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








LIGHT FIXTURES

	CEILING SURFACEMOUNT
	WALL SURFACEMOUNT
	PENDANT MOUNT
	RECESSED DOWNLIGHT
	RECESSED WALLWASH
	RECESSED FLUOR
	SURFACE FLUOR
	FLUOR. STRIP UON
	TRACK LIGHT
	DIRECTIONAL FLOOD
	EMERGENCY FIXTURE
	POLE LIGHT
	POLE LIGHT-DECORATIVE
	UPLIGHT-FLUSH IN GRADE
	BOLLARD
	TANDEM-WIRED LAMPS
	UNDERCABINET LIGHT
	WALL SURFACEMOUNT LINEAR TYPE
	PENDANT LINEAR FLUOR
	RECESSED WALLMOUNT
	WALLPACK
	EXIT LIGHT-WALL
	EXIT LIGHT-CEILING (ARROW INDICATES DIRECTION)
	LETTER ADJACENT INDICATES FIXTURE TYPE













POWER/COMM

	SINGLE RECEPT
	DUPLEX RECEPT
	DUPLEX-HALF SWITCHED
	DOUBLE DUPLEX
	SPECIAL CONFIGURATION
	FLOORMOUNT 208V, 1Ø RECEPT
	DUPLEX-FLOOR OUTLET
	GROUND FAULT CIRCUIT INTERRUPT
	JUNCTION BOX
	SPECIAL SYSTEM JUNCTION BOX
	TELEPHONE OUTLET
	DATA OUTLET
	PHONE/DATA COMBO OUTLET
	TELEVISION OUTLET
	SAFETY DISCONNECT
	DROP CORD RECEPT
	ABOVE-CLOMOUNT J-BOX
	TV OUTLET-FLOORMOUNT
	TELEPHONE FLOOR OUTLET
	DATA FLOOR OUTLET
	WIRELESS ACCESS POINT IN CEILING
	MOUNT DEVICE ABOVE COUNTER PER ARCHITECTURAL REQUIREMENTS









CONDUIT/WIRE











	NEW
	UNDERGROUND
	NEW POWER HOMERUN (3 HOTS & NEUT SHOWN)
	ISOLATED GROUND
	ISOLATED GROUND
	(E) POWER HOMERUN
	CONDUIT STUB (W/MARKER)
	VERTICAL CONDUIT RUN
	CONDUIT SEAL
	FLEXIBLE CONNECTION
	LOW VOLTAGE
	SURFACEMOUNT RACEWAY
	INDICATES LINE CONTINUES
	CORD W/PLUG

FIRE ALARM

	NORN-AUDIBLE DEVICE
	VISUAL-VISUAL DEVICE
	AUDIBLE/VISUAL
	FLOW SWITCH
	TAMPER SWITCH
	MANUAL PULL STATION
	SMOKE DETECTOR
	DUCT SMOKE DETECTOR
	HEAT DETECTOR
	BELL
	END OF LINE RESISTOR
	CHIME

MISCELLANEOUS

	MOTOR
	THERMOSTAT
	CIRCUIT BREAKER
	FUSIBLE SWITCH
	GROUND
	PHASE
	CLOCK
	CLOCK/SPEAKER COMBINATION

	WALL MOUNTED CLOCK
	PUSHBUTTON
	FLUSHMOUNT PANEL
	SURFACEMOUNT PANEL
	FLUSHMOUNT PANEL
	SURFACEMOUNT PANEL
	DAMPER MOTOR
	HUMIDISTAT
	MAGNETIC CONTACTOR
	COMBINATION STARTER

SWITCHES

\$	SPST
\$2	DPST
\$3	3-WAY
\$4	4-WAY
\$0	DIMMER
\$	TIMER SWITCH
\$T	W/THERMAL OVERLOAD
\$P	W/PILOT LIGHT
\$K	KEY OPERATED
\$S	DUAL LEVEL SWITCHING
(a)	SWITCHLEG DESIGNATION
OS	OCCUPANCY SENSOR

GENERAL LIGHTING PLAN NOTES

- DUAL LEVEL SWITCHING: IN ROOMS 100 SQ. FT. OR LARGER, OR WHERE INDICATED ON PLANS, CONTROL INBOARD LAMPS BY ONE SWITCH AND OUTBOARD LAMPS BY OTHER SWITCH
- NIGHT LIGHT (NL) DESIGNATED LUMINARIES IN INTERIOR LOCATIONS SHALL HAVE ONE BALLAST CONTINUOUSLY ENERGIZED. LUMINARIES IN EXTERIOR LOCATIONS SHALL BE AUTOMATICALLY CONTROLLED TO BE ON FROM DUSK TO DAWN
- LIGHTING FIXTURE LOCATIONS SHOWN ARE SCHEMATIC. REFER TO ARCHITECTURAL PLANS (REFLECTED CEILING, ELEVATIONS, ETC.) FOR EXACT LOCATIONS AND MOUNTING HEIGHTS PRIOR TO ROUGH-IN
- REFER TO ARCHITECT'S REFLECTED CEILING PLAN(S) FOR CEILING HEIGHTS, TYPES, FINISHES, ETC. IN EACH AREA. VERIFY FLANGE TYPES, TRIM KITS, STEM LENGTHS, ETC. FOR ALL FIXTURES PRIOR TO SUBMITTALS.
- CONFIRM LOCATION OF ALL DOORS SWINGS WITH ARCHITECTURAL PLANS PRIOR TO ROUGH-IN OF SWITCHES.
- PROVIDE UNSWITCHED HOT LEG OF ROOM LIGHTING BRANCH CIRCUIT TO EACH BATTERY POWERED EMERGENCY LIGHT AND EXIT SIGN FOR CONTINUOUS CHARGING

GENERAL POWER PLAN NOTES

- FUSING: ALL FUSIBLE SAFETY DISCONNECT SWITCHES SHALL BE PROVIDED WITH DUAL-ELEMENT TIME DELAY TYPE FUSES, SIZED AND RATED PER EQUIPMENT MANUFACTURERS' RECOMMENDATIONS. VERIFY WITH EQUIPMENT NAMEPLATE BEFORE INSTALLATION.
- INSTALL SEPARATE NEUTRALS FOR EACH BRANCH CIRCUIT SERVING ISOLATED GROUND RECEPTACLES.
- MOTOR OVERLOAD PROTECTION: WHERE REQUIRED BY NEC ARTICLE 430 PART C AND NOT SHOWN ON PLAN OR PROVIDED INTEGRAL WITH EQUIPMENT, PROVIDE AND INSTALL THERMAL OVERLOAD PROTECTION FOR ALL MOTORS.
- SPARE CONDUIT FOR RECESSED PANELS: PROVIDE (1) 3/4" SPARE CONDUIT STUB UP TO ACCESSIBLE ABOVE CEILING SPACE AND/OR ACCESSIBLE SPACE BELOW FOR EVERY (3) SPARE BREAKER SPACES AS INDICATED ON PANEL SCHEDULES.
- DEVICE LOCATIONS SHOWN ARE SCHEMATIC AND APPROXIMATE. EXACT LOCATIONS SHALL BE FIELD VERIFIED DURING ROUGH-IN WITH ARCHITECTURAL ELEVATIONS, CASEWORK SHOP DRAWINGS, FURNITURE, ETC. AND SHALL BE COORDINATED WITH OTHER TRADES TO AVOID CONFLICT WITH OTHER EQUIPMENT.
- ELECTRICAL AND COMMUNICATIONS OUTLETS SHOWN IN THE SAME LOCATION, SHALL BE MOUNTED ON OPPOSITE SIDES OF THE SAME STUD. COORDINATE BETWEEN ELECTRICAL AND COMMUNICATIONS PLANS.

GENERAL COMMUNICATION PLAN NOTES

- SIGNAL AND COMMUNICATIONS SYSTEMS RACEWAYS AND BOXES: PROVIDE AND INSTALL 4" SQUARE RECESSED JUNCTION BOX WITH 1-GANG RING AND (1) 3/4" CONDUIT STUB TO ACCESSIBLE CEILING SPACE AT EACH WALL TELEPHONE (VOICE), TELEVISION AND DATA OUTLET LOCATION SHOWN ON THE PLANS UNLESS OTHERWISE NOTED. FOR EACH COMBINATION VOICE/DATA OUTLET, PROVIDE AND INSTALL (2) 3/4" CONDUIT STUBS TO ACCESSIBLE CEILING SPACE.
- BEFORE CONSTRUCTION, COORDINATE AND VERIFY ALL DATA AND TELEPHONE LOCATIONS WITH OWNER OR ARCHITECT
- TELEPHONE WIRING: EACH TELEPHONE OUTLET LOCATION SHOWN ON THE PLANS SHALL HAVE A 4 PAIR, 24 GAUGE CONTINUOUS CABLE, CATEGORY 6 (BERK-TEK LANMARK SERIES OR APPROVED EQUAL), HOMERUN TO THE TELEPHONE TERMINAL BOARD "TTB" TERMINATE AT OUTLET LOCATION WITH OWNER APPROVED JACK, VERIFY LOCATIONS WITH OWNER OR ARCHITECT PRIOR TO CONSTRUCTION.
- TELEVISION PREWIRE: EACH TELEVISION OUTLET SHOWN ON THE PLANS SHALL HAVE AN RG6U (WITH QUAD SHIELD) COAXIAL CABLE HOMERUN PREWIRED TO THE CATV TERMINAL BOARD LABEL AND LEAVE ADEQUATE SLACK FOR UTILITY CONNECTION.
- VOICE/DATA WIRING: EACH VOICE/DATA OUTLET LOCATION SHOWN ON THE PLANS SHALL HAVE (4) 4 PAIR, 24 GAUGE, CATEGORY 6, UTP CABLES (BERK-TEK LANMARK SERIES OR APPROVED EQUAL) HOMERUN TO THE TELEPHONE TERMINAL BOARD. TERMINATE AT OUTLET LOCATION WITH OWNER APPROVED JACK. VERIFY SYSTEM REQUIREMENTS WITH OWNER OR ARCHITECT PRIOR TO CONSTRUCTION.
- DEVICE LOCATIONS SHOWN ARE SCHEMATIC AND APPROXIMATE. EXACT LOCATIONS SHALL BE FIELD VERIFIED DURING ROUGH-IN WITH ARCHITECTURAL ELEVATIONS, CASEWORK SHOP DRAWINGS, FURNITURE, ETC. AND SHALL BE COORDINATED WITH OTHER TRADES TO AVOID CONFLICT WITH OTHER EQUIPMENT.
- ELECTRICAL AND COMMUNICATIONS OUTLETS SHOWN IN THE SAME LOCATION, SHALL BE MOUNTED ON OPPOSITE SIDES OF THE SAME STUD. COORDINATE BETWEEN ELECTRICAL AND COMMUNICATIONS PLANS.

ROOF PLAN NOTES

- PROVIDE SEALTITE POWER & CONTROL CONNECTIONS TO ALL AC UNITS.
- ALL EQUIPMENT SHOWN ABOVE ROOF IS NEMA 3R.
- VERIFY EXACT EQUIPMENT LOCATIONS AND POINTS OF CONNECTION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN
- CONDUIT SHOWN IS ROUTED IN CEILING SPACE BELOW ROOF DECK
- NO ROOF MOUNT CONDUIT IS ALLOWED UNLESS OTHERWISE NOTED
- FUSE DISCONNECT SWITCHES PER EQUIPMENT NAMEPLATE RATING
- ALL ROOF PENETRATIONS SHALL BE MADE WITH ROOF JACKS, SEAL ALL PENETRATIONS WITH MASTIC

GENERAL NOTES

- CODE COMPLIANCE ALL WORK SHALL CONFORM TO AND BE PERFORMED IN ACCORDANCE WITH CODES, STANDARDS AND ORDINANCES AS SET FORTH BY THE AUTHORITIES HAVING JURISDICTION AND THEIR LATEST ADOPTED EDITIONS (IN EFFECT AT TIME OF BUILDING PERMIT APPLICATION) OF THE FOLLOWING PUBLICATIONS:
 - CALIFORNIA CODE OF REGULATIONS TITLE 24; INCLUDES CURRENT NATIONAL ELECTRICAL CODE, UNIFORM FIRE CODE, UNIFORM BUILDING CODE, ETC. WITH CALIFORNIA AND OTHER LOCAL AMENDMENTS AS APPLICABLE.
 - AMERICANS WITH DISABILITIES ACT (ADA)
- SAFETY: THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL EQUIPMENT IN A SAFE AND RESPONSIBLE MANNER. KEEP DEAD FRONT EQUIPMENT IN PLACE WHILE EQUIPMENT IS ENERGIZED. CONDUCT ALL CONSTRUCTION OPERATIONS IN A SAFE MANNER FOR EMPLOYEES AS WELL AS OTHER WORKPERSONS OR ANYONE VISITING THE JOB SITE. PROVIDE BARRIERS, FLAGS, TAPE, ETC. AS REQUIRED FOR SAFETY. THE CONTRACTOR SHALL HOLD ALL PARTIES HARMLESS OF NEGLIGENT SAFETY PRACTICES, WHICH MAY CAUSE INJURY TO OTHERS ON OR NEAR THE JOB SITE.
- FIRE RATED ASSEMBLIES SHALL MAINTAIN RATINGS AS SPECIFIED IN THE CALIFORNIA BUILDING CODE CHAPTER 7. CONTRACTOR SHALL PROVIDE AND INSTALL PHYSICAL ENCLOSURE AROUND FIXTURES, PANELS, ETC. AS REQUIRED. ALL ASSEMBLIES TO BE PENETRATED SHALL BE INSTALLED WITH APPLICABLE THROUGH-PENETRATION FIRESTOP SYSTEM AS DETERMINED BY UL CLASSIFICATION. BEFORE CONSTRUCTION, VERIFY AND COMPLY WITH REQUIREMENTS OF LOCAL AUTHORITY HAVING JURISDICTION.
- MOUNTING HEIGHTS IN INCHES ABOVE FINISH FLOOR SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED:

FROM BOTTOM OF PLATE +15" AFF: RECEPTACLES, TELEPHONE, TV & DATA OUTLETS
TOP OF SWITCH PLATE +48" AFF: LIGHT SWITCHES
+48" AFF: FIRE ALARM MANUAL PULL STATIONS, T-STATS
THE LOWER OF +80" AFF OR 6" BELOW CEILING: FIRE ALARM VISUALS
- BEFORE ROUGH-IN, VERIFY ALL MOUNTING HEIGHTS AND EXACT LOCATIONS FOR ALL EQUIPMENT ELECTRICAL CONNECTIONS, STUB-UPS, RECEPTACLES, OUTLETS, ETC. WITH ARCHITECT OR OWNER. PLACE DEVICES LOCATED ABOVE COUNTERS, SHELVING, ETC. AND BATHROOMS SO AS NOT TO CONFLICT WITH EDGES OF WAINSCOTING, COUNTER SPLASH, SHELVING, ETC. ARCHITECTURAL SHEETS SHALL GOVERN.
- LABEL PANELS, CABINETS, BACKBOARDS, MAIN DEVICES, SAFETY SWITCHES, CONTACTORS AND OTHER SPECIFICALLY DESIGNATED EQUIPMENT SHOWN ON PLANS. USE ENGRAVED LAMINATED PLASTIC NAMEPLATES ATTACHED BY SCREWS OR RIVETS. FOR FEEDERS, NEATLY AND INDELIBLY LABEL CONDUIT DESTINATIONS ON BOTH VISIBLE ENDS OF CONDUIT RUNS WHERE CONDUITS TERMINATE AT DESIGNATED ENCLOSURES, STRUCTURES OR EQUIPMENT (INCLUDING PULL AND SPLICE BOXES)
- EQUIPMENT ANCHORAGE: BRACE OR ANCHOR ALL ELECTRICAL EQUIPMENT TO RESIST A HORIZONTAL FORCE ACTING IN ANY DIRECTION. USE THE FOLLOWING CRITERIA FOR DETERMINING:
 - FIXED EQUIPMENT ON GRADE 30% OF OPERATING WEIGHT.
 - FIXED EQUIPMENT ON STRUCTURE 45% OF OPERATING WEIGHT.
 - EMERGENCY POWER EQUIPMENT ON GRADE 40% OF OPERATING WEIGHT.
 - EMERGENCY POWER EQUIPMENT ON STRUCTURE 60% OF OPERATING WEIGHT.EXCEPTIONS: FOR FLEXIBLY MOUNTED EQUIPMENT USE 4X THE ABOVE VALUES; FOR SIMULTANEOUS VERTICAL FORCE, USE 1/2X HORIZONTAL FORCE. SEE STRUCTURAL PLANS FOR ANCHORAGE DETAILS AND WHERE ANCHORAGE DETAILS ARE NOT SHOWN ON THE DRAWINGS, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER AND THE FIELD REPRESENTATIVE OF THE AUTHORITY HAVING JURISDICTION. SHOULD SAID APPROVAL BE WITHHELD, ELECTRICAL CONTRACTOR SHALL, AT NO EXTRA COST TO THE OWNER, MODIFY AND JUSTIFY INSTALLATION AS REQUIRED TO GAIN APPROVAL.

MECHANICAL SYSTEMS

- MECHANICAL UNIT CONDUITS: TO PREVENT DAMAGE DUE TO VIBRATION, BOTH POWER AND CONTROL WIRING CONDUITS FEEDING EXTERIOR MECHANICAL UNITS SHALL BE PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR WITH LIQUID TIGHT FLEXIBLE TYPE AT FINAL CONNECTION TO UNIT AND BETWEEN ROOF JACK AND DISCONNECT SWITCH WHERE DISCONNECT IS MOUNTED ON UNIT.
- NOT USED
- T-STAT J-BOXES: PROVIDE AND INSTALL 4" SQUARE JUNCTION BOX WITH 1-GANG RING AND 1/2" CONDUIT TO ACCESSIBLE CEILING SPACE ABOVE AT EACH THERMOSTAT LOCATION
- EXHAUST FANS SHALL BE PROVIDED & INSTALLED BY MECHANICAL CONTRACTOR WITH WIRING CONNECTIONS MADE BY ELECTRICAL CONTRACTOR
- MECHANICAL EQUIPMENT CONTROLS: MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LOW VOLTAGE WIRE AND CONNECTIONS (BELOW 120 VOLT) TO AND FROM ALL MECHANICAL CONTROL DEVICES. ALL LOW VOLTAGE CONTROL WIRE SHALL BE IN CONDUIT, UNLESS OTHERWISE NOTED.
- PULL ROPES: ANY RACEWAY WITHOUT CABLE OR WIRE SHALL BE INSTALLED WITH MINIMUM 200 POUND TEST PULL LINE AND LARGER IF REQUIRED BY SERVING UTILITY COMPANY. ANY NEW OR EXISTING COMMUNICATION OR SIGNAL RACEWAY ROUTED BETWEEN BUILDINGS, SIGNAL CABINETS, AND/OR SIGNAL CLOSETS WITH FUTURE CAPACITY SHALL BE INSTALLED WITH MINIMUM 200 POUND TEST PULL LINE AS WELL AS THE CALLED FOR CABLE

FIRE ALARM SYSTEM

- PROVIDE ALL WORK AND MATERIAL REQUIRED TO INSTALL DELAY EXIT PANIC HARDWARE IN COMPLIANCE WITH CBC 1003.3.1.10
- DUCT SMOKE DETECTORS SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR AND INSTALLED BY MECHANICAL CONTRACTOR. DETECTOR POWER AND SUPERVISORY WIRING AND CONNECTIONS SHALL BE MADE BY ELECTRICAL CONTRACTOR. MECHANICAL UNIT CONTROL (SHUTDOWN UPON DETECTOR ALARM) WIRING AND CONNECTIONS SHALL BE MADE BY MECHANICAL CONTRACTOR
- EXISTING BUILDING
- ANY DEMOLITION WORK SHOWN WAS PREPARED FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER DOES NOT REPRESENT THAT ALL ITEMS WHICH MAY REQUIRE DEMOLITION HAVE BEEN SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CAREFULLY EXAMINE THE SITE AND THE CONTRACT DOCUMENTS AND TO PERFORM ALL DEMOLITION AND RECONSTRUCTION WHICH MAY BE REQUIRED FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK
- EXISTING CONDITIONS: INFORMATION SHOWN FOR EXISTING CONDITIONS WAS PRIMARILY GAINED FROM "AS BUILT" DRAWINGS AND/OR LIMITED FIELD INVESTIGATION. BEFORE BID, VISIT SITE TO VERIFY EXISTING CONDITIONS AND MAKE ALLOWANCE FOR VARIATIONS FROM THAT SHOWN
- EXISTING CONDUCTORS: INTERCEPT, EXTEND, REROUTE, REPULL CONDUCTORS, SPLICE AND OTHERWISE MODIFY EXISTING CONDUCTORS OF ALL SYSTEMS AS REQUIRED TO MAINTAIN AND/OR ESTABLISH PROPER FUNCTION AND SATISFY DESIGN INTENT. REMOVE ABANDONED CONDUCTORS
- EXISTING COMMUNICATIONS, DATA AND CATV AND OTHER LOW VOLTAGE TYPE SYSTEM OUTLET LOCATIONS SHOWN ON THE PLAN TO BE RELOCATED SHALL BE PERFORMED BY THE ELECTRICAL CONTRACTOR. MODIFY EXISTING SYSTEM AS REQUIRED FOR FULL FUNCTION (SAME AS EXISTING) IN NEW LOCATION
- WHERE EXISTING BUILDING CONSTRUCTION, MECHANICAL UNITS AND OTHER EQUIPMENT IS SHOWN TO BE REMOVED, DISCONNECT AND REMOVE ALL ASSOCIATED ELECTRICAL INSTALLATION
- CLOSELY COORDINATE OUTAGE AND FACILITY DISRUPTION TIME WITH ARCHITECT AND OWNER. MINIMUM 72-HOUR NOTICE IS REQUIRED BEFORE ANY CIRCUIT SHUTDOWN OR DISRUPTION OF FACILITY PERSONNEL FUNCTIONING

AB	AMPERE	EB	ELECTRONIC BALLAST	KVA	KILOVOLTAMPS	POC	POINT OF CONNECTION
ABND	ABANDONED	EC	ELECTRICAL CONTRACTOR	KW	KILOWATT	-PP-	POWER PRIMARY
ABV	ABOVE	EC-#	EVAPORATIVE COOLER	LC	LIGHTING CONTACTOR	-PS-	POWER SECONDARY
AC	ALTERNATING CURRENT	EF-#	EXHAUST FAN	LPS	LOW PRESSURE SODIUM	(R)	RELOCATE(D)
AC-#	AIR CONDITIONER	EL	EVENING LIGHT	LRA	LOCKED ROTOR AMPS	RECEPT	RECEPTACLE
ADJ	ADJACENT	ELEC	ELECTRICAL	LS	LIFE SAFETY BRANCH	REF	REFRIGERATOR
AF	AMP FUSE, AMP FRAME	EM	EMERG BATTERY BACKUP	LT	LIGHT	REQ'D	REQUIRED
AFF	ABOVE FINISH FLOOR	EMB	EMERGENCY BALLAST	LTG	LIGHTING	RLA	RATED LOAD AMPS
AFG	ABOVE FINISH GRADE	EMERG	EMERGENCY	LV	LOW VOLTAGE	RM	ROOM
AIC	AMPERES INTERRUPTING CAPACITY	EOL	END OF LINE	MC	MECHANICAL CONTRACTOR	RMC	RIGID METAL CONDUIT
AI	ALUMINUM	EQUIP'T	EQUIPMENT	MCA	MINIMUM CKT AMPS	RMV	REMOVE
AS	AMP SWITCH RATING	ES	ENERGY SAVING	MCB	MAIN CIRCUIT BREAKER	RPLC	REPLACE
ATS	AUTOMATIC TIME SWITCH	(EXN)	(E) IN (N) LOCATION	MCTB	MAIN CATV TERMINAL BOARD	RS	RAPID START
ATS	AUTOMATIC TRANSFER SWITCH	(EXR)	(E) TO BE (R)	MCTC	MAIN CATV TERMINAL CABINET	SC	SIGNAL CABINET
AV	AUDIBLE/AUDIO VISUAL	EXT	EXTERIOR	MECH	MECHANICAL	SCC	SHORT CKT CURRENT
AWG	AMERICAN WIRE GAGE	F	FLUORESCENT	MFR	MANUFACTURER	SFM	STATE FIRE MARSHAL
BFG	BELOW FINISH GRADE	(F)	FUTURE	MFS	MAIN FUSIBLE SWITCH	SHT	SHEET
BIL	BASIC IMPULSE LEVEL	F-#	FURNACE	MH	METAL HALIDE	SL	SLIMLINE, SWITCH LEG
BLDG	BUILDING	FA	FIRE ALARM	MLO	MAIN LUGS ONLY	SPEC	SPECIFICATION
C	CONDUIT	FACP	FIRE ALARM CONTROL PANEL	MOCF	MAXIMUM OCP	SPST	SINGLE POLE SINGLE THROW
C-	CATV CONDUIT	FAT	FIRE ALARM TERMINAL	MSB	MAIN SWITCHBOARD	SQ	SQUARE
CAB'T	CABINET	FAU	FORCED AIR UNIT	MT	MOUNT	STR'G	STORAGE
CATV	CABLE TELEVISION	FBO	FURNISHED BY OTHERS	MT HT	MOUNTING HEIGHT	SURF	SURFACE
CB	CIRCUIT BREAKER, CODE BLUE	FC-#	FAN COIL	MTS	MANUAL TRANSFER SWITCH	SVC	SERVICE
CBC	CA. BUILDING CODE	FLA	FULL LOAD AMPS	MTTB	MAIN TELEPHONE TERMINAL BOARD	SW	SWITCH
CEC	CA. ELECTRICAL CODE	FLR	FLOOR	MTTC	MAIN TELEPHONE TERMINAL CABINET	T	TRANSFORMER, TERMINAL
	CA. ENERGY COMMISSION	FLUOR	FLUORESCENT	MW	MICROWAVE	-T-	TELEPHONE CONDUIT
GF	COMPACT FLUORESCENT	FS	FUSIBLE SWITCH	N	NEUTRAL (GROUNDED CONDUCTOR)	TBR	TO BE REMOVED
CFC	CALIFORNIA FIRE CODE	FVNR	FULL VOLTAGE NON-REVERSING	(N)	NEW	TC	TIME CLOCK
CLG	CEILING	G	GROUNDING CONDUCTOR	N3R	NEMA 3R	TEL	TELEPHONE
CL	CENTER LINE	GC	GENERAL CONTRACTOR	NC	NORMALLY CLOSED	TELCO	TELEPHONE COMPANY
CKT	CIRCUIT	GD	GARBAGE DISPOSAL	NEC	NATIONAL ELECTRICAL CODE	TS	TIME SWITCH
CNT'R	CONTRACTOR	GFCI	GROUND FAULT CIRCUIT INTERRUPTER	NEMA	NAT'L ELEC MANUFACTURER'S ASSOC	TSO	TIME SWITCH OVERRIDE
C.O.	CONDUIT ONLY (W/PULLROPE)	GFI	GROUND FAULT CIRCUIT INTERRUPTER	NIC	NOT IN CONTRACT	TSP	TWISTED SHIELDED PAIR
COND	CONDUIT, CONDUCTOR	GND	GROUND	NL	NIGHT LIGHT	TTB	TELEPHONE TERMINAL BOARD
CR	CRITICAL BRANCH	GRS	GALVANIZED RIGID STEEL	NF	NORMALLY OPEN	TTC	TELEPHONE TERMINAL CABINET
CSFM	CALIFORNIA SFM	GWS	GANG WITH SWITCH	NPF	NORMAL POWER FACTOR	TX	TRANSFORMER
CT	CURRENT TRANSFORMER	H	HEIGHT, HIGH	NTS	NOT TO SCALE	TYP	TYPICAL
CU	COPPER	HACR	HEATING, AC & REFRIG	OC	ON CENTER	TYP SIM	TYPICAL SIMILAR
CU-#	CONDENSING UNIT	HH	HALF HOT	OCP	OVERCURRENT PROTECTION	UC	UNDERCABINET, UNDERCOUNTER
D	DEPTH	HID	HIGH INTENSITY DISCHARGE	OD	OUTSIDE DIAMETER	UG	UNDERGROUND
DC	DIRECT CURRENT	HO	HIGH OUTPUT	OH	OVERHEAD	UGPS	UNDERGROUND PULL SECTION
DF	DRINKING FOUNTAIN	HOA	HAND-OFF-AUTO	OSA	OFFICE of the STATE ARCHITECT	UL	UNDERWRITERS LABORATORIES
DIA	DIAMETER	HP	HORSEPOWER	OSHPD	OFFICE of STATEWIDE HEALTH PLANNING & DEVELOPMENT	UON	UNLESS OTHERWISE NOTED
DISC	DISCONNECT	HPF	HIGH POWER FACTOR	OVLD	OVERLOAD	USA	US SVC ALERT 800-642-24444
DIST	DISTRIBUTION	HPS	HIGH PRESSURE SODIUM	P	POLE	V	VOLT
DPST	DOUBLE POLE SINGLE THROW	IC	INTERCOM	PA	PUBLIC ADDRESS	VA	VOLT AMPERES
DW	DISHWASHER	ID	IDENTIFICATION	PB	PULLBOX	VAC	VOLT ALTERNATING CURRENT
EM	EMERGENCY	IF	INSIDE FROST	PC	PULL CHAIN	VHO	VERY HIGH OUTPUT
(E)	EXISTING	IG	ISOLATED GROUND	PC	PULL CELL		
EA	EACH	J-BOX	JUNCTION BOX	ph	PHASE		
		K	QUANTITY 1000	PNL	PANEL		

POC	POINT OF CONNECTION
-PP-	POWER PRIMARY
-PS-	POWER SECONDARY
(R)	RELOCATE(D)
RECEPT	RECEPTACLE
REF	REFRIGERATOR
REQ'D	REQUIRED
RLA	RATED LOAD AMPS
RM	ROOM
RMC	RIGID METAL CONDUIT
RMV	REMOVE
RPLC	REPLACE
RS	RAPID START
SC	SIGNAL CABINET
SCC	SHORT CKT CURRENT
SFM	STATE FIRE MARSHAL
SHT	SHEET
SL	SLIMLINE, SWITCH LEG
SPEC	SPECIFICATION
SPST	SINGLE POLE SINGLE THROW
SQ	SQUARE
STR'G	STORAGE
SURF	SURFACE
SVC	SERVICE
SW	SWITCH
T	TRANSFORMER, TERMINAL
-T-	TELEPHONE CONDUIT
TBR	TO BE REMOVED
TC	TIME CLOCK
TEL	TELEPHONE
TELCO	TELEPHONE COMPANY
TS	TIME SWITCH
TSP	TIME SWITCH OVERRIDE
TSTO	TWISTED SHIELDED PAIR
TTB	TELEPHONE TERMINAL BOARD
TTX	TELEPHONE TERMINAL CABINET
TX	TRANSFORMER
TY	TYPICAL
TYP SIM	TYPICAL SIMILAR
UC	UNDERCABINET, UNDERCOUNTER
UG	UNDERGROUND
UGPS	UNDERGROUND PULL SECTION
UL	UNDERWRITERS LABORATORIES
USN	UNLESS OTHERWISE NOTED
UOA	UG SVC ALERT 800-642-2444
V	VOLT
VA	VOLT AMPERES
VAC	VOLT ALTERNATING CURRENT
VHO	VERY HIGH OUTPUT

This detailed electrical schematic illustrates the layout of a building floor plan, including various rooms and their associated electrical components. The plan is divided into several functional areas:

- Warehouse:** A large open area at the top of the plan, labeled "WAREHOUSE".
- Office:** A central area containing an "OFFICE" and an "OPERATIONS MANAGER" workspace.
- Restrooms:** Two restrooms are shown, both labeled "ACCESSIBLE ALL GENDER RESTROOM".
- Reception:** A "RECEPTION" area is located in the lower right corner.
- Storage:** A "STORAGE CLOSET" is situated on the left side of the plan.
- Electrical Room:** Located in the upper right corner, it contains a "MAIN SWITCHGEAR", "PANEL R", "PANEL M", "PANEL L", "TEL BACKBOARD", and "UGPS".
- Other Rooms:** A "WHOLESALE DISPLAY" area is at the bottom center, and a "SS MOP SINK" is in the lower right.

The schematic includes numerous electrical symbols and labels for equipment and wiring:

- Equipment Labels:** SP.1, CONTROL PANEL FOR SUMP PUMP, R-1,3, R-10, R-12, R-9, R-8, R-7, R-5, R-11, R-13,15, R-17,19, R-1, R-2,4,6, WH.1, 208V, 3Ø, 6KW, WH, SS MOP SINK, GFI, CREC, WEST RECEPT. R1, PANEL 'L1', PANEL 'M1', PANEL 'R1', WHOLESALE DISPLAY, RECEPTION, CR, OPERATIONS MANAGER, OFFICE, ACCESSIBLE ALL GENDER RESTROOM, STORAGE CLOSET, ELECTRICAL ROOM, MAIN SWITCHGEAR, TEL BACKBOARD, 'FACP', 'UGPS', UFER, (3)5°C SERVICE.
- Wiring Paths:** Lines with circles at the ends represent electrical conduits or cables connecting various components throughout the building.
- Room Labels:** "WAREHOUSE", "OFFICE", "OPERATIONS MANAGER", "ACCESSIBLE ALL GENDER RESTROOM", "STORAGE CLOSET", "WHOLESALE DISPLAY", "RECEPTION", "SS MOP SINK", "ELECTRICAL ROOM", "WH", "WH.1", "SS MOP SINK", "GFI", "CREC", "WEST RECEPT. R1", "PANEL 'L1'", "PANEL 'M1'", "PANEL 'R1'", "WHOLESALE DISPLAY", "RECEPTION", "CR", "OPERATIONS MANAGER", "OFFICE", "ACCESSIBLE ALL GENDER RESTROOM", "STORAGE CLOSET", "ELECTRICAL ROOM", "MAIN SWITCHGEAR", "TEL BACKBOARD", "'FACP'", "'UGPS'", "UFER", "(3)5°C SERVICE".

SCALE: 3/16" = 1'-0"

CANTELMI ENGINEERING
MECHANICAL/ELECTRICAL
2130 F. STREET BAKERSFIELD, CA. 93301
TEL: (661) 324-5252 FAX: (661) 324-8439 Cantelmi@Cantelmi.NET

FIRST FLOOR POWER PLAN
MICHAEL FLOORING, INC.
6500 DISTRICT BLVD.
BAKERSFIELD, CA 93313

DATE	ISSUED

DATE	MARK	ISSUED

DWG. BY	DBC
CHKD BY	KM
DATE	09-21-18
JOB NO.	C18-135
FILE NO.	

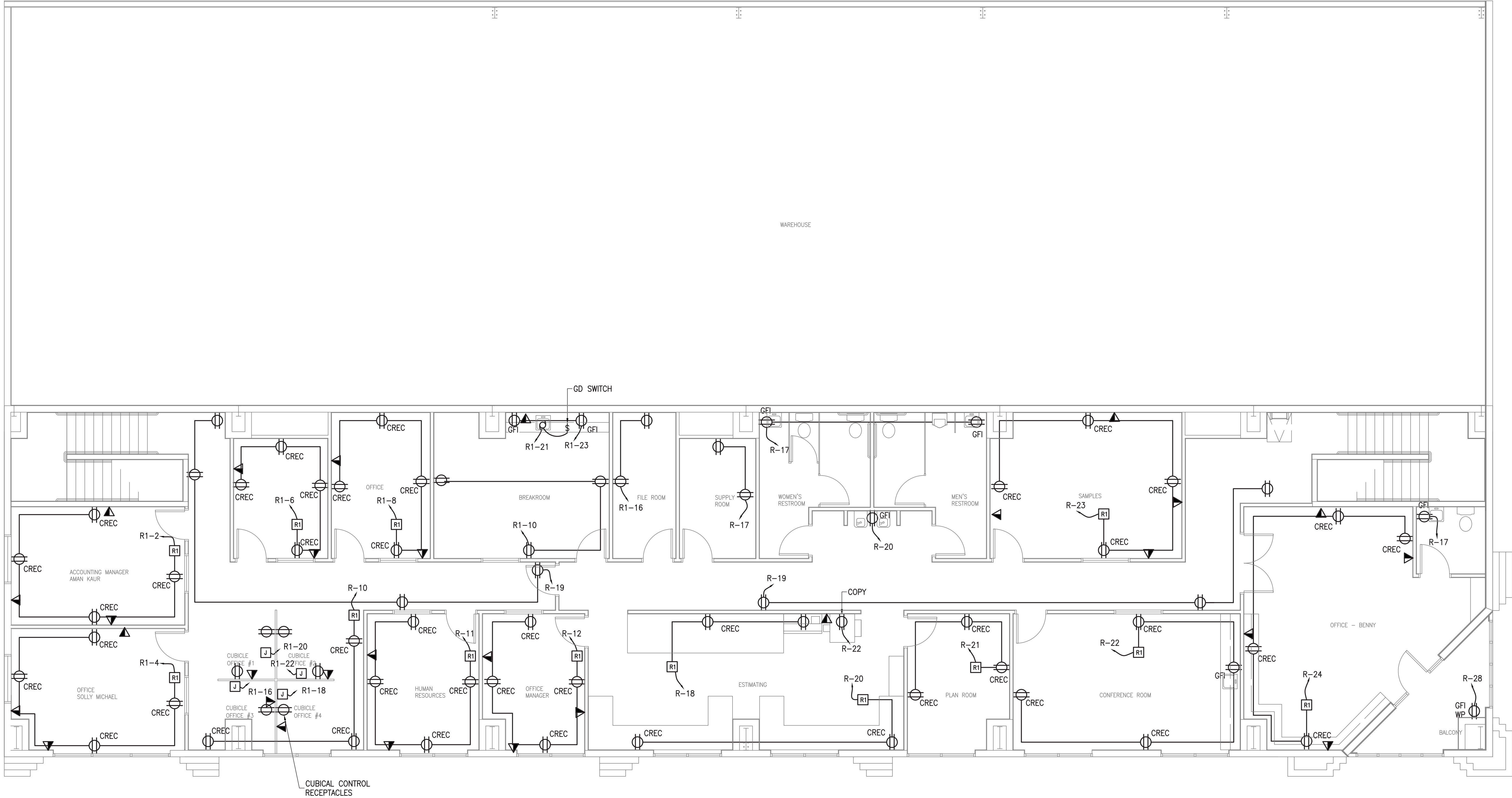


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SECOND FLOOR POWER PLAN

SCALE: 3/16" = 1'-0"

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MICHAEL FLOORING, INC.
6500 DISTRICT BLVD.
BAKERSFIELD, CA 93313

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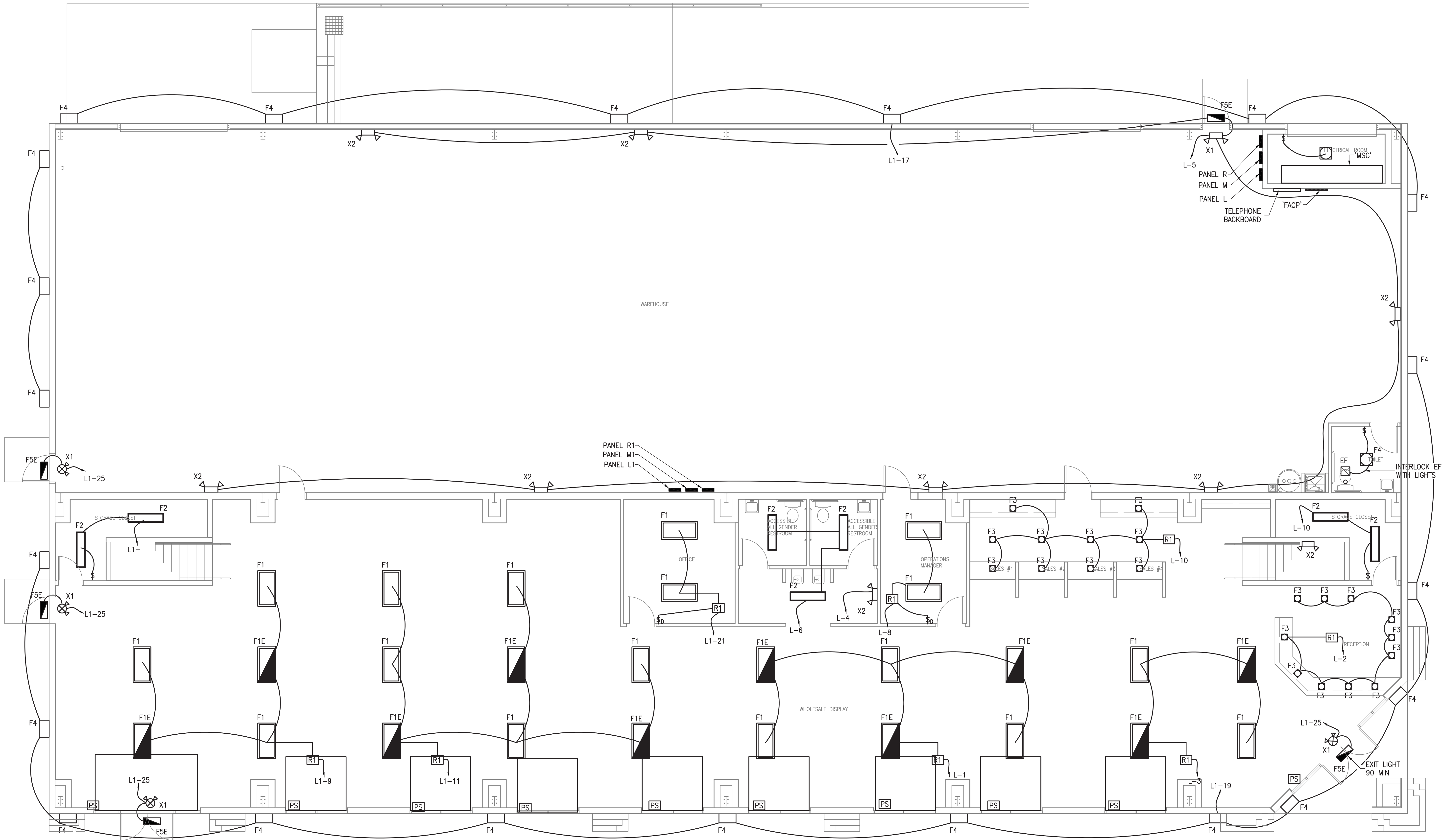
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FIRST FLOOR LIGHTING PLAN

SCALE: 3/16" = 1'-0"

CANTEMi ENGINEERING
ELECTRICAL / ELECTRICAL
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TEL: (661) 324-5252 FAX: (661) 324-8439 Cantelmi@cantelmi.net

FIRST FLOOR LIGHTING PLAN
MICHAEL FLOORING, INC.
6500 DISTRICT BLVD.
BAKERSFIELD, CA 93313

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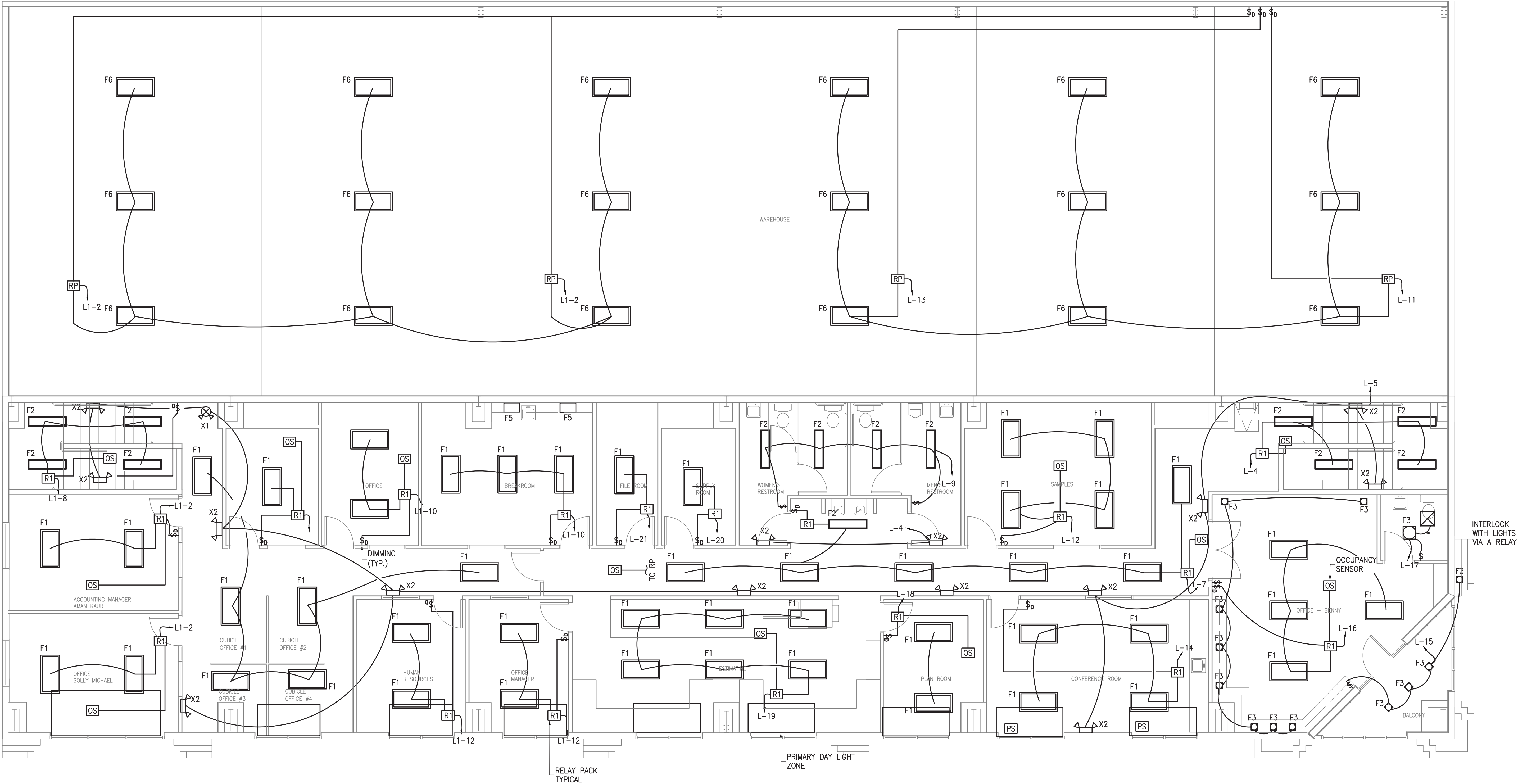
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SECOND FLOOR LIGHTING PLAN

SCALE: 3/16" = 1'-0"

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SECOND FLOOR LIGHTING PLAN
MICHAEL FLOORING, INC.
6500 DISTRICT BLVD.
BAKERSFIELD, CA 93313

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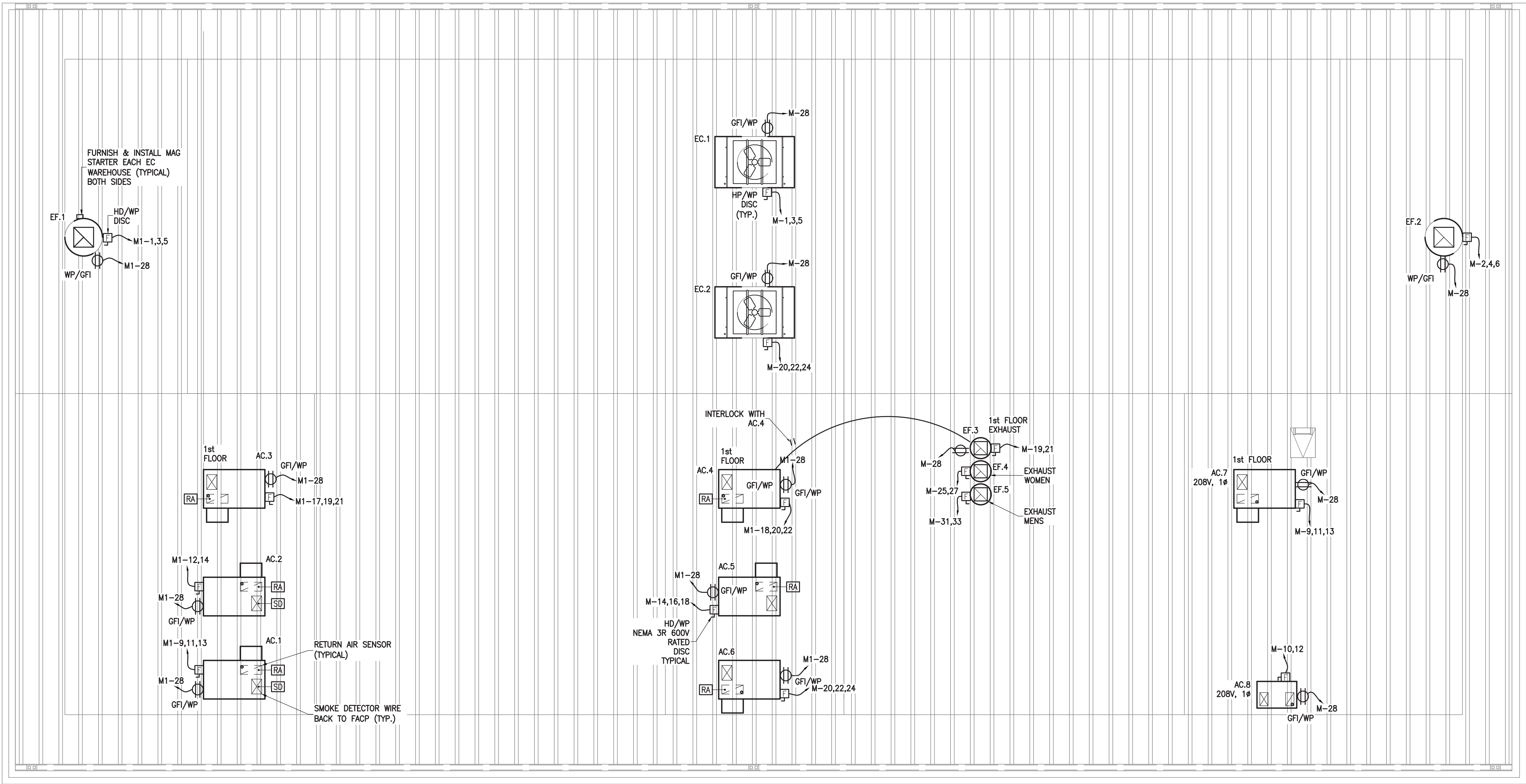
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ELECTRICAL ROOF PLAN

SCALE: 3/16" = 1'-0"

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CANTEMELMI ENGINEERING
ELECTRICAL / ELECTRICAL
M. E. C. H. A. N. I. C. A. L. / E. L. E. C. T. R. I. C. A. L.
2130 F. STREET BAKERSFIELD, CA 93301 LICENSE #21190
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ELECTRICAL ROOF PLAN
MICHAEL FLOORING, INC.
6500 DISTRICT BLVD.
BAKERSFIELD, CA 93313

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PANEL " R " EAST SIDE																							
SERVICE: 120/208V 3Φ 4W				MAIN BKR.: 200A				BUS: 225A				LOC.: SEE PLAN											
PANELBOARD												MTG.: SURFACE											
REMARKS	LOAD			R E C	L T G	M I S C	TRIP	POLE	C I R C	WIRE	C I R C	WIRE	POLE	TRIP	R E C	L T G	M I S C	LOAD			REMARKS		
	ΦA	ΦB	ΦC															ΦA	ΦB	ΦC			
SUMP PUMP	1000						20		8	1		2	6		30				2000		WH.1 6KW		
		1000						2	8	3		4	6						2000				
DISPLAY			1000				20	1	12	5		6	6	3						2000			
		1000					20	1	12	7		8	12	1	20				1500		DRINKING FOUNTAIN		
			1000				20	1	12	9		10	12	1	20				200		REC		
				1000			20	1	12	11		12	12	1	20					200	REC		
	1000						20	1	12	13		14	12	1	20						SPARE		
		400					20	1	12	15		16	12	1	20				400		DRINKING FOUNTAIN		
			400				20	1	12	17		18	12	1	20					1000	ESTIMATING		
	400						20	1	12	19		20	12	1	20				1500		COPY		
							20	1	12	21		22	12	1	20					1500	COPY		
			1000				20	1	12	23		24	12	1	20						1000		
SPARE							20	1	12	25		26	12	1	20						SPARE		
SPARE							20	1	12	27		28	12	1	20				200		GF/WP		
SPARE							20	1	12	29		30	12	1	20						SPARE		
SPARE							20	1	12	31		32	12	1	20						SPARE		
SPARE							20	1	12	33		34	12	1	20						SPARE		
SPARE							20	1	12	35		36	12	1	20						SPARE		
SPARE							20	1	12	37		38	12	1	20						SPARE		
SPARE							20	1	12	39		40	12	1	20						SPARE		
SPARE							20	1	12	41		42	12	1	20						SPARE		
TOTAL WATTS=	22700	2400	3400																5000	4300	4200		
AMPS=	63.009					ΦA= 8400								ΦB= 6700					ΦC= 7600				
												MINIMUM BKR				A.I.C. RATING= SERIES							
PHASE A =	8400																						
PHASE B =	6700																						
PHASE C =	7600																						
TOTAL WATTS	22700																						

PANEL " R1 " WEST SIDE													[BUS: 225A			[LOC.: SEE PLAN						
SERVICE: 120/208V 3Φ 4W				MAIN BKR.: 200A							[MTG.: SURFACE											
PANELBOARD																						
REMARKS	LOAD			R E C	L T G	M I S C	TRIP	POLE	WIRE	C I R C		C I R C	WIRE	POLE	TRIP	R E C	L T G	M I S C	LOAD			REMARKS
	ΦA	ΦB	ΦC																ΦA	ΦB	ΦC	
1ST FLOOR RECEPT.	1200						20		8	1		2	12	1	20				1000			2ND FLOOR REC
1ST FLOOR RECEPT.		1200							2	8	3		4	12	1	20				1000		2ND FLOOR REC
1ST FLOOR RECEPT.			1200				20	1	12	5		6	12	1	20						1000	2ND FLOOR REC
1ST FLOOR RECEPT.	1200						20	1	12	7		8	12	1	20				1000			2ND FLOOR REC
1ST FLOOR RECEPT.		1200					20	1	12	9		10	12	1	20					1000		2ND FLOOR REC
							20	1	12	11		12	12	1	20						1000	2ND FLOOR REC
WAREHOUSE	1000						20	1	12	13		14	12	1	20				1000			2ND FLOOR REC
WAREHOUSE		1000					20	1	12	15		16	12	1	20					200		REC
WAREHOUSE			1000				20	1	12	17		18	12	1	20						200	REC
WAREHOUSE	1000						20	1	12	19		20	12	1	20				200			REC
GARBAGE DISP		1500					20	1	12	21		22	12	1	20					200		REC
REC			400				20	1	12	23		24	12	1	20							SPARE
SPARE							20	1	12	25		26	12	1	20							SPARE
SPARE							20	1	12	27		28	12	1	20							SPARE
SPARE							20	1	12	29		30	12	1	20							SPARE
SPARE							20	1	12	31		32	12	1	20							SPARE
SPARE							20	1	12	33		34	12	1	20							SPARE
SPARE							20	1	12	35		36	12	1	20							SPARE
SPARE							20	1	12	37		38	12	1	20							SPARE
SPARE							20	1	12	39		40	12	1	20							SPARE
SPARE							20	1	12	41		42	12	1	20							SPARE
TOTAL WATTS=	19700	4900	2600			ΦA= 7600										ΦB= 7300			3200	2400	2200	
AMPS=	54.682															MINIMUM BKR				ΦC= 4800		A.I.C. RATING= SERIES
PHASE A =	7600																					
PHASE B =	7300																					
PHASE C =	4800																					
TOTAL WATTS	19700																					

PANEL " M " MECHANICAL EAST SIDE													LOC.: SEE PLAN									
SERVICE: 120/208V 3Φ 4W				MAIN BKR.: 200A				BUS: 225A				MTG.: SURFACE										
REMARKS	LOAD			R E C	L T G	M I S C	TRIP	POLE	WIRE	C I R C	C I R C	WIRE	POLE	TRIP	R E C	L T G	M I S C	LOAD			REMARKS	
	ΦA	ΦB	ΦC															ΦA	ΦB	ΦC		
EC.2 2HP	2000						30		8	1	2	6		30				2000			EF.2 3HP	
		2000							8	3	4	6							2000			
SPARE			2000					3	8	5	6	6	3							2000		
AC.7 6 TON	5000						20	1	12	7	8	12	1	20							SPARE	
		5000					50		6	9	10	8		30					2300		AC.8 2TON	
			5000						6	11	12	8	2							2300		
				5000				3	6	13	14	8		40				3300			AC.5 4TON	
SPARE							20	1	12	15	16	8							3300			
SPARE							20	1	12	17	18	8	3							3300		
EF.3			1000				20		8	19	20	8		30				3300			AC.6 3TON	
SPARE	1000						20	2	8	21	22	8							3300			
EF.4			1000				20	1	12	23	24	8	3							3300		
SPARE							20		8	25	26	12	1	20								
EF.5	1000							2	8	27	28	12	1	20					1200		WP GFI	
SPARE							20	1	12	29	30	12	1	20							SPARE	
EF.5			1000				20		8	31	32	12	1	20							SPARE	
								2	8	33	34	12	1	20							SPARE	
SPARE							20	1	12	35	36	12	1	20							SPARE	
SPARE							20	1	12	37	38	12	1	20							SPARE	
SPARE							20	1	12	39	40	12	1	20							SPARE	
SPARE							20	1	12	41	42	12	1	20							SPARE	
TOTAL WATTS=	58600	7000	10000												ΦB= 19100			8600	12100	10900		
AMPS=	162.66					ΦA= 18600									MINIMUM BKR			ΦC= 20900		20900		
													A.I.C. RATING= SERIES									
</																						

ALL EXTERIOR LIGHTS TO BE CONTROLLED BY
ASTRONOMICAL TIME CLOCK AND PHOTO CELL

ELECTRICAL PANELS
MICHAEL FLOORING, INC.
6500 DISTRICT BLVD.
BAKERSFIELD, CA 93313

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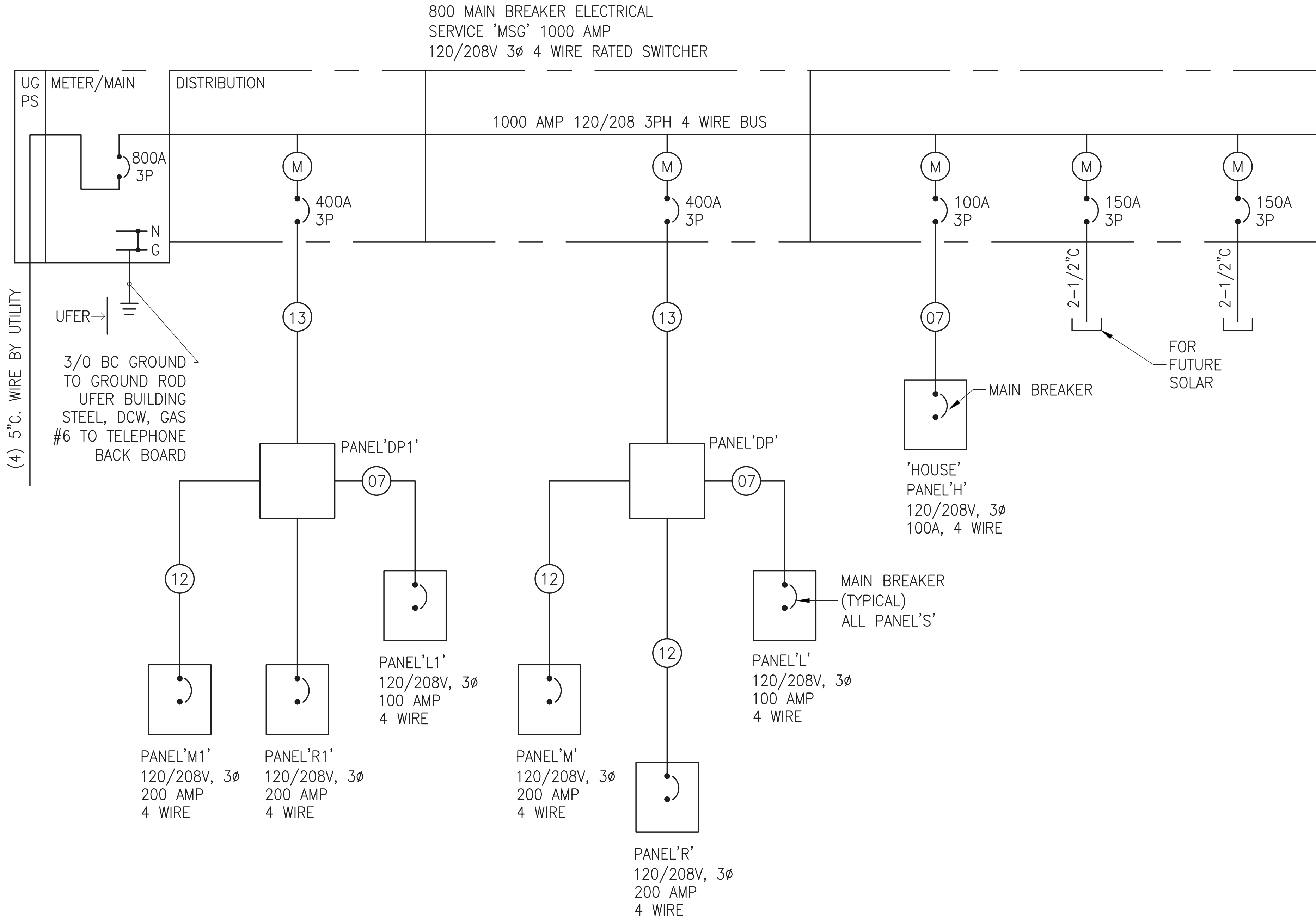
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LIGHT FIXTURE SCHEDULE VOLTAGE: 120V (U.O.N.)			
TYPE	INPUT WATTS	DESCRIPTION AND MANUFACTURER	REMARKS
F1	51	2X4 LED VOLTAGE: UNV LAMP: LED MANUFACTURER: COLUMBIA#LIT-24-40-HL-SM-FS-A12-ED-U-PK24	FLANG KIT FOR SURFACE MT FIXTURE F1E INDICATES 90MIN BATTERY ELL14
F2	48	TX4 LED VOLTAGE: UNV LAMP: LED MANUFACTURER: COLUMBIA#LAW-	
F3	26	CAN LIGHT VOLTAGE: UNV LAMP: LED MANUFACTURER: PRESCOLITE#LFBSL-DM1-8LFSL-20L-40K-9CRI-	
F4	29	WALL PACK VOLTAGE: UNV LAMP: LED MANUFACTURER: HUBBELL#LNC2-12L-U-4K-3	
F5E	8	EM OUTDOOR LIGHT VOLTAGE: UNV LAMP: LED MANUFACTURER: DUAL LITE#PG	
F6	150	HIGH BAY LIGHT VOLTAGE: UNV LAMP: LED MANUFACTURER: COLUMBIA#PEL-4-50-MHHE-FA-W-ED	
X1	8	EXIT LIGHT WITH EM LIGHTS VOLTAGE: UNV LAMP: LED MANUFACTURER: COMPASS# CCR	
X2	8	EXIT LIGHT WITH EM LIGHTS VOLTAGE: UNV LAMP: LED MANUFACTURER: DUAL LITE#	

1 SINGLE LINE DIAGRAM

FEEDER SCHEDULE					
NUMBER	AMPS	CONDUIT	CONDUCTORS PER CONDUIT (THHN/THWN. CU)		
		PVC. EMT OR GRS	3Ø 4W (C)	PULL LINE (E)	(THHN/THWN) COPPER
①	40	3/4"	4 #8	1	#10
②	50	3/4"	4 #6	1	#10
③	60	1"	4 #6	1	#10
④	70	1-1/2"	4 #4	1	#8
⑤	80	1-1/2"	4 #4	1	#8
⑥	90	1-1/2"	4 #2	1	#6
⑦	100	1-1/2"	4 #2	1	#6
⑧	110	1-1/2"	4 #1	1	#6
⑨	125	1-1/2"	4 #1	1	#6
⑩	150	2"	4 #1/0	1	#6
⑪	175	2"	4 #2/0	1	#4
⑫	200	2"	4 #3/0	1	#4
⑬	400	(2)2"	4 #3/0	1	#2 EACH

N.T.S.



CANTELM ENGINEERING
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2130 F STREET BAKERSFIELD, CA 93301
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SINGLE LINE DIAGRAM
MICHAEL FLOORING, INC.
6500 DISTRICT BLVD.
BAKERSFIELD, CA 93313

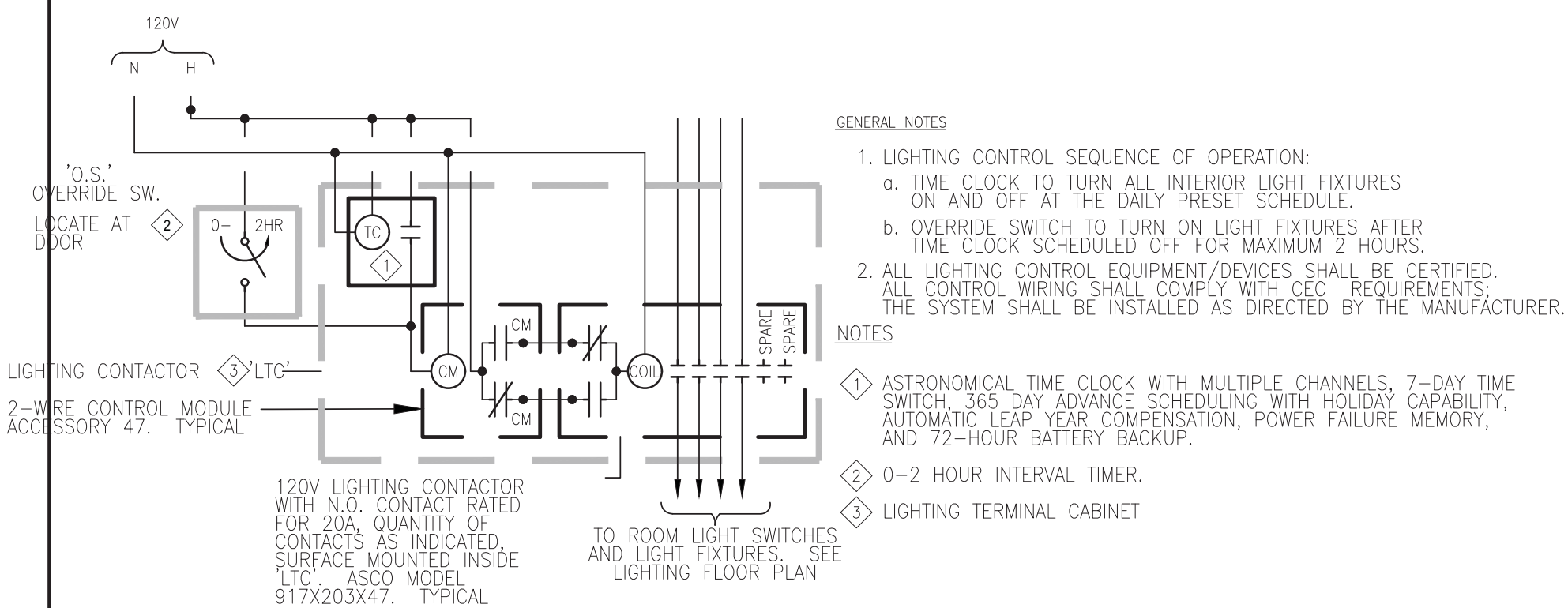
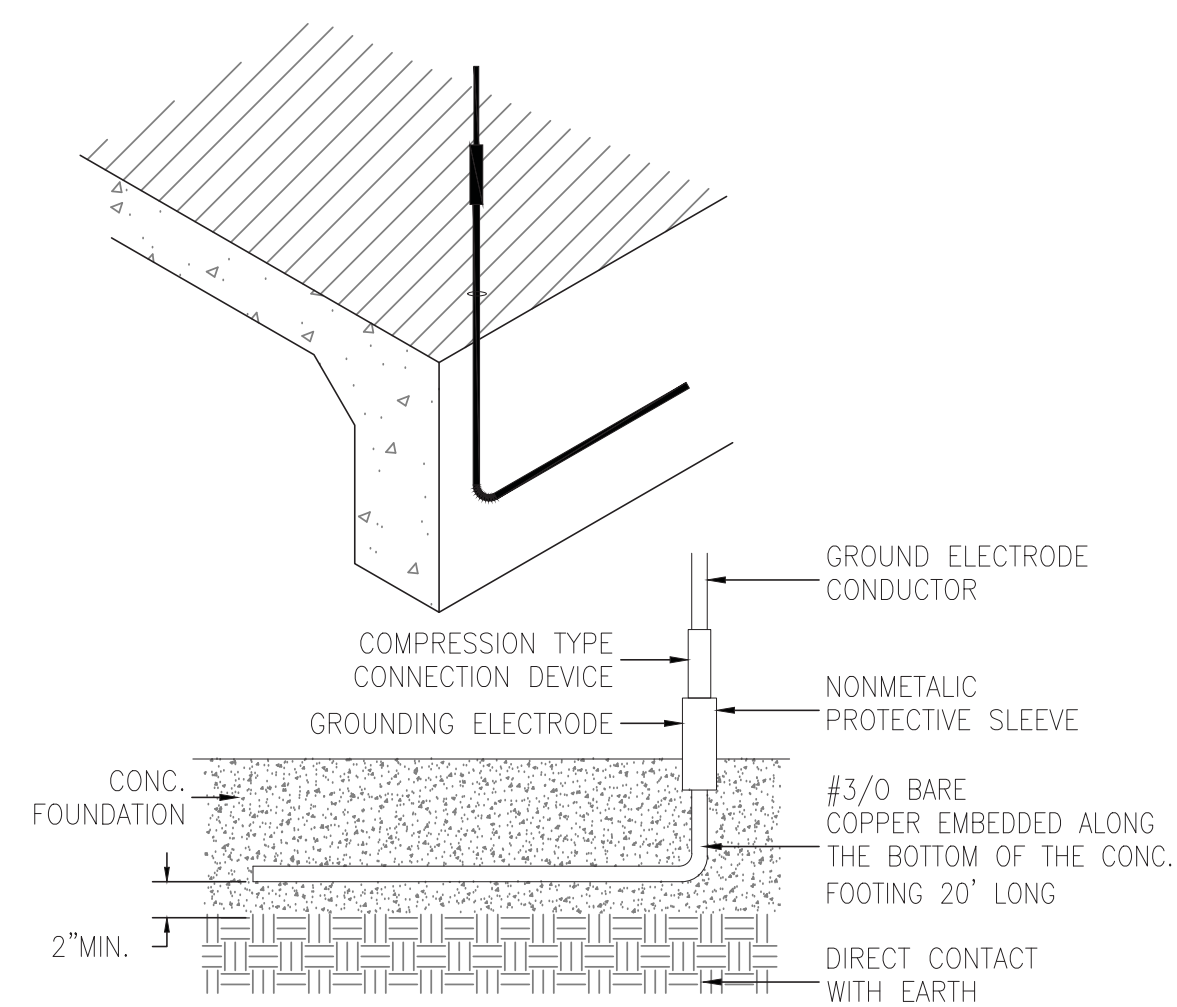
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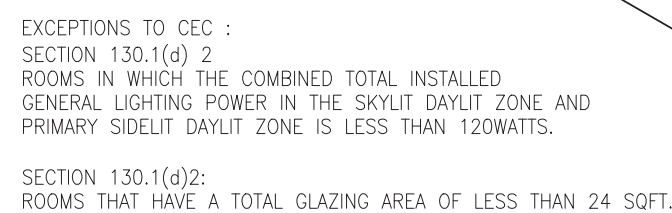
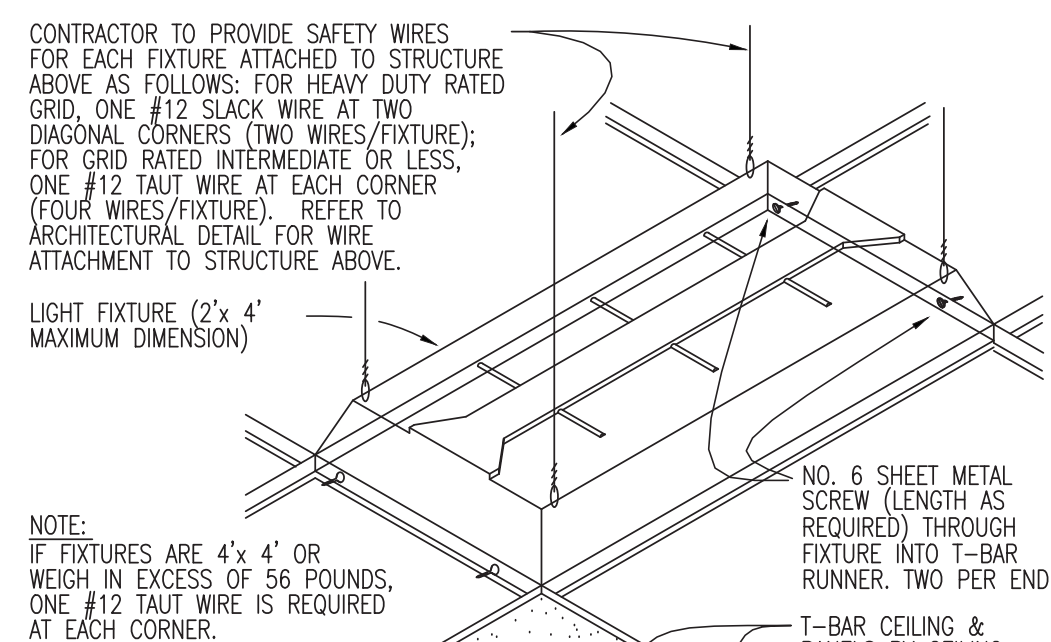
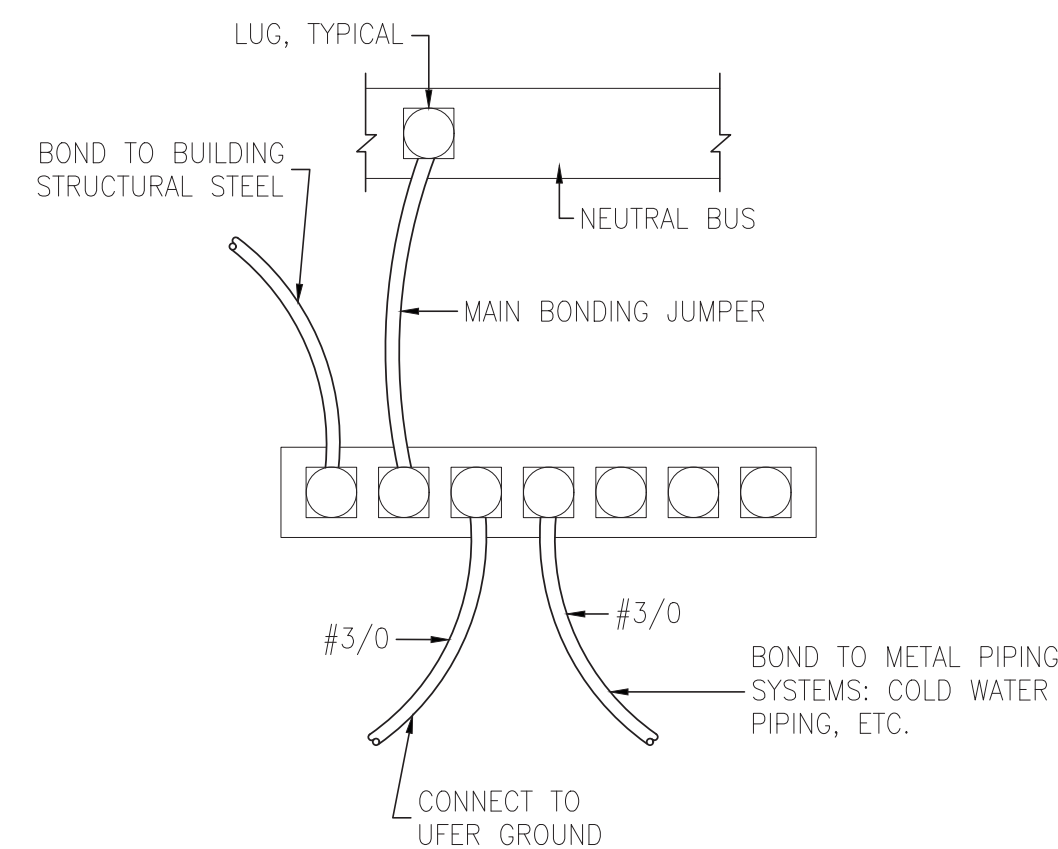
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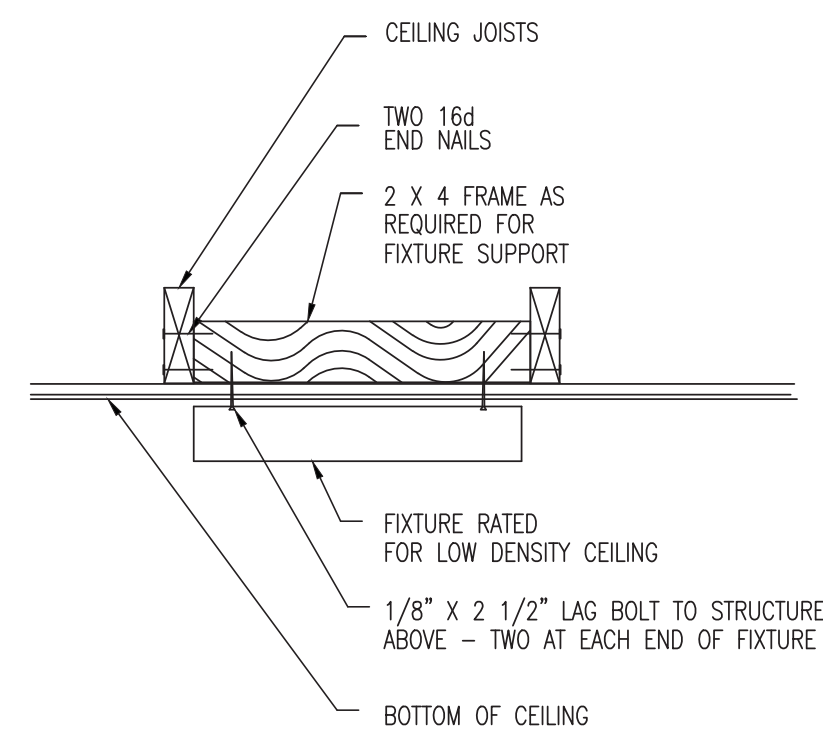
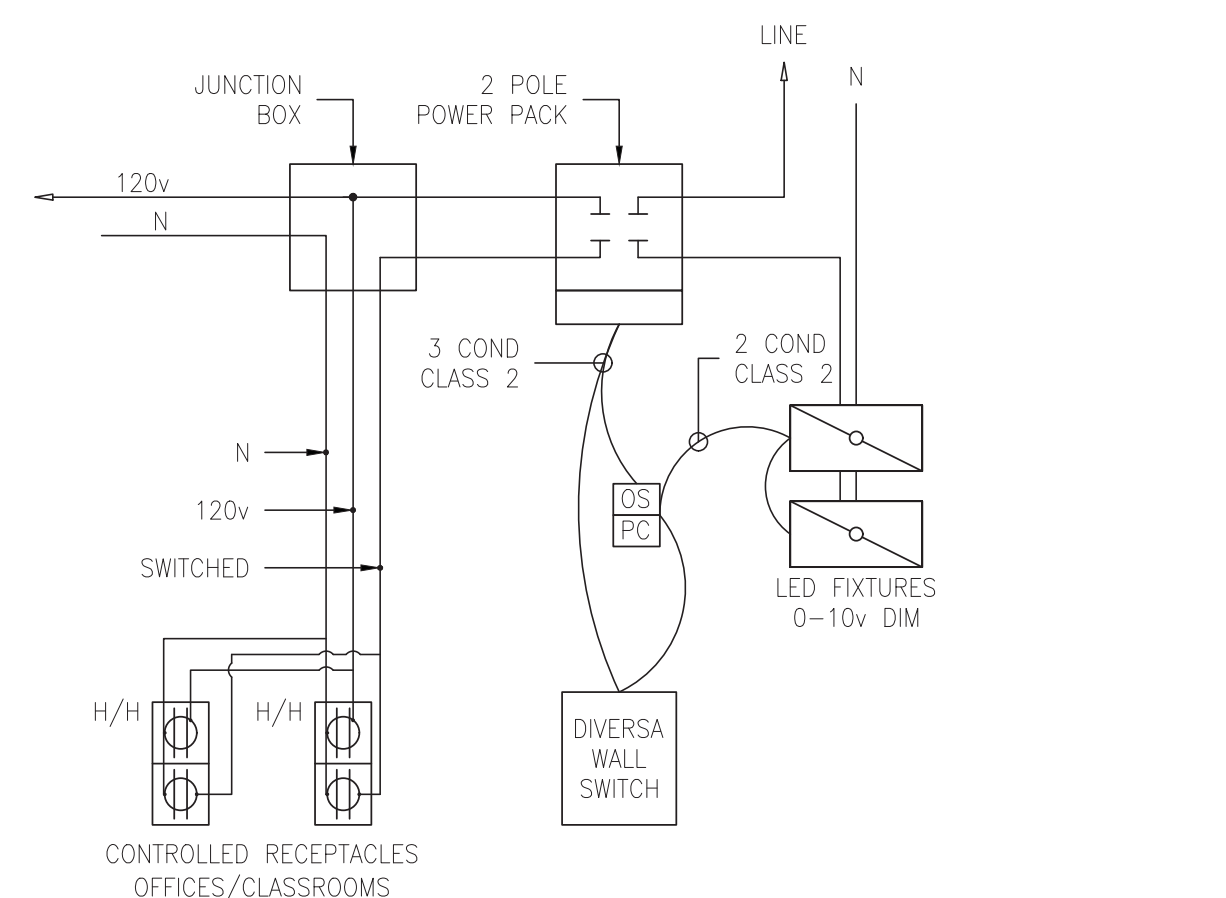
SHEET
E9.0
SHEET



1	UFER DETAIL	N.T.S.	2	ASTRONOMICAL TIMECLOCK DIAGRAM	N.T.S.
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5	BONDING DETAIL	N.T.S.	5	RECESSED FIXTURE MOUNTING	NTS	7	AUTOMATIC DAYLIGHTING CONTROLS	NTS
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9	TITLE 24 CONTROLS DIAGRAM	NTS	10	SURFACE FIXTURE MOUNTING
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DATE	ISSUED

DATE	MARK	ISSUED

DWG. BY	DBC
CHKD BY	KM
DATE	09-21-18
JOB NO.	C18-135
FILE NO.	

