

THE GIANT COMPANY 6106 NEW HOPE

6542 LOGAN SQUARE NEW HOPE, PA 18938

ITEM	TASK	YES	NO	N/A
1	CONTACT 811 UTILITY PRIOR TO EXCAVATION WORK			
2	NOTIFY EVCIA OF ANY DISCREPANCIES W/ PLANS OR POTENTIAL CONFLICTS			
3	VERIFY ALL FIELD CONDITIONS PRIOR TO START OF CONSTRUCTION IN ACCORDANCE WITH THESE PLANS.			
4	INSTALL WORK AREA PROTECTION MEASURES.			
5	FIELD LOCATE EXISTING UTILITIES AND CROSSINGS & VERIFY NO CONFLICTS W/PROPOSED INFRASTRUCTURE.			
6	FIELD VERIFY ALL STALL DIMENSIONS AND EQUIPMENT LOCATIONS.			
7	CONFIRM ALL ADA AND LOCAL REQUIREMENTS ARE MET.			
8	ESTABLISH TEMPORARY CONSTRUCTION ACCESS(ES).			
9	IMPLEMENT AND MAINTAIN EPSC CONTROL MEASURES PER LOCAL REQUIREMENTS.			
10	LOCATE VERTICAL AND HORIZONTAL UTILITIES PRIOR TO BORING.			
11	PROVIDE PROPOSED LIMITS OF ASPHALT OVERLAY SKETCH TO EVCIA & VOLTA (IF NEEDED).			
12	SEED & STABILIZE ALL DISTURBED AREAS AFTER FINAL GRADING.			

CONTRACTOR VERIFICATION CHECKLIST

CODE REQUIREMENTS:

CODE BLOCK

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE BUILDING/DWELLING, STRUCTURAL, PLUMBING, MECHANICAL, ELECTRICAL, AND FIRE/LIFE SAFETY CODES AS ADOPTED BY THE LOCAL **GOVERNING AUTHORITIES. NOTHING IN THESE** PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THE LOCAL **GOVERNING AUTHORITIES CODES.**

VOLTA PROPOSES TO INSTALL:

PROJECT DESCRIPTION

(2) ELECTRIC VEHICLE (EV) CHARGING STATION FIXTURES TO BE LOCATED IN EXISTING CURBED ISLAND AREAS THAT ARE ADJACENT TO ON-SITE PARKING SPACES AND PART OF AN EXISTING PROPERTY. AN ADDITIONAL STALL WILL BE USED TO CREATE AN ACCESSIBLE THE EV FIXTURES ARE C IS TOMARY ACCESSORY AND

INCIDENTAL TO THE FAISTING COMMERCIAL USE AND SOLELY FOR THE BENEFIT OF SUSTOMERS VISITING THE STORES. THE **EXISTING TRAFFIC CIRCULATION AT THE PROPERTY**

THE GIANT COMPANY LANDOVER, MD 20786

LEILA.TANNOUS@GIANTFOOD.COM

APPLICANT:

EV CHARGING INSTALLERS OF AMERICA LLC. EV CHARGING INSTALLERS OF AMERICA LLC. 1214 ROUTE 23, BLDG. B WANTAGE, NJ 07461 CONTACT: CHRIS LEHR PHONE #: 973-897-1697 chris.lehr@evcharginginstallers.com

VOLTA REPRESENTATIVE

VOLTA, Inc. 155 DE HARO STREET SAN FRANCISCO CA 94103 CONTACT: IAN EVANS

PHONE #: 860-986-1948 ian.evans@voltacharging.com SITE PARTNER:

8301 PROFESSIONAL PLACE CONTACT: LEILA TANNOUS PHONE #: 301-341-8956

PROJECT TEAM

	SHEET	DESCRIPTION
	G-1.0	COVER SHEET
ı	G-2.0	NOTES AND LEGENDS
ı	G-3.0	STATION OVERVIEW
ı	C-1.1	ENLARGED SITE PLAN
ı	C-3.1	FOUNDATION LAYOUT 1
ı	C-3.2	FOUNDATION LAYOUT 2
ı	C-3.3	GENERAL DETAILS
ı	C-4.0	STRIPING DETAILS
ı	E-1.0	ELECTRICAL NOTES AND RISER
ı		

PROGRAM MANAGER:

CONTACT: BASHAR SAWAKED

PROFESSIONAL ENGINEERING:

CONTACT: DURAK EVRIM ERCAN, P.E.

evrim@amperengineering.com

bashar.sawaked@evcharginginstallers.com

1214 ROUTE 23, BLDG. B

PHONE #: 973-896-2988

DURAK EVRIM ERCAN, P.E.

PHONE #: 201-920-2899

LIVINGSTON, NJ 07039

WANTAGE, NJ 07461

EMAIL:

P.O. BOX 35

SHEET INDEX



CALL before you dig.

DIG ALERT

CALL AT LEAST TWO WORKING DAYS BEFORE YOU DIG

CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING LOCATIONS, CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME

DO NOT SCALE DRAWINGS

155 DE HARO STREET SAN FRANCISCO, CA 94103



EV CHARGING INSTALLERS OF AMERICA, LLC

> 1214 Rte 23, Bld B Wantage, NJ 07461 Phone: 855-373-9566



REV	DATE	DESCRIPTION	DRN BY	CHK BY
Α	05/21/22	CD50	MM	
В	06/07/22	CREATE ACCESSIBLE STALL	MM	
С	08/03/22	CD100	MM	

ISSUE DATE 08/03/22

ISSUED FOR CONSTRUCTION



UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ARCHITECT AND OR ENGINEER, TO ALTER THIS DOCUMENT

EV CHARGING STATIONS

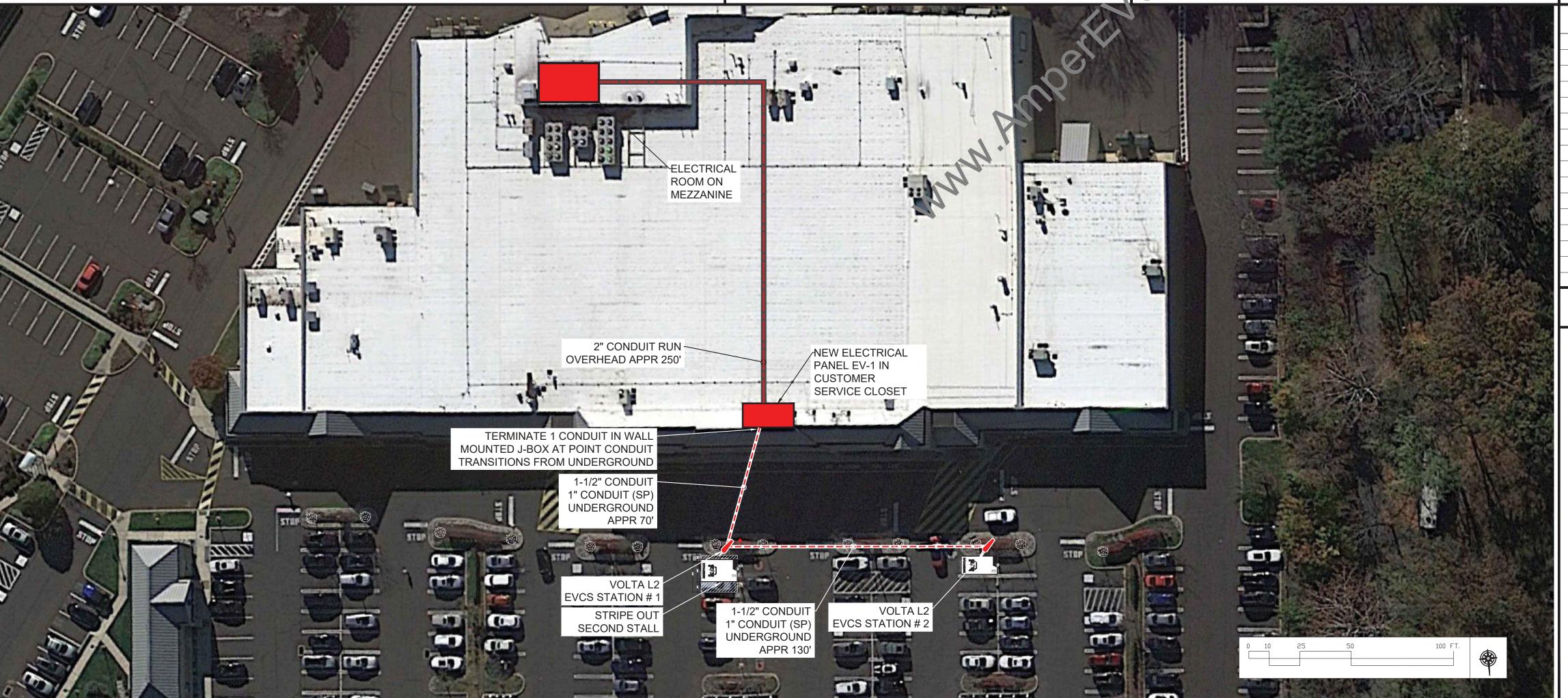
THE GIANT COMPANY NEW HOPE, PA

EVCIA JOB # 1765

SHEET TITLE

COVER SHEET

G-1.0



OVERALL SITE PLAN

Volta Gen4 L2 Station

Volta provides turn-key Electric Vehicle (EV) charging services for premium retail and entertainment destinations. We install and maintain the charging amenity at no cost to site partners as well as EV drivers, driving increased property value and attracting more customers who stay longer.

VOLTA STATION BENEFITS

- Installation, equipment and maintenance is paid by Volta
- Charges all electric vehicles
- Free electricity supported through third party content on displays
- Volta stations are occupied 80% of the retail day
- Volta has provided 88M free sponsored electric miles, delivered 25 gigawatt hours and eliminated over 39M pounds of CO2 emissions

CHARGING UNIT INFORMATION (Single Charging Units)

- Size: H 85.0" x W 36.5" x D 15.5"
- Display Size: H 48" x W 27
- Power Type: 208/240VAC, 48A, 10kW max; UL 2202
- Plug: SAE J1772 compliant connector

POWER REQUIREMENTS

- Charging unit: 60A/2P, 208/240 breaker
- Display/connectivity: 20A/1P, 120V breaker

INSTALLATION REQUIREMENTS

- Wire Diameter: #6 AWG minimum. Larger for longer conduit runs
- Conduit Diameter: 1.5" minimum per station. Larger conduit required for runs over 250'





55" Media Display

Charges up to 30miles per hour

Universal J1772 connections

Cable Management

Fully Networked





OF AMERICA, LLC

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EV CHARGING STATIONS

THE GIANT COMPANY NEW HOPE, PA

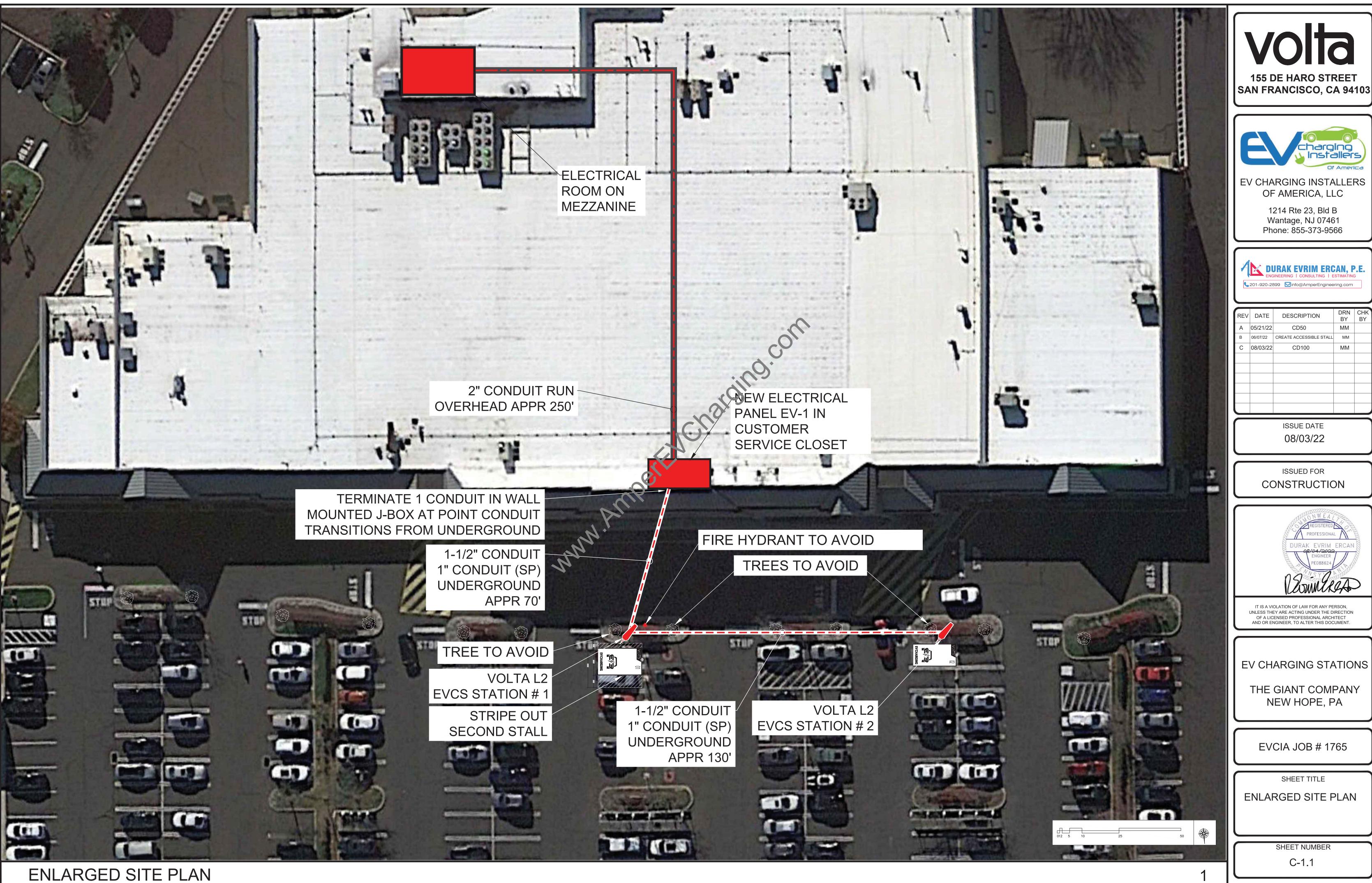
EVCIA JOB # 1765

SHEET TITLE

STATION OVERVIEW

G-3.0

STATION OVERVIEW



155 DE HARO STREET



EV CHARGING INSTALLERS OF AMERICA, LLC

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	1700	REV	DATE	DESCRIPTION	DRN BY	CHI BY
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EV CHARGING STATIONS

THE GIANT COMPANY NEW HOPE, PA

EVCIA JOB # 1765

SHEET TITLE

ENLARGED SITE PLAN

SHEET NUMBER

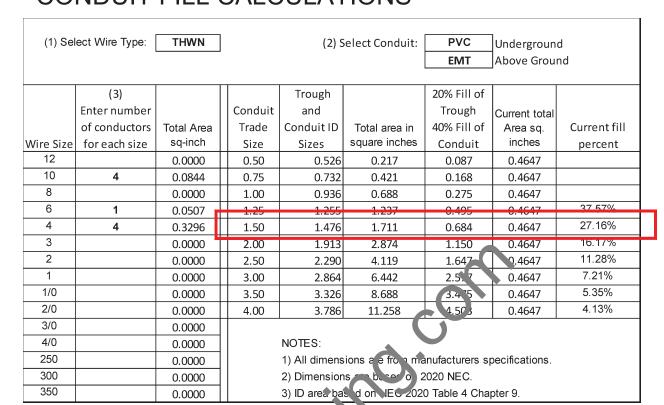
C-1.1

											PA	NEL E	V-1											
			_																	LOC	ATION:	CUST. SVC. CLOSET		
		VOLTAGE:												В	JS (A):	100								
		3 PHASE, 4	4 WIRE																	MA:	IN (A):	MLO		
No.	WIRE	CIRCUIT DESCRIPTION			LOAD					AKER		PHASE			EAKER			LOAD	·			- CIRCUIT DESCRIPTION	WIRE	No.
110.	SIZE			RCPT	MTR	A/C	KITCH	MISC	TRIP	POLE	Α	В	С	POLE	TRIP	MISC	KITCH	A/C	MTR	RCPT	CONT	CINCOIT DESCRIPTION	SIZE	
1		VOLTA CHARGING STATION #1	4.99						60	2	4.99													2
3		X	4.99						Х	Х	$\geq \leq$	4.99												4
5		VOLTA CHARGING DISPLAY #1	0.60						20	1	$\geq \leq$		0.60											6
7		VOLTA CHARGING DISPLAY #2	0.60						20	1	0.60													8
9		VOLTA CHARGING STATION #2	4.99						60	2	$\geq <$	4.99												10
11		X	4.99						Х	Х	\sim		4.99											12
13											0.00													14
15												0.00												16
17													0.00											18
19											0.00													20
			LOADS	W/ NEC	220 D	EMAND	FACTOR	S (KVA	TO:	TAL	5.59	9.98	5.59			0.00	0.00	0.00	0.00	0.00	21.16	CONNECTED KVA 21.16		
		v12 - 07/19/2022	CONT	RCPT	MTR	A/C	KITCH	MISC	10	IAL	5.59	9.96	5.59											
		A PHASE	6.99	0.00	0.00	0.00	0.00	0.00	6.	99												PANEL NOTES		
		B PHASE	12.48	0.00	0.00	0.00	0.00	0.00	12	.48	CONTINUO	US:125% L	DAC		1)IF PA	NEL EXIS	STING A	ND ACT	UAL CONI	IECTED	D KVA ARE NOT KNOWN, ASSUMPTIONS ARE MADE AS:			
		C PHASE	6.99	0.00	0.00	0.00	0.00	0.00	6.	99	RECEPTACLES:	100% 1ST 10 KV	V + 50% REMAI	NING	CONTI	NOUS & I	NON-CO	OUNITA	US CONNI	CTED	LOADS	ASSUMED TO BE %80 OF THE OCPD R	ATING.	
	DEMAND PER LOAD TYPE (KVA) 26.45 0.00 0.00 0.00 0.00 0.00							26	.45	MOTORS: 125%	LARGEST MOTO	R + 100% REM/	AINING	2)DESIGN IS BASED ON NEC TABLE 310.15(B)(16) COPPER THHN CONDUCTORS. EXISTING CONDUCTORS.										
	CONNEDTED LOAD LARGEST PHASE (KVA)								12	.48	A/C or HEA	AT:100% LO	AD		AND WIRING MAY NEED TO BE INSPECTED AND VERIFIED BY ELECTRICAL CONTRACTOR.									
	CONNECTED LOAD LARGEST PHASE (AMP								10	104 KITCHEN:65% LOAD						3)EVCS ARE CONSIDERED CONTINOUS LOADS AND ACTUAL NAME PLATE VALUES ARE USED.								
TOTAL DEMAND LOAD FOR PANEL (KVA)								(KVA)	26	5.45 MISC:100% LOAD														
			TOT	AL DEM	AND LC	AD FOR	R PANEL	(AMP)	7	'3														
	MINIMUM FEEDER AMPACITY SELECTION (AMP)									04														

VOLTAGE DROP CALCULATIONS

Station	Length	Voltage	Current	Cond. Size	Voltage Drop %	Voltage Drop Volts
1	70	208	48	4	0.80%	1.66
1	70	120	5	10	0.61%	0.73
2	200	208	48	4	2.65%	5.51
2	200	120	5	10	1.75%	2.10
FeederFrom P2	250	208	100	2/0	2.11%	4.39

CONDUIT FILL CALCULATIONS



VOLTA ______ EVCS 2 2" CONDUIT (4) # 2/0 AWG CU (1) # 6 AWG CU GND PANEL EV-1 PANEL P2 250A 3Ph/4W 100A/3Ph/4W 208/120V 208/120V MLO 1-1/2" CONDUIT 4 - # 4 AWG (E) 100A/3P IS UNUSED AND NOT WIRED 4 - # 10 AWG 1 - # 6 Gnd **NEW PANEL IN FRONT CLOSET** MAIN ELEC. ROOM **TERMINATE SPARE 1"** AN EXISTING DEMAND LOAD ANALYSIS WAS PREFORMED FROM WALL MOUNTED J-BOX. 5/31/22 TO 7/5/22. CAP WITH PULL TAPE INSTALLED MAXIMUM DEMAND LOAD AT 125 PERCENT PLUS THE NEW DEMAND LOAD IS (46.95A + 73A) 119.75A IS LESS THAN EXISTING PANEL P2 (SEE 5/C-3.3) RATING OF 250A. ALSO FEEDER OCPD IS ACCORDANCE WITH NEC 240.4 AND 230.90. THEREFORE, SWITCHGEAR HAS SUFFICIENT AVAILABLE POWER FOR -1-1/2" CONDUIT -1-1/2" CONDUIT THE SCOPE OF WORK DESCRIBED ON SHEET G-1.0. 1" CONDUIT (SP) 1" CONDUIT (SP) 4 - # 4 AWG 2 - # 4 AWG 4 - # 10 AWG 2 - # 10 AWG 1 - # 6 Gnd 1 - # 6 Gnd

ELECTRICAL NOTES:

- 1. ALL ELECTRICAL WORK AND RELATED ACTIVITIES PERFORMED ON-SITE SHALL BE DONE IN ACCORDANCE WITH NATIONAL ELECTRIC CODE (NEC) STANDARDS BEING ENFORCED BY ALL APPLICABLE JURISDICTIONAL REQUIREMENTS AT THE TIME OF CONSTRUCTION.
- 2. UTILITY EQUIPMENT INSTALLATIONS AND PREP WORK SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY ENGINEER AT TIME OF PRECONSTRUCTION MEETING TO ENSURE ACCURACY OF INSTALLATIONS.
- 3. CONDUIT PATHS ARE REPRESENTATIVE ONLY. EXACT CONDUIT PLACEMENT TO BE DETERMINED ON SITE BASED ON FIELD CONDITIONS
- 4. A NATIONALLY RECOGNIZED TESTING LABORATORY SHALL LIST ALL EQUIPMENT IN COMPLIANCE WITH NEC ARTICLE 110.3
- 5. ALL EXTERIOR EQUIPMENT SHALL BE RAIN TIGHT AND APPROVED FOR USE IN WET CONDITIONS.
- 6. ALL CONDUCTORS TO BE COPPER
- 7. ALL CONDUCTORS WITHIN A COMMON CONDUIT SHALL BE RATED FOR THE HIGHEST VOLTAGE WITH THE CONDUIT.
- 8. ALL CONDUCTORS AND CABLES SHALL BE PROVIDED WITH STRAIN RELIEF UPON ENTRY INTO ENCLOSURES
- 9. EACH UNGROUNDED CONDUCTOR SHALL BE IDENTIFIED BY PHASE AND SYSTEM PER NEC 210.5
- 10. ALL UNDERGROUND CONDUIT TO BE HDPE SDR11 (OR BETTER),
- UL RATED, MINIMUM 24" DEEP.
- MANUFACTURER'S DIRECTIONS AND SPECIFICATIONS.

 12. CHARGING UNITS ARE EQUIPPED WITH AN INTEGRATED

11. WIRING FOR VOLTA CHARGING STATIONS TO BE INSTALLED PER

CONTACTOR TO PREVENT BACK FEEDING OF POWER TO THE SOURCE.

13. SHORT CKTS RATING OF NEW PANELS AND EVCS EQMT SHALL

MATCH THE EXISTING POWER SYSTEM RATING AND TO BE FIELD

REPORT ANY INSUFFICIENCIES TO ENGINEER OF RECORD PRIOR

- VERIFIED BY THE CONTRACTOR BEFORE STARTING INSTALLATION

 14. CONTRACTOR IS RESPONSIBLE TO VERIFY DESIGN,
 ENGINEERING ASSUMPTIONS AND EXISTING FIELD CONDITIONS.
- TO ANY WORK BEING PERFORMED.

 15. WHERE A STEP-DOWN TRANSFORMER IS USED, IF THE DISTANCE FROM THE TRANSFORMER SECONDARY TERMINALS TO THE PANEL IS MORE THAN 25 FEET, AN ADDITIONAL OCPD MUST BE INSTALLED WITHIN 25 FEET OF THE TRANSFORMER SECONDARY
- 16. THE CONTRACTOR SHALL INSTALL 75°C RATED TERMINAL CIRCUIT BREAKERS IN PANEL.
- 17. THE CONTRACTOR SHALL INSTALL ALL EV EQUIPMENT PER NEC ART. 625 AND 110.25 TO PROVIDE EASY ACCESS TO OCPD
- 18. ALL METALLIC COMPONENTS SHALL BE GROUNDED VIA ELECTRICAL GROUNDING CONDUCTORS.
- 19. THE GROUND SYSTEM SHALL BE INSTALLED AS PER NEC ART. 250.

ABBREVIATIONS:

1KV 1000V RATED CONDUCTOR
A AMPERE
AC ALTERNATING CURRENT

TERMINALS. NEC 240.21(C)(3).

ART ARTICLE
AUX AUXILIARY

BLDG BUILDING STRUCTURE CONC CONCRETE COND CONDUCTOR

CU COPPER
DC DIRECT CURRENT
DCFC DIRECT CURRENT FAST CHARGER

DISC DISCONNECT
EGC EQUIPMENT GROUNDING CONDUCTOR

(E) EXISTING
EMT ELECTRIC METALLIC TUBING
EV ELECTRIC VEHICLE

EVCS ELECTRIC VEHICLE CHARGING SYSTEM
GALV GALVANIZED
GND GROUND

HDG HOT DIPPED GALVANIZED
KVA KILOVOLT AMPERE

MBJ MAIN BONDING JUMPER
MCB MAIN CIRCUIT BREAKER
MLO MAIN LUGS ONLY
MAX MAXIMUM

MIN MINIMUM
N NEUTRAL
NEC NATIONAL ELECTRICAL CODE

NF NON-FUSED
NTS NOT TO SCALE
(N) NEW
OC ON CENTER

P POLE
PCS POWER CONTROL SYSTEM

PVC POLYVINYL CHLORIDE
RMC RIGID METALLIC CONDUIT
SCH SCHEDULE
SP SPARE
THE TRUE TERRORITE DATE

TP TWISTED PAIR
TYP TYPICAL
V VOLT

W WATT XFMR TRANSFORMER VOITA

155 DE HARO STREET
SAN FRANCISCO, CA 94103



EV CHARGING INSTALLERS OF AMERICA, LLC

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08/03/22

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EV CHARGING STATIONS

THE GIANT COMPANY NEW HOPE, PA

EVCIA JOB # 1765

SHEET TITLE

ELECTRICAL NOTES
AND RISER

SHEET NUMBER

E-1.3

ELECTRICAL NOTES & RISER

1

9/4/2022 12:47:40 1