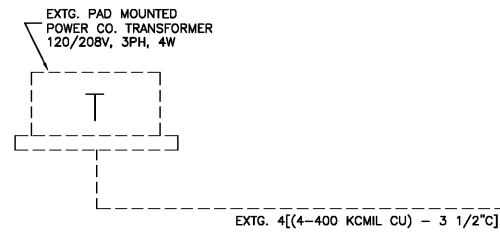
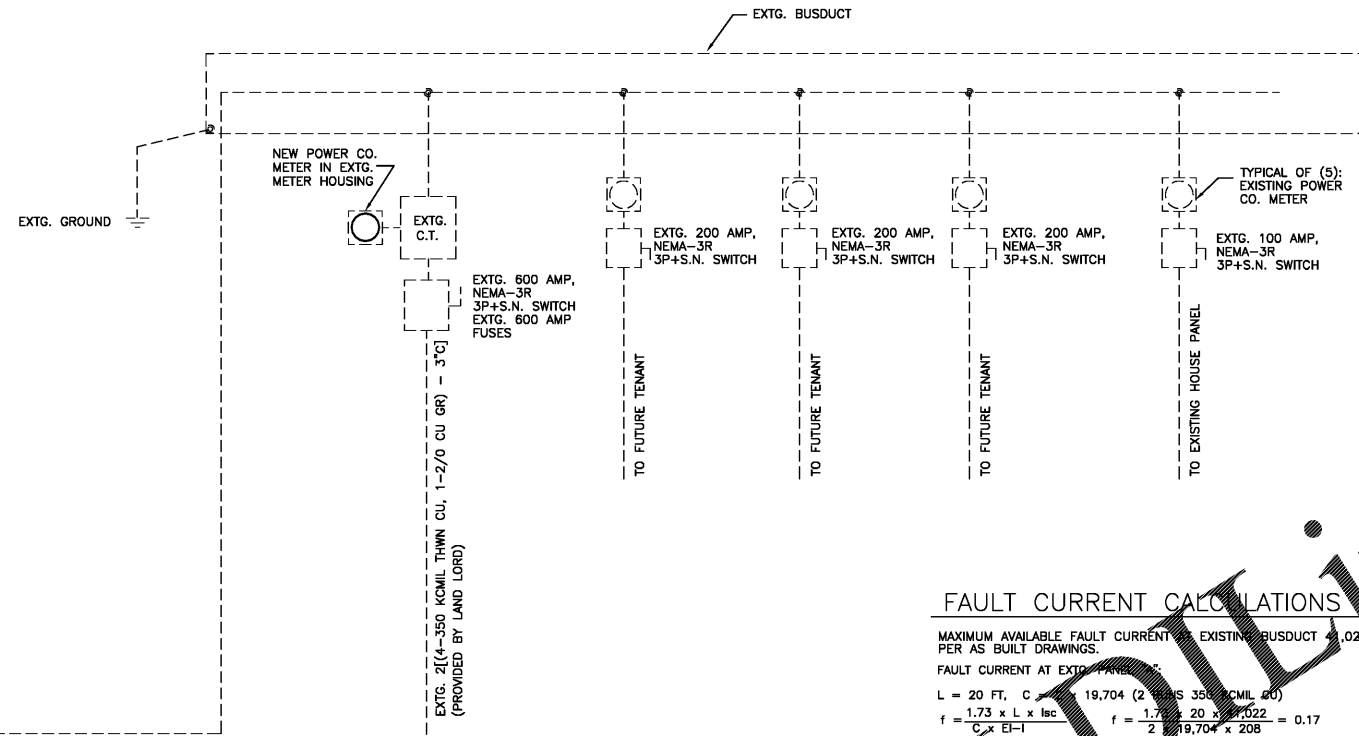


DIMMING PANEL DIAGRAM



ISOLATED GROUND DETAIL



FAULT CURRENT CALCULATIONS

MAXIMUM AVAILABLE FAULT CURRENT - EXISTING BUSDUCT 41,022 AMP RMS. PER AS BUILT DRAWINGS.

FAULT CURRENT AT EXISTING PANEL "A":
 $L = 20 \text{ FT.}, C = 19,704 (2 \text{ RUNS } 35\text{K CMIL } \#0)$
 $f = \frac{1.73 \times L \times I_{sc}}{C \times EI - 1} = \frac{1.73 \times 20 \times 41,022}{19,704 \times 208} = 0.17$
 $m = \frac{1}{1 + f} = \frac{1}{1 + 0.17} = 0.85$

$I_{sc} \text{ AT EXISTING PANEL "A"} = 41,022 \text{ AMP} \times 0.85 = 34,869 \text{ AMP}$
 ALL EXISTING CIRCUIT BREAKERS IN PANEL "A" SHALL BE SERIES RATED WITH 600 AMP FUSES IN MAIN DISCONNECT, OR FULLY RATED AND PROVIDED BY THE LANDLORD.

FAULT CURRENT AT NEW SUB PANELS "B":
 $L = 25 \text{ FT.}, C = 8,925 (1 \text{ RUN } 1/0 \text{ CU})$
 $f = \frac{1.73 \times L \times I_{sc}}{C \times EI - 1} = \frac{1.73 \times 25 \times 34,869}{8,925 \times 208} = 0.81$
 $m = \frac{1}{1 + f} = \frac{1}{1 + 0.81} = 0.55$

$I_{sc} \text{ AT NEW SUB PANELS "B"} = 34,869 \text{ AMP} \times 0.55 = 19,178 \text{ AMP}$
 ALL CIRCUIT BREAKERS IN NEW SUB PANELS "B" SHALL BE FULLY RATED 22,000 A.I.C.

FAULT CURRENT AT NEW SUB PANELS "C":
 $L = 30 \text{ FT.}, C = 8,925 (1 \text{ RUN } 1/0 \text{ CU})$
 $f = \frac{1.73 \times L \times I_{sc}}{C \times EI - 1} = \frac{1.73 \times 30 \times 34,869}{8,925 \times 208} = 0.97$
 $m = \frac{1}{1 + f} = \frac{1}{1 + 0.97} = 0.51$

$I_{sc} \text{ AT NEW SUB PANELS "C"} = 34,869 \text{ AMP} \times 0.51 = 17,783 \text{ AMP}$
 ALL CIRCUIT BREAKERS IN NEW SUB PANELS "C" SHALL BE FULLY RATED 22,000 A.I.C.

FAULT CURRENT AT NEW SUB PANELS "D":
 $L = 35 \text{ FT.}, C = 8,925 (1 \text{ RUN } 1/0 \text{ CU})$
 $f = \frac{1.73 \times L \times I_{sc}}{C \times EI - 1} = \frac{1.73 \times 35 \times 34,869}{8,925 \times 208} = 1.14$
 $m = \frac{1}{1 + f} = \frac{1}{1 + 1.14} = 0.47$

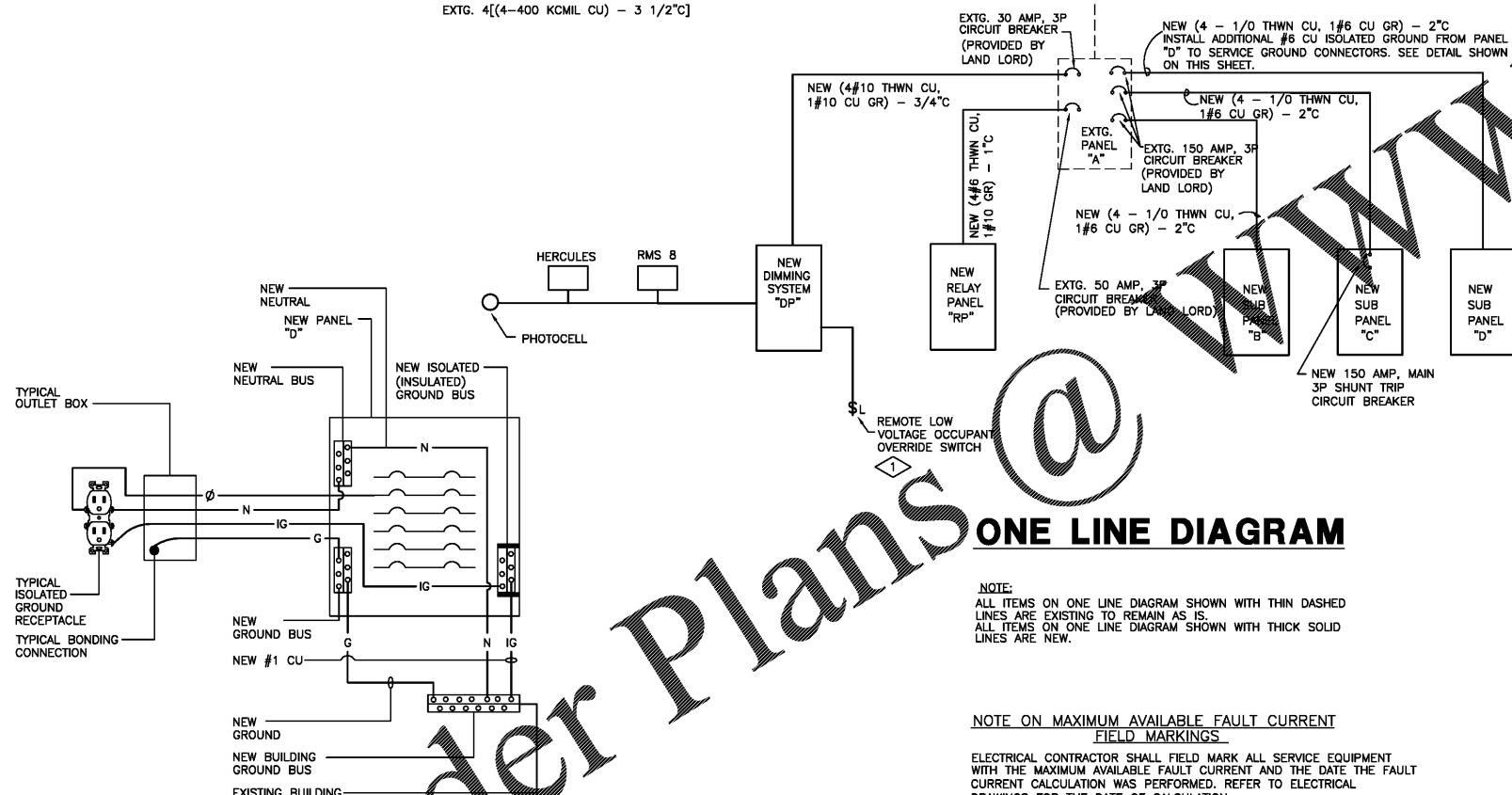
$I_{sc} \text{ AT NEW SUB PANELS "D"} = 34,869 \text{ AMP} \times 0.47 = 16,388 \text{ AMP}$
 ALL CIRCUIT BREAKERS IN NEW SUB PANELS "D" SHALL BE FULLY RATED 22,000 A.I.C.

FAULT CURRENT AT NEW DIMMING SYSTEM PANEL "DP":
 $L = 60 \text{ FT.}, C = 981 (1 \text{ RUN } \#10 \text{ CU})$
 $f = \frac{1.73 \times L \times I_{sc}}{C \times EI - 1} = \frac{1.73 \times 60 \times 34,869}{981 \times 208} = 17.74$
 $m = \frac{1}{1 + f} = \frac{1}{1 + 17.74} = 0.053$

$I_{sc} \text{ AT NEW DIMMING SYSTEM "DP"} = 34,869 \text{ AMP} \times 0.053 = 1,848 \text{ AMP}$
 ALL CIRCUIT BREAKERS IN NEW DIMMING SYSTEM "DP" SHALL BE FULLY RATED 10,000 A.I.C.

FAULT CURRENT AT NEW RELAY CONTROL PANEL "RP":
 $L = 60 \text{ FT.}, C = 2,425 (1 \text{ RUN } \#6 \text{ CU})$
 $f = \frac{1.73 \times L \times I_{sc}}{C \times EI - 1} = \frac{1.73 \times 60 \times 34,869}{2,425 \times 208} = 7.18$
 $m = \frac{1}{1 + f} = \frac{1}{1 + 7.18} = 0.12$

$I_{sc} \text{ AT NEW RELAY CONTROL PANEL "RP"} = 34,869 \text{ AMP} \times 0.12 = 4,184 \text{ AMP}$
 ALL CIRCUIT BREAKERS IN NEW RELAY CONTROL PANEL "RP" SHALL BE FULLY RATED 10,000 A.I.C.



ONE LINE DIAGRAM

NOTE:
 ALL ITEMS ON ONE LINE DIAGRAM SHOWN WITH THIN DASHED LINES ARE EXISTING TO REMAIN AS IS.
 ALL ITEMS ON ONE LINE DIAGRAM SHOWN WITH THICK SOLID LINES ARE NEW.

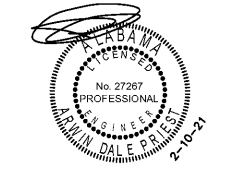
NOTE ON MAXIMUM AVAILABLE FAULT CURRENT FIELD MARKINGS

ELECTRICAL CONTRACTOR SHALL FIELD MARK ALL SERVICE EQUIPMENT WITH THE MAXIMUM AVAILABLE FAULT CURRENT AND THE DATE THE FAULT CURRENT CALCULATION WAS PERFORMED. REFER TO ELECTRICAL DRAWINGS FOR THE DATE OF CALCULATION. FIELD MARKINGS SHALL COMPLY WITH NEC 110.24

KEY NOTE:

IN COMPLIANCE WITH IECC, PROVIDE AUTOMATIC SHUT OFF OF ALL LIGHTING IN BAD DADDY'S RESTAURANT THROUGH TIME SWITCH WITH TIME-OF-DAY INDEPENDENT PROGRAM SCHEDULE. PROVIDE A LOW VOLTAGE SWITCH TO ENABLE OCCUPANT OVERRIDE OF TIME SWITCH WHICH WILL ALLOW LIGHTS TO REMAIN ON FOR NO MORE THAN 2 HOURS WHEN AN OVERRIDE IS INITIATED. COORDINATE OCCUPANT OVERRIDE SWITCH LOCATION WITH OWNER. USE TENANT PROVIDED LIGHTING CONTROL PANEL MANUFACTURED BY "MARLIN" AND RMS8 OVERRIDE SWITCHES WITH 8-BUTTONS AND HERCULES TIME CLOCK.

CONSULTANT:
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HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF COLORADO, LICENSE NO. 25033, EXPIRATION 05-24-21



GOOD TIMES RESTAURANTS, INC.
 141 Union Blvd, Suite 400
 Lakewood, CO 80226
 303-884-1430

BAD DADDY'S BURGER BAR
 "EASTCHASE"
 MONTGOMERY, AL 36117

Issue Record:

4.23.2019	FOR PLAN REVIEW
05.06.2019	WALK-IN BOX
07.01.2019	CANOPY REVS
02.10.2020	TO GO REVS

Revisions:

Drawn: DRAWN BY: VR

Checked: CHECKED BY: WR

Project No. PROJECT#: 19-207

Contractor:

ONE LINE DIAGRAM

E5.0