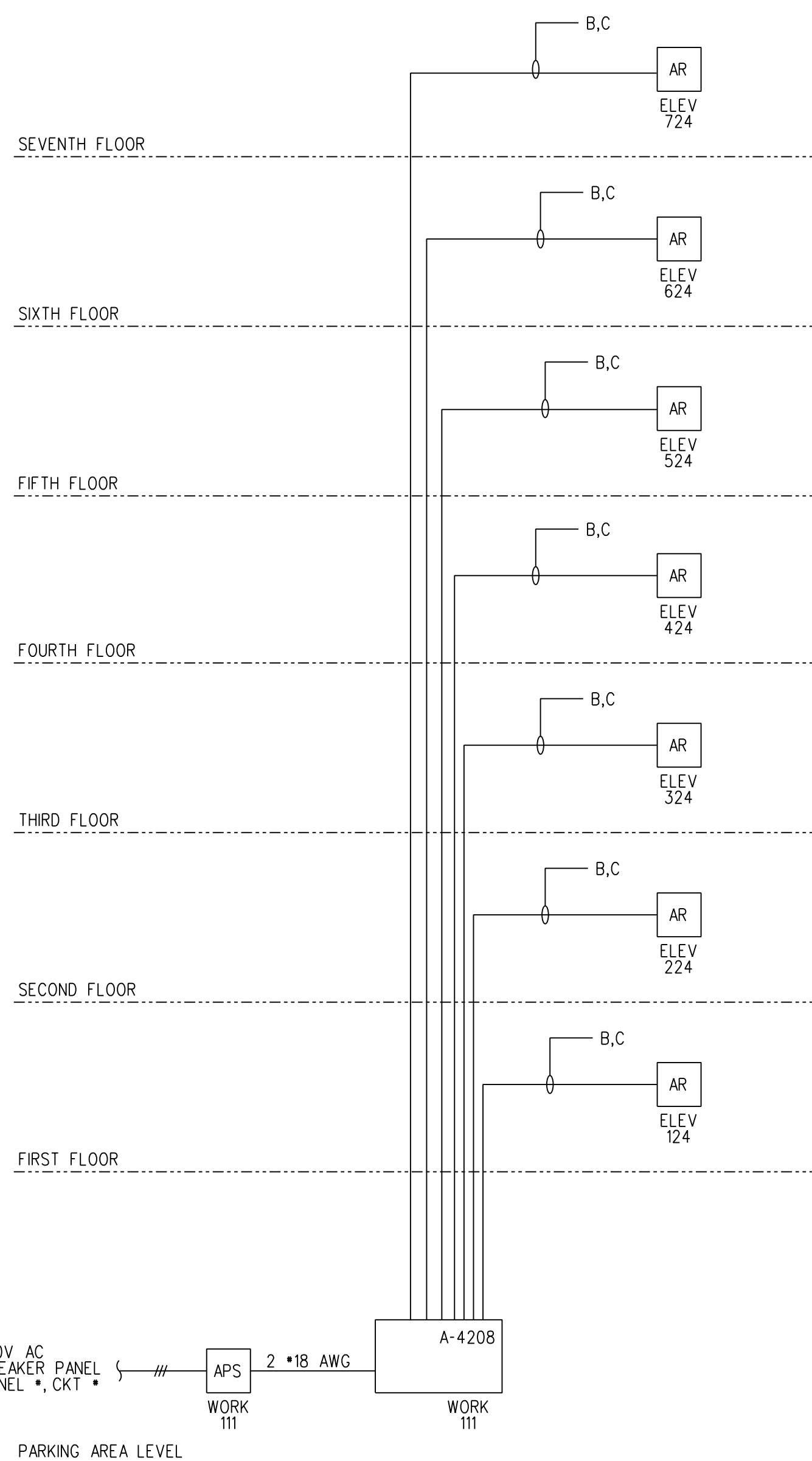


AREA OF REFUGE SYSTEM SYMBOL LEGEND

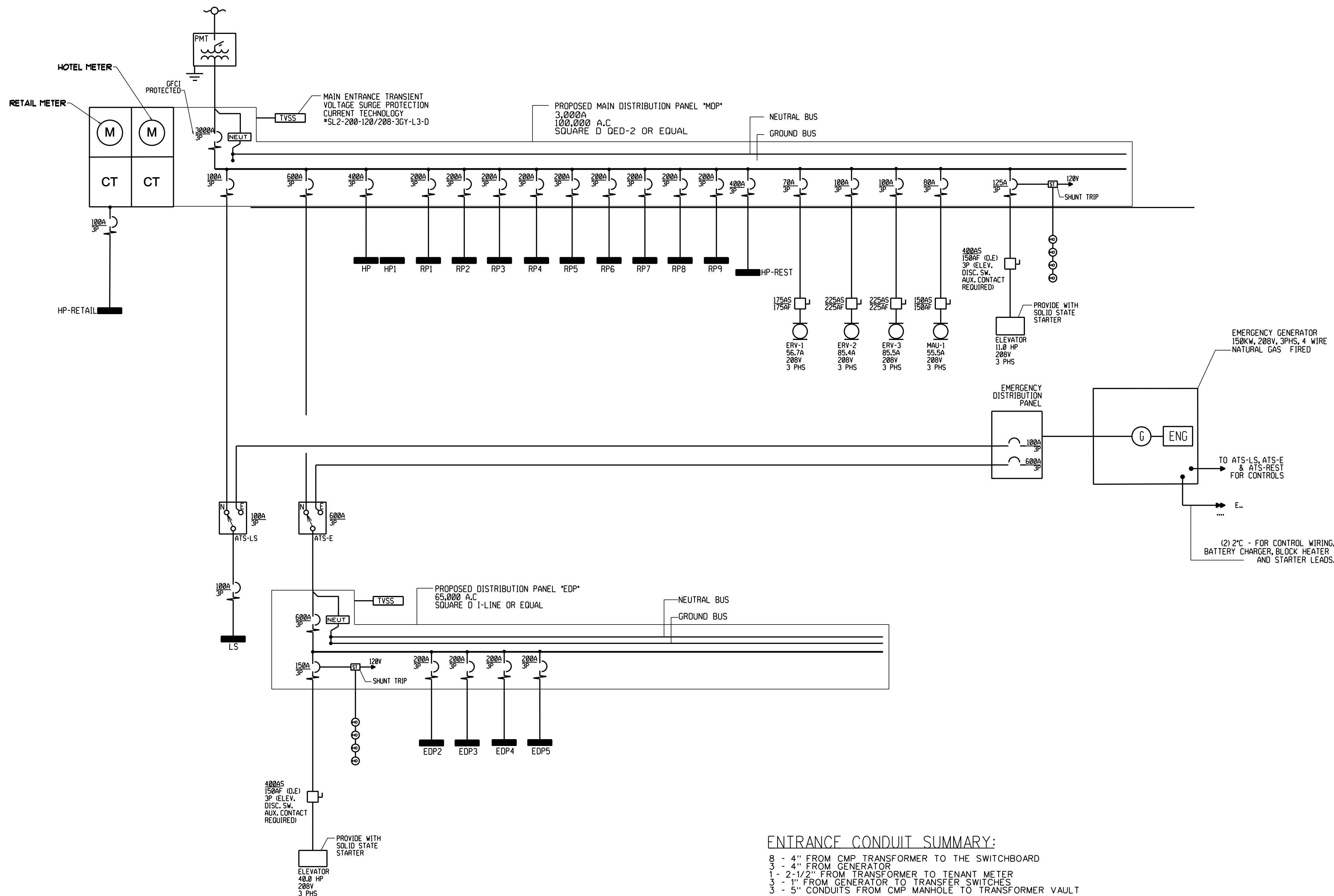
[A-4208]	AREA OF REFUGE ANNUNCIATOR (8-ZONE)	CORNELL A-4208	CORNELL BB-
[APS]	AREA OF REFUGE 24VDC POWER SUPPLY	CORNELL B-5243A	SUPPLIED WITH UNIT
[AR]	AREA OF REFUGE STATION	CORNELL 4201B/V	2-GANG BOX

AREA OF REFUGE WIRE LIST

B	RESCUE ASSISTANCE STATION - 22 AWG 4 CONDUCTOR NON-SHIELDED NON-PLENUM RATED-CMR ANIXTER SC2204N11 AREA = 0.0172 SQ. INCH	PLENUM RATED-CMP ANIXTER SC2204N22 AREA = 0.0160 SQ. INCH	
C	AUDIO RESCUE ASSISTANCE STATION - 22 AWG 2 CONDUCTOR SHIELDED NON-PLENUM RATED-CMR ANIXTER SC2202S41 AREA = 0.0255 SQ. INCH	PLENUM RATED-CMP ANIXTER SC2202S22 AREA = 0.0120 SQ. INCH	
CONDUIT SIZE	CONDUCTOR AREA	CONDUIT SIZE	CONDUCTOR AREA
1/2"	0.12 SQ INCH X	1-1/4"	0.60 SQ INCH X
3/4"	0.21 SQ INCH X	1-1/2"	0.82 SQ INCH X
1"	0.34 SQ INCH X	2"	1.34 SQ INCH X
X 40% FILL 2005 N.E.C.			
CONTACT YOUR LOCAL SIMPLEXGRINELL OFFICE FOR ANY CABLE SUBSTITUTIONS			



RISER DIAGRAM
 NOT TO SCALE



ENTRANCE CONDUIT SUMMARY:
 8 - 4" FROM CMP TRANSFORMER TO THE SWITCHBOARD
 3 - 4" FROM GENERATOR
 1 - 2-1/2" FROM TRANSFORMER TO TENANT METER
 3 - 1" FROM GENERATOR TO TRANSFER SWITCHES
 3 - 5" CONDUITS FROM CMP MANHOLE TO TRANSFORMER VAULT

FEEDER SCHEDULE

①	2" - 4, 3/0 & 1 #6 GND
②	2" - 4, #2 & 1 #8 GND
③	2" - 4, #6 & 1 #8 GND
④	4" - 4, 600 MCM & 1 #3 GND

ONE LINE DIAGRAM
 SCALE: NONE

TRANSFORMER FEEDERS, CIRCUIT PROTECTION & GROUNDING
 BASED ON NEC USING CONDUCTORS RATED FOR 75 C°(THWN, THW, THHW) AND ELECTRICAL METALIC TUBING

TAG	TRANSFORMER KVA	PRIMARY			SECONDARY						
		CIRCUIT BREAKER	PHASE CONDUCTORS	GROUND	CONDUIT	CIRCUIT BREAKER	PHASE CONDUCTORS	NEUTRAL	GROUNDING ELECTRODE	EQUIP. GROUND	CONDUIT
(A)	15	25 AMP / 3 POLE	3*10	1*10	1/2"	60 AMP / 3 POLE	3*6	1*6	1*8	1*10	1-1/4"
(B)	30	50 AMP / 3 POLE	3*8	1*10	3/4"	100 AMP / 3 POLE	3*2	1*2	1*8	1*6	1-1/2"
(C)	45	70 AMP / 3 POLE	3*4	1*8	1-1/4"	150 AMP / 3 POLE	3*2/0	1*2/0	1*4	1*6	2"
(D)	75	100 AMP / 3 POLE	3*2	1*6	1-1/2"	300 AMP / 3 POLE	3*350	1*350	1*2	1*4	3"
(E)	112.5	175 AMP / 3 POLE	3*2/0	1*6	2"	400 AMP / 3 POLE	3*600	1*600	1*1/0	1*3	4"

Mark Date Description
 Project Status
**ISSUED FOR
 CONSTRUCTION**
 03-01-2013

Drawing Title
**Electrical One Line
 Diagram**

Scale:
 Drawing Number

E40.1