

THE SCHOOL DISTRICT OF PHILADELPHIA
Office of Capital Programs
440 North Broad Street, 3rd Floor – Suite 371
Philadelphia, PA 19130

TELEPHONE: (215) 400-4730

Addendum No. 02

Subject: **Broad Street Charging Stations Project**
SDP Contract No. B-043c 2020/21

Location: Broad Street Garage
2600 N. Broad Street
Philadelphia PA 19132

This Addendum dated August 30, 2021 shall modify and become part of the Contract Documents for the work of this project. Any items not mentioned herein, or affected by, shall be performed strictly in accordance with the original documents.

NOTICE: BID OPENING POSTPONED UNTIL THURSDAY, SEPTEMBER 2, 2021

Question #1:

E201 – Feeder Legend #3 – 2#4 & 1 #8 ground in 3/4" conduit. Is this a typo error? Number of wires does not fit per code. These conduits are underground with no junction boxes, suggest 1 1/2" PVC.

- **REVISED Response: Revised Feeder Legend #3 on E201 – 100A - (2) #1, (1) #8GRD in 1 1/2".**

DRAWING:

E101: Revised Sheet Keynotes #6 &, 7

E101: Revised Electrical Charging Station Elevation Detail #2.

E201: Revised Feeder Legend #3.

E201: Revised Electrical Single Line Diagram Disconnect switch fuse and Circuit Breaker sizes to 100A.

E201: Revised New Electric Vehicle Panel (EVP1) circuit breakers to 100/2.

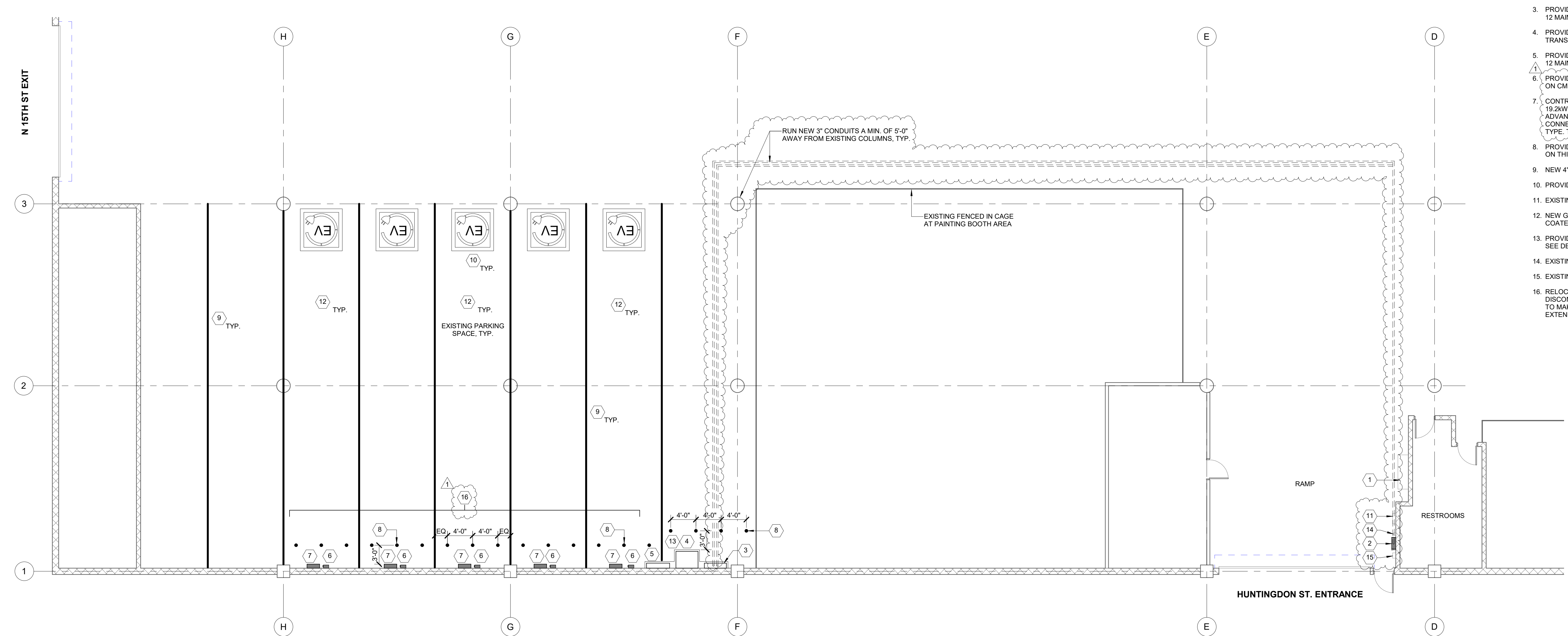
End of Addendum

GENERAL NOTES

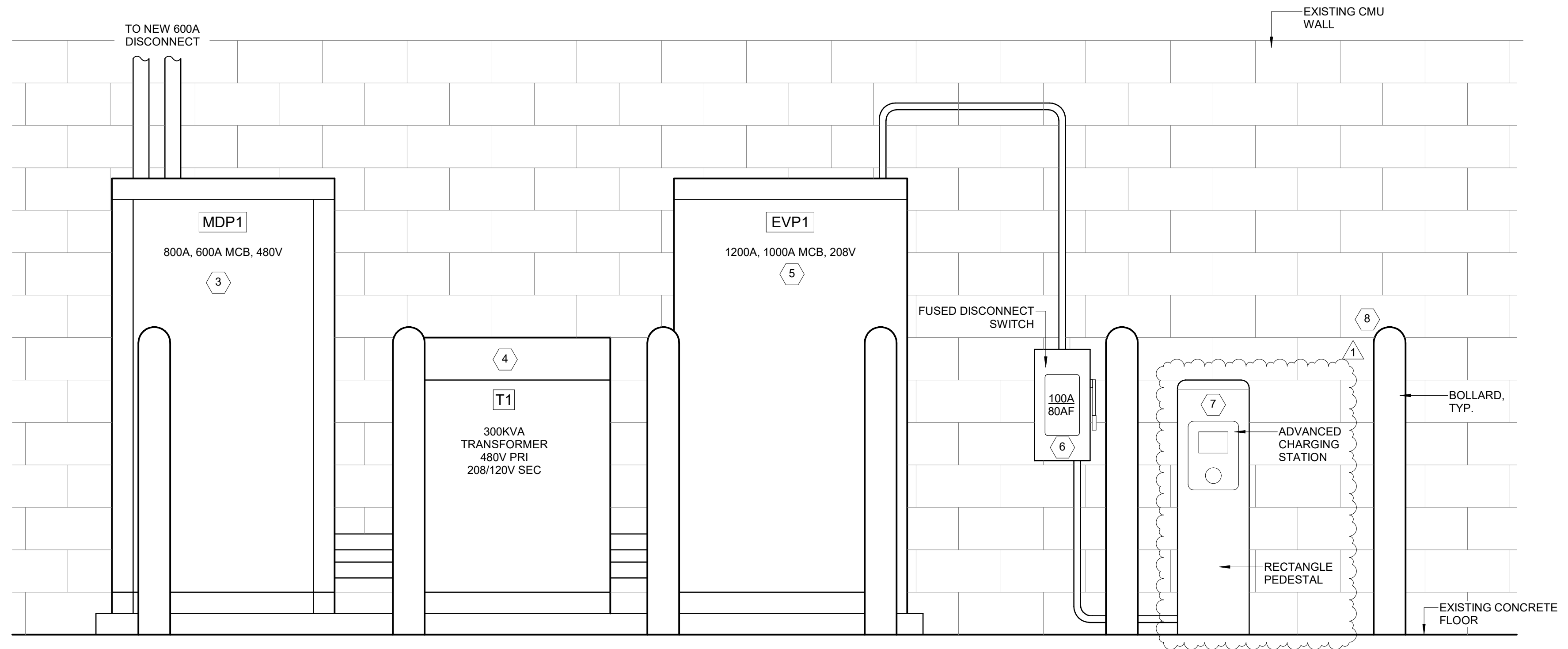
- SEE ARCHITECTURAL DRAWING E-001 FOR GENERAL NOTES AND PROJECT INFORMATION.
- REFER TO DETAIL SHEETS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

SHEET KEYNOTES

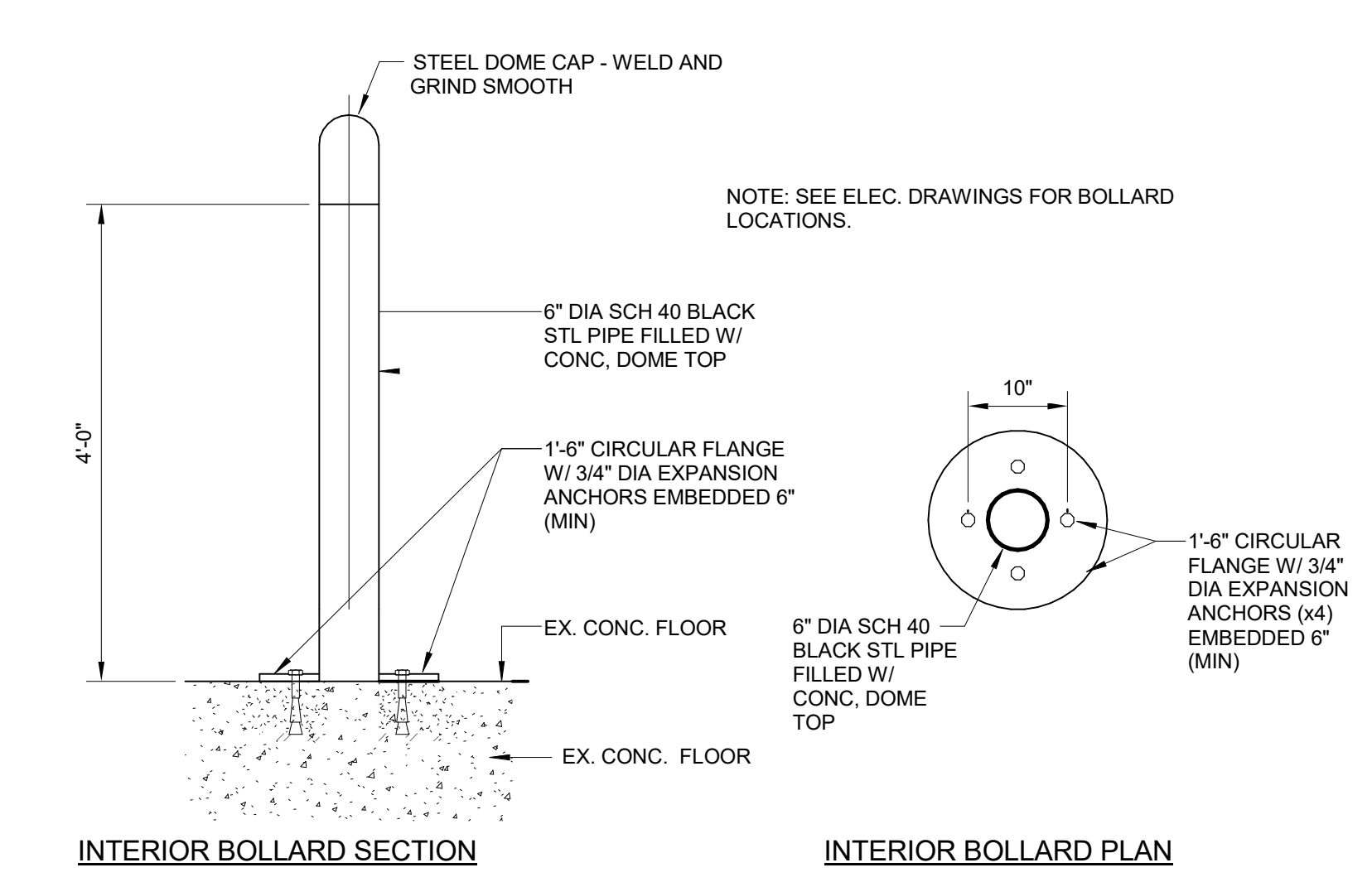
- EXISTING 800A, 480V MAIN DISTRIBUTION PANEL. REFER TO ONE LINE DIAGRAM.
- PROVIDE NEW 600A/600AF FUSED DISCONNECT SWITCH (REFER TO ONE-LINE DIAGRAM). TOP OF DISCONNECT HANDLE HEIGHT IN ITS HIGHEST POSITION TO BE NO GREATER THAN 6'-0" A.F.F.
- PROVIDE NEW 800A (600A MCB), 480/277V, 3 PHASE, 4 WIRE NEMA 12 MAIN DISTRIBUTION PANEL, 'MDP1'.
- PROVIDE NEW 300KVA, 480V PRIMARY - 208/120V SECONDARY TRANSFORMER 'T1'.
- PROVIDE NEW 1200A (1000A MCB), 208/120V, 3 PHASE, 4 WIRE NEMA 12 MAIN DISTRIBUTION PANEL, 'EVP1'.
- PROVIDE NEW 100A/100AF FUSED DISCONNECT SWITCH MOUNTED ON CMU WALL.
- CONTRACTOR SHALL INSTALL, SDP PROVIDED TYPE "C" LEVEL II, 19.2KW, BLINK IQ200 RECTANGULAR PEDESTAL MOUNT SINGLE, ADVANCED CHARGING STATION BOX WITH (1) YEAR DATA CONNECTIVITY PACKAGE AND J1772 CHARGING SYSTEM CORD TYPE TO BE MOUNTED ON CMU WALL.
- PROVIDE 6" SURFACE MOUNTED BOLLARDS, TYP. SEE DETAIL 3, ON THIS SHEET.
- NEW 4" WIDE WHITE PAINT STRIPE.
- PROVIDE EV STENCIL AND PAINT AT EACH PARKING SPACE.
- EXISTING ELECTRICAL PANEL EX.F.P-1, TO REMAIN.
- NEW GREEN PAINT COATING. ALL EV CHARGING STATIONS WILL BE COATED WITH GREEN PAINT.
- PROVIDE CONCRETE PADS FOR NEW ELECTRICAL EQUIPMENT. SEE DETAIL 3, ON THIS SHEET.
- EXISTING FIRE ALARM PULL STATION TO REMAIN.
- EXISTING SECURITY ALARM CONTROL PANEL BOX TO REMAIN.
- RELOCATE ALL EXISTING ELECTRICAL DEVICES (OUTLETS, DISCONNECTS, SWITCHES, ETC) ALONG THIS WALL AS NECESSARY TO MAKE ROOM FOR THE NEW CHARGING STATION EQUIPMENT. EXTEND CONDUITWIRING AS REQUIRED.



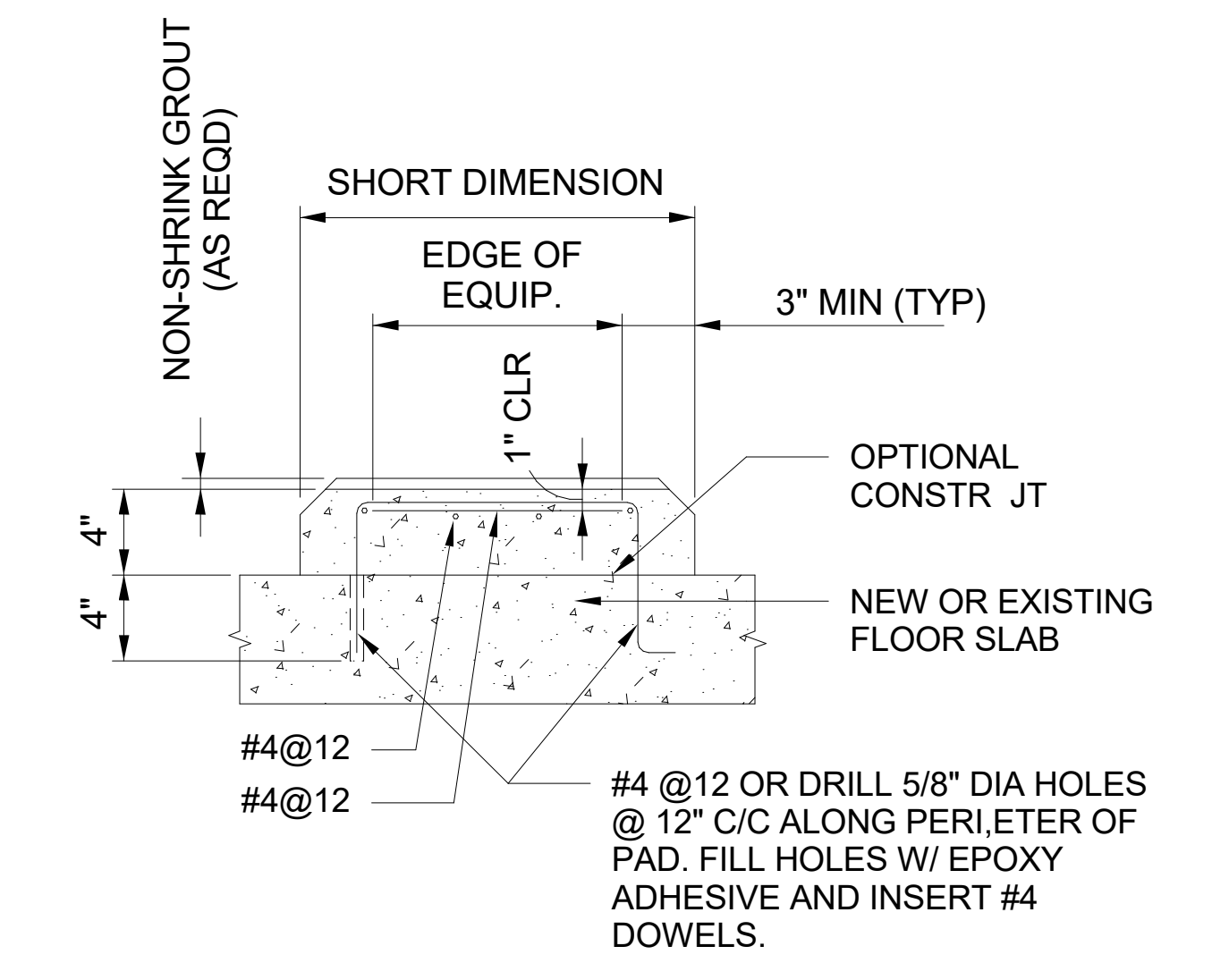
1 ELECTRICAL POWER PLAN - ELECTRIC BUSES CHARGING STATION
SCALE: 1/8" = 1'-0"



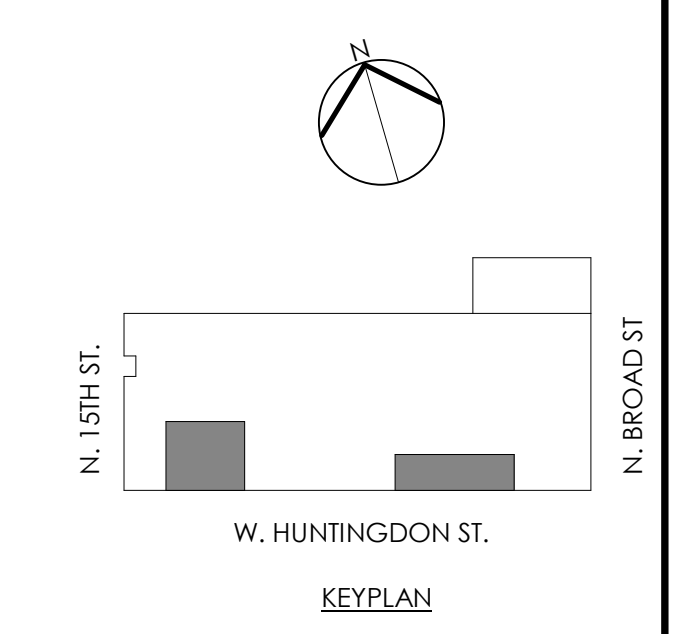
2 ELECTRICAL CHARGING STATION ELEVATION



3 INTERIOR BOLLARD DETAIL



4 CONCRETE PAD DETAIL
SCALE: 1 1/2" = 1'-0"



BID DOCUMENTS
30 AUGUST 2021

NO.	DATE	REVISION
1	08/30/21	ADDENDUM 2

SCHOOL & LOCATION
BROAD STREET GARAGE
2600 N. Broad Street
Philadelphia, PA 19132

PROJECT TITLE
ELECTRIC BUSES CHARGING UPGRADE

DRAWING SCALE
ELECTRICAL POWER PLAN

DRAWING SCALE
As indicated

LOCATION NO. 5230	FILE NO. 068625
DRAWN BY FJR	CHECKED BY BAS

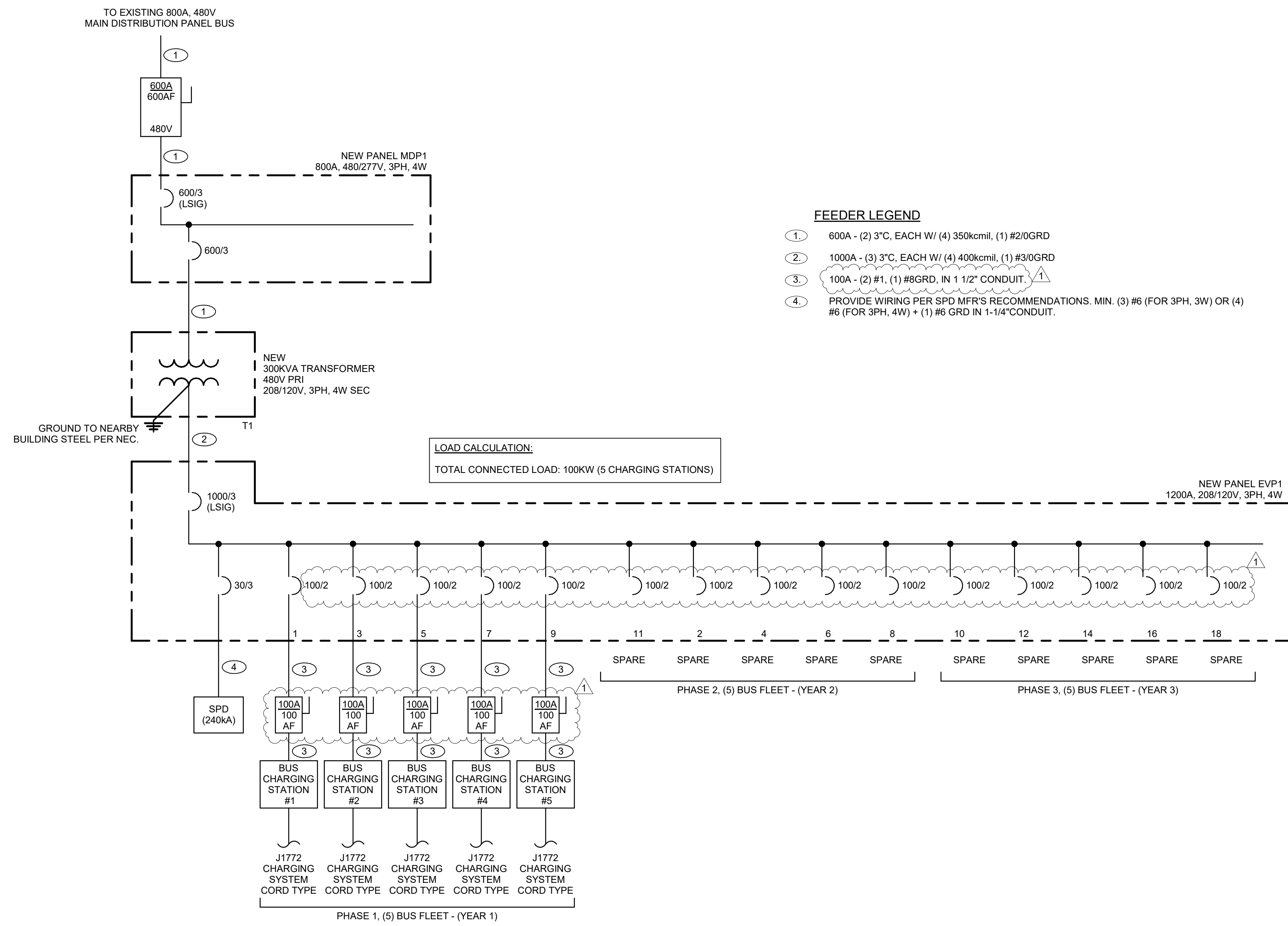
B-043(c) OF 2020/21

DRAWING NO.
E101
SHEET 3 OF 04

Project Number: 068625
6/30/2021 8:14:21 AM
Local File: B:\1068625-SDP_MEP-FP_ID\068625_BroadSt_MEP_central_P01_BM360.rvt

GENERAL NOTES

- CONDUCTOR AMPACITIES ARE GENERALLY BASED ON TABLE 310.15(B)(16) OF THE NEC FOR COPPER CONDUCTOR TYPE THW/THWN (75 DEGREE C CONDUCTOR TEMPERATURE RATING).
- FEEDER SIZES SHOWN ON THE RISER DIAGRAM INDICATE FEEDER AMPACITIES AND DO NOT NECESSARILY CORRESPOND TO CIRCUIT BREAKER AMPACITIES. CERTAIN FEEDERS MAY BE SIZED FOR THE DERATING FACTORS REQUIRED BY CODE AND/OR OVERSIZED FOR VOLTAGE DROP.



FEEDER LEGEND

- ① 600A - (2) 3" C, EACH W/ (4) 350kcmil, (1) #2/0GRD
- ② 1000A - (3) 3" C, EACH W/ (4) 400kcmil, (1) #3/0GRD
- ③ 100A - (2) #1, (1) #8GRD, IN 1 1/2" CONDUIT
- ④ PROVIDE WIRING PER SPD MFR'S RECOMMENDATIONS. MIN. (3) #6 (FOR 3PH, 3W) OR (4) #6 (FOR 3PH, 4W) + (1) #6 GRD IN 1-1/4" CONDUIT.

LOAD CALCULATION:
TOTAL CONNECTED LOAD: 100KW (5 CHARGING STATIONS)

1 ELECTRICAL SINGLE LINE DIAGRAM

PANEL DESIGNATION		TYPE: BRANCH POWER		LOCATION: BROAD STREET PARKING GARAGE										
MDP1		NUMBER OF POLES: **		VOLTAGE: 480/277V, 3-PHASE, 4-WIRE										
		MAIN BUS RATING: 800A		PANEL MOUNTING: FREE STANDING										
		MAIN RATING: 600 MCB		PANEL ENCLOSURE (NEMA): 12, TOP FEED, FRONT ACCESS ONLY										
				SHORT CIRCUIT: 22 kA										
CIR. No.	CIR. BKR.	DESCRIPTION	WIRE	GROUND	CONDUIT	LOAD - KVA			CONDUIT	GROUND	WIRE	DESCRIPTION	CIR. BKR.	CIR. No.
						ΦA	ΦB	ΦC						
		4.50" BLANK										4.50" BLANK		
		4.50" BLANK										4.50" BLANK		
		1.50" BLANK										4.50" BLANK		
		1.50" BLANK										4.50" BLANK		
1	600/3	TRANSFORMER T1 (PANEL EVP1)	**REFER TO ONE-LINE DIAGRAM**									4.50" BLANK		
	600/3	BRANCH MOUNTED MAIN										4.50" BLANK		
TOTAL						42.8	32.1	32.1	0.0	0.0	0.0	TOTAL		
PANEL CONNECTED LOAD						ΦA 42.8			ΦB 32.1			ΦC 32.1		
						X SOLID NEUTRAL BUS			X EQUIPMENT GROUND BUS					
						107.0 KVA CONNECTED TOTAL								

2 NEW MAIN DISTRIBUTION PANEL - MDP1

PANEL DESIGNATION		TYPE: BRANCH POWER		LOCATION: BROAD STREET PARKING GARAGE										
NEW PANEL EVP1		NUMBER OF POLES: **		VOLTAGE: 208/120V, 3-PHASE, 4-WIRE										
		MAIN BUS RATING: 1200A		PANEL MOUNTING: FREE STANDING										
		MAIN RATING: 1000 MCB		PANEL ENCLOSURE (NEMA): 12, FRONT ACCESS ONLY										
				SHORT CIRCUIT: 22 kA										
CIR. No.	CIR. BKR.	DESCRIPTION	WIRE	GROUND	CONDUIT	LOAD - KVA			CONDUIT	GROUND	WIRE	DESCRIPTION	CIR. BKR.	CIR. No.
						ΦA	ΦB	ΦC						
		4.50" BLANK										4.50" BLANK		
		4.50" BLANK										4.50" BLANK		
		4.50" BLANK				10.70						**REFER TO ONE-LINE DIAGRAM**	100/2	2
		4.50" BLANK				10.70	10.70					**REFER TO ONE-LINE DIAGRAM**	100/2	4
		4.50" BLANK				10.70		10.70				**REFER TO ONE-LINE DIAGRAM**	100/2	6
		4.50" BLANK				10.70		10.70				**REFER TO ONE-LINE DIAGRAM**	100/2	8
		4.50" BLANK				10.70		10.70				**REFER TO ONE-LINE DIAGRAM**	100/2	10
		4.50" BLANK										**REFER TO ONE-LINE DIAGRAM**	100/2	12
		4.50" BLANK										**REFER TO ONE-LINE DIAGRAM**	100/2	14
		4.50" BLANK										**REFER TO ONE-LINE DIAGRAM**	100/2	16
		4.50" BLANK										**REFER TO ONE-LINE DIAGRAM**	100/2	18
		4.50" BLANK										**REFER TO ONE-LINE DIAGRAM**	100/2	20
		4.50" BLANK										**REFER TO ONE-LINE DIAGRAM**	100/2	22
		4.50" BLANK										**REFER TO ONE-LINE DIAGRAM**	100/2	24
		4.50" BLANK										**REFER TO ONE-LINE DIAGRAM**	100/2	26
		4.50" BLANK										**REFER TO ONE-LINE DIAGRAM**	100/2	28
		4.50" BLANK										**REFER TO ONE-LINE DIAGRAM**	100/2	30
TOTAL						0.0	0.0	0.0	42.8	32.1	32.1	TOTAL		
PANEL CONNECTED LOAD						ΦA 42.8			ΦB 32.1			ΦC 32.1		
						X SOLID NEUTRAL BUS			X EQUIPMENT GROUND BUS					
						107.0 KVA CONNECTED TOTAL								

5 NEW ELECTRIC VEHICLE PANEL - EVP1

BID DOCUMENTS
30 AUGUST 2021

1 08/30/21 ADDENDUM 2
NO. DATE REVISION

SCHOOL & LOCATION
BROAD STREET GARAGE
2600 N. Broad Street
Philadelphia, PA 19132

PROJECT TITLE
ELECTRIC BUSES CHARGING UPGRADE

DRAWING SCALE
ONE-LINE DIAGRAM, PANEL SCHEDULE AND DETAILS

DRAWING SCALE
12" = 1'-0"

LOCATION NO. FILE NO.
5230 068625

DRAWN BY CHECKED BY
FJR BAS

B-043(c) OF 2020/21

DRAWING NO.
E201
SHEET 4 OF 04