DIVISION 16 – ELECTRICAL

PART 1 – GENERAL

1.1 DESCRIPTION OF THE WORK

A. Work under this section includes, but is not necessarily limited to, furnishing and installing the following:
   1. Electrical service and service equipment.
   2. Lighting and power distribution system.
   3. Provide lighting fixtures selected by owner with lamps to match.
   4. Wiring devices, boxes, cover plates, etc.
   5. Source of power for all items of equipment.
   6. Grounding.
   7. Other requirements and/or systems where shown.

B. All work shall be complete and items, equipment, etc., shall be electrically connected for proper and correct operation.

C. All work under this contract shall be installed in accordance with the latest edition of the following codes and standards insofar as they apply:
   1. The 2017 National Electrical Code.
   2. The National Electrical Safety Code.
   3. Underwriter's Laboratories, Inc., Standards and approved listings.
   4. Electrical Testing Labatories standards.
   5. North Carolina Building Code, Latest Edition and Revisions.
   6. All local codes and ordinances.

D. The Electrical Contractor shall be licensed in the State of North Carolina and have all local licenses required for the work.

E. Obtain all permits, licenses, inspections, etc., required for the work and pay for the same. Furnish final certificate of inspection and approval from the electrical inspector having jurisdiction prior to acceptance of the work.

F. All work shall be done by skilled mechanics and shall present a neat, trim, workmanlike condition when complete.

1.2 INTENT

A. The intent of these specifications and the accompanying drawings is to convey as reasonably as possible the requirements for a complete job ready for the building to operate. The Electrical Contractor shall take this into consideration and include in his base bid allowance for contingencies as will allow him to provide minor pieces of equipment and labor not specifically indicated but required for the job to operate properly, at no additional cost to the Owner.

1.3 COORDINATION

A. Coordinate work with other contractors. Notify Architect of apparent conflicts early to expedite construction. If structural damage appears imminent, stop work and notify Architect for a decision before resuming operations.

B. Locations shown are approximate. The drawings do not give exact details as to elevations and locations of various pipes, fittings, ducts, conduit, etc., and do not show all offsets and other installation details which may be required. Coordinate all locations with architect before any rough-in.

1.4 SHOP DRAWINGS

A. Shop drawings shall be submitted for panels and service equipment, lighting, wiring devices, and cover plates. These may consist of the manufacturer's standard catalog or tear sheets and shall have the exact items being offered clearly identified.

PART 2 – PRODUCTS AND MATERIALS

2.1 GENERAL

A. All material shall be new and shall bear the manufacturer's name, trade name, and UL label where such standard has been established for the particular material. Materials shall be the standard products of manufacturer's regularly engaged in the manufacturer of the required type of equipment and the manufacturer's latest approved design.
   1. Boxes installed in concealed locations shall be set flush with the finished surfaces.
   2. Provide rated boxes in all fire barriers & walls installed per code.

2.2 NOT USED

2.3 CONDUCTORS

A. Conductors shall be color coded, sizes #8 and larger may be color taped on the job. Color coding shall be: Standard Practice.

B. Conductors shall be manufactured by Dodge, Southwire or approved equal. Conductors shall meet the latest requirements of NEMA and IPCEA and shall be UL approved.

C. Metallic sheathed "MC" cable may be used where allowed by N.E.C.

D. Conductors shall be spliced and taped as follows:
   1. Size #10 and #12, use Ideal "Wing Nuts" or T&B "Piggy" connectors. Connectors shall be rated for 150 degrees C for use in recessed lighting fixtures.
   2. Size #8 and larger shall be solderless screw and screw-clamping type, smoothly covered and shaped with rubber gum type with final cover vinyl plastic electrical type. In lieu of rubber gum and vinyl plastic type, factory fabricated approved preformed insulating covers may be used. All connectors shall be UL approved.
   3. No split-bolt type connectors may be used.

E. All branch wire and connections shall be copper and sized per National Electric Code.

F. All conductors shall be continuous without splice between junction, outlet, device boxes, etc. No splicing will be permitted in panelboard cabinets, safety switches, etc.

G. All wiring in mechanical spaces shall be plenum rated.

H. Provide GFI protection within 6'-0" of any sink.

I. All multi-wire branch circuits shall comply with 2017 NEC, 210.4(B).

J. All wiring at medical facilities shall comply with 2017 NEC, 517.1.

2.4 PANELBOARDS, SAFETY SWITCHES

A. Panelboards shall comply with NEMA Standard PB 1 – Latest Edition and as manufactured by Square D or ITE-Siemens.

B. The contractor shall be responsible for correctly phasing the circuits in the panelboards.

C. Safety switches shall be general duty type, size and rating as required for load service. Safety switches shall be fused or unfused as shown and/or as required. Safety switches serving motor loads shall be horsepower rated for load served.

2.5 NOT USED

2.6 WIRING DEVICES

A. Wiring devices shall be commercial grade by Bryant, Leviton, or approved equal. With matching cover. Color by Architect.

B. Wiring devices installed under a Kitchen Hood shall have stainless steel covers.

C. Wiring devices installed over counters shall comply with ANSI A117.1.

2.7 NOT USED

2.8 CONDUIT

A. PVC conduit will be allowed where N.E.C. approved.

B. All service conduit shall be rigid where exposed below 8'-0" AFF or exposed to the elements or hazardous conditions.

PART 3 – EXECUTION

3.1 CIRCUIT GROUNDING

A. All circuits shall contain an insulated, green, copper grounding conductor, sized in accordance with Table 250-95 of the NEC. Grounding conductors shall be connected to equipment grounding bus in panelboard and securely attached and grounded to the device or enclosure at the other end.

3.2 GROUNDING TYPE CONVENIENCE OUTLETS AND SWITCHES

A. Outlets and switches shall be solidly grounded to equipment grounding system with a green colored insulated conductor. Electrical connections shall be continuous from equipment ground bus in panelboard to the hex nut on the convenience outlet or switch.

3.3 MOTORS

A. All motors shall be connected to conduit system with short length (minimum length 24" and maximum length 36") of flexible liquidtight conduit.

3.4 NOT USED

3.5 EQUIPMENT LABELING

A. Provide permanent name plates for all panelboards, safety switches, wiring troughs, etc., for identification of equipment controlled, services, etc. Nameplates shall be securely and permanently attached to equipment with stainless steel screws. Nameplates shall include the name of the equipment and where it is fed from.

B. All switch plates, receptacle plates and outlet covers shall be labeled with machine printed vinyl labels identifying the circuit(s) within.

C. All empty conduit runs shall be identified and indicated where they terminate.

D. Provide typewritten directory in each panelboard to clearly identify each circuit, service, etc.

3.6 NOT USED

3.7 NOT USED

3.8 JUNCTION AND/OR PULL BOXES

A. Boxes shall be installed where necessary to avoid excessive runs and/or too many bends between outlets.

3.9 PULL WIRE

A. Leave pull wire in each empty conduit run.

3.10 NOT USED

3.11 GROUNDING

A. All grounding shall be in accordance with Article 250 of the NEC. In addition, the following requirements shall be met:
   1. Grounding conductors shall be installed as to permit the shortest and most direct path from equipment to ground. All connections to grounding conductors shall be accessible.
   2. Equipment ground continuity shall be maintained through flexible metal conduit.
   3. All wiring devices equipped with grounding connection shall be solidly grounded to ground system with grounding conductors.
   4. The frame of all lighting fixtures shall be securely grounded to the equipment ground system with grounding conductors.
   5. All equipment enclosures, and non-current-carrying metallic parts of electrical equipment, raceway systems, etc., shall be effectively and adequately bonded to ground.
   6. All equipment enclosures, and non-current-carrying metallic parts of electrical equipment, raceway systems, etc., shall be effectively and adequately bonded to ground.

3.12 ELECTRICAL WORK IN CONNECTION WITH OTHER WORK

A. PLUMBING WORK: The Electrical Contractor shall furnish and install switches and devices as shown and electrically connect electric water heaters, etc. All other electrical work required will be performed by the PLUMBING CONTRACTOR.

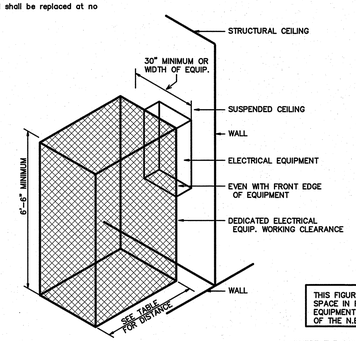
B. HEATING AND AIR CONDITIONING WORK: The Electrical Contractor shall provide all disconnect switches, starters, and associated hardware for the equipment furnished including all line and load side wiring and conduit. Final connections to the equipment will be by the HVAC contractor. All control wiring will be accomplished by the HVAC contractor. Coordinate all work associated with the HVAC contractor.

3.13 CLEAN UP

A. During construction, keep the site clean of debris. Upon completion, and before final inspection, clean up the premises to remove all evidence of work. In addition upon completion of construction leave equipment clean.

3.14 GUARANTEE

A. Guarantee all materials and labor included in the electrical work for a period of one year from date of final acceptance by the Owner. Any part or parts of the work or equipment which prove to be defective during the guarantee period shall be replaced at no additional cost to the Owner.



ELECTRICAL EQUIPMENT WORKING CLEARANCE PER ARTICLE 110-26 OF N.E.C.

WORKING CLEARANCES			
VOLTAGE TO GROUND NOMINAL	MIN. CLEAR DISTANCE IN FEET		
CONDITION:	1	2	3
0–150	3	3	3
151–600	3	3–1/2	4

THIS FIGURE ILLUSTRATES THE WORKING SPACE IN FRONT OF THE ELECTRICAL EQUIPMENT REQUIRED BY SECTION 110-16 OF THE N.E.C.

WHERE THE CONDITIONS ARE AS FOLLOWS:

1 EXPOSED LIVE PARTS ON ONE SIDE AND NO LIVE OR GROUNDED PARTS ON THE OTHER SIDE OF THE WORKING SPACE, OR EXPOSED LIVE PARTS ON BOTH SIDES EFFECTIVELY GUARDED BY SUITABLE WOOD OR INSULATED BUSBARS OPERATING AT NOT OVER 300V SHALL NOT BE CONSIDERED LIVE PARTS.

2 EXPOSED LIVE PARTS ON ONE SIDE AND GROUNDED PARTS ON THE OTHER SIDE.

3 EXPOSED LIVE PARTS ON BOTH SIDES OF THE WORK SPACE (NOT GUARDED AS PROVIDED IN CONDITION 1) WITH THE OPERATOR BETWEEN.

1 ELECTRICAL CLEARANCES
SCALE: NTS

GENERAL NOTES

1 ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND ALL LOCAL CODES HAVING JURISDICTION.

2 ALL BRANCH CIRCUIT CONDUCTORS TO BE COPPER (SERVICE CONDUCTORS MAY BE ALUMINUM WITH SAME AMPACITY AS COPPER CONDUCTORS. RE-SIZE CONDUCTERS AND CONDUIT PER NEC.)

3 ALL CIRCUITS TO BE 2 #12, 1 #12 GND IN 1/2" EMT CONDUIT AS A MINIMUM. PROVIDE WIRING FOR LARGER CIRCUITS AS REQUIRED BY NEC. RIGID CONDUIT IS REQUIRED WHERE EXPOSED BELOW 8'-0" A.F.F.

4 ALL EMPTY CONDUIT RUNS IN EXCESS OF 10 FEET SHALL BE PROVIDED WITH A PULL WIRE OR FISH TAPE/CORD.

5 CONTRACTOR SHALL VERIFY THAT ALL DOOR SWINGS ARE CORRECT BEFORE INSTALLING LIGHT SWITCH OUTLETS.

6 ALL BRANCH CIRCUIT CONDUCTORS FROM THE PANEL TO THE FIRST OUTLET SHALL BE INCREASED TO THE NEXT LARGER SIZE WHERE THE LENGTH OF THE HOME RUN EXCEEDS 120 FEET ON 120V AND 208V CIRCUITS.

7 THE CORRECT NUMBER OF WIRES MAY NOT BE INDICATED FOR ALL CIRCUITS, ONLY THOSE WHERE CLARIFICATION IS NECESSARY. THE ELECTICAL CONTRACTOR SHALL PROVIDE ALL WIRES NECESSARY FOR THE PROPER FUNCTION OF THE SYSTEM WHETHER INDICATED ON DRAWINGS OR NOT.

8 THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTLY PHASING THE CIRCUITS IN THE PANELBOARDS.

9 THE ELECTRICAL CONTRACTOR SHALL VERIFY THE TYPE OF CEILING SYSTEM WITH THE GENERAL CONTRACTOR TO INSURE THAT ALL LIGHTING FIXTURES ARE COMPATIBLE WITH THE CEILING SYSTEM BEING INSTALLED. LIGHTING FIXTURES SHOULD NOT BE ORDERED UNTIL TYPE OF CEILING HAS BEEN VERIFIED.

10 ELECTRICAL REQUIREMENTS INDICATED ON DRAWINGS MAY DIFFER FROM ACTUAL EQUIPMENT FURNISHED. IF FURNISHED EQUIPMENT DIFFERS FROM RATINGS ON DRAWINGS CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER FOR APPROPRIATE ACTION TO BE TAKEN.

11 IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO COORDINATE EXACT BREAKER REQUIREMENTS FOR ALL EQUIPMENT PRIOR TO ORDERING PANEL. ADJUST BREAKER AND WIRE SIZES AS REQUIRED.

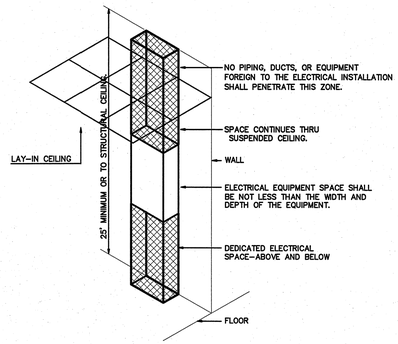
12 PROVIDE BOXES, JACKS, WIRING AND CONDUIT FROM LOCATIONS SHOWN TO MTP LOCATION. VERIFY EXACT REQUIREMENTS WITH OWNER.

13 ELECTRICAL CONTRACTOR SHALL PROVIDE ALL DISCONNECTS FOR MECHANICAL & PLUMBING EQUIPMENT. DISCONNECTS SHALL BE PER MANUFACTURES RECOMMENDATIONS AND FUSED PER NAME PLATE. PROVIDE NEMA 3R ENCLOSURES ON EXTERIOR. COORDINATE FUSE SIZES.

14 THE EC SHALL MEET WITH THE ARCHITECT AND TENANT PRIOR TO INSTALLING OUTLET BOXES TO VERIFY LOCATIONS AND MOUNTING HEIGHTS OF RECEPTACLES AND TELEPHONE OUTLETS.

ELECTRICAL LEGEND

X / O_X / X	LIGHT FIXTURE: LETTER DENOTES FIXTURE TYPE (REFER TO LIGHTING PLAN AND FIXTURE SCHEDULE). NL = NIGHT LIGHT (NOT SWITCHED/ALWAYS ON)
(S) U / WP/GFI	DUPLEX RECEPTACLE – 120V; MOUNT 18" TO CENTER AFF UNLESS NOTED OTHERWISE; "WP" INDICATES WEATHER PROOF, "GFI" INDICATES GROUND FAULT CURRENT INTERRUPT PROTECTED. 'U' INDICATES RECEPTACLE WITH (2) USB PORTS. (S) INDICATES SHUNT TRIP BREAKER, OR WIRING THROUGH RELAYS IN HOOD CONTROL CABINET
	QUADRAPLEX RECEPTACLE – 120V
	FLOOR OR CEILING OUTLET (AS NOTED) – 120V
	SPECIAL PURPOSE RECEPTACLE – REFER TO POWER PLAN AND PANEL SCHEDULE
S	LIGHT SWITCH
S_M	SWITCH WITH INTEGRAL PIR/US MOTION SENSOR FOR AUTOMATIC SHUT-OFF WITH UP TO 2 HOUR ADJUSTABLE DELAY.
S_D	DIMMABLE LIGHT SWITCH
(S)	MOTOR RATED SWITCH
(J)	JUNCTION BOX
	TELE/DATA OUTLET – PROVIDE JUNCTION BOX WITH CONDUIT BACK TO MTP. PROVIDE (1) TELEPHONE JACK AND (1) CAT 5 DATA JACK
	SINGLE-POLE HOMERUN TO PANELBOARD
	TWO-POLE OR 3-POLE HOMERUN TO PANELBOARD
EXIT	EXIT LIGHT
	EMERGENCY EGRESS FIXTURE
PC	PHOTOCELL
	BRANCH CIRCUIT WIRING
	SWITCH LEG
	GROUND CONNECTION
PANEL A	DISTRIBUTION PANELBOARD
	DISCONNECTING MEANS AS REQUIRED BY CODE



ELECTRICAL EQUIPMENT DEDICATED SPACE PER ARTICLE 110.26.F.1 OF N.E.C.

2 DEDICATED SPACE
SCALE: NTS

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5/5/21

PROJECT TITLE
MI CANCUN

115 S. RALEIGH ST.
ANGIER, NORTH CAROLINA

PROJECT NO.
2006r

DRAWING TITLE
ELECTRICAL SPECIFICATIONS

E1

PLOT DATE 5/5/2021

NOTE:
THE EXISTING INFORMATION SHOWN ON THIS DRAWING IS FROM A FIELD INVESTIGATION.
THE CONTRACTOR IS RESPONSIBLE FOR VISITING THE SITE AND FIELD VERIFYING ALL RELEVANT INFORMATION.
THE SUBMISSION OF A BID INDICATES ACCEPTANCE OF EXISTING CONDITIONS. NOTIFY THE ENGINEER OF ANY DISCREPANCIES NOTED.

Mi Concun Angier E2

WALL LEGEND

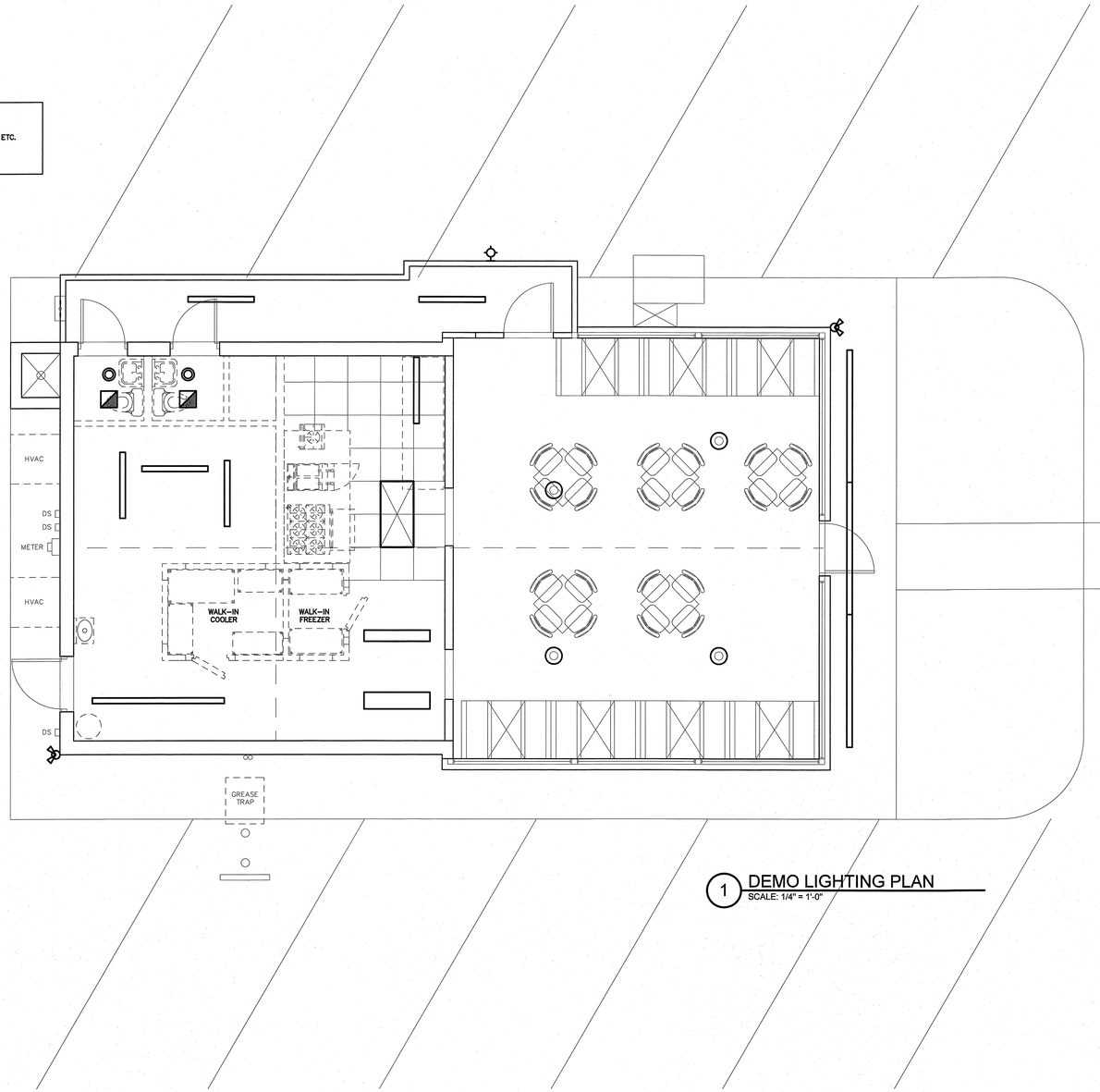
EXISTING WALL TO REMAIN

EXISTING WALL TO BE REMOVED

THE SCOPE OF DEMOLITION IS AS FOLLOWS–

REMOVE ALL LIGHTING AND CIRCUITS BACK TO THE PANEL UNLESS OTHERWISE NOTED.
REMOVE ALL DEMO'ED LIGHT FIXTURES AND PROPERLY DISPOSE OF ALL FIXTURES, BALLASTS, ETC.

REMOVE ALL DEVICES AND CIRCUITS BACK TO THE PANEL UNLESS OTHERWISE NOTED.
REMOVE ALL WIRING AND CONDUITS BACK TO CONCEALED JUNCTION POINT.



1 DEMO LIGHTING PLAN
SCALE: 1/4" = 1'-0"

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 22038 BENJAMIN E. BURKE
5/5/21

PROJECT TITLE
MI CANCUN

115 S. RALEIGH ST.
ANGIER, NORTH CAROLINA

PROJECT NO.
2006r

DRAWING TITLE
DEMO LIGHTING PLAN

E2

PLOT DATE 5/5/2021

NOTE:
THE EXISTING INFORMATION SHOWN ON THIS DRAWING IS FROM A FIELD INVESTIGATION.
THE CONTRACTOR IS RESPONSIBLE FOR VISITING THE SITE AND FIELD VERIFYING ALL RELEVANT INFORMATION.
THE SUBMISSION OF A BID INDICATES ACCEPTANCE OF EXISTING CONDITIONS. NOTIFY THE ENGINEER OF ANY DISCREPANCIES NOTED.

EQUIPMENT SCHEDULE

(VERIFY ALL EQUIPMENT REQUIREMENTS PRIOR TO ROUGH-IN)

ITEM	QUAN	DESCRIPTION	ITEM	QUAN	DESCRIPTION
1	1	ICE MACHINE W/ BIN	33A	1	48" FLAT GRIDDLE (GAS)
2	1	1-DOOR WORKTOP REFRIGERATOR	33B	1	12" RADIANT GRILL (GAS)
3	1	MILLWORK BACK COUNTERTOP	34	1	60" REFRIGERATED CHEF BASE
4	1	MARGARITA MACHINE	35	1	STOCK POT BURNER (GAS)
5	1	SOILED DISH RACK STORAGE	36	1	CHEESEMELTER (GAS)
6	1	DEEP WELL GLASS FROSTER	37	1	6-BURNER RANGE W/ OVEN (GAS)
7	LOT	WALLMOUNT CLEAN GLASS SHELVING	38	1	DEEP FRYER (GAS)
8	1	POINT OF SALE	39	1	UNDERCOUNTER FREEZER
9	1	BACK BAR REFRIGERATION	40	1	S/S SPLASHGUARD
10	1	S/S 24" ICE WELL W/ COLD PLATE	41	1	DEEP FRYER (GAS)
11	1	S/S BAR DUMP SINK	42	1	HIGH TEMP DISHMACHINE
12	1	S/S BAR HAND SINK	43	1	S/S 48" LH CLEAN DISHTABLE
13	1	PASS-THRU SHELF	44	2	S/S WALLMOUNT RACK STORAGE
14	1	MILLWORK COUNTERTOP W/ BASE CABINETS	45	1	NOT USED
15	1	CLEAN GLASS RACK STORAGE UNIT	46	1	S/S DRYING RACK CART
16	2	TEA BREWER / URN	47	2	S/S WALLMOUNT HAND SINK W/ SPLASHGUARDS
17	1	COFFEE BREWER	48	LOT	S/S FREESTANDING SHELVING UNIT
18	1	SODA DISPENSER W/ ICE MACHINE	49	2	S/S PREP SINK
19	1	S/S DROP-IN HAND SINK W/ SPLASHGUARDS	50	1	S/S 16" X 84" WALLMOUNT SHELF
20	1	BAG-IN-BOX UNIT W/ CARBONATOR	51	1	S/S 16" X 84" WALLMOUNT SHELF
21	–	NOT USED	52	1	S/S 3-COMPARTMENT SINK W/ 24" DRAINBOARDS
22	–	28" REFRIG SANDWICH/SALAD UNIT	53	1	S/S 15" X 72" WALLMOUNT SHELF W/ POTRACK
23	1	CARBON DIOXIDE TANK	54	1	2-DOOR REACH-IN REFRIGERATOR
24	1	S/S FILLER TABLE W/ UNDERSHELF	55	1	FLY FAN (VERIFY LOCATION/REQUIREMENTS)
25	1	4-WELL HOT HOLDING TABLE (VERIFY MODEL)	56	1	WATER HEATER IN EXTERIOR ENCLOSURE
26	1	60" REFRIG SANDWICH / SALAD UNIT	57	1	EXT WALK-IN COOLER/FREEZER COMBO (VERIFY)
27	1	CHIP WARMER	58	LOT	WALK-IN SHELVING
28	1	1-DOOR UNDERCOUNTER REFRIGERATOR	59	1	CAN WASH IN EXTERIOR ENCLOSURE
29	1	S/S 16" X 36" WALLMOUNT SHELF	60	1	EXT STEP-IN KEG COOLER (VERIFY)
30	1	S/S 16" X 60" WALLMOUNT SHELF	61	1	DRAFT BEER TOWER W/ SPILL/RINSE DRIP TRAY
31	1	S/S PASS-THRU SHELF	62	1	DRAFT BEER REFRIGERATED LINE GLYCOL CHILLER
32	2	HOOD KEF (X2)	63	1	NITROGEN GENERATOR W/ TANK
32	1	HOOD KMUA			

HEALTH DEPARTMENT LIGHTING NOTES

PRIOR TO INSPECTION, EC SHALL VERIFY THAT THE FOLLOWING MINIMUM LIGHT LEVELS ARE PROVIDED:

10 fc AT A DISTANCE OF 2'-6" ABOVE THE FLOOR IN DRY STORAGE AREAS AND IN OTHER AREAS AND ROOMS DURING CLEAN-UP;

20 fc AT SELF-SERVICE COUNTERS SUCH AS BUFFETS AND SALAD BARS, WHERE FRESH PRODUCE OR PACKAGED FOOD IS SOLD OR OFFERED FOR CONSUMPTION, INSIDE EQUIPMENT SUCH AS REACH-IN AND UNDER-COUNTER REFRIGERATORS, AND AT A DISTANCE OF 2'-6" ABOVE THE FLOOR IN AREAS USED FOR HANDWASHING, WAREWASHING, EQUIPMENT AND UTENSIL STORAGE, AND IN TOILET ROOMS;

50 fc AT FOOD PREPARATION SURFACES AND SURFACES WHERE EMPLOYEE SAFETY IS A FACTOR SUCH WHERE USING KNIVES, SLICERS, GRINDERS, OR SAWS, ETC.

EC SHALL ADJUST LIGHTING AS REQUIRED TO PROVIDE THE NECESSARY MINIMUM LIGHT LEVELS.

THE LIGHTING IN THE KITCHEN AND PREP AREAS ARE DESIGNED AROUND HEALTH DEPARTMENT REQUIREMENTS FOR MINIMUM LIGHT LEVELS. PER SECTION 101.3 OF THE 2012 NC ENERGY CODE, THESE SPACES ARE EXEMPT FROM MEETING THE REQUIRED INTERIOR ENERGY ALLOWNACE PER TABLE 505.5.2.

PROVIDE JUNCTION BOXES FOR WALK-IN COOLER LIGHTS. COORDINATE LOCATION AND REQUIREMENTS.

MINIMUM 10fc SHALL BE MAINTAINED IN WALK-IN COOLER. EC SHALL PROVIDE SUPPLEMENTAL FIXTURES IF FREEZER/COOLER GLOBES ARE NOT ADEQUATE.

PROVIDE CONDUIT SEALS FOR ALL LOCATIONS WHERE CONDUITS PENETRATE WALK-IN COOLER WALLS.

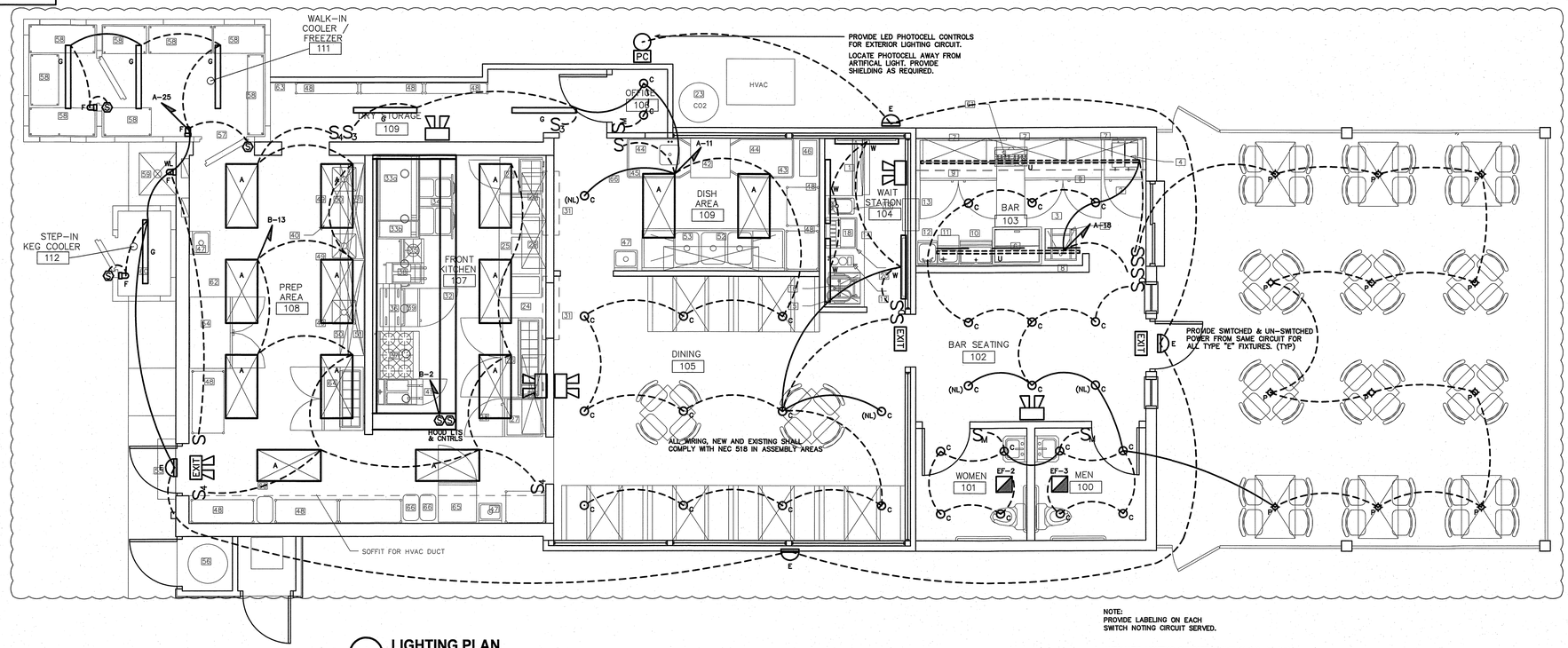
EC SHALL VERIFY THAT 50fc IS PROVIDED AT ALL EQUIP UNDER THE HOOD PRIOR TO HEALTH DEPT INSPECTION. PROVIDE NEW OR SHIFT FIXTURE LOCATIONS AS NECESSARY.

Mi Cancun Angier E3

LIGHTING SCHEDULE *

MARK	MANUFACTURER	CATALOG NO.	VOLT.	LAMPS NO.	LAMPS TYPE	LAMPS W	BALLAST TYPE	W/ FIXTURE	REMARKS
A	COLUMBIA	LJT24-40VLSM-FSA12-EU	120	–	LED	–	–	60	LED 2X4 SURFACE-MOUNT FIXTURE, FOOD GRADE LENS *
C	PRESCOLITE	LF6LEDG4-6MFLED6G435K	120	–	LED	–	–	30	LED 6" RECESSED CAN LIGHT *
E	COMPASS	CUSO	120	–	LED	–	–	10	EMERGENCY EGRESS FIXTURE – DUAL MODE, NORMAL AND EMERGENCY OPERATION *
F	HUBBELL	VTC-5K-G-U	120	–	LED	–	–	28	LED VAPOR TIGHT, COOLER *
G	COLUMBIA	LXEM4-35ML-RFA-EDU	120	–	LED	–	–	42	ENCLOSED GASKETED LED STRIP LIGHT *
U	ASPECT LED	AL-SL-NR-U	120	–	LED	–	–	3W/FT	LED FLEX STRIP LIGHTING, COLOR/FINISH BY ARCH *
P	CHOSEN BY OWNER/ARCH; PROVIDED BY EC.		120	–	LED	–	–	30	LED PENDANT FIXTURE ($150 ALLOWANCE) *
W	ECLIPSE	BU-D-4-4K-EBU	120	–	LED	–	–	40	LED WALL-MOUNT DIRECT LIGHT FIXTURE, FOOD GRADE LENS, COLOR/FINISH BY ARCH *
EXIT	MULE	PVT-U-B-R-U-SD	120	–	LED	–	–	–	EXIT LIGHT, COLOR/FINISH BY ARCH *
EM	MULE	SQRXU	120	–	LED	–	–	–	COMBINATION EMERGENCY/EXIT LIGHT, COLOR/FINISH BY ARCH *
EM	MULE	SQLED	120	–	LED	–	–	–	EMERGENCY LIGHT, COLOR/FINISH BY ARCH *

* OR APPROVED EQUAL. PROVIDE CUT SHEETS FOR OWNER APPROVAL PRIOR TO ORDERING FIXTURES.



1 **LIGHTING PLAN**
SCALE: 1/4" = 1'-0"

NOTE:
PROVIDE LABELING ON EACH SWITCH NOTING CIRCUIT SERVED.

AUTOMATIC LIGHTING SHUTOFF IS NOT SHOWN IN THE EGRESS PATH LIGHTING AS ALLOWED PER 505.2.2.2.1 EXCEPTION #3, WHERE AUTOMATIC SHUTOFF WOULD ENDANGER OCCUPANT SAFETY.

TIE ALL EXIT AND EMERGENCY LIGHTS TO NEAREST AVAILABLE UNSWITCHED LIGHTING CIRCUIT IN THE AREA SERVED.

VERIFY HEIGHT/LOCATION OF ALL SWITCHES AND DEVICES PRIOR TO INSTALLATION.

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NORTH CAROLINA PROFESSIONAL SEAL 22038 ENGINEER BENJAMIN E BURKE
5/5/21

PROJECT TITLE
MI CANCUN

115 S. RALEIGH ST.
ANGIER, NORTH CAROLINA

PROJECT NO.
2006r

DRAWING TITLE
LIGHTING PLAN

E3

PLOT DATE 12/30/2020
⚠ PLAN REVISIONS 5/04/2021

NOTE:
THE EXISTING INFORMATION SHOWN ON THIS DRAWING IS FROM A FIELD INVESTIGATION.
THE CONTRACTOR IS RESPONSIBLE FOR VISITING THE SITE AND FIELD VERIFYING ALL RELEVANT INFORMATION.
THE SUBMISSION OF A BID INDICATES ACCEPTANCE OF EXISTING CONDITIONS. NOTIFY THE ENGINEER
OF ANY DISCREPANCIES NOTED.

Mi Cancun Angier E4

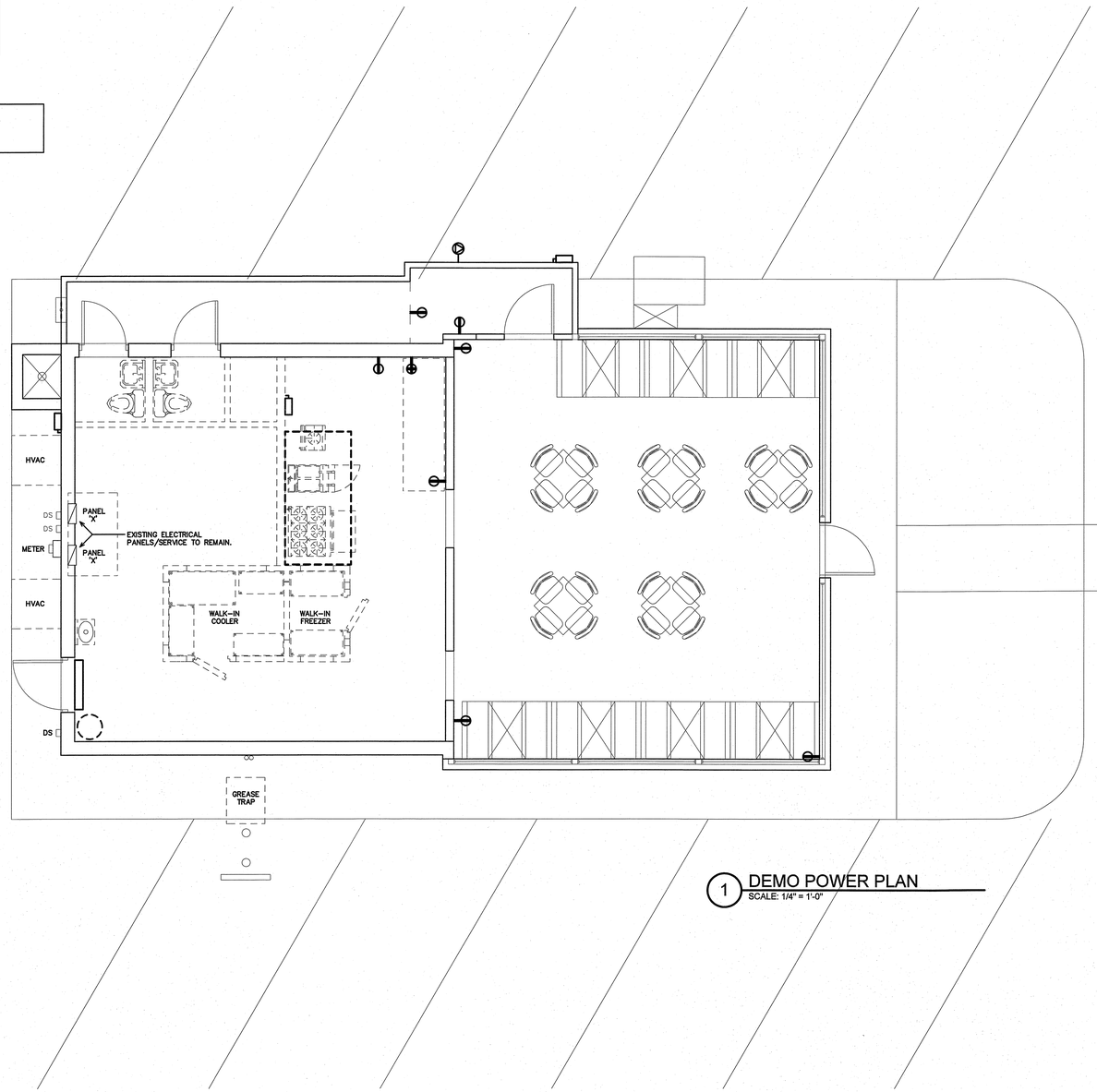
WALL LEGEND

EXISTING WALL TO REMAIN

EXISTING WALL TO BE REMOVED

THE SCOPE OF DEMOLITION IS AS FOLLOWS–

REMOVE ALL DEVICES AND CIRCUITS BACK TO THE PANEL UNLESS OTHERWISE NOTED.
REMOVE ALL WIRING AND CONDUITS BACK TO CONCEALED JUNCTION POINT.



1 DEMO POWER PLAN
SCALE: 1/4" = 1'-0"

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 20058 BENJAMIN E. BURKE
5/5/21

PROJECT TITLE
MI CANCUN

115 S. RALEIGH ST.
ANGIER, NORTH CAROLINA

PROJECT NO.
2006r

DRAWING TITLE
DEMO POWER PLAN

E4

PLOT DATE 5/5/2021

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THE SUBMISSION OF A BID INDICATES ACCEPTANCE OF EXISTING CONDITIONS. NOTIFY THE ENGINEER OF ANY DISCREPANCIES NOTED.

EQUIPMENT SCHEDULE

(VERIFY ALL EQUIPMENT REQUIREMENTS PRIOR TO ROUGH-IN)

ITEM	QUAN	DESCRIPTION	ELECTRICAL CHARACTERISTICS								
			FLA	MCA	MOCP	WATTS	HP	VOLTS	PH	CONNECTION	WIRE SIZES
1	1	ICE MACHINE W/ BIN	12A	–	20A	–	–	240	1	DISCONNECT	3–#12, 1–#12 GND IN 3/4" CONDUIT
2	1	1–DOOR WORKTOP REFRIGERATOR	2.2A	–	20A	–	1/5	120	1	5–15	2–#12, 1–#12 GND IN 1/2" CONDUIT
3	1	MILLWORK BACK COUNTERTOP	–	–	–	–	–	–	–	–	–
4	1	MARGARITA MACHINE	–	–	20A	1700	1/2	120	1	5–15	2–#12, 1–#12 GND IN 1/2" CONDUIT
5	1	SOILED DISH RACK STORAGE	–	–	–	–	–	–	–	–	–
6	1	DEEP WELL GLASS FROSTER	1.6A	–	20A	–	1/3	120	1	5–15	2–#12, 1–#12 GND IN 1/2" CONDUIT
7	LOT	WALLMOUNT CLEAN GLASS SHELVING	–	–	–	–	–	–	–	–	–
8	1	POINT OF SALE	–	–	20A	–	–	120	1	5–15	2–#12, 1–#12 GND IN 1/2" CONDUIT
9	1	BACK BAR REFRIGERATION	2.8A	–	20A	–	1/3	120	1	5–15	2–#12, 1–#12 GND IN 1/2" CONDUIT
10	1	S/S 24" ICE WELL W/ COLD PLATE	–	–	–	–	–	–	–	–	–
11	1	S/S BAR DUMP SINK	–	–	–	–	–	–	–	–	–
12	1	S/S BAR HAND SINK	–	–	–	–	–	–	–	–	–
13	1	PASS–THRU SHELF	–	–	–	–	–	–	–	–	–
14	1	MILLWORK COUNTERTOP W/ BASE CABINETS	–	–	–	–	–	–	–	–	–
15	1	CLEAN GLASS RACK STORAGE UNIT	–	–	–	–	–	–	–	–	–
16	2	TEA BREWER / URN	14.8A	–	20A	–	–	120	1	5–15	2–#12, 1–#12 GND IN 1/2" CONDUIT
17	1	COFFEE BREWER	13.9A	–	20A	–	–	120	1	5–15	2–#12, 1–#12 GND IN 1/2" CONDUIT
18	1	SODA DISPENSER W/ ICE MACHINE	–	–	20A	300	–	120	1	5–15	2–#12, 1–#12 GND IN 1/2" CONDUIT
19	1	S/S DROP–IN HAND SINK W/ SPLASHGUARDS	–	–	–	–	–	–	–	–	–
20	1	BAG–IN–BOX UNIT W/ CARBONATOR	7.2A	–	20A	–	–	120	1	5–15	2–#12, 1–#12 GND IN 1/2" CONDUIT
21	–	NOT USED	–	–	–	–	–	–	–	–	–
22	–	28" REFRIG SANDWICH/SALAD UNIT	3.8A	–	20A	–	–	120	1	5–15	2–#12, 1–#12 GND IN 1/2" CONDUIT
23	1	CARBON DIOXIDE TANK	–	–	–	–	–	–	–	–	–
24	1	S/S FILLER TABLE W/ UNDERSHELF	–	–	–	–	–	–	–	–	–
25	1	4–WELL HOT HOLDING TABLE (VERIFY MODEL)	–	–	30A	2000	–	120	1	5–30	2–#10, 1–#10 GND IN 3/4" CONDUIT
26	1	60" REFRIG SANDWICH / SALAD UNIT	4.4A	–	20A	–	1/3	120	1	5–15	2–#12, 1–#12 GND IN 1/2" CONDUIT
27	1	CHIP WARMER	12.5A	–	20A	1500	–	120	1	5–15	2–#12, 1–#12 GND IN 1/2" CONDUIT
28	1	1–DOOR UNDERCOUNTER REFRIGERATOR	2.2A	–	20A	–	1/5	120	1	5–15	2–#12, 1–#12 GND IN 1/2" CONDUIT
29	1	S/S 16" X 36" WALLMOUNT SHELF	–	–	–	–	–	–	–	–	–
30	1	S/S 16" X 60" WALLMOUNT SHELF	–	–	–	–	–	–	–	–	–
31	1	S/S PASS–THRU SHELF	–	–	–	–	–	–	–	–	–
32	2	HOOD KEF (X2)	11.6A	–	20A	–	1	120	1	DISCONNECT	2–#12, 1–#12 GND IN 1/2" CONDUIT
32	1	HOOD KMUA	8.1A	–	20A	–	1	120	1	DISCONNECT	2–#12, 1–#12 GND IN 1/2" CONDUIT

ITEM	QUAN	DESCRIPTION	ELECTRICAL CHARACTERISTICS								
			FLA	MCA	MOCP	WATTS	HP	VOLTS	PH	CONNECTION	WIRE SIZES
33A	1	48" FLAT GRIDDLE (GAS)	–	–	–	–	–	–	–	–	–
33B	1	12" RADIANT GRILL (GAS)	–	–	–	–	–	–	–	–	–
34	1	60" REFRIGERATED CHEF BASE	3.2A	–	20A	–	1/4	120	1	5–15	2–#12, 1–#12 GND IN 1/2" CONDUIT
35	1	STOCK POT BURNER (GAS)	–	–	–	–	–	–	–	–	–
36	1	CHEESEMELTER (GAS)	–	–	–	–	–	–	–	–	–
37	1	6–BURNER RANGE W/ OVEN (GAS)	–	–	–	–	–	–	–	–	–
38	1	DEEP FRYER (GAS)	–	–	–	–	–	–	–	–	–
39	1	UNDERCOUNTER FREEZER	1.9A	–	20A	–	1/3	120	1	5–15	2–#12, 1–#12 GND IN 1/2" CONDUIT
40	1	S/S SPLASHGUARD	–	–	–	–	–	–	–	–	–
41	1	DEEP FRYER (GAS)	–	–	–	–	–	–	–	–	–
42	1	HIGH TEMP DISHMACHINE	68.8A	–	90A	–	–	240	1	DISCONNECT	2–#3, 1–#8 GND IN 1" CONDUIT
43	1	S/S 48" LH CLEAN DISHTABLE	–	–	–	–	–	–	–	–	–
44	2	S/S WALLMOUNT RACK STORAGE	–	–	–	–	–	–	–	–	–
45	1	NOT USED	–	–	–	–	–	–	–	–	–
46	1	S/S DRYING RACK CART	–	–	–	–	–	–	–	–	–
47	2	S/S WALLMOUNT HAND SINK W/ SPLASHGUARDS	–	–	–	–	–	–	–	–	–
48	LOT	S/S FREESTANDING SHELVING UNIT	–	–	–	–	–	–	–	–	–
49	2	S/S PREP SINK	–	–	–	–	–	–	–	–	–
50	1	S/S 16" X 84" WALLMOUNT SHELF	–	–	–	–	–	–	–	–	–
51	1	S/S 16" X 84" WALLMOUNT SHELF	–	–	–	–	–	–	–	–	–
52	1	S/S 3–COMPARTMENT SINK W/ 24" DRAINBOARDS	–	–	–	–	–	–	–	–	–
53	1	S/S 15" X 72" WALLMOUNT SHELF W/ POTRACK	–	–	–	–	–	–	–	–	–
54	1	2–DOOR REACH–IN REFRIGERATOR	2.3A	–	20A	–	1/5	120	1	5–15	2–#12, 1–#12 GND IN 1/2" CONDUIT
55	1	FLY FAN (VERIFY LOCATION/REQUIREMENTS)	–	–	20A	500	–	120	1	5–15	2–#12, 1–#12 GND IN 1/2" CONDUIT
56	1	WATER HEATER IN EXTERIOR ENCLOSURE	–	–	–	–	–	–	–	–	–
57	1	EXT WALK–IN COOLER/FREEZER COMBO (VERIFY)	–	–	20A	–	–	240	1	DISCONNECT (2)	3–#12, 1–#12 GND IN 3/4" CONDUIT
58	LOT	WALK–IN SHELVING	–	–	–	–	–	–	–	–	–
59	1	CAN WASH IN EXTERIOR ENCLOSURE	–	–	–	–	–	–	–	–	–
60	1	EXT STEP–IN KEG COOLER (VERIFY)	–	–	20A	–	–	240	1	DISCONNECT	3–#12, 1–#12 GND IN 3/4" CONDUIT
61	1	DRAFT BEER TOWER W/ SPILL/RINSE DRIP TRAY	–	–	–	–	–	–	–	–	–
62	1	DRAFT BEER REFRIGERATED LINE GLYCOL CHILLER	12.1A	–	20A	–	1/3	120	1	5–15	2–#12, 1–#12 GND IN 1/2" CONDUIT
63	1	NITROGEN GENERATOR W/ TANK	5A	–	20A	–	–	120	1	5–15	2–#12, 1–#12 GND IN 1/2" CONDUIT

KITCHEN/BAR AREA:
ALL SINGLE PHASE RECEPTACLES 50A OR LESS, 150 VOLTS TO GROUND OR LESS AND ALL THREE PHASE RECEPTACLES 100A OR LESS, 150 VOLTS TO GROUND OR LESS SHALL BE GFCI PROTECTED.

EC PROVIDE WIRING FROM HOOD CONTROLS TO FANS ON ROOF. VERIFY HOOD FANS HAVE INTEGRAL DISCONNECTING MEANS ON ROOF AS SPECIFIED. IF NOT, PROVIDE WP/NEMA–3R RATED DISCONNECTING MEANS AS REQUIRED. PROVIDE FAN DISCONNECTING MEANS WITH–IN SIGHT OF HOOD CONTROLLER. SEE MECH SHEETS FOR KITCHEN HOOD FAN LOCATIONS.

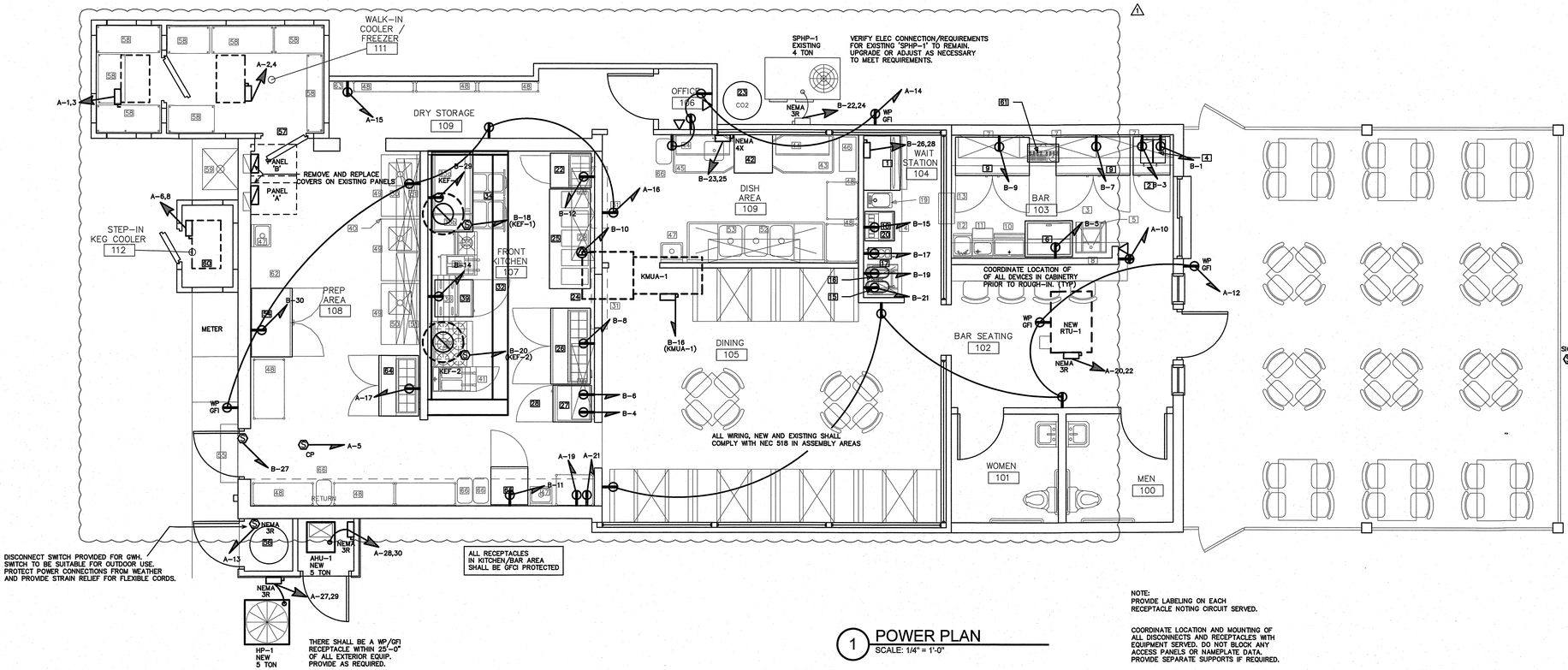
CO DETECTOR(S) REQUIRED IN ALL A2 OCCUPANCY (RESTAURANT) SPACES WITH GAS FUEL FIRED EQUIPMENT. PROVIDE IN KITCHENS AND ANY OTHER AREAS OPEN TO KITCHENS

(S) RECEPTACLES SHALL RUN THROUGH HOOD CONTROL RELAYS FOR "SHUNT PURPOSES".

SHUNT TRIP IS ONLY REQUIRED FOR ELECTRICAL HEAT GENERATING EQUIPMENT. NOT REQUIRED FOR THIS PROJECT.

PROVIDE CONDUIT SEALS FOR ALL LOCATIONS WHERE CONDUITS PENETRATE WALK–IN COOLER WALLS.

VERIFY EXACT LOCATION OF COOLER/FREEZER EQUIP. W/ OWNER/ARCH.



1 POWER PLAN
SCALE: 1/4" = 1'-0"

NOTE:
PROVIDE LABELING ON EACH RECEPTACLE NOTING CIRCUIT SERVED.

COORDINATE LOCATION AND MOUNTING OF ALL DISCONNECTS AND RECEPTACLES WITH EQUIPMENT SERVED. DO NOT BLOCK ANY ACCESS PANELS OR NAMEPLATE DATA. PROVIDE SEPARATE SUPPORTS IF REQUIRED.

VERIFY HEIGHT/LOCATION OF ALL DEVICES PRIOR TO INSTALLATION.

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NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER SEAL 22036 BENJAMIN E. BURKE
5/5/21

PROJECT TITLE
MI CANCUN

115 S. RALEIGH ST.
ANGIER, NORTH CAROLINA

PROJECT NO.
2006r

DRAWING TITLE
POWER PLAN

E5

PLOT DATE 12/30/2020
⚠ PLAN REVISIONS 5/04/2021

NOTE:
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Mi Concun Angier E6

EQUIPMENT WIRING SCHEDULE

EQUIPMENT	MCA	MOCP	VOLTS	PH	WIRE SIZE
AHU-1	58.5A	60A	240V	1	3-#6, 1-#10 GND IN 1" CONDUIT
HP-1	34.2A	50A	240V	1	3-#8, 1-#10 GND IN 3/4" CONDUIT
RTU-1	47.3A	50A	208V	1	3-#8, 1-#10 GND IN 3/4" CONDUIT

NOTE:
THE ELECTRICAL CONTRACTOR SHALL VERIFY ALL EQUIPMENT ELECTRICAL REQUIREMENTS PRIOR TO ROUGH-IN AND RELEASING GEAR. ADJUST BREAKER, WIRE SIZES, ETC. AS REQUIRED.

Mi Concun Angier E6

EXISTING PANEL 'A'

MAKE: CUTLER HAMMER | TYPE: VERIFY | RATING: 120/240 1 PHASE 3 WIRE | MOUNTING: FLUSH | MINIMUM AIC: VERIFY | MLO MAIN CIRCUIT BREAKER | EQUIPMENT GROUND BUS [X] YES [ ] NO | SERVICE ENTRY RATED [ ] YES [ ] NO

LOAD SERVICE	CKT BRKR	WATTS PER PHASE A	WATTS PER PHASE B	CKT NO	NEUTRAL A B	CKT NO	WATTS PER PHASE A	WATTS PER PHASE B	CKT BRKR	LOAD SERVICE
WALK-IN FREEZER	30A	---		1		2	---		30A	SPARE
.			---	3		4		---		.
WALK-IN COOLER	20A	---		5		6	---		30A	HOT BAR
SPARE	30A		---	7		8		---		.
.		---		9		10	---		20A	REGISTER
LTS	20A		---	11		12		---		SPACE
HEATER	20A	---		13		14	---		20A	SPARE
ICE MACHINE	20A		---	15		16		---	20A	SPARE
.	20A	---		17		18	---		20A	LTS
SPACE			---	19		20		---	100A	AC-1
SPACE		---		21		22	---			.
.	20A		---	23		24		---		SPACE
LTS	20A	---		25		26	---			SPACE
.	30A		---	27		28		---	60A	.
.		---		29		30	---			.
NOTES	SUB-TOTALS 'B'	---	---		200A BUS		---	---		SUB-TOTALS 'A'
					200A LUGS		---	---		SUB-TOTALS 'B'
					200A FEED		---	---		GRAND TOTAL
					VERIFY SIZE		--A	--A		AMPS/PHASE

TOTAL CONNECTED LOAD

Mi Concun Angier E6

EXISTING PANEL 'B'

MAKE: CUTLER HAMMER | TYPE: VERIFY | RATING: 120/240 1 PHASE 3 WIRE | MOUNTING: FLUSH | MINIMUM AIC: VERIFY | MLO MAIN CIRCUIT BREAKER | EQUIPMENT GROUND BUS [X] YES [ ] NO | SERVICE ENTRY RATED [ ] YES [ ] NO

LOAD SERVICE	CKT BRKR	WATTS PER PHASE A	WATTS PER PHASE B	CKT NO	NEUTRAL A B	CKT NO	WATTS PER PHASE A	WATTS PER PHASE B	CKT BRKR	LOAD SERVICE
SPARE	20A	---		1		2	---		20A	HOOD LTS
SPARE	20A		---	3		4		---	20A	SPARE
REFRIG.	20A	---		5		6	---		20A	SPARE
SPARE	20A		---	7		8		---		.
OUTSIDE FAN	20A	---		9		10	---		30A	SPARE
SPARE	20A		---	11		12		---		.
LTS	20A	---		13		14	---		30A	SPARE
REC	20A		---	15		16		---		.
REC	20A	---		17		18	---		30A	SPARE
LTS	20A		---	19		20		---		.
REFRIG.	20A	---		21		22	---		50A	AC-2
SPACE			---	23		24		---		.
SPACE		---		25		26	---		30A	AC-3
SPACE			---	27		28		---		.
SPACE		---		29		30	---			SPACE
NOTES	SUB-TOTALS 'B'	---	---		200A BUS		---	---		SUB-TOTALS 'A'
					200A LUGS		---	---		SUB-TOTALS 'B'
					200A FEED		---	---		GRAND TOTAL
					VERIFY SIZE		--A	--A		AMPS/PHASE

TOTAL CONNECTED LOAD

Mi Concun Angier E6

REVISED PANEL 'A'

MAKE: CUTLER HAMMER | TYPE: VERIFY | RATING: 120/240 1 PHASE 3 WIRE | MOUNTING: FLUSH | MINIMUM AIC: VERIFY | MLO MAIN CIRCUIT BREAKER | EQUIPMENT GROUND BUS [X] YES [ ] NO | SERVICE ENTRY RATED [ ] YES [ ] NO

LOAD SERVICE	CKT BRKR	WATTS PER PHASE A	WATTS PER PHASE B	CKT NO	NEUTRAL A B	CKT NO	WATTS PER PHASE A	WATTS PER PHASE B	CKT BRKR	LOAD SERVICE
WALK-IN COOLER/FREEZER	20A	1200		1		2	1200		20A	WALK-IN COOLER/FREEZER
.			1200	3		4		1200		.
CIRC PUMP	20A	300		5		6	1200		20A	STEP-IN KEG COOLER
SPARE	30A		---	7		8		1200		.
.		---		9		10	360		20A	REC: POS
LTS: DINING,HALL	20A		484	11		12		720	20A	REC: BAR,DINING
GWH CNTRLS	20A	300		13		14	720		20A	REC: OFFICE,DINING
NITRO GENERATOR (63)	20A		600	15		16		720	20A	REC: HALLWAY,KITCHEN
REF. PREP TABLE (64)	20A	528		17		18	1440		20A	LTS: FRONT/BAR
REC: KITCHEN	20A		180	19		20		4572	50A	RTU-1
REC: KITCHEN	20A	180		21		22	4572			.
SIGN	20A		1200	23		24		---		SPACE
LTS: EXT,COOLER	20A	320		25		26	---			SPACE
HP-1	50A		3312	27		28		5520	60A	AHU-1
.		3312		29		30	5520			.
NOTES	SUB-TOTALS 'B'	7064	6976		200A BUS		15012	13932		SUB-TOTALS 'A'
EXISTING/UNCHANGED CIRCUIT					200A LUGS		7064	6976		SUB-TOTALS 'B'
NEW/REVISED CIRCUIT					200A FEED		22076	20908		GRAND TOTAL
					VERIFY SIZE		184A	174A		AMPS/PHASE

TOTAL CONNECTED LOAD

NEC ALLOWABLE DEMAND FACTORS

1. DEMAND FACTORS PER NEC 220
2. LARGEST OF: NEC TABLE 220.12 OR CONNECTED LOAD
3. NEC TABLE 220.56
4. NEC 220.51
5. NEC 220.43A, 200 VA/LINEAR FT
6. NON-COINCIDENT LOADS, LARGEST OF THE TWO LOADS IS COUNTED

DIVERSIFIED LOAD SUMMARY

LOAD TYPE	DEMAND FACTOR①	A	B	TOTAL DIVERSIFIED LOAD
GENERAL LIGHTING ②	125%	2200	605	2805
TRACK LIGHTING	125%	---	---	---
GENERAL USE	≤10KVA@100%	1280	1620	2880
RECEPTACLES	>10KVA@50%	---	---	---
MOTORS AND EQUIPMENT (LARGEST)	125%	4140	4140	8280
MOTORS AND EQUIPMENT (ALL OTHERS)	100%	10092	10092	20184
WATER HEATERS	125%	---	---	---
KITCHEN EQUIPMENT ③	65%	3284	2730	6014
FIX. ELEC. SPACE HEAT. ④	100%	---	---	---
SHOW WINDOW LIGHTS ⑥	125%	---	---	---
SIGN	125%	---	1500	1500
MISC	100%	600	---	600
PHASE (TOTAL VA)		21576	20687	42263
TOTAL AMPS		180A	172A	VOLT AMPS / VOLTS = 176A TOTAL AMPS

Mi Concun Angier E6

REVISED PANEL 'B'

MAKE: CUTLER HAMMER | TYPE: VERIFY | RATING: 120/240 1 PHASE 3 WIRE | MOUNTING: FLUSH | MINIMUM AIC: VERIFY | MLO MAIN CIRCUIT BREAKER | EQUIPMENT GROUND BUS [X] YES [ ] NO | SERVICE ENTRY RATED [ ] YES [ ] NO

LOAD SERVICE	CKT BRKR	WATTS PER PHASE A	WATTS PER PHASE B	CKT NO	NEUTRAL A B	CKT NO	WATTS PER PHASE A	WATTS PER PHASE B	CKT BRKR	LOAD SERVICE
1-DOOR REFRIG (2)	20A	264		1		2	800		20A	HOOD LTS/CNTRLS
MARGARITA MACHINE (4)	20A		1700	3		4		264	20A	1-DOOR UC REFRIG. (28)
GLASS FROSTER (6)	20A	192		5		6	1500		20A	CHIP WARMER (27)
BACK BAR REFRIG (9)	20A		336	7		8		528	20A	80" REFRIG UNIT (26)
BACK BAR REFRIG (9)	20A	336		9		10	2000		30A	HOT HOLDING TABLE (25)
HOT HOLDING (65)	20A		1200	11		12		456	20A	28" REFRIG UNIT (22)
LTS: KITCHEN	20A	712		13		14	228		20A	UC FREEZER (39)
BAG N BOX (20)	20A		864	15		16		972	20A	HOOD KMUA
COFFEE BREWER (17)	20A	1668		17		18	1392		20A	HOOD KEF-1
TEA BREWER (18)	20A		1776	19		20		1392	20A	HOOD KEF-2
TEA BREWER (18)	20A	1776		21		22	3564		50A	SPHP-1
DISH MACHINE (42)	90A		8256	23		24		3564		.
.		8256		25		26	1440		20A	ICE MACHINE (1)
FLY FAN (55)	20A		500	27		28		1440		.
REFRIG CHEF BASE (34)	20A	384		29		30	276		20A	2-DOOR REACH-IN (54)
NOTES	SUB-TOTALS 'B'	13588	14632		200A BUS		11200	8616		SUB-TOTALS 'A'
EXISTING/UNCHANGED CIRCUIT					200A LUGS		13588	14632		SUB-TOTALS 'B'
NEW/REVISED CIRCUIT					200A FEED		24788	23248		GRAND TOTAL
					VERIFY SIZE		207A	194A		AMPS/PHASE

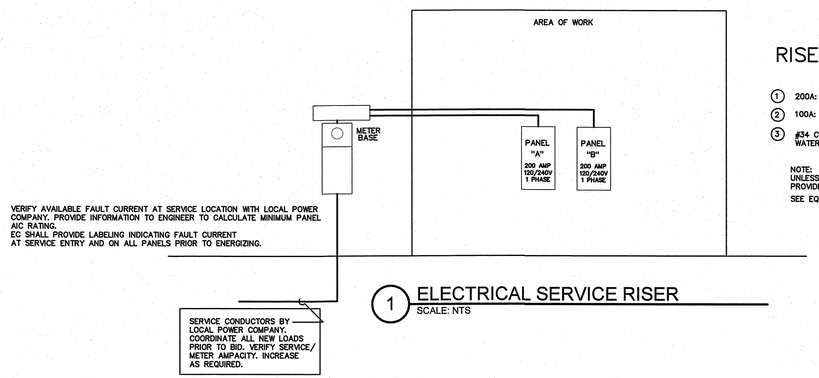
TOTAL CONNECTED LOAD

NEC ALLOWABLE DEMAND FACTORS

1. DEMAND FACTORS PER NEC 220
2. LARGEST OF: NEC TABLE 220.12 OR CONNECTED LOAD
3. NEC TABLE 220.56
4. NEC 220.51
5. NEC 220.43A, 200 VA/LINEAR FT
6. NON-COINCIDENT LOADS, LARGEST OF THE TWO LOADS IS COUNTED

DIVERSIFIED LOAD SUMMARY

LOAD TYPE	DEMAND FACTOR①	A	B	TOTAL DIVERSIFIED LOAD
GENERAL LIGHTING ②	125%	890	---	890
TRACK LIGHTING	125%	---	---	---
GENERAL USE	≤10KVA@100%	---	---	---
RECEPTACLES	>10KVA@50%	---	---	---
MOTORS AND EQUIPMENT (LARGEST)	125%	4455	4455	8910
MOTORS AND EQUIPMENT (ALL OTHERS)	100%	---	---	---
WATER HEATERS	125%	---	---	---
KITCHEN EQUIPMENT ③	65%	13333	12795	26128
FIX. ELEC. SPACE HEAT. ④	100%	---	---	---
SHOW WINDOW LIGHTS ⑥	125%	---	---	---
SIGN	125%	---	---	---
MISC	100%	---	---	---
PHASE (TOTAL VA)		18678	17250	35928
TOTAL AMPS		156A	144A	VOLT AMPS / VOLTS = 150A TOTAL AMPS



1 ELECTRICAL SERVICE RISER
SCALE: NTS

RISER WIRING SCHEDULE

1. 200A: 3-#3/0 IN 2" CONDUIT
2. 100A: 3-#3, 1-#8 CU GND, IN 1 1/4" CONDUIT
3. #34 CU GND TO BUILDING STEEL, FOUNDATION STEEL AND METALLIC WATER MAIN AND #6 CU GND TO 10' X 5/8" DRIVEN GROUND ROD

NOTE:
UNLESS OTHERWISE NOTED ALL OTHER CIRCUITS ARE 20A, 120VOLT. PROVIDE 2-#12, 1-#12 CU GND IN 1/2" CONDUIT.
SEE EQUIPMENT SCHEDULES FOR ADDITIONAL WIRE SIZES.

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5/5/21

PROJECT TITLE
MI CANCUN

115 S. RALEIGH ST.
ANGIER, NORTH CAROLINA

PROJECT NO.
2006r

DRAWING TITLE
ELECTRICAL PANELS & RISER

E6

PLOT DATE 5/5/2021