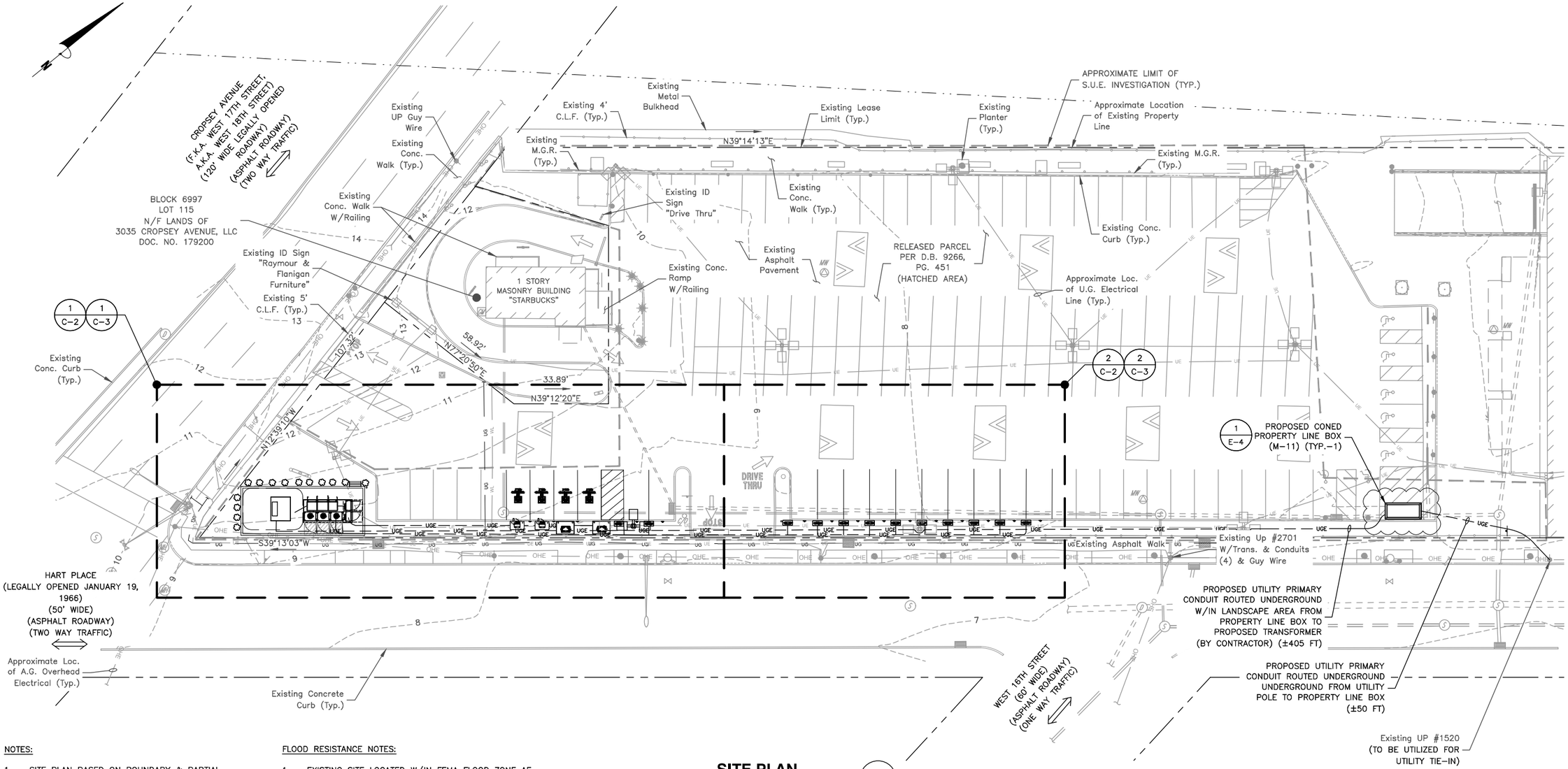


SITE PLAN

1

SCALE: 1"=40' FOR 11"x17"
1"=20' FOR 22"x34"

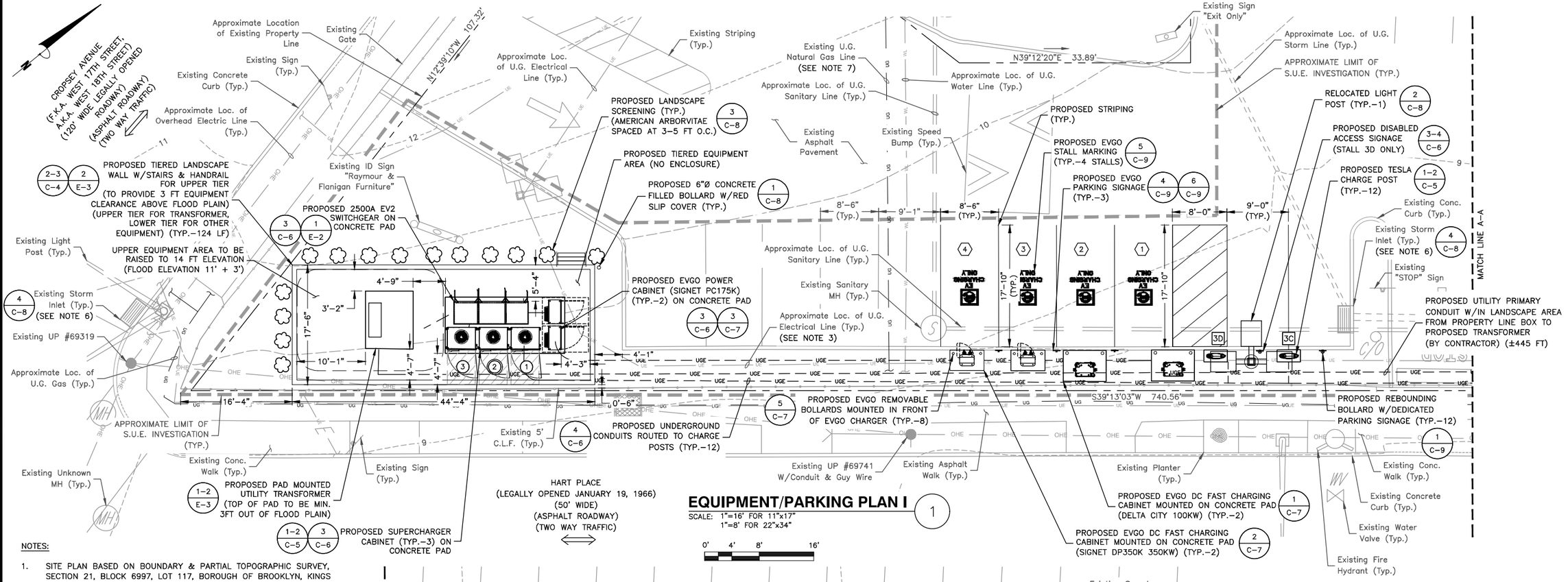
0' 20' 40'

NOTES:

1. SITE PLAN BASED ON BOUNDARY & PARTIAL TOPOGRAPHIC SURVEY, SECTION 21, BLOCK 6997, LOT 117, BOROUGH OF BROOKLYN, KINGS COUNTY CITY & STATE OF NEW YORK BY CONTROL POINT ASSOCIATES, INC. DATED 05/20/2021.
2. UTILITY CONNECTION TO BE MADE UNDER CONED STANDARDS, CONFIRM FINAL DESIGN PRIOR TO CONSTRUCTION, CONED ORDER # 535272.
3. EXISTING UNDERGROUND UTILITIES LOCATED WITHIN AREA OF PROPOSED TRENCH & EQUIPMENT SITE AREA. HAND DIG AND RELOCATE AS REQUIRED.
4. EXISTING CUSTOMER OWNED ELECTRICAL CONDUIT TO BE RELOCATED AS NEEDED DURING CONSTRUCTION.
5. ELECTRICAL PRIMARY TIE-IN LOCATION AND SCOPE TO BE CONFIRMED W/UTILITY PRIOR TO CONSTRUCTION.
6. EXISTING STORM DRAIN INLETS TO BE COVERED WITH SILT BAG DURING CONSTRUCTION.
7. CONTRACTOR TO LOCATE NATURAL GAS PIPING PRIOR TO CONSTRUCTION. ALL PROPOSED ELECTRICAL CONDUITS & ELECTRICAL EQUIPMENT TO BE KEPT A MINIMUM OF 24" FROM GAS LINE.
8. 406.7.11 CODE COMPLIANCE: AN EXCEPTION IS REQUESTED FROM CODE 406.7.11.1. EXCEPTION 1. – THE PROVISIONS OF THIS SECTION SHALL NOT APPLY TO OPEN PARKING LOTS FOR BUILDINGS OF OCCUPANCY GROUP M (MERCANTILE)

FLOOD RESISTANCE NOTES:

1. EXISTING SITE LOCATED W/IN FEMA FLOOD ZONE AE, BASE FLOOD ELEVATIONS DETERMINED TO BE 11 FT. REFERENCED FROM FEMA FLOOD MAP #3604970353G, FIRM PANEL 0353G. DESIGN FLOOD ELEVATION (DFE) = BFE + 2 FT = 11 FT + 2 FT = 13 FT.
2. ALL PROPOSED ELECTRICAL EQUIPMENT TO BE INSTALLED ABOVE DFE & BFE AT ELEVATION OF 13 FT. PROPOSED UTILITY EQUIPMENT TO BE INSTALLED AT ELEVATION OF 14 FT.
3. WATER SENSOR TO BE INSTALLED AT STALL 1A & TO BE WIRED TO SHUNT TRIP EXISTING ELECTRICAL SERVICE DURING FLOOD.
4. PROPOSED EV CHARGERS TO BE INSTALLED AT GRADE (BELOW BFE) WITH WATER SENSOR. WHEN WATER SENSOR SENSES FLOOD WATERS ALL EV CHARGERS AND TESLA EQUIPMENT TO BE SHUT DOWN AUTOMATICALLY WITH USE OF SHUNT TRIP DEVICE.
5. EV CHARGE POST MATERIAL MADE OF PLASTIC AND WILL NOT BE DAMAGED DURING FLOODING. INTERNAL COMPONENTS TO BE TESTED BY TESLA SERVICE TEAM AFTER FLOOD EVENT & BEFORE BEING PUT BACK INTO SERVICE.
6. PROPOSED INSTALLATION SHALL BE IN COMPLIANCE W/ BC APPENDIX G.



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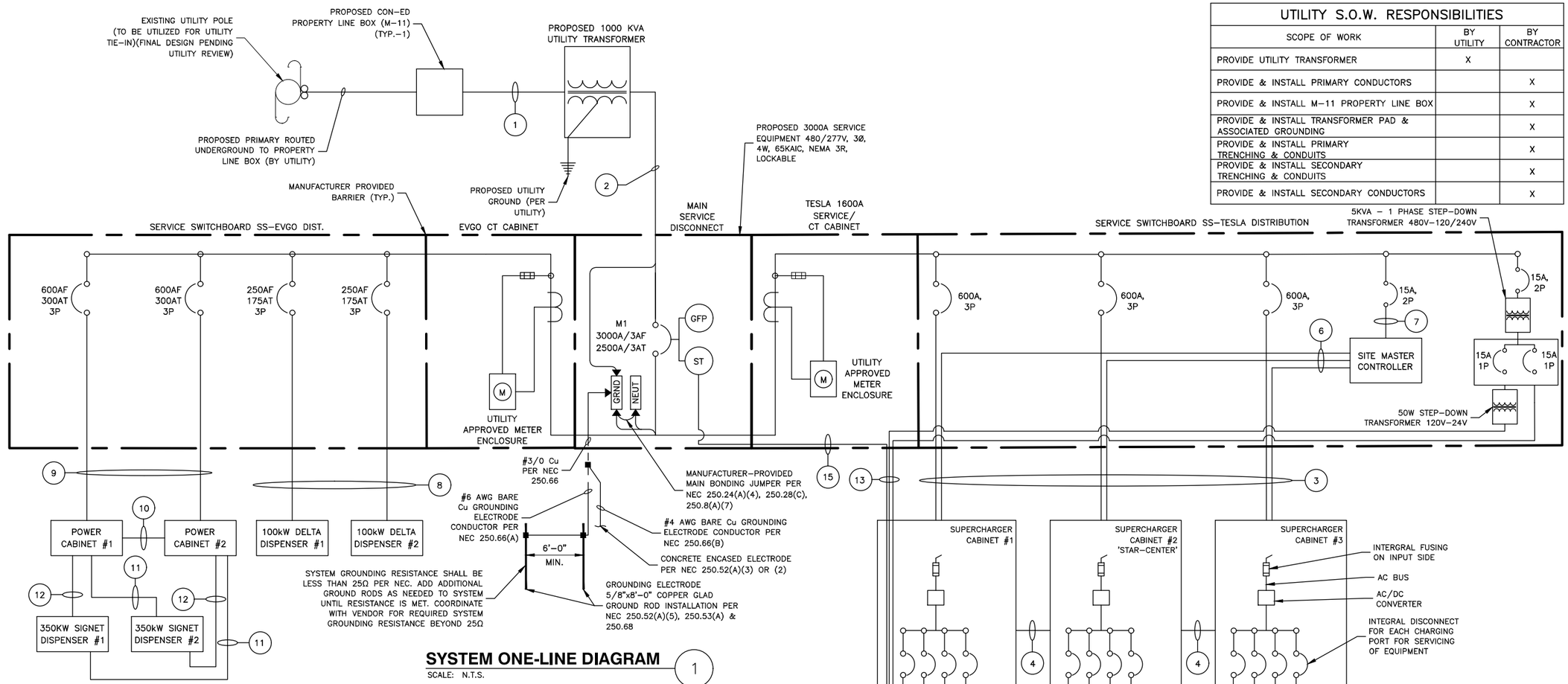
5. EV CHARGE POST MATERIAL MADE OF PLASTIC AND WILL NOT BE DAMAGED DURING FLOODING. INTERNAL COMPONENTS TO BE TESTED BY TESLA SERVICE TEAM AFTER FLOOD EVENT & BEFORE BEING PUT BACK INTO SERVICE.
6. PROPOSED INSTALLATION SHALL BE IN COMPLIANCE W/ BC APPENDIX G.

LEGEND	
(1)	SUPERCHARGER #
(2)	'STAR–CENTER' MASTER CABINET #
1A	TESLA CHARGE POST
⟨1⟩	EVGO CHARGE POST

CHARGING POST CIRCUIT SCHEDULE

SUPERCHARGER	CHARGE POST	DEDICATED/ENABLED
(1)	1A	DEDICATED
	1B	DEDICATED
	1C	DEDICATED
	1D	DEDICATED
'STAR–CENTER' (2)	2A	DEDICATED
	2B	DEDICATED
	2C	DEDICATED
	2D	DEDICATED
(3)	3A	DEDICATED
	3B	DEDICATED
	3C	DEDICATED
	3D	DEDICATED
	⟨1⟩	DEDICATED
	⟨2⟩	DEDICATED
	⟨3⟩	DEDICATED
	⟨4⟩	DEDICATED



SYSTEM ONE-LINE DIAGRAM

SCALE: N.T.S.

1

UTILITY S.O.W. RESPONSIBILITIES

SCOPE OF WORK	BY UTILITY	BY CONTRACTOR
PROVIDE UTILITY TRANSFORMER	X	
PROVIDE & INSTALL PRIMARY CONDUCTORS		X
PROVIDE & INSTALL M-11 PROPERTY LINE BOX		X
PROVIDE & INSTALL TRANSFORMER PAD & ASSOCIATED GROUNDING		X
PROVIDE & INSTALL PRIMARY TRENCHING & CONDUITS		X
PROVIDE & INSTALL SECONDARY TRENCHING & CONDUITS		X
PROVIDE & INSTALL SECONDARY CONDUCTORS		X

SERVICE ELECTRICAL CIRCUIT SCHEDULE

NO:	FROM	TO	CONFIGURATION
1	CONED PROPERTY LINE BOX (M-11)	PROPOSED UTILITY TRANSFORMER: INCOMING	(3) #2/0 CU 15kV, MV-105 W/100% RATED INSULATION ROUTED IN 4" PVC CONDUIT W/(1) 4" SPARE
2	UTILITY TRANSFORMER	PROPOSED SERVICE EQUIPMENT: INCOMING	[4 SETS] (3) 500MCM CU (XHHW-2) & (1) 500MCM CU (XHHW-2) NEUT IN 4" CONDUIT & (1) 4" SPARE (AS REQUIRED BY UTILITY)
3	PROPOSED SERVICE EQUIPMENT: I-LINE PANEL (600A, 80% RATED BREAKER)	PROPOSED TESLA SUPERCHARGER (TYP.-3)	[2 SETS] (3) 500MCM AL (XHHW-2) (1) 500MCM AL (XHHW-2) NEUT (1) #1 AWG CU EGC OR 2/0 AL EGC* IN 4" PVC/HDPE** CONDUIT
4	DC BUS BETWEEN PROPOSED SUPERCHARGERS	DC BUS BETWEEN PROPOSED SUPERCHARGERS	[2 SETS] (2) 600MCM AL (XHHW-2) (1) 1/0 AWG CU EGC (1) 3/0 AWG AL DC MID 1000V RATED IN 3" PVC/HDPE** CONDUIT
5	PROPOSED TESLA SUPERCHARGER	PROPOSED TESLA POST (TYP.-12)	[1 SET PER CHARGE POST:] (4) 350 AL (XHHW-2) (1000V RATED) (1) #1 AWG CU EGC OR 2/0 AL EGC* & SHIELDED 600V RATED COMM CABLE (PER TESLA) IN 4" PVC/HDPE** CONDUIT
6	INTEGRATED SITE CONTROLLER	SUPERCHARGER (TYP.-3)	SHIELDED 600V RATED CAT6+ COMM CABLE ROUTED W/PROPOSED AC FEEDERS IN 4" PVC/HDPE** CONDUIT (SEE FEEDER SCHEDULE #3)
7	PROPOSED SERVICE EQUIPMENT: I-LINE PANEL (15A)	INTEGRATED SITE CONTROLLER	FACTORY INSTALLED WIRING (BY MANUFACTURER)
8	PROPOSED SERVICE EQUIPMENT: I-LINE PANEL (250AF/175AT BREAKER)	100 KW DELTA PROPOSED EVGO DISPENSER	(4) 3/0 KCMIL CU (THWN-2) (1) #6 AWG CU (THWN-2) GND IN 3" PVC CONDUIT & (1) 3" SPARE
9	PROPOSED SERVICE EQUIPMENT: I-LINE PANEL (600AF/300AT BREAKER)	175 KW SIGNET POWER UNIT (TYP.-2)	(4) 350 KCMIL CU (THWN-2) (1) #1 AWG CU (THWN-2) GND IN 3" PVC CONDUIT & (1) 3" SPARE
10	175 KW SIGNET POWER UNIT	175 KW SIGNET POWER UNIT	18AWG TWISTED PAIR CAN CABLE IN 1" PVC
11	175 KW SIGNET POWER UNIT	350 KW SIGNET DISPENSER	(2) 500 KCMIL CU (XHHW-2) (1) #2 AWG CU (XHHW-2) GND IN 3" PVC CONDUIT
12	175 KW SIGNET POWER UNIT	350 KW SIGNET DISPENSER	(2) 500 KCMIL CU (XHHW-2) (1) #2 AWG CU (XHHW-2) GND IN 3" PVC CONDUIT DISPENSER CONTROL OPTIC CABLES (ST/ST 62.5/125) CABLE IN (1) 1-1/2" PVC CONDUIT DISPENSER POWER (2) #10 AWG + (1) #10 G IN (1) 1" PVC CONDUIT
13	PROPOSED SERVICE EQUIPMENT: I-LINE PANEL (15A)	SUPERCHARGER CABINET #1	[2 SETS]: (2) #10 AWG + (1) #10 AWG G (1000V RATED) IN 1" PVC CONDUIT
14	SUPERCHARGER CABINET #1	WATER SENSOR AT CHARGE POST 1A	[2 SETS]: (2) #10 AWG + (1) #10 AWG G (1000V RATED) IN 4" PVC CONDUIT ROUTED TO CHARGE POST (SEE #4)
15	WATER SENSOR AT CHARGE POST 1A	SHUNT TRIP (MAIN SERVICE EQUIPMENT)	(2) #12 AWG + (1) #12 AWG G (1000V RATED) IN 4" PVC CONDUIT (TO SC 1) & 1" PVC CONDUIT (TO SHUNT)

*MODIFIED PER NEC 250.54(A)(2)
**PER UL LISTED HDPE CONDUIT PERMITTED. CONTRACTOR TO CONFIRM USE W/TESLA CM

BREAKER TRIP SETTINGS

3000A MAIN BREAKER:
(SQUARE-D CAT NO. WL3GGB64A3SXXXXXXA)
- LTPU (Ir) = 1
- LT BAND (tr) = 8
- STPU (Isd) = 2.5
- ST BAND (tsd) = 0.1 OUT
- INST (Ii) = 10
- Ig = D
- tg = .3 OUT

600A SUPERCHARGER BREAKER:
(SQUARE-D CAT. #MJP36600YP)
- TRIP = FIXED (600A)
- INST. = 5

UTILITY FAULT CURRENT

TRANSFORMER: 1000KVA

SECONDARY VOLTAGE: 277/480V

SECONDARY FAULT CURRENT: 31,000A

* FAULT CURRENT INFORMATION BY CON-ED PROVIDED 07/27/21.

NOTES:

1. CONDUCTOR LENGTHS ARE ESTIMATES ONLY. FINAL CONDUCTOR ROUTING PATH AND LENGTHS SHALL BE DETERMINED BY THE CONTRACTOR IN THE FILED BASED ON PHYSICAL MEASUREMENTS. CONTRACTOR TO ORDER CONDUCTORS BASED ON FIELD MEASUREMENTS (MUST BE APPROVED BY TESLA INSTALLATION MANAGER).
2. ALL ELECTRICAL WORK AND RELATED ACTIVITIES PREFORMED ON-SITE SHALL BE DONE IN ACCORDANCE WITH NATIONAL ELECTRIC CODE (NEC) AND UTILITY COMPANY STANDARDS.
3. ALL CONDUCTORS TO RECEIVE ANTI-OXIDATIVE COATING DURING INSTALLATION.
4. TESLA DC RUN LENGTH MAXIMUM IS 320' INCLUDING BURIED DEPTH. ANY DC RUN LENGTHS OVER THE MAXIMUM SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF TESLA.
5. UTILITY EQUIPMENT INSTALLATIONS AND PREP WORK SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY ENGINEER AT TIME OF PRE CONSTRUCTION MEETING TO ENSURE ACCURACY OF INSTALLATION.
6. UTILITY CONDUITS, CONNECTORS, TRANSFORMER PAD & TRANSFORMER FOUNDATION TO BE INSTALLED PER UTILITY SPECIFICATION. CONFIRM LATEST SPECIFICATIONS PRIOR TO CONSTRUCTION.
7. EXISTING UNDERGROUND UTILITIES LOCATED WITHIN AREA OF PROPOSED TRENCH & EQUIPMENT SITE AREA. HAND DIG AND RELOCATE AS REQUIRED.
8. CONTRACTOR RESPONSIBLE FOR ALL TRAFFIC SAFETY MEASURES THROUGHOUT DURATION OF CONSTRUCTION. COORDINATE ANY ACCESS ROAD CLOSURES W/OWNER.
9. CONTRACTOR TO PROVIDE EMERGENCY SIGNAGE TO BE LOCATED ON PROPOSED SWITCHGEAR FOR DESIGNATION OF UTILITY POWER SHUT-OFF AND EMERGENCY CONTACT INFORMATION.

PRIMARY SERVICE LENGTHS

	LINEAR LENGTH	ESTIMATED LENGTH*
PROPERTY LINE BOX TO TRANSFORMER	450'	475'
TOTAL LENGTH OF AC AL WIRE**:		1425'

NOTES:

* AC CONDUCTORS 25 FT IS ADDED TO THE HORIZONTAL RUN LENGTH TO ACCOUNT FOR BURIED DEPTH & TRANSITIONS. AN ADDITIONAL 60' IS ADDED FOR THE REQUIRED 30' AT EITHER END FOR UTILITY CONNECTIONS.

** ESTIMATED LENGTH OF Al WIRE = SUM OF ESTIMATED LENGTH X # WIRES PER CONDUIT

SECONDARY SERVICE LENGTHS

	LINEAR LENGTH	ESTIMATED LENGTH*
TRANSFORMER TO SWITCHGEAR	15'	40'
TOTAL LENGTH OF AC AL WIRE**:		160'
NUMBER OF WIRE FILLED CONDUIT:		4
TOTAL LENGTH OF AL WIRE***:		640'

NOTES:

* AC CONDUCTORS 25 FT IS ADDED TO THE HORIZONTAL RUN LENGTH TO ACCOUNT FOR BURIED DEPTH & TRANSITIONS. AN ADDITIONAL 60' IS ADDED FOR THE REQUIRED 30' AT EITHER END FOR UTILITY CONNECTIONS.

** ESTIMATED LENGTH OF Al WIRE = SUM OF ESTIMATED LENGTH X # WIRES PER CONDUIT

*** LENGTH OF AL WIRE PER DISCONNECT =ESTIMATED TOTAL LENGTH OF AL WIRE X # WIRE FILLED CONDUIT

AC SUPERCHARGER LENGTHS

SUPERCHARGER	LINEAR LENGTH SWITCHGEAR TO SUPERCHARGER	ESTIMATED LENGTH*
1	16'	41'
LENGTH OF AC AL WIRE PER CONDUIT**:		164'
TOTAL NUMBER OF CONDUITS:		2
LENGTH OF AC AL WIRE ***:		328'
2	11'	36'
LENGTH OF AC AL WIRE PER CONDUIT**:		144'
TOTAL NUMBER OF CONDUITS:		2
LENGTH OF AC AL WIRE ***:		288'
3	6'	31'
LENGTH OF AC AL WIRE PER CONDUIT**:		124'
TOTAL NUMBER OF CONDUITS:		2
LENGTH OF AC AL WIRE ***:		248'
TOTAL LENGTH OF AC AL WIRE ***:		864'
TOTAL LENGTH OF EGC****:		216'

NOTES:

* AC CONDUCTORS: 25 FT IS ADDED TO THE HORIZONTAL RUN LENGTH TO ACCOUNT FOR BURIED DEPTH & TRANSITIONS.

** ESTIMATED LENGTH OF Al WIRE = SUM OF ESTIMATED LENGTH X 4 WIRES PER SUPERCHARGER

*** LENGTH = LENGTH OF AC AL WIRE PER CONDUIT X # OF CONDUITS

**** TOTAL LENGTH = SUM OF AC LENGTHS

***** TOTAL LENGTH OF EGC = LENGTH X # SETS

TESLA DC CHARGING POST LENGTHS

SUPERCHARGER	CHARGE POST	LINEAR LENGTH	ESTIMATED DC WIRE LENGTH*
1	1A	254'	276'
	1B	245'	267'
	1C	236'	258'
	1D	227'	249'
2	2A	223'	245'
	2B	213'	235'
	2C	203'	225'
	2D	194'	216'
3	3A	189'	211'
	3B	179'	201'
	3C	129'	151'
	3D	120'	142'
CONDUIT LENGTH:			2676'
TOTAL CONDUCTOR LENGTH**:			10704'
TOTAL LENGTH OF EGC & COMM CABLE**:			2676'

NOTES:

1. ANY DC RUN OVER 340' SHALL BE BROUGHT TO THE ATTENTION OF TESLA CM.

* 22 FT IS ADDED TO THE HORIZONTAL RUN LENGTH TO ACCOUNT FOR BURIED DEPTH & TRANSITIONS.

** ESTIMATED LENGTH OF DC Cu WIRE = SUM OF ESTIMATED LENGTH X 4 WIRES PER SUPERCHARGER

EVGO SERVICE LENGTHS

	LINEAR LENGTH	ESTIMATED LENGTH*
SS-EVGO TO POWER CABINET #1	10'	35'
TOTAL LENGTH OF AC CU WIRE**:		140'
SS-EVGO TO POWER CABINET #2	14'	39'
TOTAL LENGTH OF AC CU WIRE**:		156'
SS-EVGO TO DELTA DISPENSER #1	95'	120'
TOTAL LENGTH OF DC CU WIRE**:		480'
SS-EVGO TO DELTA DISPENSER #2	108'	133'
TOTAL LENGTH OF DC CU WIRE**:		532'

NOTES:

* AC CONDUCTORS: 25 FT IS ADDED TO THE HORIZONTAL RUN LENGTH TO ACCOUNT FOR BURIED DEPTH & TRANSITIONS.

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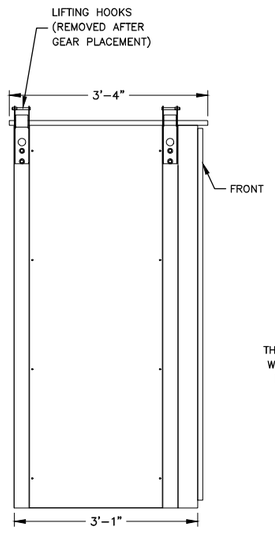
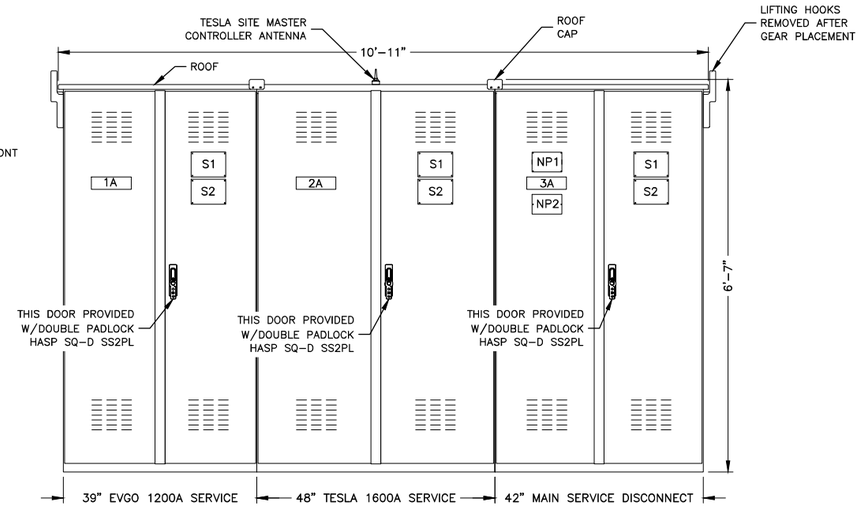


LEFT-SIDE VIEW
(END SECTION)



FRONT VIEW
(EXTERIOR DOORS SHOWN)

2500A EV-2 SWITCHBOARD

1

SCALE: 3/8"=1' FOR 11"x17"
3/4"=1' FOR 22"x34"

0' 1' 2' 3'