLED STATE OF FIXTURES SERVED FROM CENTRAL LIGHTING INVERTER.
5. SPACE CONTROLLED BY LINE VOLTAGE SWITCH FOR ON/OFF FOR SAFETY

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LIGHTING PLAN

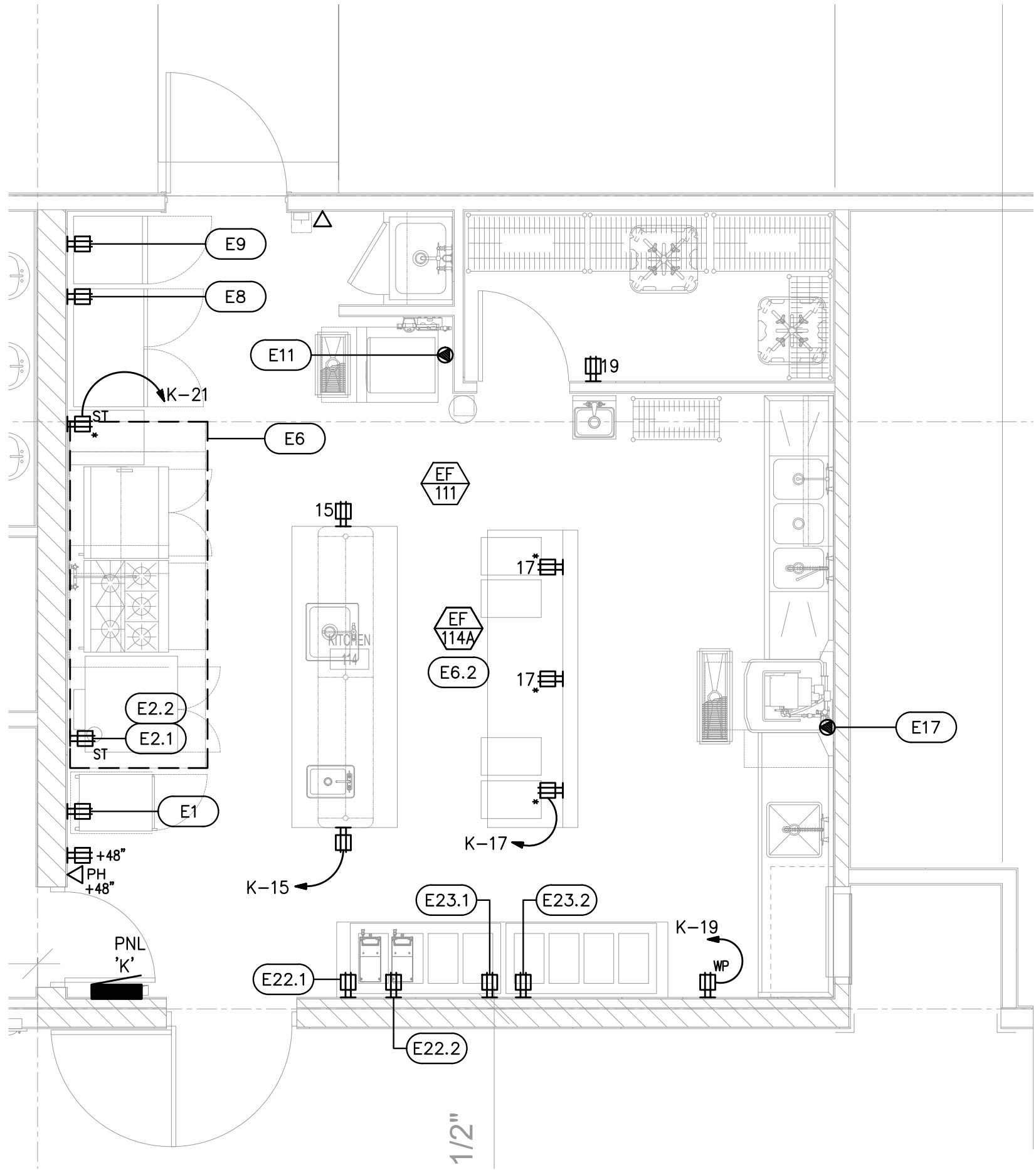
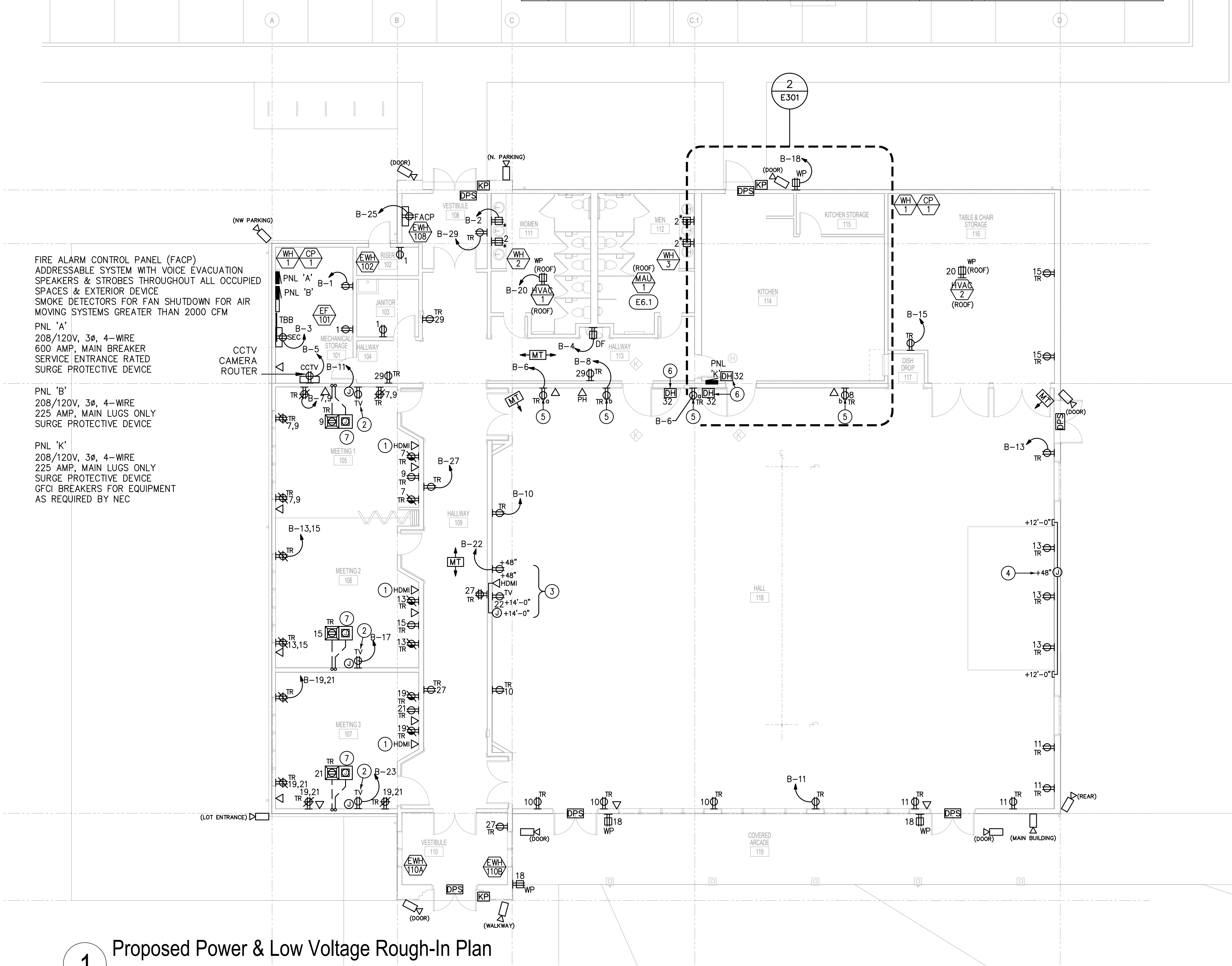
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E201

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KITCHEN EQUIPMENT CONNECTION SCHEDULE												
NAME	DESCRIPTION	MAXIMUM RATINGS					FEEDER		CIRCUIT #	BY	DISCONNECT	REMARKS
		HP	KVA	FLA	MCA	MOCP	VOLT/PH	1#12 EACH PHASE NEUTRAL PLUS GROUND				
E1	MOBILE HEATED CABINET		1.92	16.00	20.00	20	120	1		SEE PANEL SCH	• NEMA 5-20P	CORD & PLUG CORD & PLUG PROVIDE WITH SHUNT-TRIP BREAKER.
E2.1	CONVECTION OVEN - GAS	1/2	0.72	6.00	7.50	20	120	1		SEE PANEL SCH	• NEMA 5-20P	CIRCUIT TO BE DEDICATED (ONLY E2.2 FUTURE TO BE ADDED)
E2.2	FUTURE CONVECTION OVEN - GAS	1/2	0.72	6.00	7.50	20	120	1		SEE PANEL SCH	• NEMA 5-20P	FUTURE DEVICE TO BE INSTALLED ON SAME CIRCUIT AS E2.1.
E6	TYPE 1 HOOD									SEE PANEL SCH		NO ELECTRIC REQUIRED. PROVIDE FIRE ALARM CONNECTIONS AS REQUIRED.
E6.1	MAU-1 (SEE MAU-1 MECHANICAL SCHEDULES)									SEE PANEL SCH		SEE MECHANICAL SCHULES AND MECHANICAL/ELECTRICAL COORDINATION SCHEDULE
E6.2	EF-114A (SEE MECHANICAL SCHEDULES)									SEE PANEL SCH		SEE MECHANICAL SCHULES AND MECHANICAL/ELECTRICAL COORDINATION SCHEDULE
E8	2 DOOR REACH-IN REFRIGERATOR	1/2	0.65	5.40	6.75	20	120	1		SEE PANEL SCH	• NEMA 5-15P	CORD & PLUG
E9	REACH-IN FREEZER	1/2	0.44	3.70	4.63	20	120	1		SEE PANEL SCH	• NEMA 5-15P	CORD & PLUG
E11	FUTURE ICE-MAKER		1.82	15.20	19.00	20	120	1		SEE PANEL SCH	• 20A/1P CIRCUIT BREAKER	DIRECT CONNECTION FUTURE EQUIPMENT
E17	DISH-WASHER		16.36	45.40	56.75	60	208	3	1" C, 4#6 + #10 GND	SEE PANEL SCH	• 60A/3P CIRCUIT BREAKER	
E22.1	COFFEE BREWER		1.80	15.00	18.75	20	120	1		SEE PANEL SCH	• NEMA 5-15P	CORD & PLUG
E22.2	COFFEE BREWER		1.80	15.00	18.75	20	120	1		SEE PANEL SCH	• NEMA 5-15P	CORD & PLUG
E23.1	HOT FOOD SERVING COUNTER		2.50	20.83	26.04	30	120	1	3/4" C, 2#10 + #10 GND	SEE PANEL SCH	• NEMA 5-30P	CORD & PLUG
E23.2	HOT FOOD SERVING COUNTER		2.50	20.83	26.04	30	120	1	3/4" C, 2#10 + #10 GND	SEE PANEL SCH	• NEMA 5-30P	CORD & PLUG



CONSTRUCTION NOTES:

- UNLESS NOTED OTHERWISE ALL CIRCUITS SHOWN ORIGINATE FROM PANEL 'B'
- PROVIDE TAMPER RESISTANT IN ALL AREAS ACCESSIBLE BY CHILDREN.
- UNLESS NOTED OTHERWISE ALL CIRCUITS SHOWN WITHIN KITCHEN ORIGINATE FROM PANEL 'K'.

PLAN NOTES:

- PROVIDE WALL-MOUNTED FEMALE HDMI JACK AT LOCATION. PROVIDE 1-1/4" CONDUIT TO ABOVE CEILING SPACE.
- PROVIDE DUPLEX RECEPTACLE AND RECESSED JUNCTION BOX 24" BELOW CEILING LEVEL FOR TV. PROVIDE 1-1/4" CONDUIT FROM J-BOX TO ABOVE CEILING SPACE.
- PROVIDE DUPLEX RECEPTACLES, WALL MOUNTED HDMI JACK & RECESSED J-BOX FOR TV. PROVIDE 1-1/4" CONDUIT BETWEEN HDMI JACK & J-BOX. COORDINATE EXACT LOCATIONS WITH THOMAS MAGNAN PH: 253.840.4020.
- PROVIDE RECESSED J-BOX AND 3/4" CONDUITS STUBBED TO LOCATIONS SHOWN FOR SPEAKER SYSTEM. PROVIDE CABLE "PASS-THRU" FACEPLATE FOR JUNCTION BOX. COORDINATE EXACT LOCATIONS WITH THOMAS MAGNAN PH: 253.840.4020.
- GROUP DUPLEX RECEPTACLES ON SEPARATE CIRCUITS TO AVOID OVERLOADING AS SHOWN.
- PROVIDE 120V HOT CONDUCTOR FROM 120V CIRCUIT, 'B-32' FOR ELECTRIFIED MAGNETIC DOOR HOLDS.
- PROVIDE WIREMOLD RFB2 SERIES FLOOR BOX FOR SLAB-ON-GRADE INSTALLATION.

RMC ARCHITECTS



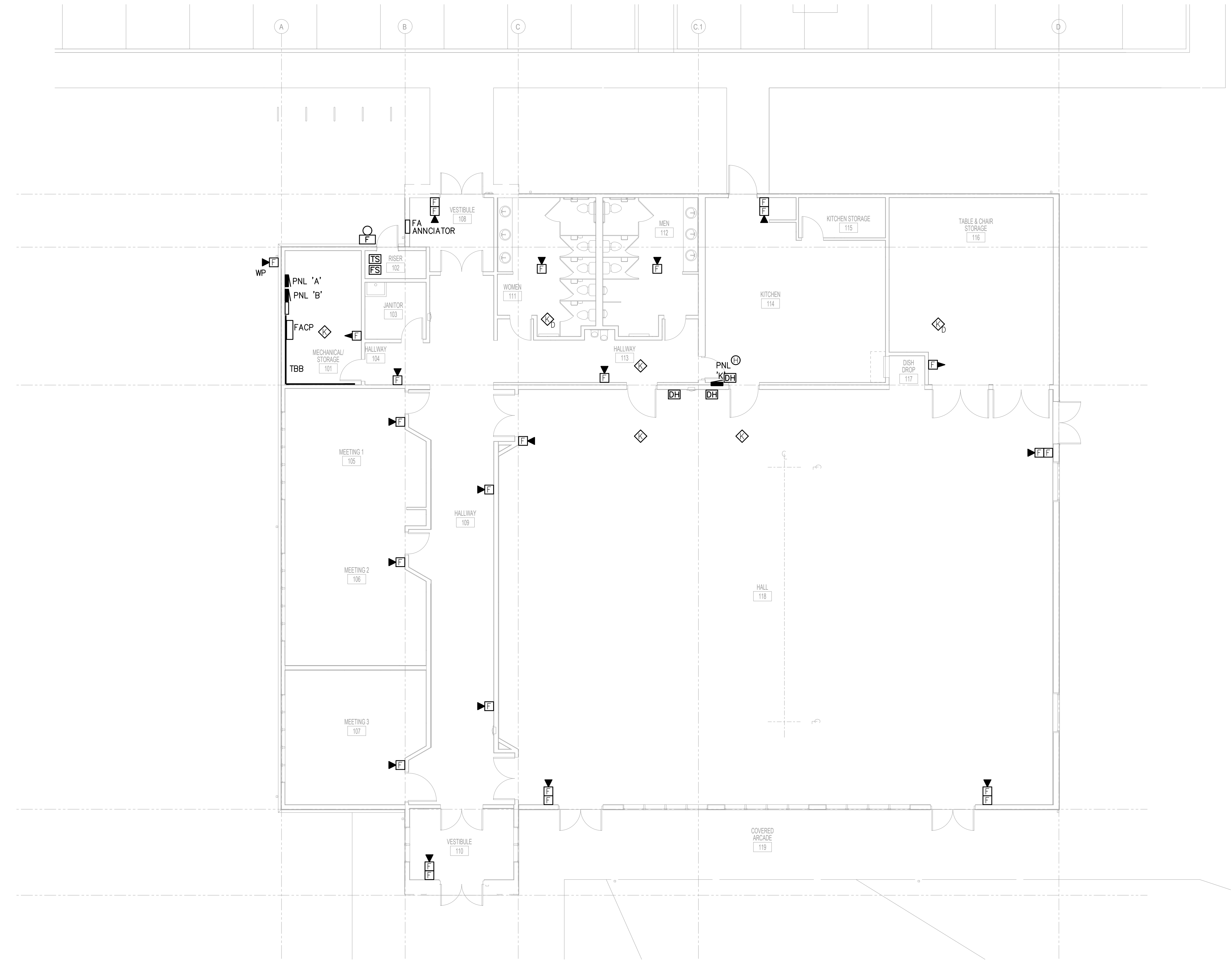
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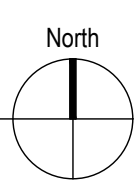
POWER AND LOW
VOLTAGE
ROUGH-IN PLAN

E301

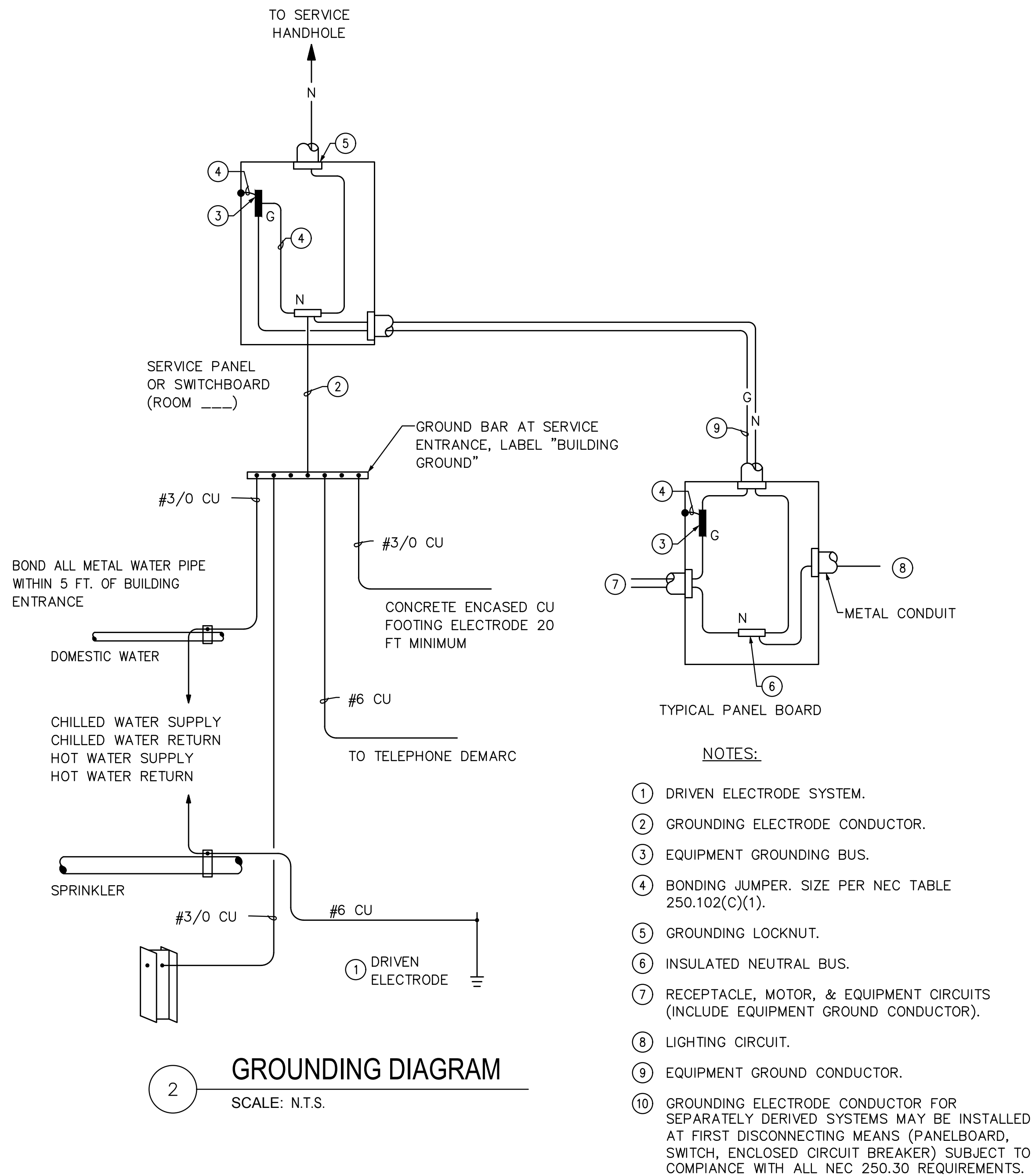
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1 Proposed Fire Alarm Plan
0 2 4 8 16 SCALE: 1/8" = 1'-0"



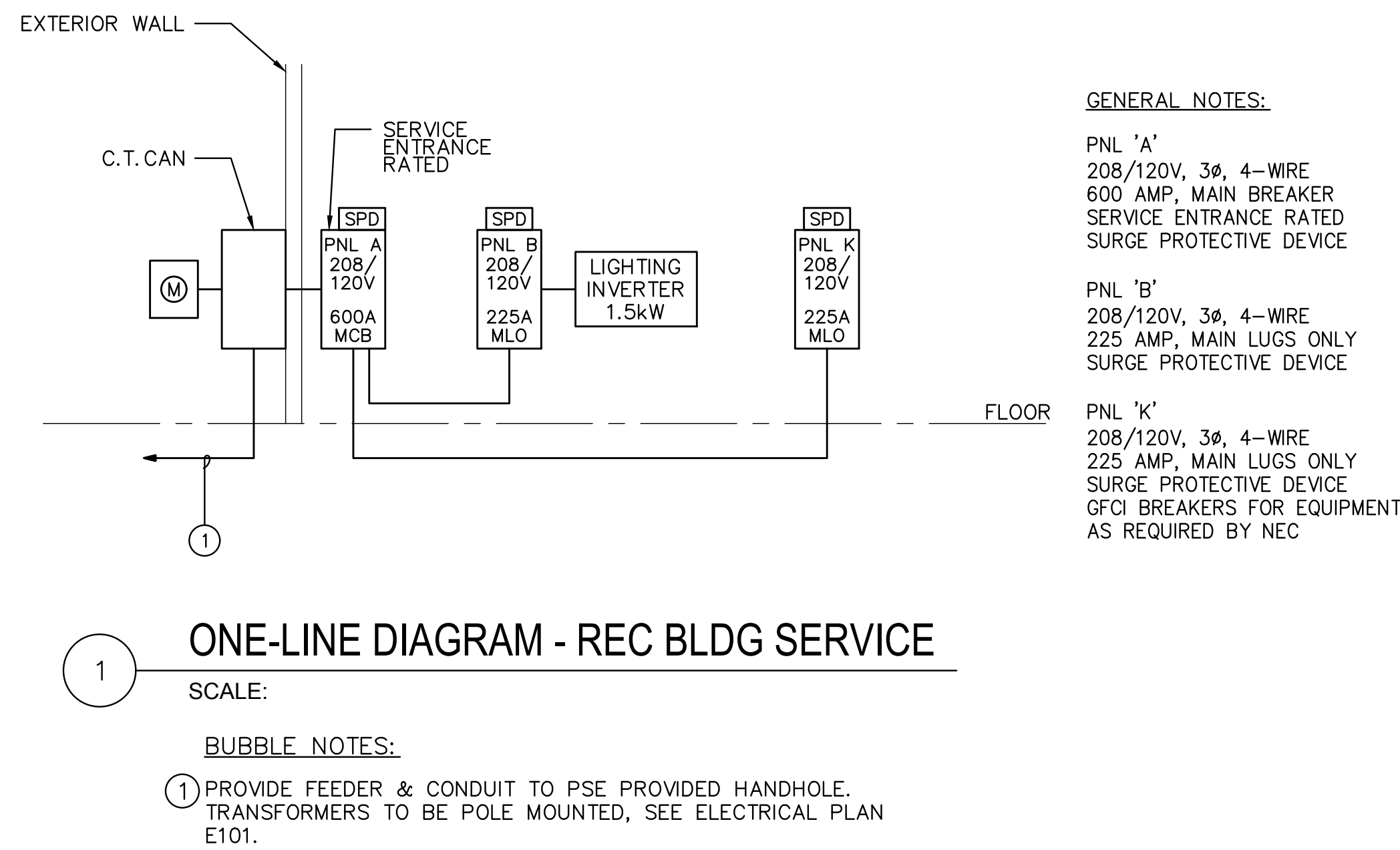
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GROUNDING DIAGRAM

SCALE: N.T.S.



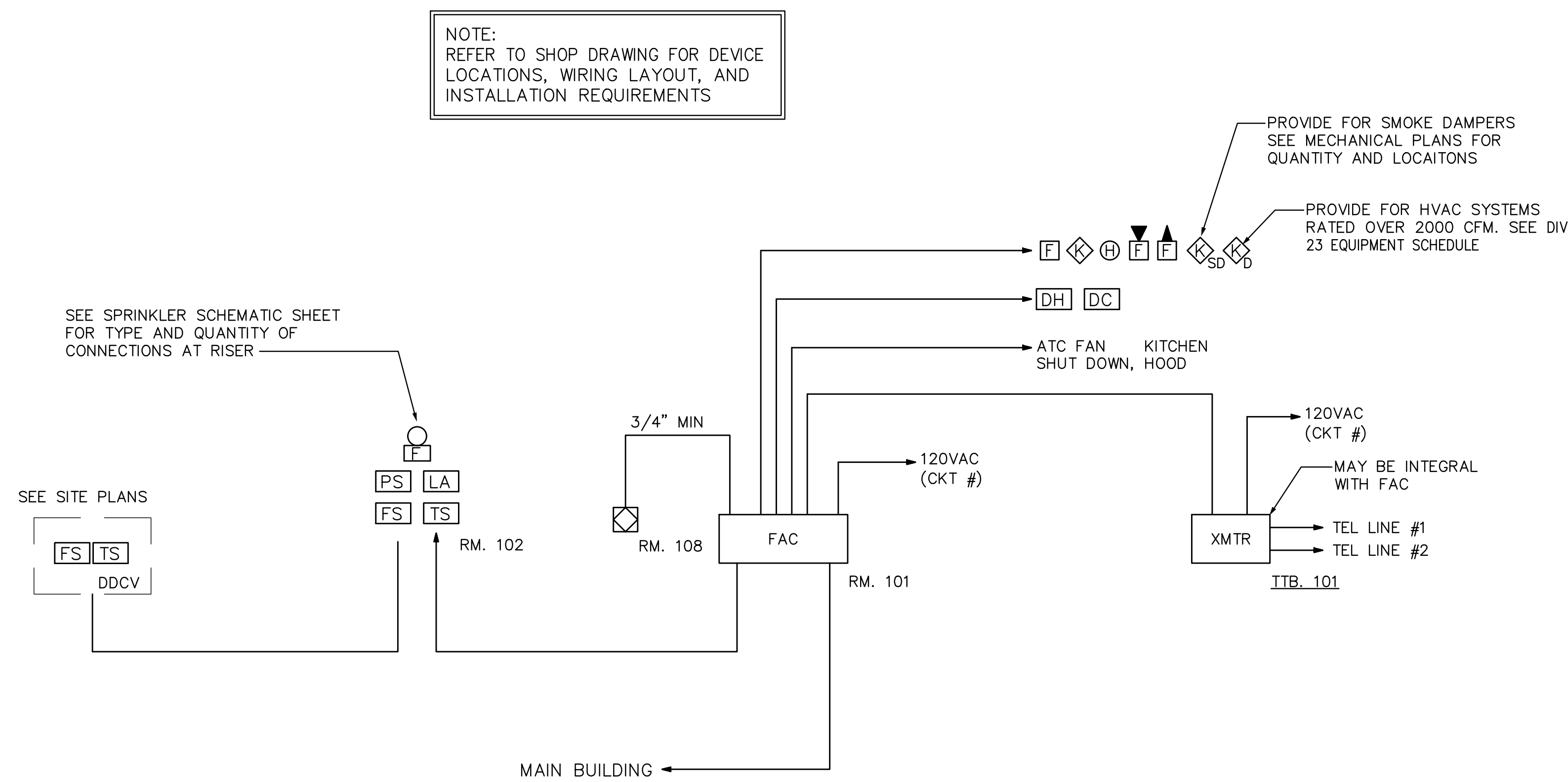
FEEDER SCHEDULE (BASED ON COPPER CONDUCTORS)		
CALLOUT	DESCRIPTION	REMARKS
225-4-G	2 1/2"C-4#4/0 + #4 GND	
600-4	(2) 2 1/2"C-4#350 KCM IN PARALLEL	

Panel Name: A										PANEL SCHEDULE					Mfr:		S.E. Rated		
Location: MAIN ELEC ROOM 101										208Y/120 Volt		Section: 1		of 1		Cat #			
Fed From: UTILITY										3 Phase, 4 Wire Surface Mounted Panelboard									
22 kAIC Sym										600 Amp		Main Circuit Brea		600 Amp Bus Capacity		Copper Bu 100% Neutral			
Ckt No.	Circuit Description				Ckt Brkr	Pol	kVA	P	H	kVA	Ckt Brkr	Pol	Circuit Description				Ckt No.		
1	HVAC-1				90/ 3		6.82	a		8.00	200/ 3		PANEL B				2		
3					-		6.82	b		8.84	-						4		
5					-		6.82	c		7.60	-						6		
7	HVAC-2				125/ 3		8.74	a		15.28	200/ 3		PANEL K				8		
9					-		8.74	b		10.36	-						10		
11					-		8.74	c		10.16	-						12		
13	EF-114A				20/ 3		0.83	a		1.12	20/ 1		LT G: HALL 118				14		
15					-		0.83	b		0.56	20/ 1		LT G: HALL 118				16		
17					-		0.83	c		1.09	20/ 1		LT G: RR 111, RR 112, KIT CHEN 114, STORAGE 116				18		
19	EWH-110A, EWH-110B				20/ 3		1.00	a		0.73	20/ 1		LT G: WEST SIDE				20		
21					-		1.00	b		0.59	20/ 1		LT G: HALLWAYS				22		
23					-		1.00	c		0.69	20/ 1		LT G: EXTERIOR				24		
25	SPACE						0.00	a		0.00	20/ 1		SPACE				26		
27	SPACE						0.00	b		0.00	20/ 1		SPACE				28		
29	SPACE						0.00	c		0.00	20/ 1		SPACE				30		
31	SPACE						0.00	a		0.00	20/ 1		SPACE				32		
33	SPACE						0.00	b		0.00	20/ 1		SPACE				34		
35	SPACE						0.00	c		0.00	20/ 1		SPACE				36		
37	SPACE						0.00	a		0.00	30/ 3		SURGE PROTECTIVE DEVICE				38		
39	SPACE						0.00	b		0.00	-						40		
41	SPACE						0.00	c		0.00	-						42		
Load Summary																			
Connected Load		Factor		Calculated Load		Notes:													
Lighting 4.78 kVA		125%		5.97 kVA		1.													
Receptacles 15.48 kVA		50%>10kVA		12.74 kVA															
All Motors 1.67 kVA		100%		1.67 kVA															
Lrgst Motor 2.49 kVA		125%		3.11 kVA															
Kitchen 31.22 kVA		65%		20.29 kVA															
Miscellaneous 61.53 kVA		100%		61.53 kVA		Phase Balance													
Non-Coincident 0.00 kVA		0%		0.00 kVA		FA 353.95 Amps													
Total 117.16 kVA				105.31 kVA		FB 314.14 Amps													
325.2 Amps				292.3 Amps		FC 307.50 Amps													

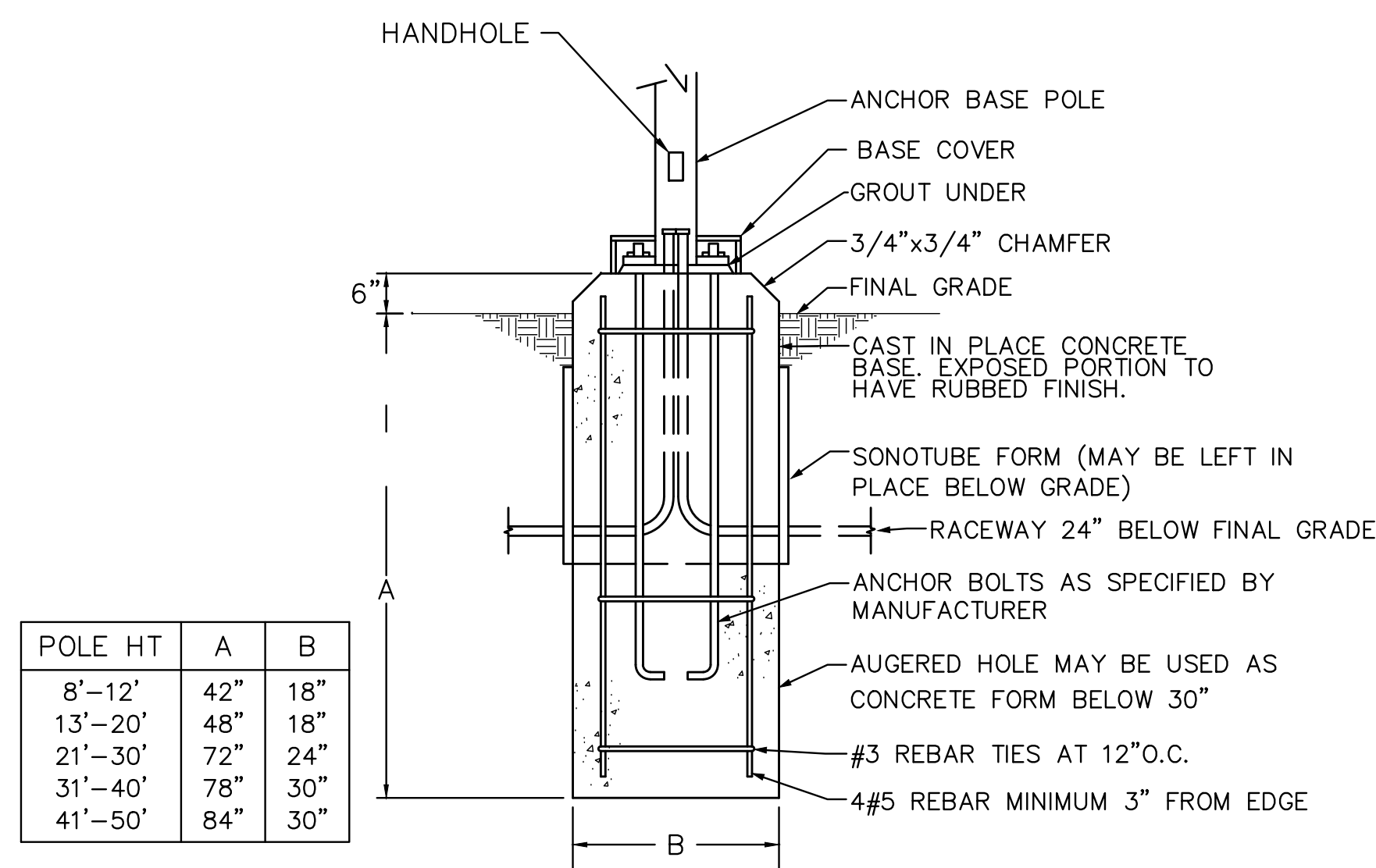
Panel Name: B PANEL SCHEDULE										Mfr:	
Location: MAIN ELEC ROOM 101				208Y/120 Volt Section: 1 of 1				Cat#			
Fed From: PANEL A 3 Phase, 4 Wire Surface Mounted Panelboard											
10 kAIC Sym 200 Amp Main Lugs Only				200 Amp Bus Capacity				Copper Bu 100% Neutral			
Ckt No.	Circuit Description	Ckt Brkr Amps	Pol	kVA	P H	kVA	Ckt Brkr Amps	Pol	Circuit Description	Ckt No.	
1	REC: 101, 102, 103	20/ 1	0.72	a	0.72	20/ 1	REC: 111, 112	2			
3	MISC: 101 SECURITY	20/ 1	0.50	b	0.75	20/ 1	MISC: 113 DRINKING FOUNTAIN	4			
5	MISC: 101 CCTV	20/ 1	0.50	c	0.36	20/ 1	REC: 118	6			
7	REC: 105 (SWIT CHED)	20/ 1	1.08	a	0.36	20/ 1	REC: 118	8			
9	REC: 105 (UNSWIT CHED)	20/ 1	1.08	b	0.90	20/ 1	REC: 118	10			
11	MISC: 105 TV	20/ 1	0.75	c	0.90	20/ 1	REC: 118	12			
13	REC: 106 (SWIT CHED)	20/ 1	0.72	a	0.72	20/ 1	REC: 118	14			
15	REC: 106 (UNSWIT CHED)	20/ 1	0.72	b	0.54	20/ 1	REC: 116	16			
17	MISC: 106 TV	20/ 1	0.75	c	0.72	20/ 1	REC: EXTERIOR	18			
19	REC: 107 (SWIT CHED)	20/ 1	1.08	a	0.36	20/ 1	REC: ROOF MAINTENANCE	20			
21	REC: 107 (UNSWIT CHED)	20/ 1	1.08	b	0.93	20/ 1	MISC: 118 TV/ REC: 118	22			
23	MISC: 108 TV	20/ 1	0.75	c	0.90	20/ 1	MISC: WH-1/ MTR CP-1, EF-101	24			
25	MISC: 108 FACP	20/ 1	0.50	a	1.44	20/ 1	MISC: 111 WH-2	26			
27	REC: 109, 110	20/ 1	0.90	b	1.44	20/ 1	MISC: 112 WH-3	28			
29	REC: 104, 108, 113	20/ 1	0.72	c	1.25	20/ 1	MISC: EWH-102, EWH-108	30			
31	SPARE	20/ 1	0.00	a	0.30	20/ 1	MISC: DOOR HOLDERS	32			
33	SPARE	20/ 1	0.00	b	0.00	20/ 1	SPARE	34			
35	SPARE	20/ 1	0.00	c	0.00	20/ 1	SPARE	36			
37	SPARE	20/ 1	0.00	a	0.00	20/ 1	SPARE	38			
39	SPARE	20/ 1	0.00	b	0.00	20/ 1	SPARE	40			
41	SPARE	20/ 1	0.00	c	0.00	20/ 1	SPARE	42			
Load Summary		Connected Load		Factor		Calculated Load		Notes:			
Lighting		0.00 kVA		125%		0.00 kVA		1.			
Receptacles		13.86 kVA		50%>10kVA		11.93 kVA					
All Motors		0.30 kVA		100%		0.30 kVA					
Lrgst Motor		0.00 kVA		125%		0.00 kVA					
Kitchen		0.00 kVA		100%		0.00 kVA					
Miscellaneous		10.28 kVA		100%		10.28 kVA		Phase Balance			
Non-Coincident		0.00 kVA		0%		0.00 kVA		FA 66.62 Amps			
Total		24.44 kVA				22.51 kVA		FB 73.61 Amps			
		67.8 Amps				62.5 Amps		FC 63.29 Amps			

MECHANICAL EQUIPMENT CONNECTION SCHEDULE													
NAME	DESCRIPTION	LOCATION	MAXIMUM RATINGS				(CU) FEEDER			PANEL SEE PANEL FOR CKT	DISCONNECT		REMARKS
			HP	KVA	FLA	MCA	MOCP	VOLT/PH	#12 EACH PHASE, NEUTRAL, PLUS GROUND		BY	DESCRIPTION	
HVAC-1	GAS HEAT / ELECTRIC COOLING	EXTERIOR - ROOF		20.46	56.8	71.0	90	208 3	1-1/4"C - 3#3 + #8 GND	A	•	WP - 100AS/90AF	PROVIDE UNI-STRUT FOR MOUNTING OF DISCONNECT.
HVAC-2	GAS HEAT / ELECTRIC COOLING	EXTERIOR - ROOF		26.23	72.8	91.0	125	208 3	1-1/2"C - 3#1 + #8 GND	A	•	WP - 200AS/125AF	PROVIDE UNI-STRUT FOR MOUNTING OF DISCONNECT.
MAU-1	MAKEUP AIR	EXTERIOR - ROOF		1.59	4.4	5.5	20	208 3		A	•	WP - 30AS/20AF	PROVIDE UNI-STRUT FOR MOUNTING OF DISCONNECT.
EF-101	EXHAUST FAN	MECH/STOR 101		0.20	1.7	2.1	20	120 1		B	•	20A RATED SINGLE POLE TOGGLE	
EF-111	EXHAUST FAN	KITCHEN	1/4	0.70	5.8	7.3	20	120 1		K	•	20A RATED SINGLE POLE TOGGLE	
EF-114A	EXHAUST FAN - TYPE 1 HOOD	KITCHEN	1-1/2	3.39	9.4	11.8	20	208 3		A	•	30AS/20AF	
EF-114B	EXHAUST FAN	EXTERIOR ROOF - KITCHEN	1/4	0.70	5.8	7.3	20	120 1		K	•	20A RATED SINGLE POLE TOGGLE	
EW-H102	ELECTRIC WALL HEATER	RISER 102		0.50	4.2	5.2	20	120 1		B	•	20A RATED SINGLE POLE TOGGLE	
EW-H108	ELECTRIC WALL HEATER	VESTIBULE 108		0.75	6.3	7.8	20	120 1		B	•	20A RATED SINGLE POLE TOGGLE	
EW-H110A	ELECTRIC WALL HEATER	VESTIBULE 110		1.50	4.2	5.2	20	208 3		A	•	20A RATED THREE POLE TOGGLE	
EW-H110B	ELECTRIC WALL HEATER	VESTIBULE 110		1.50	4.2	5.2	20	208 3		A	•	20A RATED THREE POLE TOGGLE	
WH-1	ELECTRIC WATER HEATER	STOR 116		0.60	5.0	6.3	20	120 1		B	•	20A RATED SINGLE POLE TOGGLE	
WH-2	ELECTRIC WATER HEATER	WOMEN 111		1.44	12.0	15.0	20	120 1		B	•	20A RATED SINGLE POLE TOGGLE	
WH-3	ELECTRIC WATER HEATER	MEN 112		1.44	12.0	15.0	20	120 1		B	•	20A RATED SINGLE POLE TOGGLE	
CP-1	CIRCULATION PUMP	STOR 116		0.10	0.8	1.0	20	120 1		B	•	20A RATED SINGLE POLE TOGGLE	

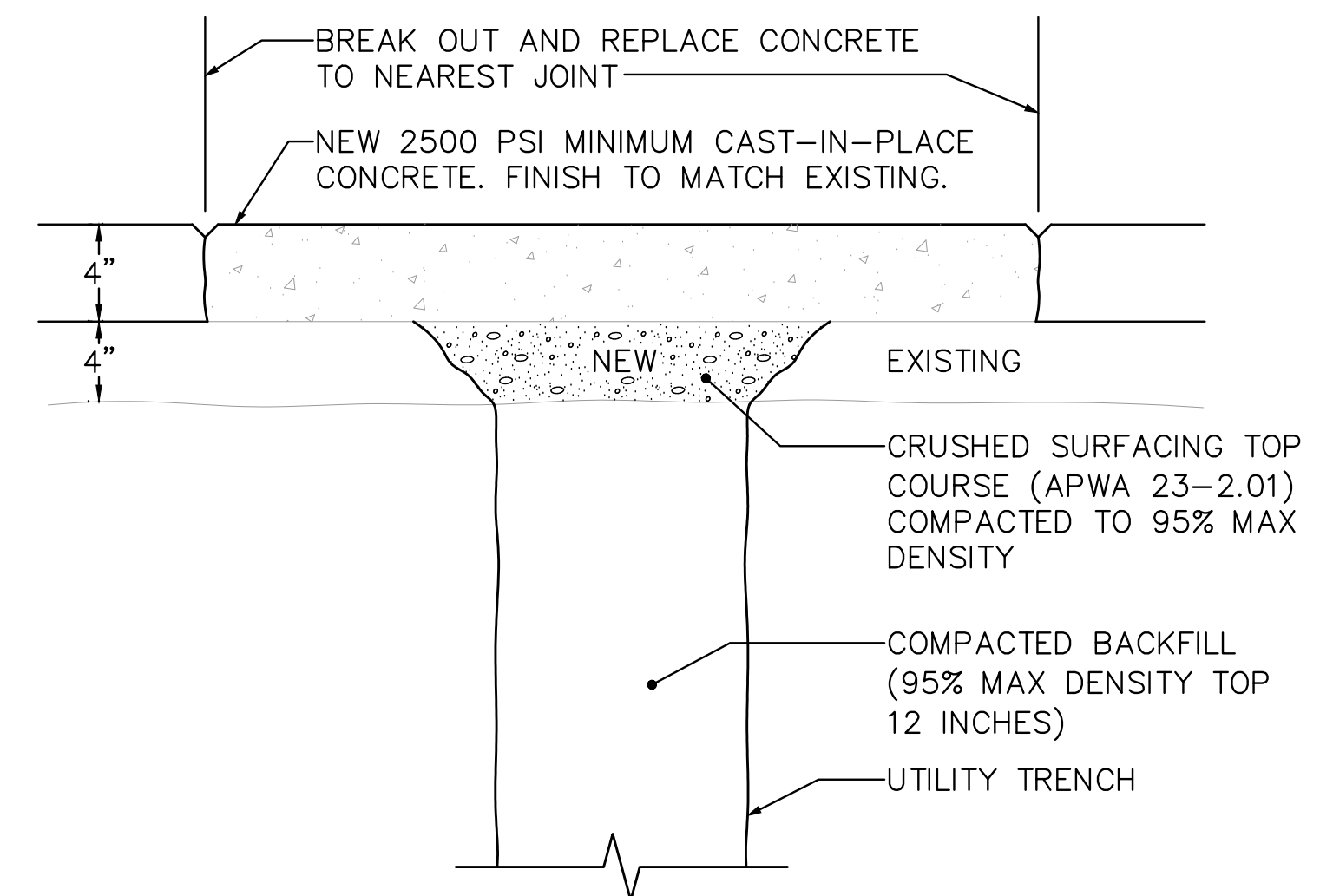
Panel Name: K										PANEL SCHEDULE					Mfr:		
Location: KITCHEN 114					208Y/120 Volt					Section: 1		of 1		Cat#			
Fed From: PANEL A										3 Phase, 4 Wire					Surface Mounted Panelboard		
10 kAIC Sym					200 Amp		Main Lugs Only		200 Amp		Bus Capacity		Copper Bu 100% Neutral		Isolated Ground		
Ckt No.	Circuit Description				Ckt Brkr	Amps	Pol	kVA	H	kVA	Ckt Brkr	Amps	Pol	Circuit Description			Ckt No.
1	E1 - MOBILE HEAT ED CABINET				20/ 1	1.92	a	5.45		60/ 3	E17 - DISHWASHER						2
3	E2.1 - CONVECTION OVEN - GAS				20/ 1	0.72	b	5.45		-							4
5	SHUNT -TRIP					0.00	c	5.45		-							6
7	E6 - TYPE ONE HOOD				20/ 1	0.00	a	1.80	20/ 1	E22.1 - COFFEE BREWER							8
9	E8 - 2-DOOR REACH-IN REFER				20/ 1	0.65	b	1.80	20/ 1	E22.2 - COFFEE BREWER							10
11	E9 - REACH-IN FREEZER				20/ 1	0.44	c	2.50	30/ 1	E23.1 - HOT FOOD SERVING COUNTER							12
13	E11 - ICE-MAKER (FUTURE)				20/ 1	1.82	a	2.50	30/ 1	E23.2 - HOT FOOD SERVING COUNTER							14
15	REC - CONV				20/ 1	0.36	b	0.67	20/ 1	EF-111							16
17	REC - CONV				20/ 1	0.54	c	0.70	20/ 1	EF-114B							18
19	REC - CONV				20/ 1	0.54	a	0.53	20/ 3	MAU-1							20
21	REC - CONV				20/ 1	0.18	b	0.53	-								22
23	SHUNT -TRIP					0.00	c	0.53	-								24
25	E2.2 - CONVECTION OVEN - GAS (FUTURE)				20/ 1	0.72	a	0.00	20/ 1	SPARE							26
27	SHUNT -TRIP					0.00	b	0.00	20/ 1	SPARE							28
29	SPARE					20/ 1	0.00	c	0.00	20/ 1	SPARE						30
31	SPARE					20/ 1	0.00	a	0.00		SPACE						32
33	SPARE					20/ 1	0.00	b	0.00		SPACE						34
35	SPARE					20/ 1	0.00	c	0.00		SPACE						36
37	SPACE						0.00	a	0.00		SPACE						38
39	SPACE						0.00	b	0.00		SPACE						40
41	SPACE						0.00	c	0.00		SPACE						42
Load Summary		Connected Load		Factor		Calculated Load		Notes:									
Lighting		0.00 kVA		125%		0.00 kVA		1.									
Receptacles		1.62 kVA		50%>10kVA		1.62 kVA											
All Motors		0.70 kVA		100%		0.70 kVA											
Lrgst Motor		0.67 kVA		125%		0.83 kVA											
Kitchen		31.22 kVA		65%		20.29 kVA											
Miscellaneous		1.59 kVA		100%		1.59 kVA		Phase Balance									
Non-Coincident		0.00 kVA		0%		0.00 kVA		F _A 127.24 Amps									
Total		35.80 kVA				25.04 kVA		FB 86.24 Amps									
		99.4 Amps				69.5 Amps		FC 84.60 Amps									



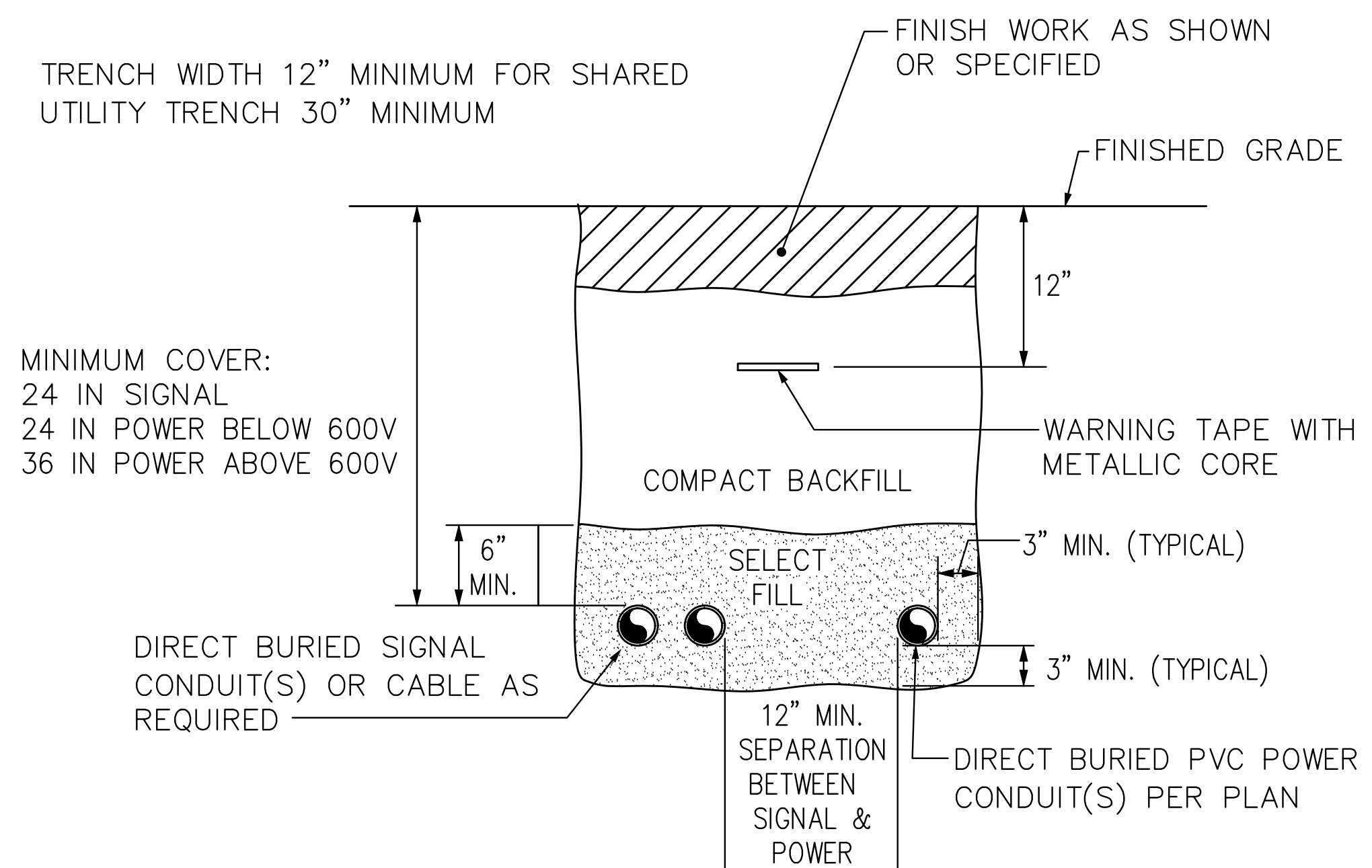
4 FIRE ALARM RISER DIAGRAM
SCALE: N.T.S.



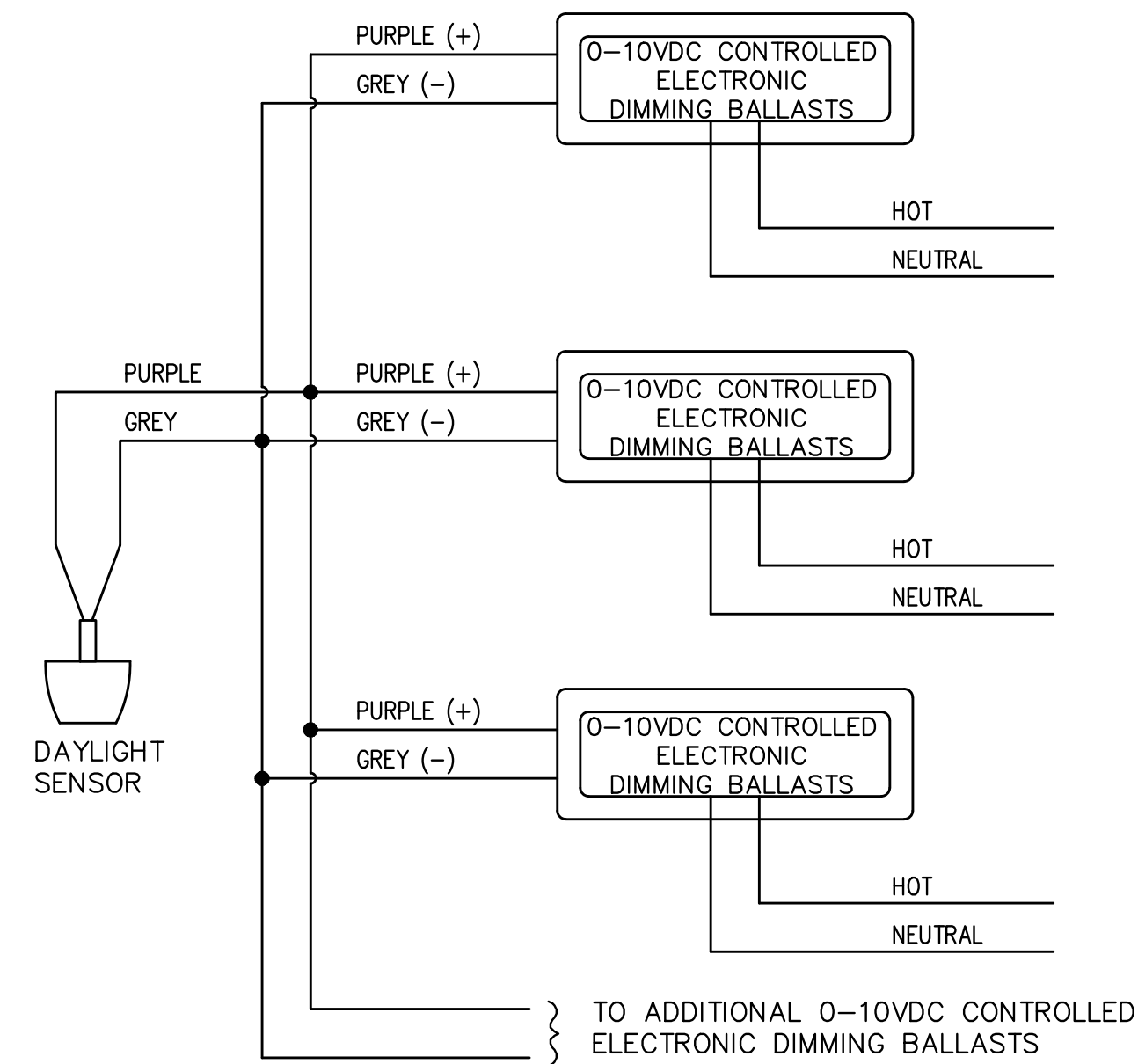
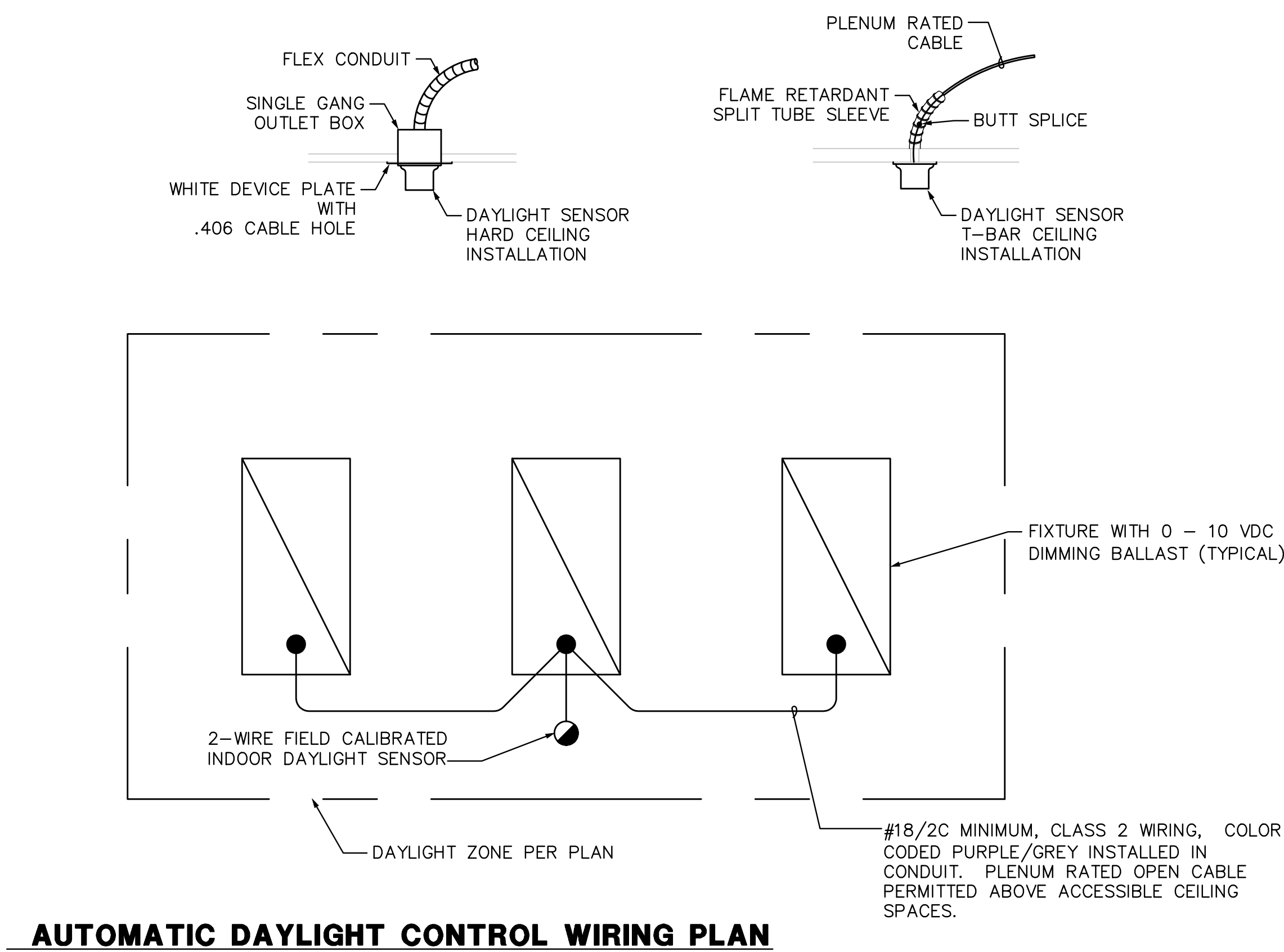
3 POLE BASE DETAIL
SCALE: N.T.S.



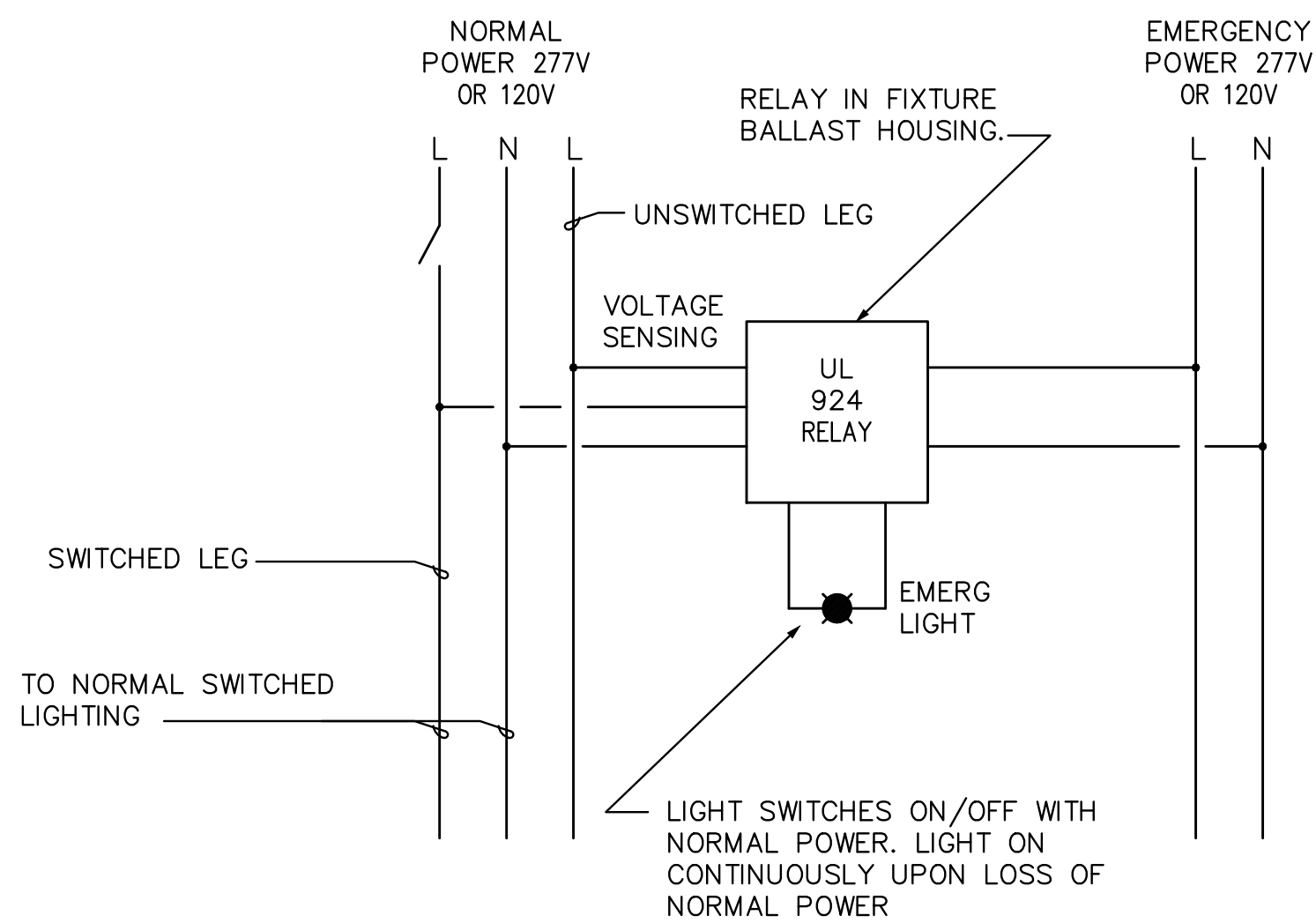
2 CONCRETE WALKWAY REPAIR
SCALE: N.T.S.



1 ELECTRICAL UTILITY TRENCH SECTION
SCALE: N.T.S.



1 **AUTOMATIC DAYLIGHT CONTROL**
SCALE: N.T.S.



2 **EMERGENCY LIGHTING POWER TRANSFER RELAY DIAGRAM**
SCALE: N.T.S.