

DAMMON ENGINEERING, INC.

CHIEF ENGINEER
EMMETT
DAMMON, P.E.

CHIEF ARCHITECT
ROBERT
WILTSE

554 OLD SPANISH TRAIL
SLIDELL, LA. 70458
OFFICE: 985-649-5832
FAX: 985-641-5950

WEBSITE:
WWW.DAMMONENGINEERING.COM

EMAIL:
DAMMONENG@BELLSOUTH.NET

ARCHITECTURE
ENGINEERING
STUDIES
PLANNING
INVESTIGATION
EXPERT WITNESS

**PAPA JOHN'S
PIZZA
TENANT
BUILDOUT**

3013 PONTCHARTRAIN DR.
SLIDELL
LOUISIANA

70458
APPROVED [Signature] 8/18/11

**ELECTRICAL
PANELS**

[Signature]

REV:

SCALE: AS NOTED

JOB#: 2119

DATE: 8/12/2011

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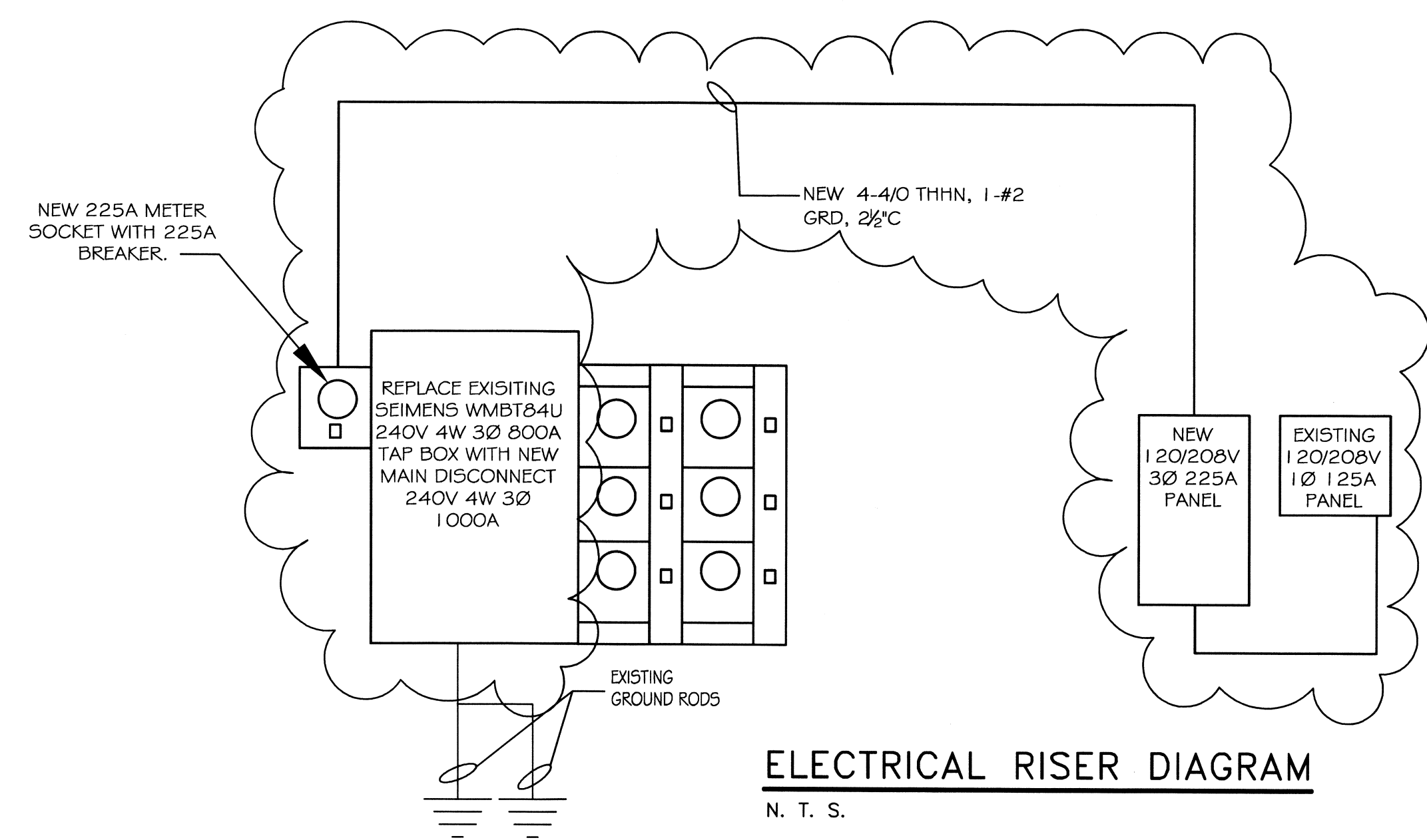
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GENERAL NOTES:

- GENERAL REQUIREMENTS**
- ELECTRICAL CONTRACTOR SHALL COORDINATE FULLY WITH OTHER CONTRACTORS ASSOCIATED WITH THIS PROJECT TO VERIFY ALL EQUIPMENT LOCATIONS, CONNECTION REQUIREMENTS, ELEVATIONS AND LOCATIONS OF PIPES, CONDUITS AND DUCTS TO PREVENT CONFLICTS DURING CONSTRUCTION. ANY RELOCATION OR REROUTING OF EQUIPMENT, PIPES, CONDUITS, DUCTS OR MATERIALS RESULTING FROM A LACK OF COORDINATION BETWEEN CONTRACTORS WILL BE AT THE CONTRACTORS EXPENSE.
 - EQUIPMENT ROUGH-INS SHOWN ARE ACCURATE TO THE BEST OF DESIGNER'S KNOWLEDGE. HOWEVER, IN SOME INSTANCES, THE OWNER OR SUPPLIER MAY SUBSTITUTE, OR THE EQUIPMENT ITEM MAY VARY FROM WHAT IS SHOWN. THEREFORE, THE CONTRACTOR SHALL VERIFY ALL CRITICAL DIMENSIONS WITH THE OWNER PRIOR TO CONSTRUCTION. FAILURE OF THE ELECTRICAL CONTRACTOR TO VERIFY THESE DIMENSIONS SHALL PLACE THE RESPONSIBILITY FOR ANY SUBSEQUENT RELOCATION DIRECTLY UPON THE CONTRACTOR.
 - ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL REQUIRED DISCONNECT SWITCHES AND MOTOR STARTERS TO ALL EQUIPMENT.
 - ELECTRICAL CONTRACTOR SHALL REVIEW WITH OWNER AND SIGNAGE MANUFACTURER, REQUIREMENTS AND LOCATION OF BUILDING SIGNAGE PRIOR TO CONSTRUCTION AND PROVIDE 120VAC CONNECTION AS REQUIRED.
 - ELECTRICAL CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS AT JOB COMPLETION TO ARCHITECT.
 - ALL WORK SHALL BE INSTALLED PER ALL GOVERNING CODES.
 - ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL OVEN PLUGS, HUBBELL PLUGS (TWIST LOCKS)/ RECEPTACLES COMPLETE. REFER TO INSTRUCTION MANUAL FOR DETAILS.
 - ALL LIGHTING AND SIGN CIRCUIT BREAKERS TO BE "SWITCH GRADE".
 - ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL STARTERS FOR ROOF MOUNTED SUPPLY AND EXHAUST FANS (SF-1 AND EF-2) AND START-STOP SWITCH. BOTH SF-1 AND EF-2 SHALL RUN AND STOP TOGETHER AND ARE TO BE CONTROLLED FROM THE SAME SWITCH.
 - ALL JUNCTION BOXES INSTALLED ABOVE OR DIRECTLY BELOW THE SUSPENDED CEILING SHALL BE SUPPORTED IN ACCORDANCE WITH ARTICLE 314-23 OF THE 2008 NEC.
 - COMPUTER AND PHONE WIRING SHALL BE ROUTED IN 3/4" CONDUIT TO PHONE BOARD FROM DEVICE LOCATION.
 - ALL ISOLATED GROUND RECEPTACLE CIRCUITS SHALL BE EQUIPPED WITH INSULATED GROUND CONDUCTOR AND SEPARATE NEUTRAL WIRE.
 - NEUTRAL WIRES FOR ISOLATED GROUND CIRCUITS SHALL NOT BE SHARED WITH OTHER BRANCH CIRCUITS. PROVIDE SEPARATE NEUTRAL WIRE FOR EACH ISOLATED GROUND CIRCUIT.
 - ISOLATED GROUND CIRCUITS SHALL NOT BE ROUTED WITHIN SAME CONDUIT AS GENERAL BRANCH CIRCUIT WIRING. PROVIDE SEPARATE CONDUIT FOR SERVICE TO ISOLATED GROUND CIRCUITS.
 - ISOLATED GROUND RECEPTACLES SHALL UNDER NO CIRCUMSTANCE BE INSTALLED IN COMMON JUNCTION BOX WITH NON-ISOLATED GROUND TYPE RECEPTACLE.
 - ELECTRICAL CONTRACTOR SHALL USE THE PORCELAIN WIRE NUTS PROVIDED WITH THE HEAT STRIP UNITS. THE USE OF PLASTIC WIRE NUTS WILL VOID THE MANUFACTURERS' WARRANTY. ELECTRICAL CONTRACTOR SHALL USE 90°C WIRE FOR CONNECTION TO HEAT STRIP UNITS PER MANUFACTURER'S RECOMMENDATION.
 - USE CIRCUIT BREAKERS U.L. LISTED AS HACR TYPE FOR USE WITH HVAC AND REFRIGERATING EQUIPMENT HAVING MOTOR GROUP COMBINATIONS AND MARKED FOR USE WITH HACR TYPE CIRCUIT BREAKERS.
 - ELECTRICAL CONTRACTOR SHALL MAKE ALL REQUIRED ELECTRICAL CONNECTIONS FOR WALK-IN COOLER LIGHTING, WALK-IN COOLER REFRIGERATION UNIT AND CUT TABLE HEAT STRIP UNITS.
 - FLUORESCENT LAMPS IN FOOD PREP, COOK AND FOOD STORAGE AREAS SHALL BE PROVIDED WITH SHATTER PROTECTIVE COVERS. GENERAL ELECTRIC "COVERGUARD" LAMPS OR APPROVED EQUAL.
 - ALL EXIT SIGNS, EMERGENCY EGRESS LIGHTS AND NIGHT LIGHT FIXTURES SHALL BE CONNECTED TO THE BRANCH CIRCUITS INDICATED AHEAD OF RESPECTIVE CONTROL SWITCH, IN ORDER TO PROVIDE UNSWITCHED SOURCE TO FIXTURES.
 - ALL 125 VOLT, SINGLE PHASE, 15 OR 20 AMP RECEPTACLES LOCATED IN THE KITCHEN AREA SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION AS REQUIRED BY SECTION 210.8.B.2 OF THE 2008 NEC.
- RACEWAY SYSTEMS**
- ALL BRANCH CIRCUIT WIRING SHALL BE ROUTED IN EMT, ELECTRICAL METALLIC TUBING. USE STEEL SET SCREW TYPE FITTINGS ON ALL EMT.
 - CONDUIT SHALL BE SUPPORTED AT INTERVALS PER NEC REQUIREMENTS AND SHALL BE SECURELY FASTENED TO BUILDING WITH AN APPROVED FASTENING SYSTEM.
- WIRING, WIRING DEVICES, PLATES AND GROUNDING**
- ALL WIRING SHALL CONSIST OF COPPER CONDUCTORS WITH THERMOPLASTIC INSULATION RATED FOR SIX HUNDRED (600) VOLTS. ALL WIRING INSULATION SHALL BE HEAT AND MOISTURE RESISTANT TYPES THW, THWN, OR THHN FOR INTERNAL AND DRIVE LOCATIONS.
 - MINIMUM CONDUCTOR SIZE SHALL BE NO. 12 AWG FOR ALL POWER CIRCUITS (I.E. RECEPTACLES, LIGHTING, EQUIPMENT POWER, ETC.).
 - ALL SPLICES AND CONNECTIONS SHALL BE MADE IN OUTLET BOXES, JUNCTION BOXES OR EQUIPMENT WHERE ACCESSIBLE.
 - CONDUCTORS SHALL BE PULLED WITHOUT THE USE OF OIL OR GREASE. WIRE PULLING LUBRICANTS WHICH ARE APPROVED FOR USE WITH CONDUCTOR INSULATION MAY BE USED. CARE SHALL BE TAKEN IN PULLING WIRE TO ASSURE THAT MAXIMUM ALLOWABLE PULLING TENSION OF WIRE IS NOT EXCEEDED. WIRING WITH DAMAGED CONDUCTORS OR INSULATION WILL NOT BE ACCEPTED.
 - ALL PLUG-IN DEVICES SHALL BE GROUNDED TYPE. A GROUNDING JUMPER FROM RECEPTACLE TO OUTLET BOX SHALL BE INSTALLED WHERE CONDUIT SYSTEM IS USED FOR GROUND.
 - INSTALL INSULATED GREEN GROUNDING CONDUCTOR (NO. 12 AWG MINIMUM) IN RACEWAYS AS INDICATED ON DRAWINGS AND IN ALL NON-METALLIC RACEWAYS PER NEC.
 - SWITCHES FOR LIGHTING CONTROL SHALL BE INDUSTRIAL GRADE, IVORY COLOR, SIDE WIRED ONLY, TWENTY (20) AMP, ONE HUNDRED TWENTY-TWO HUNDRED SEVENTY-SEVEN (120/277) VOLT.
 - DUPLEX RECEPTACLES SHALL BE INDUSTRIAL GRADE, THREE (3) WIRE GROUNDING, IVORY COLOR, FINDER GROOVE, TWENTY (20) AMP, NEMA 5-20R 125 VAC.
 - PLATES SHALL BE FURNISHED AND INSTALLED FOR ALL WIRING DEVICES, TELEPHONE OUTLETS, JUNCTION BOXES, ETC.
 - PLATES FOR FLUSH MOUNTED DEVICES SHALL BE STAINLESS STEEL PLATES FOR SURFACE MOUNTED BOXES SHALL BE GALVANIZED STEEL.
- LIGHTING FIXTURES**
- PROVIDE LIGHTING FIXTURES, OF SIZES, TYPES AND RATINGS INDICATED; COMPLETE WITH, BUT NOT LIMITED TO, HOUSINGS, ENERGY-EFFICIENT LAMPS, LAMP HOLDERS, REFLECTORS, ENERGY EFFICIENT BALLASTS, STARTERS AND WIRING. SHIP FIXTURES FACTORY-ASSEMBLED, WITH THOSE COMPONENTS REQUIRED FOR A COMPLETE INSTALLATION. DESIGN FIXTURES WITH CONCEALED HINGES AND CATCHES, WITH METAL PARTS GROUNDED AS COMMON UNIT, AND SO CONSTRUCTED AS TO DAMPEN BALLAST GENERATED NOISE.
 - FLUORESCENT BALLASTS PROVIDED FOR FOUR (4) FOOT T-8 FLUORESCENT LAMPS SHALL BE THREE-LAMP ENERGY SAVING, ELECTRONIC TYPE.
 - INSTALL INTERIOR LIGHTING FIXTURES AT LOCATIONS AS INDICATED, IN ACCORDANCE WITH FIXTURE MANUFACTURER'S WRITTEN INSTRUCTIONS, APPLICABLE REQUIREMENTS OF NEC, NECA'S "STANDARD OF INSTALLATION", NEMA STANDARDS, AND WITH RECOGNIZED INDUSTRY PRACTICES TO ENSURE THAT LIGHTING FIXTURES FULFILL REQUIREMENTS.
 - PROVIDE AND INSTALL ALL LIGHT FIXTURES INDICATED COMPLETE WITH SPECIFIED LAMPS. FLUORESCENT LAMPS SHALL BE 48" 32W T-8, RAPID START WITH NOMINAL OPERATING TEMPERATURES OF 3,500 K - MINIMUM INITIAL LIGHT OUTPUT OF 2850 LUMENS. COMPACT FLUORESCENT LAMPS SHALL BE 26 WATT COMPACT FLUORESCENT LAMPS SHALL BE HIGH COLOR RENDERING, HIGH EFFICIENCY LAMPS WITH NOMINAL OPERATING TEMPERATURE OF 3,500 K.
 - FASTEN LIGHTING FIXTURES SECURELY TO STRUCTURAL SUPPORTS; AND ENSURE THAT FIXTURES ARE PLUMB AND LEVEL.
 - FLUORESCENT FIXTURES INSTALLED IN LAY-IN CEILINGS SHALL BE SUPPORTED BY ADDITIONAL WIRE SUPPORT AT TWO CORNERS. ATTACHED TO CEILING GRID, AND ANCHORED TO STRUCTURAL MEMBER. THIS ADDITIONAL WIRE SUPPORT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR AND IS NOT CONSIDERED PART OF GENERAL GRID LAYOUT.
 - PROVIDE EQUIPMENT GROUNDING CONNECTIONS FOR INTERIOR LIGHTING FIXTURES AS INDICATED. TIGHTEN CONNECTION TO COMPLY WITH TIGHTENING TORQUES SPECIFIED IN UL STD 486A TO ASSURE PERMANENT AND EFFECTIVE GROUNDS.
 - ALL LIGHT FIXTURES SHALL BE U.L. LISTED.
- FIRE RATED WALL PENETRATIONS**
- PROVIDE U.L. LISTED FIRESTOP SYSTEM SEALANTS AROUND ALL CONDUITS PASSING THROUGH ALL RATED WALLS OR FLOORS IN ACCORDANCE WITH THE U.L. FIRE RESISTANCE DIRECTORY.
 - THE SELECTED SYSTEM MUST DISPLAY AN APPROVED U.L. PENETRATION SYSTEM NUMBER AND BE INSTALLED IN ACCORDANCE WITH THE SELECTED SYSTEM TAKING INTO ACCOUNT THE CONSTRUCTION AND THE RATING OF THE RATED ASSEMBLY BEING PENETRATED AND THE TYPE OF PENETRATION BEING MADE.
 - THE ELECTRICAL CONTRACTOR SHALL REVIEW ARCHITECTURAL DRAWINGS TO CONFIRM NUMBER AND EXTENT OF ALL FIRE RATED PARTITIONS IN THE FACILITY.
 - APPROVED PRODUCTS:
(1) HILTI CS240
(2) TERMO PYRESHIELD
(3) 3M CP-25

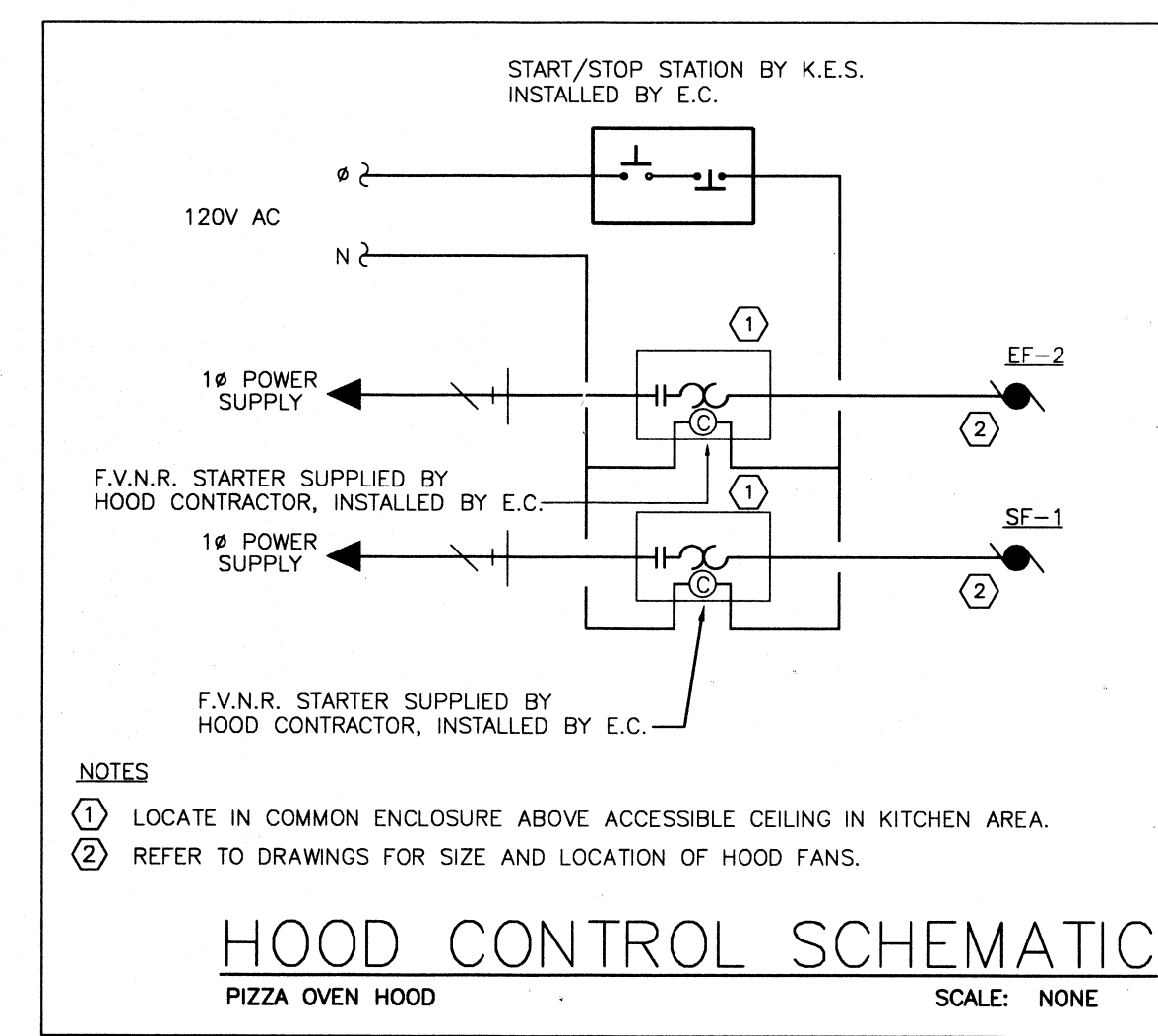
NOTE: ELECTRICAL SERVICE AND SYSTEM DETAILED IS DESIGNED BASED ON 120 / 208 VOLT THREE PHASE SERVICE. ELECTRICAL CONTRACTOR TO VERIFY AVAILABLE SERVICE. MAKE NECESSARY MODIFICATIONS AS REQUIRED.

ELECTRICAL DESIGN BASED UPON 2008 NATIONAL ELECTRICAL CODE.



ELECTRICAL RISER DIAGRAM
N. T. S.

NOTE: TO UPGRADE EXISTING SERVICE TO BUILDING IT WILL BE NECESSARY TO DISCONNECT THE BUILDING POWER AND TO HAVE CABLE COMPANY RELOCATE THEIR DISTRIBUTION BOX TO FACILITATE THE INSTALLATION OF THE NEW MAIN DISCONNECT.



HOOD CONTROL SCHEMATIC
PIZZA OVEN HOOD
SCALE: NONE

ELECTRICAL LOAD SUMMARY

LOAD TYPE	CONNECT. LOAD (KVA)	DEMAND FACTOR	DEMAND LOAD (KVA)
LIGHTING (NEC TBL 220.42)	5.7	1.0	5.7
RECEPTACLES (NEC TBL 220.44)	8.1	*	8.1
SIGN LIGHTING	3.4	1.0	3.4
KITCHEN EQUIPMENT (NOTE 1)	20.9	0.65	13.6
H.V.A.C.	29.7	1.2	35.6
TOTAL	67.8		66.4

SERVICE SIZING LOAD = 66.4 KVA (3Ø)

* RECEPTACLE DEMAND FACTOR AT 100% ON FIRST 10KVA AND 50% ON THE REMAINDER.

NOTE 1: 6 OR MORE PIECES KITCHEN EQUIPMENT DERATED AT 65% OF EQUIPMENT SCHEDULE LOAD PER NEC 220.56 AND TABLE 220.56.

PANEL: 'A' NEW
LOCATION: REAR DOOR MAIN PANEL

SERVICE: 120/208V, 225A 3Ø, 4W
ENCLOSURE: EXISTING PANEL W/EQUIPMENT GRND BAR
225A, MLD, 22,000 AIC

CCT. NO.	THHN WIRE SIZE	LOAD DESCRIPTION	BREAKER	LOAD (KVA)	AMP	POLE	LOAD DESCRIPTION	THHN WIRE SIZE	CCT. NO.
1				7.1	4.3		10 TON AHU #1	6	4
3	3	10 TON A/C #1	100	7.1	4.3	3			8
5				7.1	4.3				8
7				2.8	5.4				12
8	8	5 TON A/C #2	40	2.8	5.4	3	50 TON AHU #2	6	10
9				2.8	5.4				12
11				2.1	1.2				14
13	10	PS-770 #1	30	2.1	1.2	3	COOLER COMPRESSOR	12	16
15				2.1	1.2				18
17	10	PS-770 #2	30	2.1	1.2	3			20
19				2.1	1.7				22
21	12	MENU BOARD	20	1	1.7	2	HEAT LAMPS	10	24
23	12	WINDOW SIGNS	20	1	1.7	2	HEAT LAMPS	10	26
25	12	PAPA JOHN'S SIGN & TIMER	20	1	1.7	2			28
27	12	BOTTLE COOLER & CUT TABLE	20	1	1.5		SPARE		30
29	12	PIZZA PREP TBL	20	1	1.3		HOT WATER HEATER	8	32
31	12	SF-1	20	1	0.8				34
33	12	EF-2	20	1	1.6		SUPERVISOR COMPUTER	12	36
35	12	SPARE	20	1	1.4		TELEPHONE SYSTEM	12	38
37				0.5	1		COOLER EVAPORATOR	12	40
39	8	MAIN DISCONNECT	225	3	5.6		SUB PANEL	1	42
41				5.6	5.6				
43				5.6	5.6				
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