





A  
three inches = one foot

B  
one and one-half inches = one foot

C  
one inch = one foot

D  
three-quarters inch = one foot

E  
one-half inch = one foot

F  
three-eighths inch = one foot

G  
one-quarter inch = one foot

A

B

C

D

E

F

### GENERAL NOTES

- A. WORK REQUIRED OUTAGES SHALL BE SCHEDULED 4 WEEKS IN ADVANCE WITH COR AND SHALL BE PERFORMED OUTSIDE NORMAL WORKING HOURS.

### NOTES

1. REMOVE EXISTING PANEL AND FEEDER. REPLACE WITH NEW 150A MCB, 208Y/120V 3PH-4W PANEL. INTERCEPT AND EXTEND EXISTING CONDUIT AND CIRCUITRY AS REQUIRED. NEW CIRCUIT NUMBERS SHALL MATCH EXISTING. REFER TO PANEL SCHEDULE AND FLOOR PLANS FOR ADDITIONAL INFORMATION.
2. REMOVE EXISTING PANEL AND FEEDER. REPLACE WITH NEW 100A MLO, 208Y/120V 3PH-4W PANEL. INTERCEPT AND EXTEND EXISTING CIRCUITRY AS REQUIRED. NEW CIRCUIT NUMBERS SHALL MATCH EXISTING. REFER TO PANEL SCHEDULE AND FLOOR PLANS FOR ADDITIONAL INFORMATION.
3. RUN 4 #1, #6 G.E.C. IN 1" SC.
4. RUN 4 #10, #6 G.E.C. IN 2" C.
5. REPLACE EXISTING 50A BREAKER WITH 60A-3 POLE BREAKER.
6. REPLACE FEEDER WITH 3 #8, #10 GND.

Panel: LNBC													
Location: Electrical-1 BA-104-1				Mounting: Surface			A.I.C. Rating: 10,000A						
Supply From: TX-LNBO				Enclosure: Type 1			Mains Type: MCB						
Voltage: 120/208 Wye-3PH-4W							Mains Rating: 225 A						
CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	EXISTING	20 A	1	0 VA	0 VA					1	20 A	EXISTING	2
3	EXISTING	20 A	1			0 VA	0 VA			1	20 A	EXISTING	4
5	EXISTING	20 A	1					0 VA	0 VA	1	20 A	EXISTING	6
7	EXISTING	20 A	1	0 VA	0 VA					1	20 A	EXISTING	8
9	EXISTING	20 A	1			0 VA	0 VA			1	20 A	EXISTING	10
11	EXISTING	20 A	1					0 VA	0 VA	1	20 A	EXISTING	12
13	EXISTING	20 A	1	0 VA	0 VA					1	20 A	EXISTING	14
15	EXISTING	20 A	1			0 VA	0 VA			1	20 A	EXISTING	16
17	EXISTING	20 A	1					0 VA	0 VA	1	20 A	EXISTING	18
19	EXISTING	20 A	1	0 VA	0 VA					1	20 A	EXISTING	20
21	EXISTING	20 A	1			0 VA	0 VA			1	20 A	EXISTING	22
23	EXISTING	20 A	1					0 VA	0 VA	1	20 A	EXISTING	24
25	Space	--	--	0 VA	0 VA					--	--	Space	26
27	Space	--	--			0 VA	0 VA			--	--	Space	28
29	Space	--	--					0 VA	0 VA	--	--	Space	30
31	MAIN	100 A	3	0 VA	0 VA					3	60 A	EXISTING	32
33	--	--	--			0 VA	0 VA			--	--	--	34
35	--	--	--					0 VA	0 VA	--	--	--	36
Total Load:				0.00 kVA		0.00 kVA		0.00 kVA					
Notes: NEW PANELBOARD. PROVIDE 150A MAIN BREAKER.													
TOTAL CONNECTED						ESTIMATED DEMAND							
0 kVA						0 kVA (0 A)							

Panel: LN4C

Location: ELECTRICAL CLOSET 4A105

Mounting: Surface

A.I.C. Rating: 10,000A

Supply From: TX-LNBO

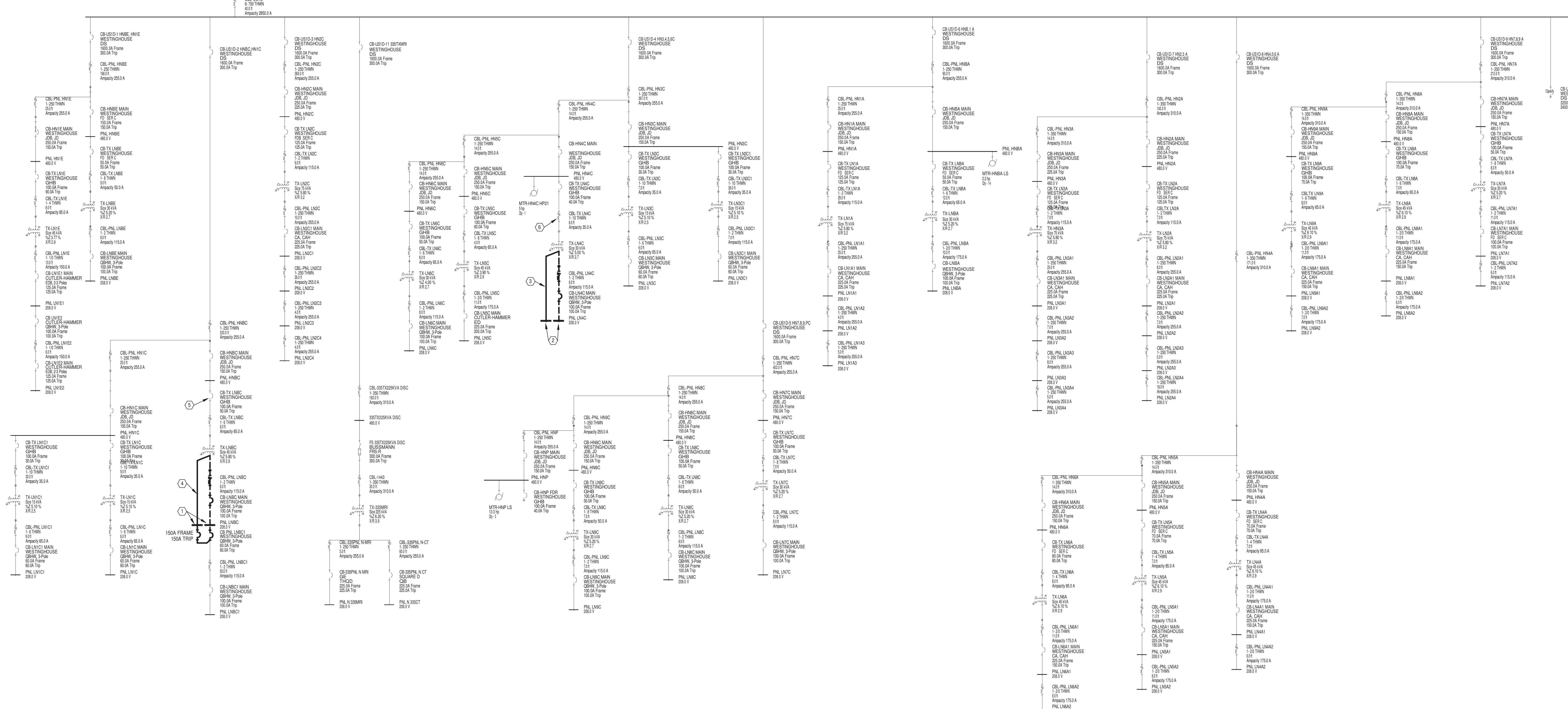
Enclosure: Type 1

Mains Type: MLO

Voltage: 120/208 Wye-3PH-4W

Mains Rating: 100 A

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	EXISTING	20 A	1	0 VA	0 VA					1	20 A	EXISTING	2
3	EXISTING	20 A	1			0 VA	0 VA			1	20 A	EXISTING	4
5	EXISTING	20 A	1					0 VA	0 VA	1	20 A	EXISTING	6
7	EXISTING	20 A	1	0 VA	0 VA					1	20 A	EXISTING	8
9	EXISTING	20 A	1			0 VA	0 VA			1	20 A	EXISTING	10
11	EXISTING	20 A	1					0 VA	0 VA	1	20 A	EXISTING	12
13	EXISTING	20 A	1	0 VA	0 VA					3	30 A	EXISTING	14
15	EXISTING	20 A	1			0 VA	0 VA			--	--	--	16
17	EXISTING	20 A	1					0 VA	0 VA	--	--	--	18
19	EXISTING	20 A	1	0 VA	0 VA					2	20 A	OFF	20
21	EXISTING	20 A	1			0 VA	0 VA			--	--	--	22
23	EXISTING	20 A	1					0 VA	0 VA	1	20 A	EXISTING	24
25	Space	--	--	0 VA	0 VA					--	--	EXISTING	26
27	Space	--	--			0 VA	0 VA			--	--	Space	28
29	Space	--	--					0 VA	0 VA	3	100 A	EXISTING	30
31	Space	--	--	0 VA	0 VA					--	--	--	32
33	Space	--	--			0 VA	0 VA			--	--	--	34
Total Load:				0.00 kVA		0.00 kVA		0.00 kVA					
Notes: NEW PANELBOARD.													
TOTAL CONNECTED										ESTIMATED DEMAND			
0 kVA										0 kVA (0 A)			



1 B330-US1D SINGLE-LINE DIAGRAM  
Scale: N.T.S.

CONSULTANTS:

**Heapy Engineering**  
MEP Design Technology Planning Commissioning Energy  
Nationally Recognized Leader in Sustainability  
1400 W Dorothy Lane, Dayton, OH 45409-1310  
Ph 937-224-0861 Fax 937-224-5777 www.heapy.com  
Heapy Project No.: 2016-05088 Firm License No.: 01528



ARCHITECT/ENGINEERS:

JOHN POE ARCHITECTS

3131 NEWMARK DRIVE,  
SUITE 200  
MIAMI, FL 33136  
937-461-3290 PHONE  
937-461-0260 FAX  
jpoe@johnpoe.com

Drawing Title

B330 US1D - SINGLE LINE  
DIAGRAM

Approved: Project Director

Project Title

CORRECT ARC FLASH  
DEFICIENCIES

Location

Dayton, Ohio

Date

07/06/2017

Checked

MSG

Drawn

JRS

Project No.

552-16-551

JPA Project No.

Building Number

Drawing Number

330E003

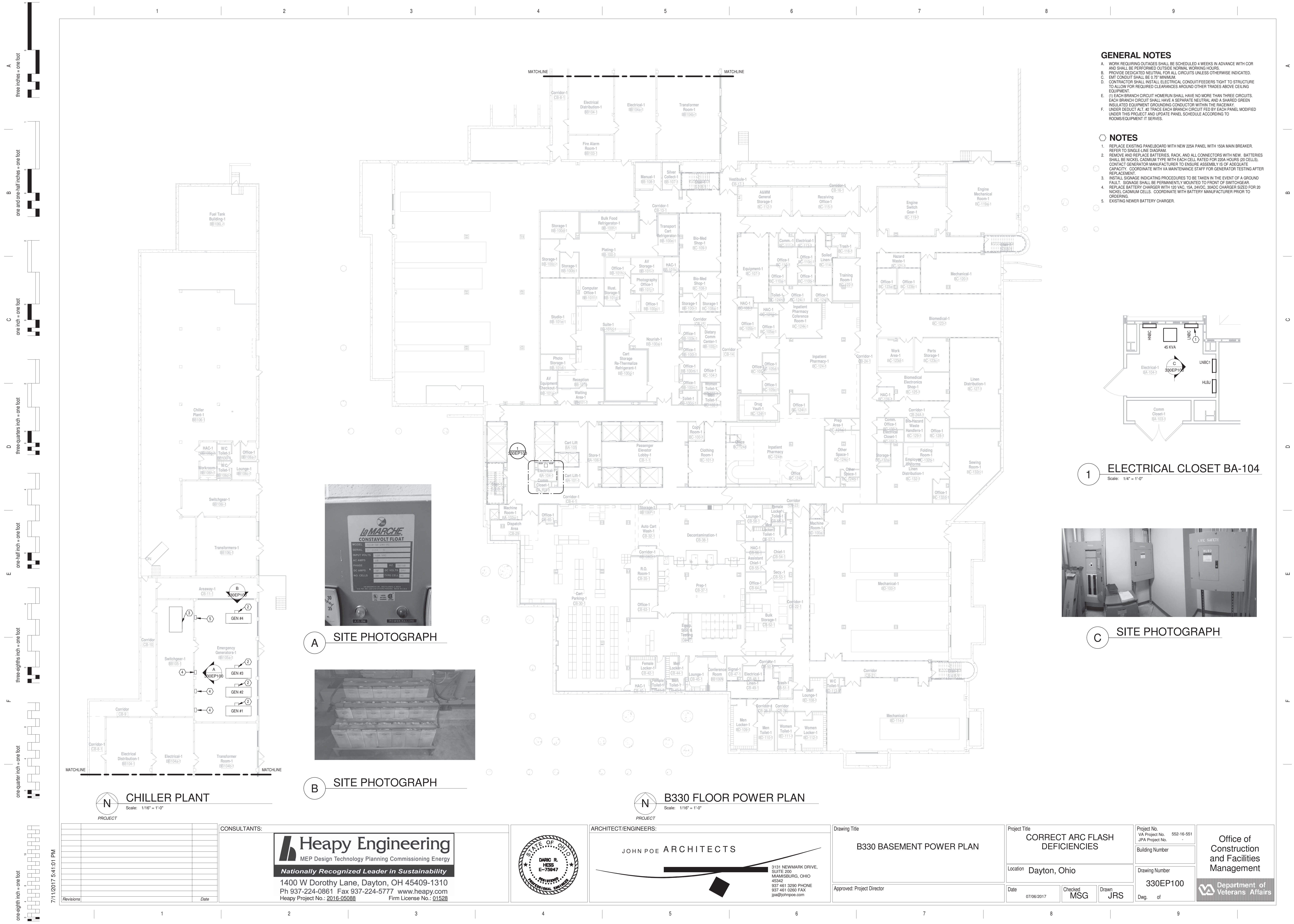
Dwg. of

Office of  
Construction  
and Facilities  
Management



7/11/2017 5:40:37 PM



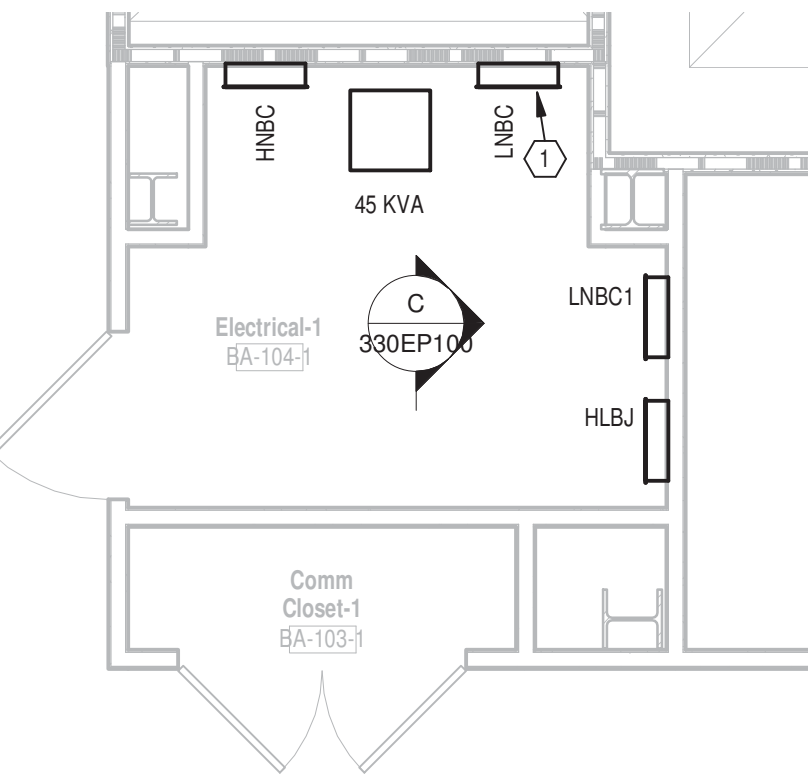


GENERAL NOTES

- A. WORK REQUIRING OUTAGES SHALL BE SCHEDULED 4 WEEKS IN ADVANCE WITH COR AND SHALL BE PERFORMED OUTSIDE NORMAL WORKING HOURS.
- B. PROVIDE DEDICATED NEUTRAL FOR ALL CIRCUITS UNLESS OTHERWISE INDICATED.
- C. EMT CONDUIT SHALL BE 0.75" MINIMUM.
- D. CONTRACTOR SHALL INSTALL ELECTRICAL CONDUIT FEEDERS TIGHT TO STRUCTURE TO ALLOW FOR REQUIRED CLEARANCES AROUND OTHER TRADES ABOVE CEILING EQUIPMENT.
- E. (1) EACH BRANCH CIRCUIT HOMERUN SHALL HAVE NO MORE THAN THREE CIRCUITS. EACH BRANCH CIRCUIT SHALL HAVE A SEPARATE NEUTRAL AND A SHARED GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR WITHIN THE RACEWAY.
- F. UNDER DEDUCT ALL #2 TRACE EACH BRANCH CIRCUIT FED BY EACH PANEL MODIFIED UNDER THIS PROJECT AND UPDATE PANEL SCHEDULE ACCORDING TO ROOMS/EQUIPMENT IT SERVES.

NOTES

- 1. REPLACE EXISTING PANELBOARD WITH NEW 225A PANEL WITH 150A MAIN BREAKER. REFER TO SINGLE-LINE DIAGRAM.
- 2. REMOVE AND REPLACE BATTERIES, RACK, AND ALL CONNECTORS WITH NEW. BATTERIES SHALL BE NICKEL CADMIUM TYPE WITH EACH CELL RATED FOR 288A HOURS (20 CELLS). CONTACT GENERATOR MANUFACTURER TO ENSURE ASSEMBLY IS OF ADEQUATE CAPACITY. COORDINATE WITH VA MAINTENANCE STAFF FOR GENERATOR TESTING AFTER REPLACEMENT.
- 3. INSTALL SIGNAGE INDICATING PROCEDURES TO BE TAKEN IN THE EVENT OF A GROUND FAULT. SIGNAGE SHALL BE PERMANENTLY MOUNTED TO FRONT OF SWITCHGEAR.
- 4. REPLACE BATTERY CHARGER WITH 120 VAC, 15A, 24VDC, 30ADC CHARGER SIZED FOR 20 NICKEL CADMIUM CELLS. COORDINATE WITH BATTERY MANUFACTURER PRIOR TO ORDERING.
- 5. EXISTING NEWER BATTERY CHARGER.



ELECTRICAL CLOSET BA-104

Scale: 1/4" = 1'-0"



SITE PHOTOGRAPH



SITE PHOTOGRAPH



SITE PHOTOGRAPH

CHILLER PLANT

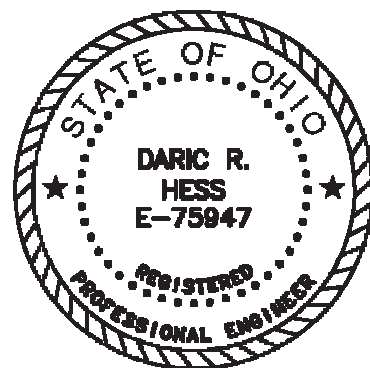
Scale: 1/16" = 1'-0"

B330 FLOOR POWER PLAN

Scale: 1/16" = 1'-0"

CONSULTANTS:

**Heapy Engineering**  
MEP Design Technology Planning Commissioning Energy  
*Nationally Recognized Leader in Sustainability*  
1400 W Dorothy Lane, Dayton, OH 45409-1310  
Ph 937-224-0861 Fax 937-224-5777 www.heapy.com  
Heapy Project No.: 2016-05088 Firm License No.: 01528



ARCHITECT/ENGINEERS:

JOHN POE ARCHITECTS

3131 NEWMARK DRIVE,  
SUITE 200  
MIAMI SBURG, OHIO  
45442  
937 461 3290 PHONE  
937 461 0260 FAX  
jpo@johnpoe.com

Drawing Title  
**B330 BASEMENT POWER PLAN**

Approved: Project Director

Project Title  
**CORRECT ARC FLASH DEFICIENCIES**

Location  
**Dayton, Ohio**

Date  
07/06/2017

Checked  
**MSG**

Drawn  
**JRS**

Project No.  
VA Project No. 552-16-551  
JPA Project No. -  
Building Number

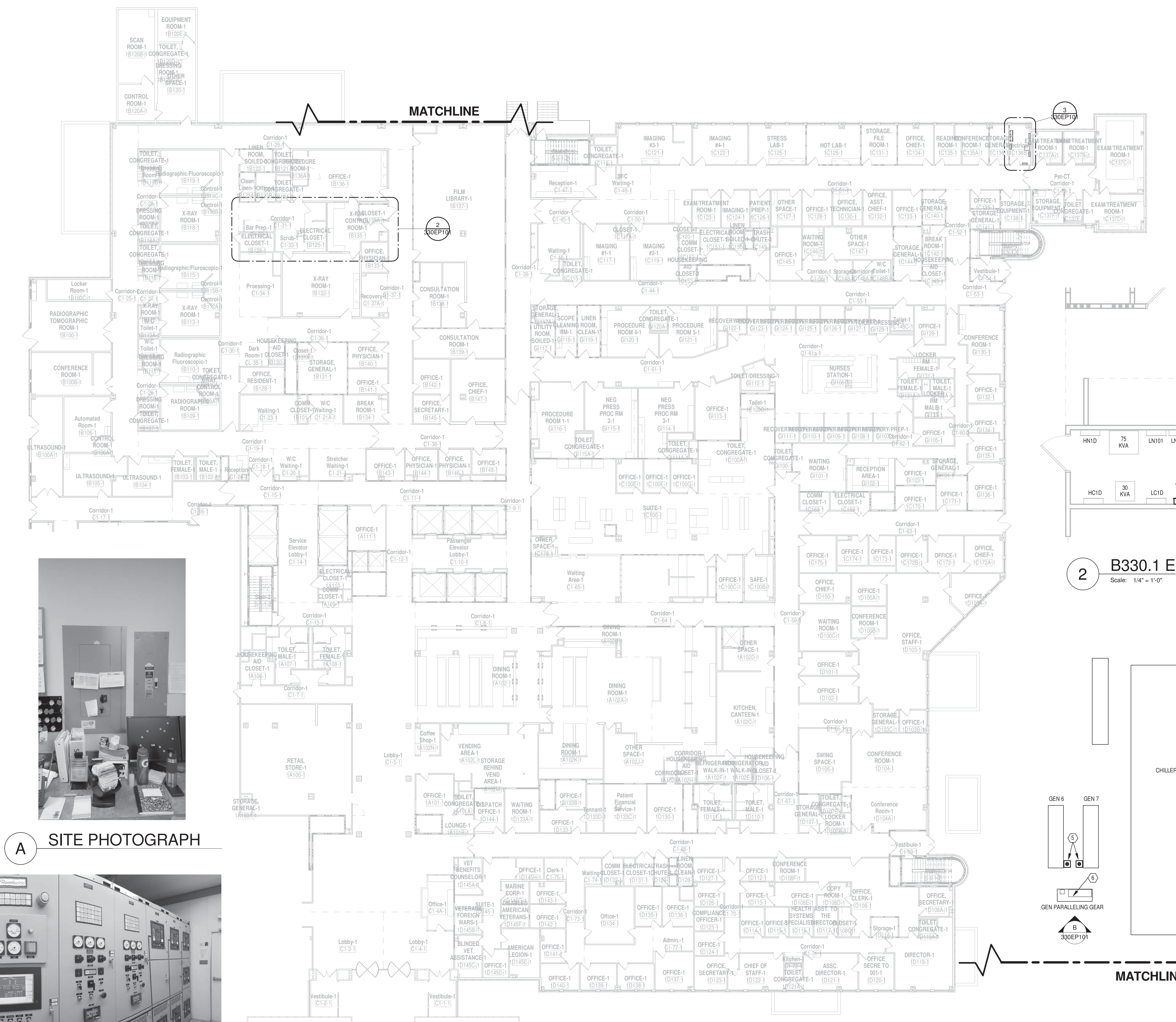
Drawing Number  
**330EP100**

Dwg. of

Office of  
Construction  
and Facilities  
Management







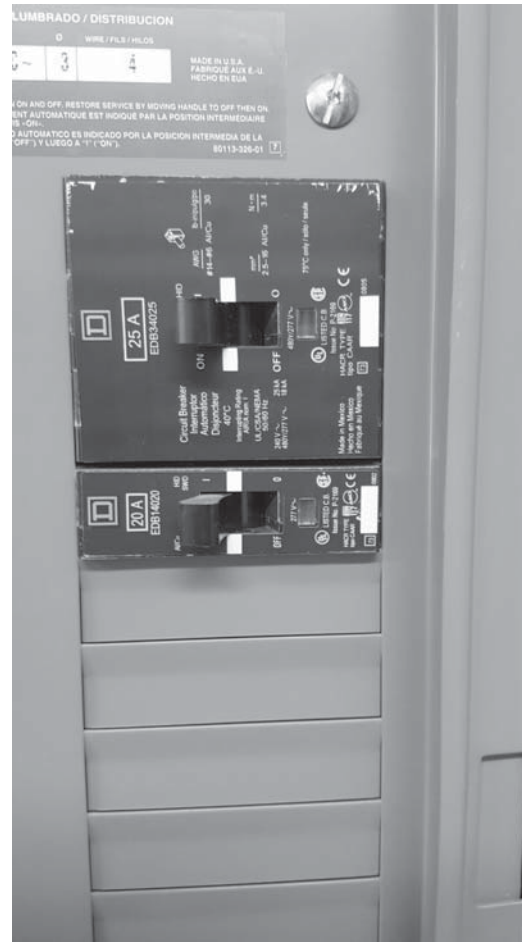
**A SITE PHOTOGRAPH**



**B SITE PHOTOGRAPH**

**3 ELECTRIC ROOM**

Scale: 1/4" = 1'-0"



**C SITE PHOTOGRAPH**

### GENERAL NOTES

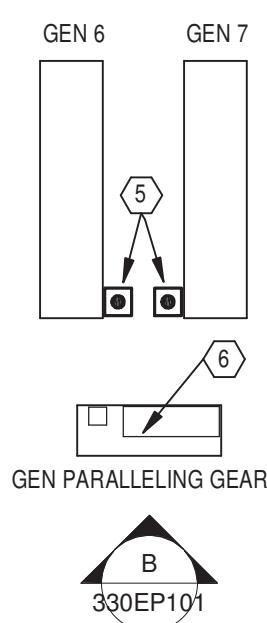
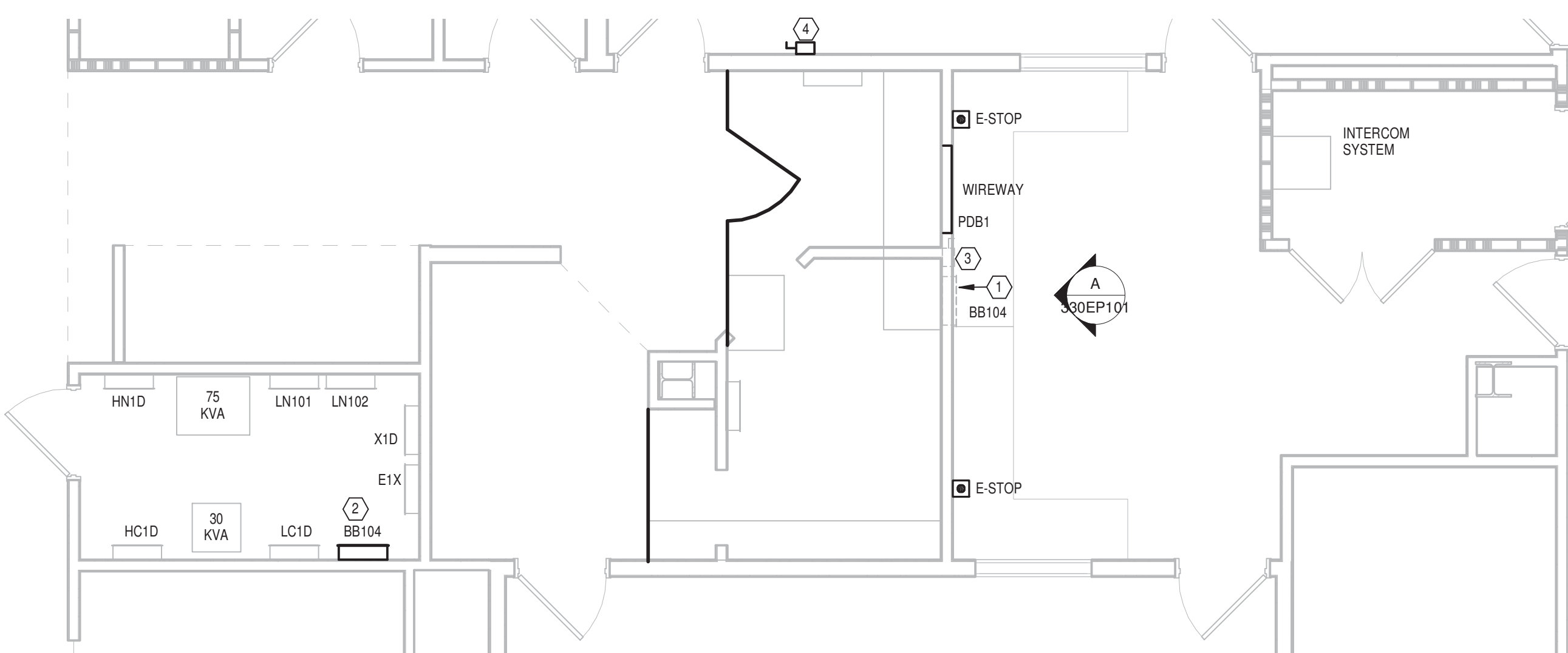
- SCHEDULE ANY OUTAGES WITH THE COR 4 WEEKS PRIOR TO PERFORMING WORK. CONTRACTOR SHALL SUBMIT A SEQUENCE OF CONSTRUCTION NARRATIVE TO THE COR AND ENGINEER FOR APPROVAL PRIOR TO SCHEDULING SHUTDOWN. NARRATIVE SHALL INCLUDE DATE AND TIME OF SHUTDOWN, ANTICIPATED DURATION, AND SEQUENCE OF REMOVAL AND INSTALLATION. CONTRACTOR SHALL SCHEDULE A WALK THRU WITH THE COR AND ENGINEER PRIOR TO PERFORMING WORK.
- PROVIDE DEDICATED NEUTRAL FOR ALL CIRCUITS UNLESS OTHERWISE INDICATED.
- EMT CONDUIT SHALL BE 0.75" MINIMUM.
- CONTRACTOR SHALL INSTALL ELECTRICAL CONDUIT FEEDERS TIGHT TO STRUCTURE TO ALLOW FOR REQUIRED CLEARANCES AROUND OTHER TRADES ABOVE CEILING EQUIPMENT.
- (1) EACH BRANCH CIRCUIT HOMERUN SHALL HAVE NO MORE THAN THREE CIRCUITS. EACH BRANCH CIRCUIT SHALL HAVE A SEPARATE NEUTRAL AND A SHARED GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR WITHIN THE RACEWAY.
- UNDER DEDUCT ALT. #2 TRACE EACH BRANCH CIRCUIT FED BY EACH PANEL MODIFIED UNDER THIS PROJECT AND UPDATE PANEL SCHEDULE ACCORDING TO ROOMS/EQUIPMENT IT SERVES.

### NOTES

- REMOVE PANEL COVER AND INTERIOR. USE NON-REVERSIBLE COMPRESSION TYPE SPLICES TO EXTEND EXISTING FEEDERS AND CIRCUITRY TO NEW PANEL LOCATION WHERE INDICATED. PROVIDE CUSTOM BLANK COVER FOR PANEL TUB. SUBMIT A SEQUENCE OF CONSTRUCTION NARRATIVE TO THE COR FOR APPROVAL. INCLUDE WORK TO BE PERFORMED, OUTAGE DURATIONS, AND START & COMPLETION TIMES.
- NEW PANEL LOCATION. SIZE PER SINGLE LINE DIAGRAM.
- REMOVE ENCLOSED CIRCUIT BREAKER AND EXTEND CIRCUITRY USING NON-REVERSIBLE COMPRESSION TYPE SPLICES TO NEW LOCATION. PROVIDE CUSTOM BLANK COVER.
- NEW ENCLOSED CIRCUIT BREAKER LOCATION.
- PROVIDE WEATHER PROOF CLEAR PROTECTIVE COVERS FOR E-STOP PUSH BUTTON.
- INSTALL SIGNAGE INDICATING PROCEDURES TO BE TAKEN IN THE EVENT OF A GROUND FAULT. SIGNAGE SHALL BE PERMANENTLY MOUNTED TO FRONT OF SWITCHGEAR.
- REPLACE 25A/3P BREAKER WITH 50A/3P BREAKER. REFER TO SINGLE LINE DIAGRAM. PERFORM WORK OUTSIDE OF NORMAL WORKING HOURS.

**2 B330.1 ELEC ROOM**

Scale: 1/4" = 1'-0"



**MATCHLINE**

**B330 - FIRST FLOOR POWER PLAN**

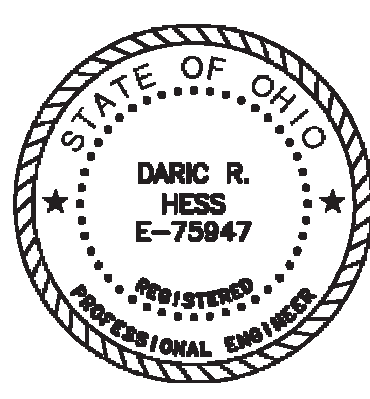
Scale: 1/16" = 1'-0"



PROJECT

CONSULTANTS:

**Heapy Engineering**  
MEP Design Technology Planning Commissioning Energy  
**Nationally Recognized Leader in Sustainability**  
1400 W Dorothy Lane, Dayton, OH 45409-1310  
Ph 937-224-0861 Fax 937-224-5777 www.heapy.com  
Heapy Project No.: 2016-05088 Firm License No.: 01528



ARCHITECT/ENGINEERS:

**JOHN POE ARCHITECTS**

3131 NEWMARK DRIVE,  
SUITE 200  
MIAMI, FL 33133  
407.461.3290 PHONE  
407.461.0260 FAX  
jpae@johnpoe.com

Drawing Title

**B330 1ST FLOOR POWER PLAN**

Approved: Project Director

Project Title

**CORRECT ARC FLASH DEFICIENCIES**

Location

**Dayton, Ohio**

Date

07/06/2017

Checked

**MSG**

Drawn

**JRS**

Project No.

552-16-551

JPA Project No.

Building Number

Drawing Number

**330EP101**

Dwg. of

Office of  
Construction  
and Facilities  
Management



7/11/2017 5:41:37 PM



