

AERIAL MAP

[illegible][illegible]

1201 WP BALL BLVD
(TESLA STATION)
SANFORD, FL 32771

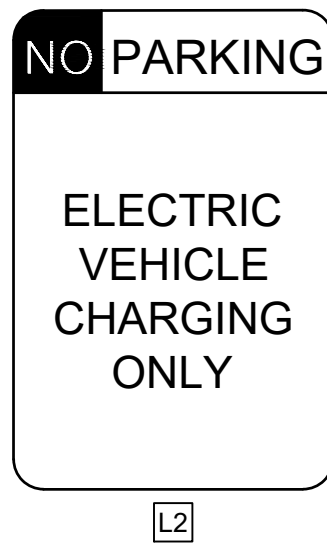
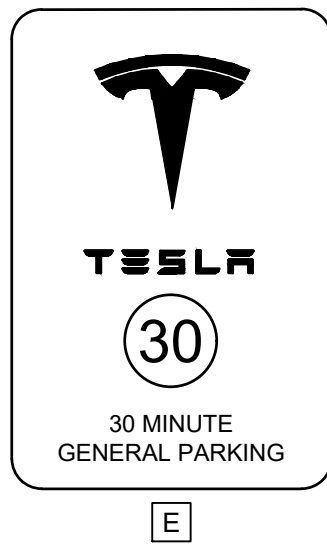
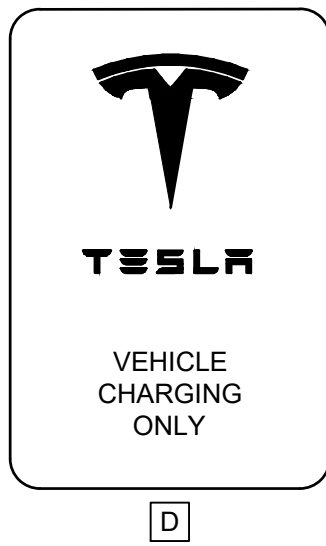
INSTALL MANAGER	DESIGNER
MIGUEL YEPES	JDP

T-1


SITE INFORMATION		APPLICABLE CODES	DESIGN LOADING		DRAWING INDEX		
<div>ADDRESS: 1201 WP BALL BLVD (TESLA STATION) SANFORD, FL 32771</div> <div>POWER COMPANY: FPL</div> <div>CONTACT: FAVYAN TORRES (954) 224-2448</div> <div>PROPERTY OWNER: TARGET</div> <div>CONTACT: AMANDA CLEMENTSON (612) 304-5434</div> <div>EQUIPMENT SUPPLIER: TESLA, INC. 3500 DEER CREEK ROAD PALO ALTO, CA 94304 (650) 681-5000</div> <div>GPD GROUP, INC. LIC. # - 30920 CONTACTS:</div> <div>PROJECT MANAGER: ZACHERY SHEETS, PE - OH# 77870 (330)572-2148 ZSHEETS@GPDGROUP.COM</div> <div>PROJECT COORDINATOR: TROY EVESLAGE, PE - INF PE11500164 (317) 295-3179 TEVESLAGE@GPDGROUP.COM</div> <div>PERMIT COORDINATOR: SARAH HONEYCUTT (330) 572-3508 SHONEYCUTT@GPDGROUP.COM</div> <div>LATITUDE (NAVD88) N 28°47'57.72" 28.799367°</div> <div>LONGITUDE (NAVD88) W 81°20'17.80" -81.338333°</div> <div>PERMITTING JURISDICTION: CITY OF SANFORD</div> <div>CONTACT: AMYE KING DIR PLANNER AMYE.KING@SANFORDFL.GOV (407) 893-1303</div> <div>COUNTY: SEMINOLE</div> <div>UTILITY COORDINATOR JADEN BEACHY (330) 572-3643 JBACHY@GPDGROUP.COM</div> <div>FLOOD HAZARD AREA NOTE THE SITE IS LOCATED IN FLOOD ZONES "X" AND "A" (AREAS OF MINIMAL FLOOD HAZARD AND WITHOUT BASE FLOOD ELEVATION) PER FLOOD INSURANCE MAP NUMBER 12117C0065F, EFFECTIVE DATE - 09/28/2007.</div>		ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES: 2020 FLORIDA BUILDING CODE, 7TH EDITION 2017 NATIONAL ELECTRICAL CODE IN THE EVENT OF CONFLICT, THE MOST RESTRICTIVE CODE SHALL PREVAIL.		LATERAL LOAD DESIGN DATA: WIND DESIGN DATA (ASCE 7-16): BASIC WIND SPEED (V _m): 134 MPH RISK CATEGORY II EXPOSURE CATEGORY C SEISMIC DESIGN DATA (ASCE 7-16): 1.0 SEISMIC IMPORTANCE FACTOR (I) 1.0 RISK CATEGORY II SITE CLASS (ASSUMED) D MAPPED SPECTRAL RESPONSE SHORT PERIODS (S _s) 0.065 1 SEC. PERIODS (S ₁) 0.035 SPECTRAL RESPONSE COEFF. SHORT PERIODS (S _{ps}) 0.069 1 SEC. PERIODS (S _{D1}) 0.056 SEISMIC DESIGN CATEGORY A FROST DEPTH: 0"		T-1	TITLE SHEET & PROJECT DATA
		CIVIL	SHEET TITLE				
		C-2	SITE PLAN				
		ELECTRICAL	SHEET TITLE				
		E-2	ONE-LINE DIAGRAM & PANEL SCHEDULE				


CABINET #	POST #	SIGN TYPE
1	1A	D
	1B	D
	1C	D
	1D	D
2	2A	D
	2B	D
	2C	E
	2D	E
3	3A	E
	3B	E
	3C	E
	3D	E

PARKING STALL ANALYSIS	
EXISTING STANDARD STALLS UTILIZED AS A RESULT OF THIS PROJECT	19
PROPOSED TESLA V3 STALLS	12
PROPOSED TESLA L2 STALLS	4
PROPOSED STANDARD STALLS	0
NET STALL COUNT	-3



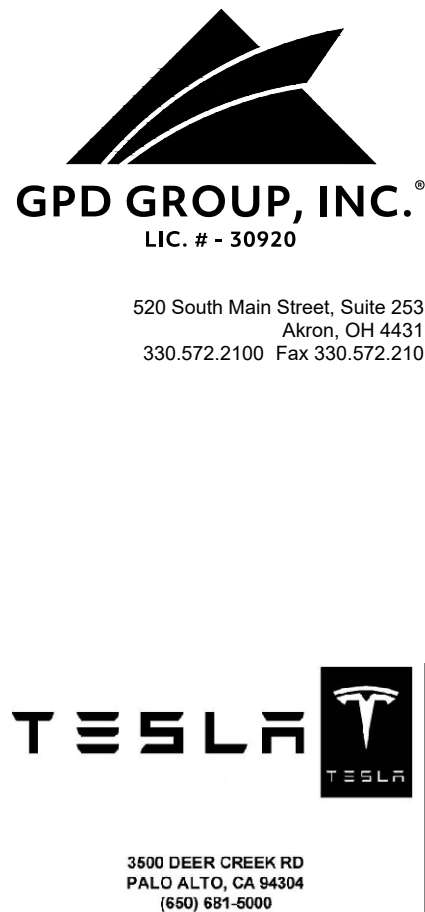
- ## CONSTRUCTION KEYNOTES AND LEGEND
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1. PROPOSED PAD MOUNTED ELECTRICAL UTILITY TRANSFORMER (BY UTILITY).
 2. PROPOSED EQUIPMENT CLEAR SPACE (TYPICAL).
 3. PROPOSED ELECTRIC METER MOUNTED TO H-FRAME (TYPICAL OF 2).
 4. PROPOSED SWITCHGEAR ASSEMBLY W/ INTEGRATED MASTER CONTROLLER, STEP-DOWN TRANSFORMER, AND SUB-PANEL.
 5. PROPOSED TESLA CHARGE POST WITH INDIVIDUAL CAST-IN-PLACE CONCRETE FOUNDATION (TYPICAL OF 12).
 6. PROPOSED CHARGEPOINT LEVEL 2 DUAL-PORT CHARGE POST ON PEDESTAL MOUNT (TYPICAL OF 2).
 7. PROPOSED TESLA NON-ILLUMINATED PARKING SIGN IN BOLLARD (TYPICAL OF 16). SEE CHARGING POST SCHEDULE THIS SHEET FOR SIGN TYPE. WHERE POSSIBLE, CONTRACTOR SHALL MOUNT SIGN TO LIGHT POLE IN LIEU OF POST.
 8. PROPOSED TESLA CHARGING CABINET WITH CONCRETE FOUNDATION (TYPICAL OF 3).
 9. PROPOSED CONCRETE PAD.
 10. PROPOSED LANDSCAPING.
 11. PROPOSED 6" CONCRETE CURB.
 12. PROPOSED COMPOSITE WHEELSTOP (TOTAL OF 4).
 13. PROPOSED REMOVABLE DETERRENT BOLLARD (TOTAL OF 2).
 14. PROPOSED DETERRENT BOLLARD (TOTAL OF 2).
 15. PROPOSED LIGHT POLE (TOTAL OF 2).
 16. ALL DISTURBED AREAS SHALL BE MULCHED UNLESS OTHERWISE NOTED.

 PROPOSED ASPHALT PAVEMENT TO MATCH EXISTING IN TYPE AND DEPTH.
INCLUDE ENGINEERED COMPACTED BACKFILL BELOW PAVEMENT SECTION.
TRENCHING NOT INCLUDED

 EXISTING 10' UTILITY EASEMENT

GENERAL SHEET NOTES

1. CONTRACTOR SHALL REMOVE EXISTING PAVEMENT AND/OR CURB USING CLEAN SAWCUTS TO INSTALL PROPOSED UNDERGROUND CONDUITS AND REPLACE PAVEMENT AND/OR CURB AFTER CONDUITS HAVE BEEN INSTALLED. SEE ELECTRICAL SHEETS FOR CONDUIT ROUTING, APPROXIMATE CONDUIT RUN LENGTHS AND TRENCH DETAIL. CONTRACTOR SHALL MEET OR EXCEED EXISTING PAVEMENT SPECIFICATIONS. NOTIFY TESLA OF ANY DISCREPANCIES PRIOR TO PERFORMING WORK.
2. APPLY LIQUID ASPHALT AT ALL JOINTS BETWEEN CONCRETE AND ASPHALT AND WHERE PROPOSED ASPHALT MEETS EXISTING, INCLUDING SAW CUT JOINTS.
3. PROPERTY LINE AND RIGHT-OF-WAY BOUNDARIES ARE SHOWN FOR REFERENCE ONLY. REFER TO SURVEY FOR EXACT LOCATION.
4. SEE BLEW & ASSOCIATES, P.A. SURVEY FOR ALL APPLICABLE BENCHMARKS.
5. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING SLOPES AND GRADES PRIOR TO CONSTRUCTION. FINAL GRADES SHALL BE DETERMINED IN FIELD BY THE CONTRACTOR.
6. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE TOWARDS THE NEAREST EXISTING DRAINAGE STRUCTURE AND ENSURE NO PONDING OCCURS ON SITE.

[illegible]

NOT FOR
CONSTRUCTION

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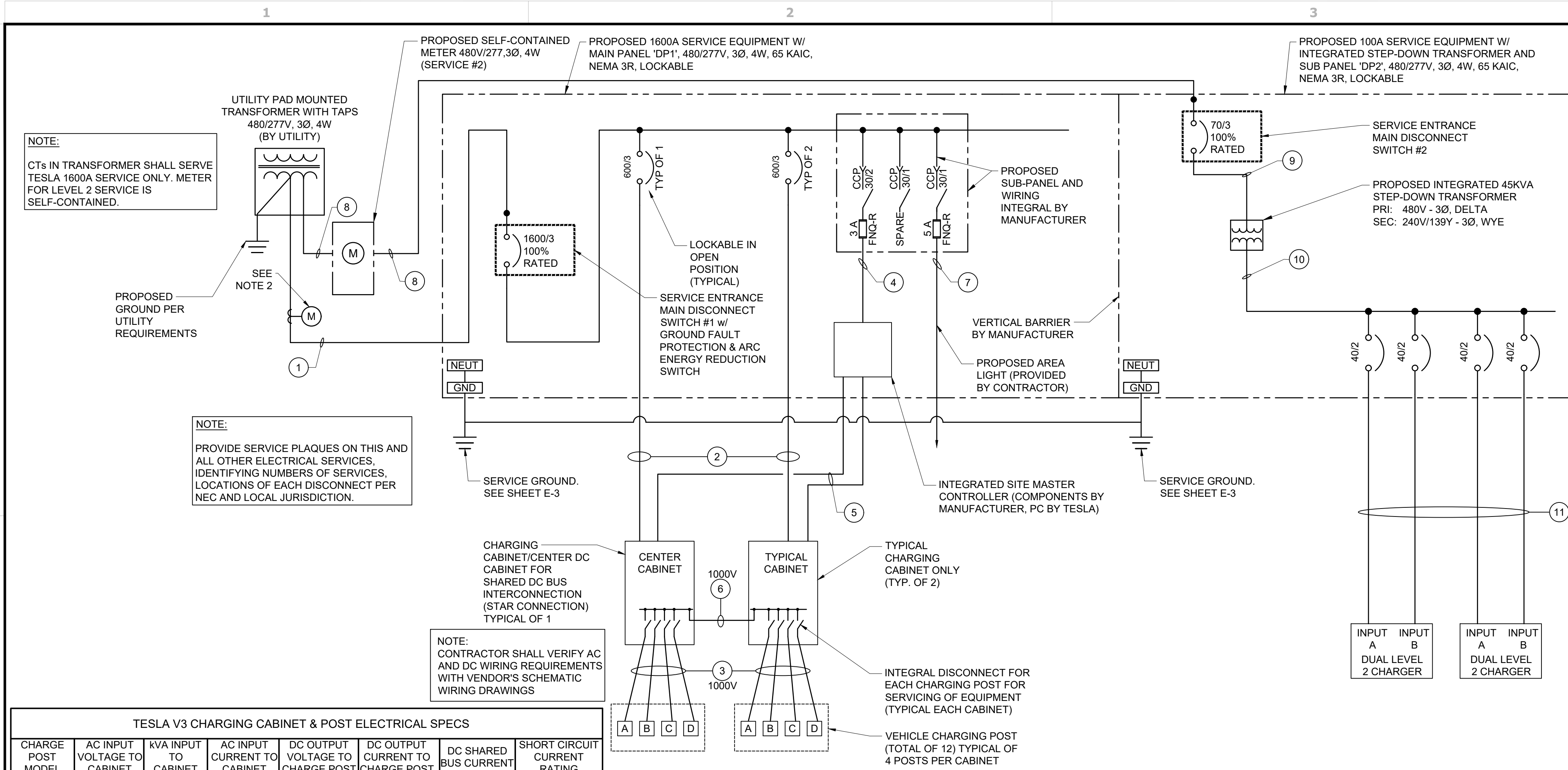
SITE PLAN

ISSUED FOR:	
PERMIT	XXX
BID	XXX
CONSTRUCTION	XXX
RECORD	XXX

INSTALL MANAGER	DESIGNER
MIGUEL YEPES	JDP

JOB NO.
2021095.22

C-2



TESLA V3 CHARGING CABINET & POST ELECTRICAL SPECS							
CHARGE POST MODEL	AC INPUT VOLTAGE TO CABINET	kVA INPUT TO CABINET	AC INPUT CURRENT TO CABINET	DC OUTPUT VOLTAGE TO CHARGE POST	DC OUTPUT CURRENT TO CHARGE POST	DC SHARED BUS CURRENT	SHORT CIRCUIT CURRENT RATING
V3	380V-480V	387kVA	465A	0V - 500V	350A	640A	85 KAIC

PANEL 'DP1'											
DESCRIPTION	Phase A kVA	Phase B kVA	Phase C kVA	CKT. BKR / Poles		CKT. BKR / Poles	Phase A kVA	Phase B kVA	Phase C kVA	DESCRIPTION	
CHARGING CABINET #1	129.00	129.00	129.00	600/3	1	2				SPACE	
CHARGING CABINET #2	129.00	129.00	129.00	600/3	3	4				SPACE	
CHARGING CABINET #3	129.00	129.00	129.00	600/3	5	6				SPACE	
SPACE	0.00	0.00	0.00		7	8				SPACE	
SPACE	0.00	0.00	0.00		9	10				SPACE	
SPACE	0.00	0.00	0.00		11	12				SPACE	
MASTER CONTROLLER	0.10	0.10	0.00	30/2	13	14				SPACE	
LED LIGHT POLE	387.10	387.10	387.28	30/1	15	16				SPACE	
CONNECTED kVA 387.10 387.10 387.28 100% RATED											
TOTAL kVA 1161.48 TOTAL AMPS 1397.04											
VOLTAGE 480 Y/ 277 PHASE 3 No OF WIRES 4 NEMA 3R ENCLOSURE											
MAIN C/B 3 POLES LUGS BUS 1600 AMPS 65 KAIC											
SERVICE ENTRANCE RATED SPD ISOLATED GROUNDED BUS SURFACE											
200% RATED NEUTRAL FULLY RATED FLUSH											
***THE SUM OF THE TOTAL CONNECTED LOADS (NON-CONTINUOUS LOAD PLUS THE CONTINUOUS LOAD) TERMINATE IN AN OVERCURRENT DEVICE WHERE BOTH THE OVERCURRENT DEVICE AND ITS ASSEMBLY ARE LISTED FOR OPERATION AT 100% OF THEIR RATING											

PANEL BOARD NOTES

- CIRCUITS SHALL BE REARRANGED AS REQUIRED TO MAINTAIN THE MOST BALANCED LOADS ON EACH PHASE WITHIN EACH PANEL. PROVIDE TYPED PANEL DIRECTORY MOUNTED PER MANUFACTURERS RECOMMENDATIONS WITH SERVICE EQUIPMENT.
- OCBP FOR CHARGING CABINETS ARE CALCULATED AS FOLLOWS: 465A AC INPUT TO CABINET x 1.25 = 581.25A ==> 600A BRANCH BREAKER REQUIRED

PANEL 'DP2'											
DESCRIPTION	Phase A kVA	Phase B kVA	Phase C kVA	CKT. BKR / Poles		CKT. BKR / Poles	Phase A kVA	Phase B kVA	Phase C kVA	DESCRIPTION	
DUAL PORT LEVEL 2 CHARGER INPUT A	3.60	3.60		40/2	1	2				SPACE	
DUAL PORT LEVEL 2 CHARGER INPUT B	3.60		3.60	40/2	3	4				SPACE	
DUAL PORT LEVEL 2 CHARGER INPUT A		3.60		40/2	5	6				SPACE	
DUAL PORT LEVEL 2 CHARGER INPUT B	3.60		3.60	40/2	7	8				SPACE	
SPACE	10.80	10.80	7.20		9	10				SPACE	
CONNECTED kVA 10.80 10.80 7.20											
TOTAL kVA 28.80 TOTAL AMPS 69.28											
VOLTAGE 240 Y/ 139 PHASE 3 No OF WIRES 4 NEMA 3R ENCLOSURE											
MAIN C/B 3 POLES LUGS BUS 200 AMPS 22 KAIC											
SERVICE ENTRANCE RATED SPD ISOLATED GROUNDED BUS SURFACE											
200% RATED NEUTRAL FULLY RATED FLUSH											
* BASED OFF TESLA SUPERCHARGER LOAD PROFILE											
NOTE: CONTRACTOR SHALL VERIFY 'AIC' RATINGS WITH UTILITY COMPANY AND PERFORM A SHORT CIRCUIT STUDY											

PANEL BOARD NOTES

- CIRCUIT BREAKERS SHALL ONLY BE RATED FOR 240V. 240/120V RATED BREAKERS ARE NOT ACCEPTABLE.

FEEDER/CIRCUIT SCHEDULE	
NO	CONFIGURATION
1	(3) 600 MCM AI (XHHW-2, 90°C) (1) 600 MCM AI NEUT (XHHW-2, 90°C) (5) SETS - EACH IN 4" PVC CONDUIT
2	(3) 500 MCM AI (XHHW-2, 90°C) (1) 500 MCM AI NEUT (XHHW-2, 90°C) (1) #1 AWG Cu GND (XHHW-2, 90°C) (2) SETS - EACH IN 4" PVC CONDUIT OR 4" NON-METALLIC FLEXIBLE 90° CONDUIT RATED FOR DIRECT BURIAL
3	(4) 350 MCM AI (XHHW-2, 90°, 1000V RATED) (1) #1 AWG Cu GND (XHHW-2, 90°, 1000V RATED) (1) 1000V, CLASS 1, COMM CABLE (1) SET IN 4" PVC CONDUIT OR 4" NON-METALLIC FLEXIBLE 90° CONDUIT RATED FOR DIRECT BURIAL
4	FACTORY INSTALLED WIRING
5	OUTDOOR RATED/SHIELDED CAT5e OR CAT6 COMMUNICATION CABLE IN 1" PVC CONDUIT.
6	(2) 600 MCM AI (XHHW-2, 90°, 1000V RATED) (1) #3/0 AWG AI DC MID (XHHW-2, 90°, 1000V RATED) (1) #1/0 AWG Cu GND (XHHW-2, 90°, 1000V RATED) (2) SETS - EACH IN 3" PVC CONDUIT. (1) #3/0 AWG AI DC MID DISC. (XHHW-2, 1000V RATED) 36" LONG IN EA. CABINET, NOT ROUTED IN CONDUIT
7	(1) #12 AWG Cu (THWN-2, 90°C) (1) #12 AWG Cu NEUT (THWN-2-2, 90°C) (1) #12 AWG Cu GND (THWN-2-2, 90°C) (1) SET IN 1" CONDUIT
8	(4) #1/0 AWG AI (THWN-2) IN 1-1/4" PVC CONDUIT
9	FACTORY INSTALLED SECONDARY WIRING (BY MANUFACTURER)
10	FACTORY INSTALLED SECONDARY WIRING (BY MANUFACTURER)
11	(4) #6 AWG Cu (THWN-2) (1) #10 AWG Cu GND (THWN-2) IN 1" PVC CONDUIT

NOTE:
ALL AC CONDUCTORS SHALL BE RATED @ 600 VOLTS.
ALL DC CONDUCTORS SHALL BE RATED @ 1000 VOLTS.

GENERAL SHEET NOTES

- NEUTRAL MUST BE INCLUDED FOR PROPER OPERATION OF TESLA SUPERCHARGERS.
- PROPOSED UTILITY CTs SHALL BE LOCATED IN UTILITY APPROVED CT COMPARTMENTS MOUNTED IN TRANSFORMER. PROPOSED METERS SHALL BE MOUNTED ON H-FRAME.
- ALL CONDUIT FURNISHED AND INSTALLED BY CONTRACTOR.
- ALL WIRING FURNISHED BY TESLA AND INSTALLED BY CONTRACTOR UNLESS NOTED OTHERWISE. SEE SHEET E-1 FOR UTILITY/CONTRACTOR SCOPE OF WORK.
- THE TESLA PROVIDED CHARGING CABINETS AND THE CHARGING POSTS USED ON THIS PROJECT COMPLY WITH THE FOLLOWING STANDARDS:
 - TUV CERTIFIED TO UL 2202
- THE AFOREMENTIONED STANDARDS IDENTIFY THE REQUIREMENTS MET BY THE TUV CERTIFIED EQUIPMENT, INCLUDING BUT NOT LIMITED TO:
 - PROTECTION AGAINST ELECTRIC SHOCK
 - OVERLOAD AND SHORT CIRCUIT PROTECTION
 - FAULT PROTECTION
 - DEGREES OF PROTECTION AGAINST ACCESS TO HAZARDOUS LIVE PARTS
 - THE INTERNAL COMPONENTS OF THE SYSTEM ARE PROPRIETARY. ANY QUESTIONS CONCERNING ACTUAL INTERNAL PROTECTIVE DEVICES MUST BE COORDINATED DIRECTLY WITH TESLA.
 - INTERLOCK THAT DE-ENERGIZES THE ELECTRIC VEHICLE CONNECTOR WHENEVER THE ELECTRICAL CONNECTOR IS UNCOUPLED FROM THE ELECTRIC VEHICLE
 - AUTOMATIC DE-ENERGIZATION OF CHARGING POST CABLE UPON EXPOSURE TO STRAIN
- ALL ELECTRICAL EQUIPMENT SHALL BE LABELED, LISTED, OR CERTIFIED BY A NATIONALLY RECOGNIZED TESTING LABORATORY ACCREDITED BY THE UNITED STATES OCCUPATIONAL SAFETY HEALTH ADMINISTRATION.

REV.	DATE	DESCRIPTION
A	05/24/21	ISSUED FOR 50% REVIEW

NOT FOR
CONSTRUCTION

1201 WP BALL BLVD
(TESLA STATION)
SANFORD, FL 32771
ONE-LINE DIAGRAM
& PANEL SCHEDULE

ISSUED FOR:	
PERMIT	xxx
BID	xxx
CONSTRUCTION	xxx
RECORD	xxx

INSTALL MANAGER	DESIGNER
MIGUEL YEPES	JDP

JOB NO.
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E-2