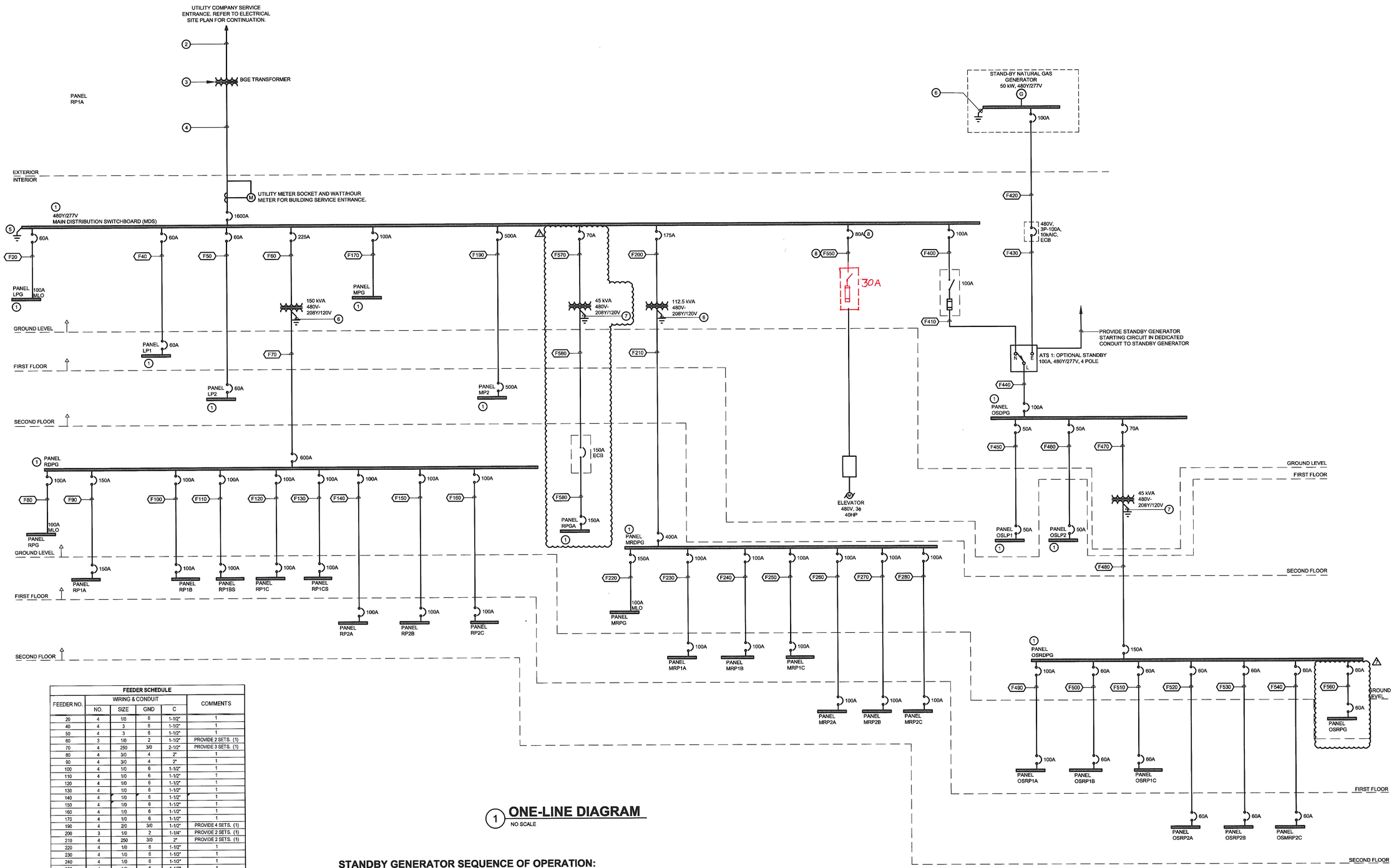

1 ONE-LINE DIAGRAM

NO SCALE

FEEDER SCHEDULE					
FEEDER NO.	WIRING & CONDUIT				COMMENTS
	NO.	SIZE	GND	C	
20	4	1/0	6	1-1/2"	1
40	4	3	6	1-1/2"	1
50	4	3	6	1-1/2"	1
60	3	1/0	2	1-1/2"	PROVIDE 2 SETS. (1)
70	4	250	3/0	2-1/2"	PROVIDE 3 SETS. (1)
80	4	3/0	4	2"	1
90	4	3/0	4	2"	1
100	4	1/0	6	1-1/2"	1
110	4	1/0	6	1-1/2"	1
120	4	1/0	6	1-1/2"	1
130	4	1/0	6	1-1/2"	1
140	4	1/0	6	1-1/2"	1
150	4	1/0	6	1-1/2"	1
160	4	1/0	6	1-1/2"	1
170	4	1/0	6	1-1/2"	1
190	4	2/0	3/0	1-1/2"	PROVIDE 4 SETS. (1)
200	3	1/0	2	1-1/4"	PROVIDE 2 SETS. (1)
210	4	250	3/0	2"	PROVIDE 2 SETS. (1)
220	4	1/0	6	1-1/2"	1
230	4	1/0	6	1-1/2"	1
240	4	1/0	6	1-1/2"	1
250	4	1/0	6	1-1/2"	1
260	4	1/0	6	1-1/2"	1
270	4	1/0	6	1-1/2"	1
280	4	1/0	6	1-1/2"	1
400	4	1/0	6	1-1/2"	1
410	4	1/0	6	1-1/2"	1
420	4	1/0	6	1-1/2"	1
430	4	1/0	6	1-1/2"	1
440	4	1/0	6	1-1/2"	1
450	4	4	8	1"	1
460	4	4	8	1"	1
470	3	2	6	1-1/4"	1
480	4	3/0	4	2"	1
490	4	1/0	6	1-1/2"	1
500	4	3	8	1-1/4"	1
510	4	3	8	1-1/4"	1
520	4	3	8	1-1/4"	1
530	4	3	8	1-1/4"	1
540	4	3	8	1-1/4"	1
550	4	3	8	1-1/4"	1
560	4	3	8	1-1/4"	1
570	3	2	6	1-1/4"	1
580	4	3/0	4	2"	1

FEEDER SCHEDULE NOTES:
(1) PROVIDE ALUMINUM FEEDERS
(2) PROVIDE COPPER FEEDERS

STANDBY GENERATOR SEQUENCE OF OPERATION:

1. THE ELECTRICAL DISTRIBUTION SYSTEM CONSISTS OF A "NORMAL" AND " OPTIONAL STAND-BY" POWER DISTRIBUTION SYSTEM. BOTH DISTRIBUTION SYSTEMS ARE SUPPLIED BY NORMAL UTILITY POWER UNDER NORMAL OPERATING CONDITIONS. THE OPTIONAL STAND-BY DISTRIBUTION SYSTEM IS SUPPLIED BY THE GENERATOR UPON LOSS OF POWER.
2. OPTIONAL STAND-BY DISTRIBUTION SYSTEM (ATS 1):
   A. LOSS OF NORMAL UTILITY POWER AT THE OPTIONAL STAND-BY SYSTEM ATS 1 SHALL RESULT IN THE FOLLOWING SEQUENCE OF EVENTS:
      * THE OPTIONAL STAND-BY ATS WILL START THE GENERATOR AUTOMATICALLY WITH NO TIME DELAY.
      * THE OPTIONAL STAND-BY ATS WILL SWITCH TO GENERATOR POWER AND LOAD WILL BE APPLIED TO THE GENERATOR WITHIN 10 SECONDS.
   B. WHEN THE OPTIONAL STAND-BY DISTRIBUTION SYSTEM IS SUPPLIED BY GENERATOR POWER, ALL EQUIPMENT CONNECTED TO THE OPTIONAL STAND-BY SYSTEM WILL OPERATE IN THE SAME WAY AS WHEN THIS EQUIPMENT IS SUPPLIED BY NORMAL UTILITY POWER.
   C. UPON RETURN OF NORMAL CONTINUOUS STABLE UTILITY POWER FOR 10 CONSECUTIVE MINUTES, THE FOLLOWING SEQUENCE OF EVENTS SHALL OCCUR:
      * THE OPTIONAL STAND-BY ATS WILL AUTOMATICALLY SWITCH BACK TO NORMAL UTILITY POWER.
      * THE GENERATOR WILL CONTINUE TO RUN IN COOL DOWN MODE FOR A TIME AS RECOMMENDED BY THE GENERATOR MANUFACTURER AND THEN WILL AUTOMATICALLY SHUT DOWN.

GENERAL NOTES:

1. REFER TO E001 FOR ELECTRICAL LEGEND, ABBREVIATIONS AND GENERAL NOTES.
2. THERE IS A NEW BGE ELECTRICAL SERVICE REQUIRED AS PART OF THIS PROJECT. PROVIDE ALL LABOR, MATERIALS, TOOLS, COORDINATION WITH BGE, AND ALL INCIDENTALS REQUIRED TO PROVIDE A COMPLETE AND OPERATIONAL BGE SERVICE ENTRANCE. ALL WORK SHALL BE IN COMPLIANCE WITH THE LATEST EDITION OF BGE STANDARDS AND REQUIREMENTS.
3. PROVIDE ALL EQUIPMENT SHOWN UNLESS NOTED OTHERWISE.

○ DRAWING NOTES:

1. PROVIDE INTEGRAL SURGE PROTECTIVE DEVICE.
2. BGE PRIMARY SERVICE ENTRANCE CONDUCTORS AND RACEWAY. RACEWAY PROVIDED BY CONTRACTOR. CONDUCTORS PROVIDED BY BGE. REFER TO SITE PLAN FOR ADDITIONAL INFORMATION.
3. BGE SERVICE ENTRANCE PAD MOUNT TRANSFORMER. TRANSFORMER FOUNDATION/PAD (PAD AND GROUNDING) PROVIDED BY CONTRACTOR. TRANSFORMER PROVIDED BY BGE.
4. PROVIDE EMPTY RACEWAY. CONDUCTORS PROVIDED BY BGE. REFER TO SITE PLAN FOR ADDITIONAL INFORMATION.
5. PROVIDE (1) #4/0 (ALUMINUM CONDUCTOR) GROUNDING ELECTRODE CONDUCTOR TO GROUNDING ELECTRODE SYSTEM GROUND BUS BAR. REFER TO SERVICE ENTRANCE POWER SYSTEM GROUNDING DETAIL ON ELECTRICAL DETAIL DRAWING FOR ADDITIONAL INFORMATION.
6. PROVIDE (1)#3/0 (ALUMINUM CONDUCTOR) TO NEAREST GROUNDING ELECTRODE.
7. PROVIDE (1)#4 (ALUMINUM CONDUCTOR) TO NEAREST GROUNDING ELECTRODE.
8. COORDINATE FINAL SIZE WITH ELEVATOR PROVIDER/INSTALLER.

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SEAL:

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NUM: ,EXP DATE:

PROJECT:

INNOVATIVE LEARNING CENTER

NEW MIDDLE SCHOOL

500 CHESTNUT AVE
TOWSON, MD 21204

PREPARED FOR:

LOYOLA BLAKEFIELD

500 CHESTNUT AVE
TOWSON, MD 21204

MARK	DATE	DESCRIPTION
7	05-01-2020	PR 003
3	04-24-2020	ASI #6
1	12-06-2019	CONFORMED SET

PROJECT NO:	18-00386-001
DATE:	AUGUST 30, 2019
SCALE:	As indicated
DESIGNED BY:	RMK
DRAWN BY:	RMK
CHECKED BY:	DMW

DRAWING TITLE:

ELECTRICAL ONE-LINE DIAGRAM

SHEET NUMBER:

E701

BKM# 18044.01

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ARL: G:\18044.01\Drawings\Acad\E\E701 - POWER 1-LINE DIAGRAM
Plotted By: Ryan Klein | 4/30/2020 12:51 PM