

ELECTRIC VEHICLE CHARGING SYSTEM

(48) EV CHARGER-TESLA V4 SUPERCHARGER
 2215 E ANDERSON LN., AUSTIN, TX 78752



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 201-986-6181
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PROJECT DATA

PROJECT ADDRESS: 2215 E ANDERSON LN., AUSTIN, TX 78752
 OWNER: 2215 E ANDERSON LN
 DESIGNER: ESR
 SCOPE: ELECTRIC VEHICLE CHARGING SYSTEM WITH
 (48) EV CHARGER- TESLA V4 SUPERCHARGER
 (12) TESLA PRE-ASSEMBLED SUPERCHARGER UNITS

AUTHORITIES HAVING JURISDICTION:
 BUILDING: CITY OF TEXAS CITY
 ZONING: CITY OF TEXAS CITY
 UTILITY: N/A

GENERAL NOTES

1. ALL ELECTRICAL MATERIALS SHALL BE NEW AND LISTED BY RECOGNIZED ELECTRICAL TESTING LABORATORY CUSTOM MADE EQUIPMENT SHALL HAVE COMPLETE TEST DATA SUBMITTED BY THE MANUFACTURER ATTESTING TO ITS SAFETY.
2. ALL METALLIC EQUIPMENT SHALL BE GROUNDED.
3. ALL SPECIFIC WIRING IS BASED ON THE USE OF COPPER.
4. CONTRACTOR SHALL OBTAIN ELECTRICAL PERMITS PRIOR TO INSTALLATION AND SHALL COORDINATE ALL INSPECTIONS, TESTING COMMISSIONING AND ACCEPTANCE WITH THE CLIENT, UTILITY CO. AND CITY INSPECTORS AS NEEDED.
5. THE ELECTRICAL CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS OF SERVICE POINTS AND SERVICE SIZES WITH THE SERVING UTILITY COMPANY AND COMPLY WITH ALL UTILITY COMPANIES REQUIREMENTS.
6. DRAWINGS ARE DIAGRAMMATIC ONLY, ROUTING OF RACEWAYS SHALL BE OPTION OF THE CONTRACTOR UNLESS OTHERWISE NOTED AND SHALL BE COORDINATED WITH OTHER TRADES.
7. IF THE DISTANCES FOR CABLE RUNS ARE DIFFERENT THAN SHOWN, THE CONTRACTOR SHALL NOTIFY THE ELECTRICAL ENGINEER TO VALIDATE THE WIRE SIZE. FINAL DRAWINGS WILL BE RED-LINED AND UPDATED AS APPROPRIATE.
8. WHENEVER A DISCREPANCY IN QUALITY OF EQUIPMENT ARISES ON THE DRAWING OR SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL MATERIAL AND SERVICES REQUIRED BY THE STRICTEST CONDITIONS NOTED ON THE DRAWINGS OR IN THE SPECIFICATIONS TO ENSURE COMPLETE COMPLIANCE AND LONGEVITY OF THE OPERABLE SYSTEM REQUIRED BY THE ARCHITECT / ENGINEERS.
9. ALL BROCHURES, OPERATION MANUALS, CATALOGS, SHOP DRAWINGS, ETC. SHALL BE HANDED OVER TO OWNER'S REPRESENTATIVE AT THE COMPLETION OF WORK.

REVISIONS		
DESCRIPTION	DATE	REV
INITIAL DESIGN	04/27/2026	

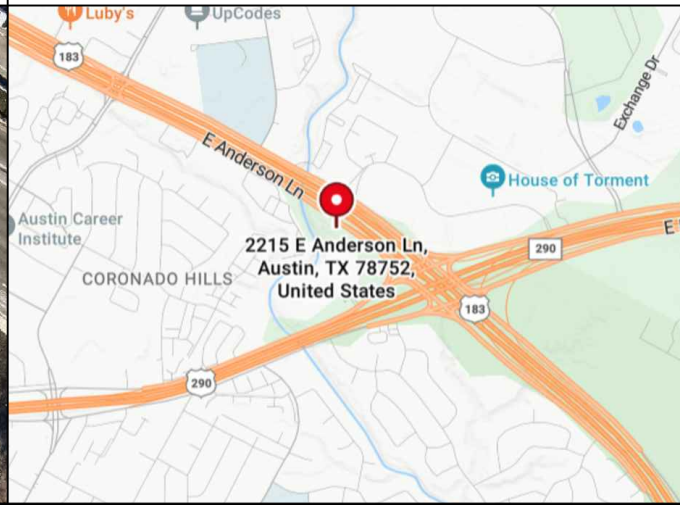
CODE REFERENCES

2023 NATIONAL ELECTRICAL CODE
 2024 INTERNATIONAL BUILDING CODE
 2024 INTERNATIONAL FIRE CODE

VICINITY MAP



AERIAL MAP



SHEET INDEX

- EV-1 COVER PAGE
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- EV-3 ELECTRICAL PLAN
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- EV-10 INSTALLATION DETAILS
- EV-11 INSTALLATION DETAILS
- EV-12 INSTALLATION DETAILS
- EV-13-13.1 ELECTRICAL LINE DIAGRAM
- EV-14 WIRING CALCULATIONS
- EV-15+ EV-CHARGER SPECIFICATION

PROJECT NAME & ADDRESS

2215 E ANDERSON LN
 2215 E ANDERSON LN.,
 AUSTIN, TX 78752

DRAWN BY

ESR

SHEET NAME

COVER PAGE

SHEET SIZE

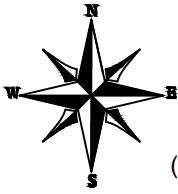
ANSI B
 11" X 17"

SHEET NUMBER

EV-1

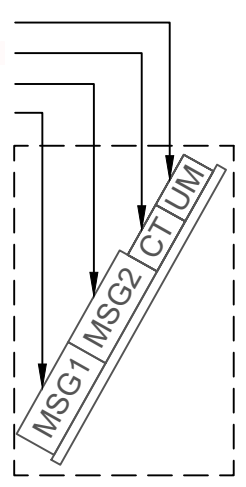
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 (48) EV CHARGER- TESLA V4 SUPERCHARGER
 (12) TESLA PRE-ASSEMBLED SUPERCHARGER UNITS



- (N) (04) EV CHARGER- TESLA V4 SUPERCHARGER (TYP.)
- (N) PRE-ASSEMBLED SUPERCHARGER UNIT (PSU-12)
- (N) DISCONNECT (ACDS) (TYP.)
- (N) TESLA V3 SUPERCHARGER CABINET (TYP.)

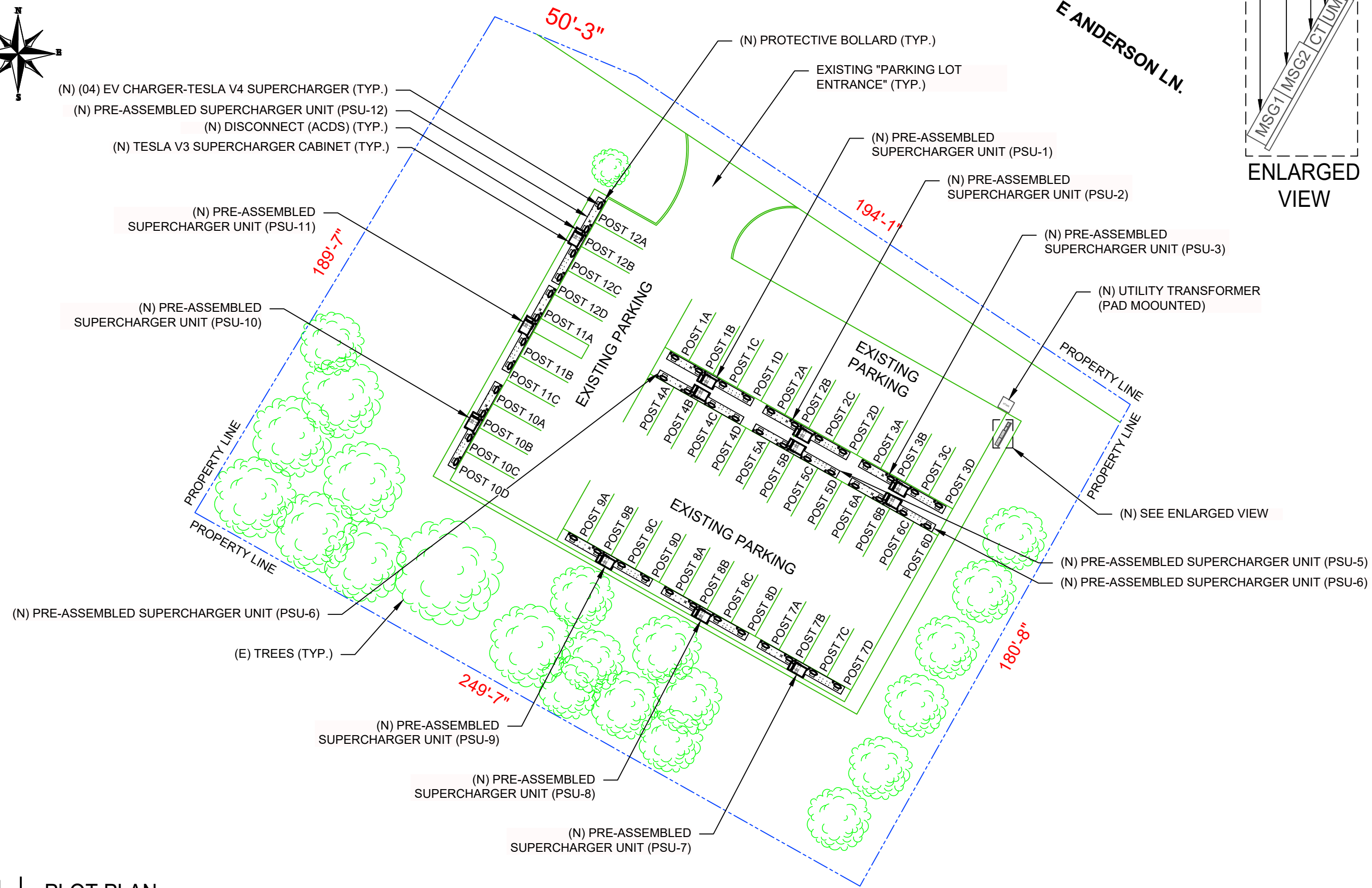
- (N) UTILITY METER (ON H-FRAME)
- (N) CT CABINET (ON H-FRAME)
- (N) 4000A MAIN SWITCHGEAR #2 (PAD MOUNTED)
- (N) 4000A MAIN SWITCHGEAR #1 (PAD MOUNTED)



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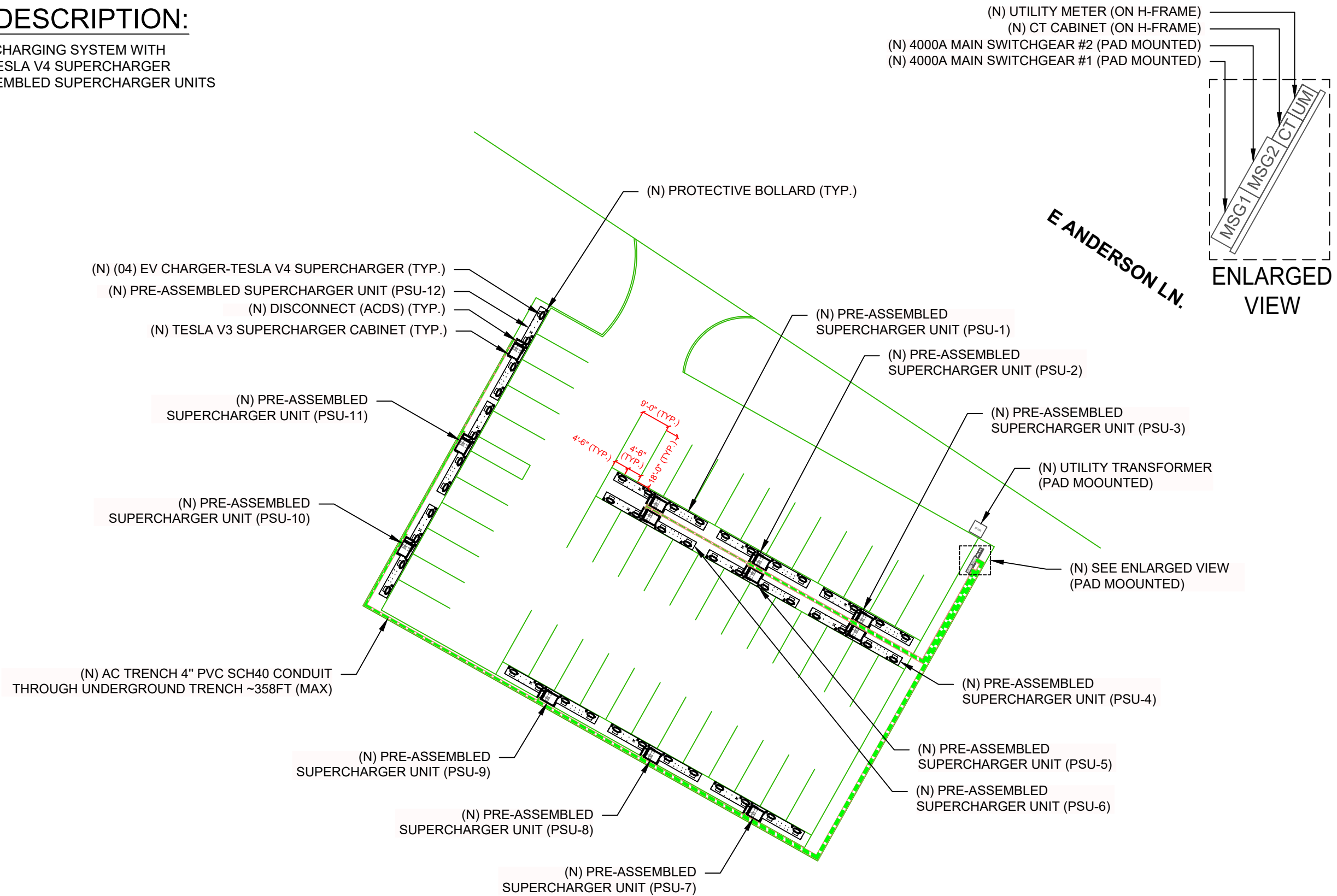
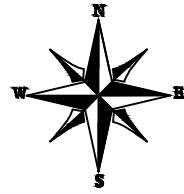
PROJECT NAME & ADDRESS

2215 E ANDERSON LN
 2215 E ANDERSON LN.,
 AUSTIN, TX 78752

DRAWN BY	ESR
SHEET NAME	PLOT PLAN
SHEET SIZE	ANSI B 11" X 17"
SHEET NUMBER	EV-2

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DRAWN BY
ESR

SHEET NAME
ELECTRICAL PLAN

SHEET SIZE
**ANSI B
 11" X 17"**

SHEET NUMBER
EV-3

NOTE: THE V4 PSU IS DESIGNED SUCH THAT EACH POST IS SPACED 9'-0" (2.75 M) APART TO ALIGN WITH THE TYPICAL STALL WIDTHS IN NORTH AMERICA. THE PSU SHOULD BE PLACED IN A LOCATION SUCH THAT THE V4 POST TERMINUS IS CENTERED IN THE STALL (SEE SECTION 2.2.1 STANDARD CHARGING STALL LAYOUTS FOR MORE DETAIL ON POST PLACEMENT).

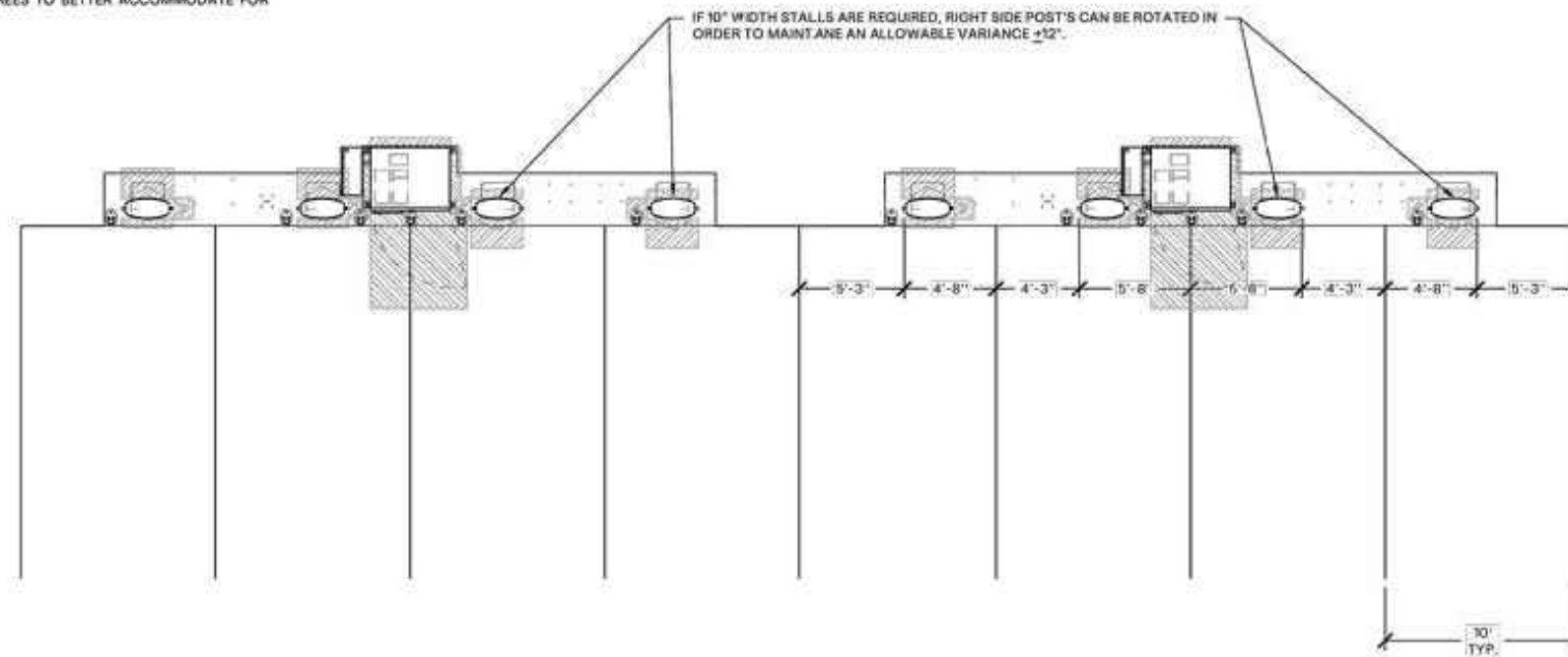
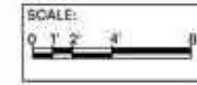
LEGEND

MSG	- MAIN SWITCH GEAR	—	- TRENCH
UM	- UTILITY METER	—	- AC CONDUIT
CT	- CT CABINET	XFMR	- TRANSFORMER

ROTATED POSTS – ALTERNATIVE LAYOUT

THE OUTER POSTS CAN ALSO BE ROTATED 180 DEGREES TO BETTER ACCOMMODATE FOR WIDER STALLS.

IF 10" WIDTH STALLS ARE REQUIRED, RIGHT SIDE POST'S CAN BE ROTATED IN ORDER TO MAINTAIN AN ALLOWABLE VARIANCE $\pm 12"$.

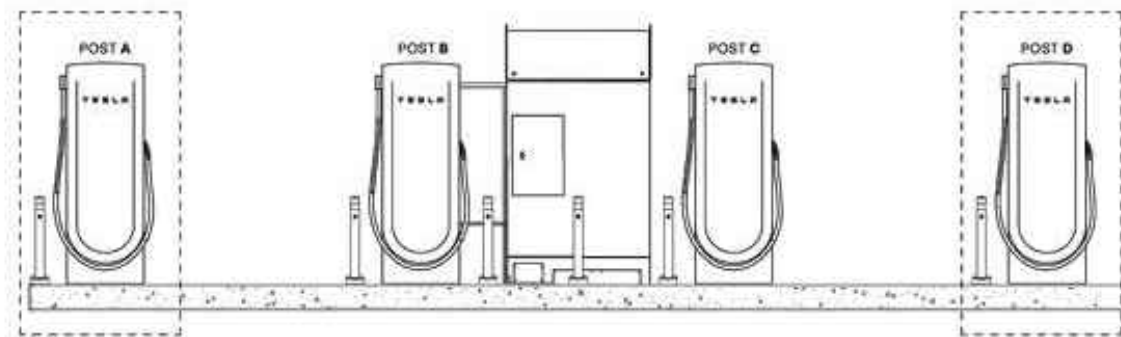
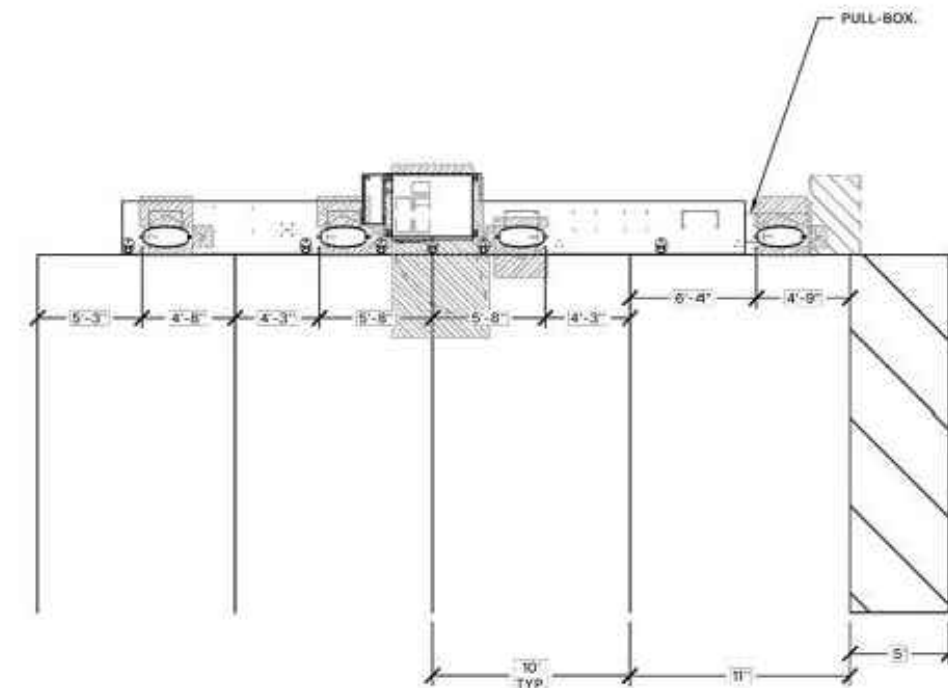
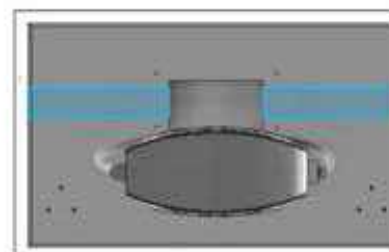
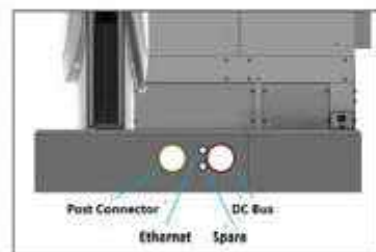


RELOCATED POSTS – ADA COMPLIANCE OR PULL-IN/ TRAILER STALLS

THE OUTER LEFT POST (POST A) AND OUTER RIGHT POST (POST D) CAN BE RELOCATED OFF THE PSU. THIS ALLOWS MORE FLEXIBILITY IN DEPLOYMENTS, INCLUDING PULL-IN STALL CAPABILITY AND ADA SPECIFIC LAYOUTS.

POST RELOCATION IS POSSIBLE BY REMOVING THE POST FROM THE EMBEDDED ANCHORS AND RE-ROUTING THE CONDUCTORS FROM THE POST RECESS THROUGH THE "POST CONNECTOR" ON THE OUTSIDE LEFT AND RIGHT FACE OF THE PSU SLAB. THE CONDUIT CONNECTOR IN THE SLAB IS 4" PVC WITH A COUPLER MOUNTED FLUSH TO THE OUTSIDE SURFACE.

AN ALTERNATIVE METHOD IS TO ROUTE A CONDUIT THROUGH THE CABINET WINDOW, WITH THIS METHOD, ANY POST CAN BE REMOVED FROM THE PSU.



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SHEET NAME
**POST LAYOUT
 OPTIONS**

SHEET SIZE
**ANSI B
 11" X 17"**

SHEET NUMBER
EV-4

PRODUCT ASSEMBLY OVERVIEW

TESLA V4 PRE-ASSEMBLED SUPERCHARGER UNIT (V4 PSU) INCLUDES (1) V3.5 SUPERCHARGER CABINET AND (4) V4 CHARGEPOST. ADDITIONALLY, THE V4 PSU HAS A 600A BREAKER UPSTREAM OF THE CABINET THAT IS PLACED ON THE LEFT-SIDE OF THE CABINET ENCLOSURE THAT CAN ACT AS SERVICE DISCONNECT. THE LOAD SIDE OF THE BREAKER IS WIRED DIRECTLY TO THE AC BUS LUGS OF THE CABINET. V4 PSU CONDUCTORS ARE DUAL-RATED FOR USE IN THE UNITED STATES AND CANADA.



FIG. 2 - V4 PSU LEFT-SIDE VIEW

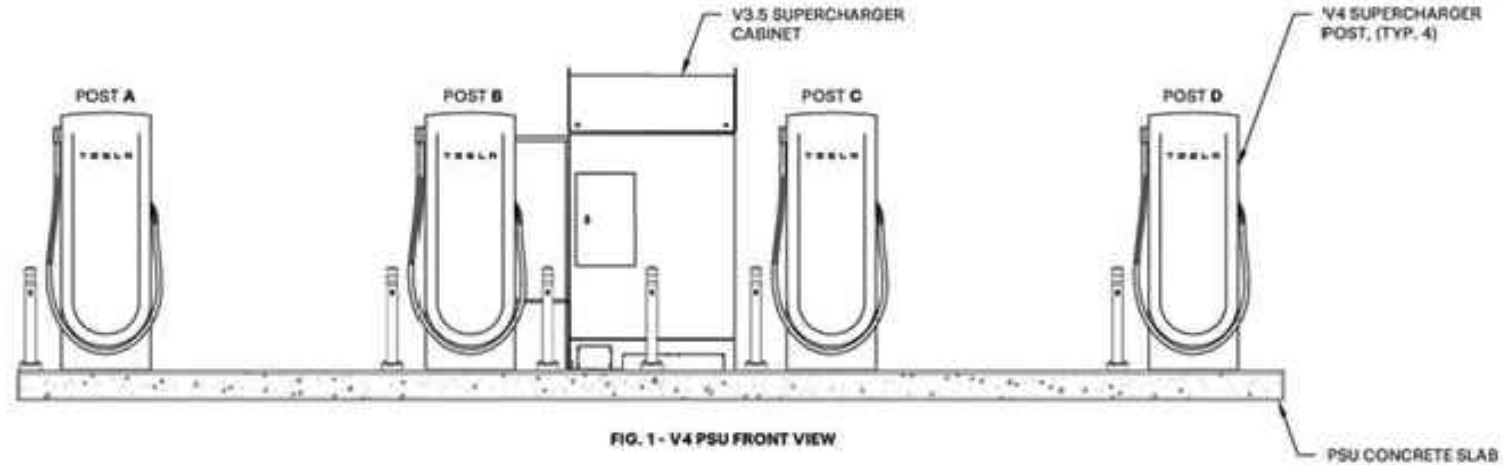
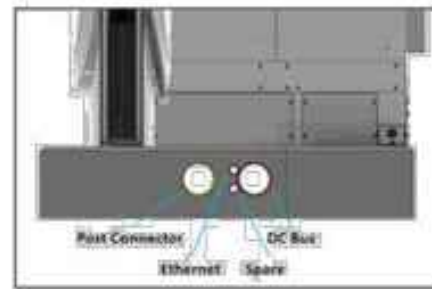


FIG. 1 - V4 PSU FRONT VIEW

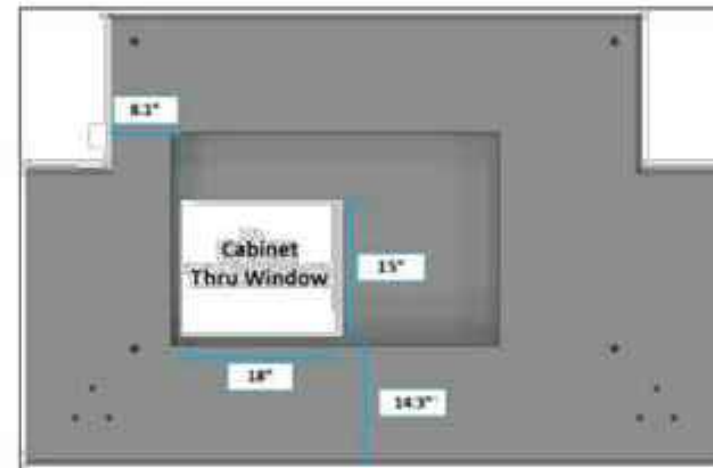
SLAB FEATURES

THE PSU HAS EMBEDDED CONDUITS TO USE FOR SITE-LEVEL FUNCTIONALITY INCLUDING: CONNECTING THE DC BUS TO ADJACENT PSU'S, CONNECTING ETHERNET BETWEEN CABINET, AND RELOCATING POSTS OFF THE PSU FOR ADA OR PULL-IN/TRAILER STALLS.



CABINET THRU WINDOW

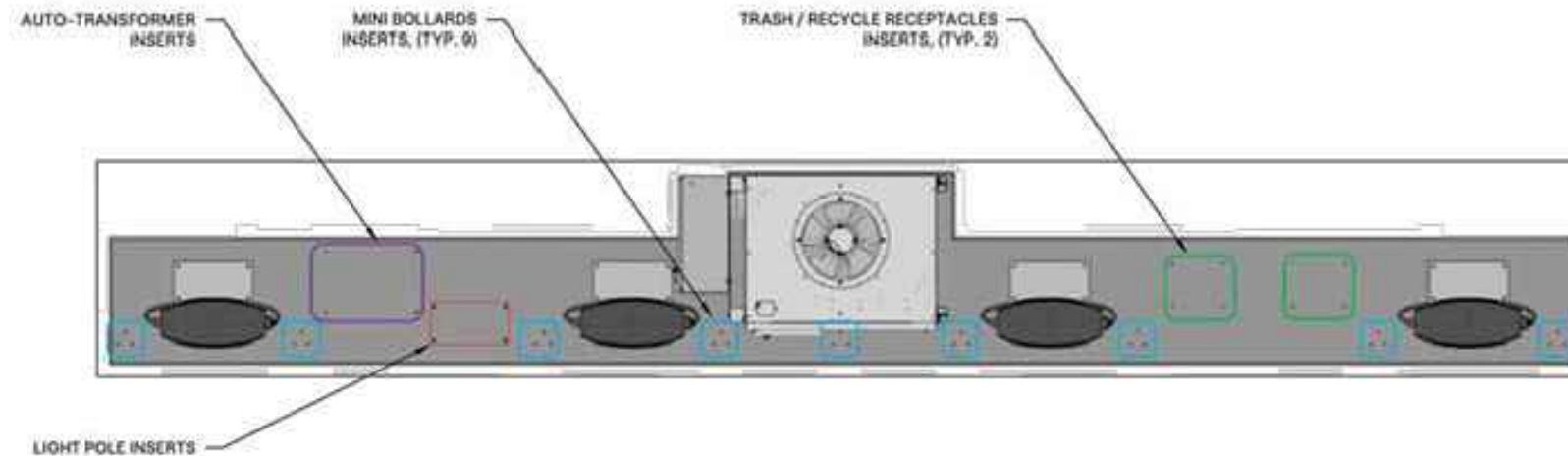
THE PSU SLAB HAS A THRU WINDOW BENEATH THE CABINET. THIS CAN BE USE AS AN ALTERNATIVE METHOD TO CONNECT THE DC BUS OR AS AN ALTERNATIVE METHOD TO RELOCATING POSTS OFF THE PSU FOR ADA OR PULL-IN / TRAILER STALLS.



EMBEDDED INSERTS

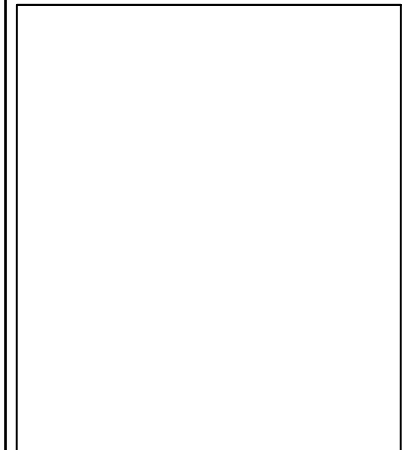
THE PSU HAS OPTIONAL INSERTS TO MOUNT ACCESSORIES SUCH AS AN AUTO-TRANSFORMER, LIGHTPOLES, MINI BOLLARDS, AND TRASH / RECYCLE RECEPTACLES. TO USE THE INSERTS, SIMPLY REMOVE THE FLUSH MOUNTED COVER PLUGS THAT COME INSTALLED ON THE SLAB.

EQUIPMENT	INSERT THREAD AND DEPTH
AUTO-TRANSFORMER	1/2" - 18 THREAD X 1" LONG
MINI BOLLARDS	3/8" - 18 THREAD X 1" LONG
TRASH / RECYCLE RECEPTACLES	1/2" - 18 THREAD X 1" LONG
LIGHT POLE	3/8" - 18 THREAD X 1" LONG



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SHEET NAME
PRODUCT OVERVIEW

SHEET SIZE
**ANSI B
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SHEET NUMBER
EV-5

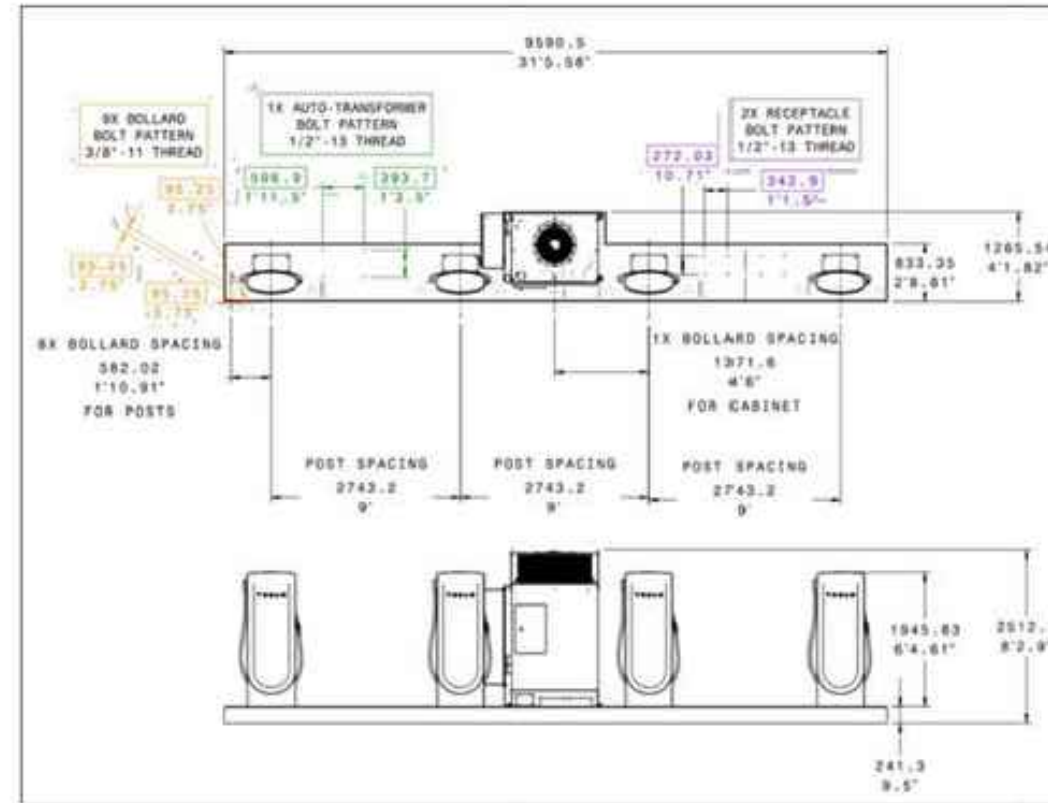
PRE-INSTALLATION PLANNING

ONE OF THE KEY DIFFERENCES BETWEEN A TYPICAL SITE INSTALL AND A PSU INSTALL IS THE NEED FOR A CRANE ON SITE TO UNLOAD THE PSUs FROM THE DELIVERY TRUCK AND PLACE THEM INTO THEIR FINAL POSITION. IT IS CRITICAL FOR THE DEVELOPER AND DESIGNER TO CHECK IF THERE IS A VIABLE PATHWAY FOR BOTH A CRANE AND A 8'-6" WIDE X 53' LONG FLATBED TRUCK TO ARRIVE ON SITE AND PARK IN AN AREA THAT ENABLES UNLOADING AND PLACEMENT OF THE PSUs.



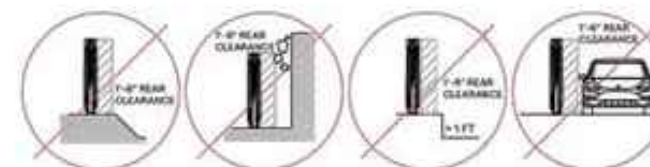
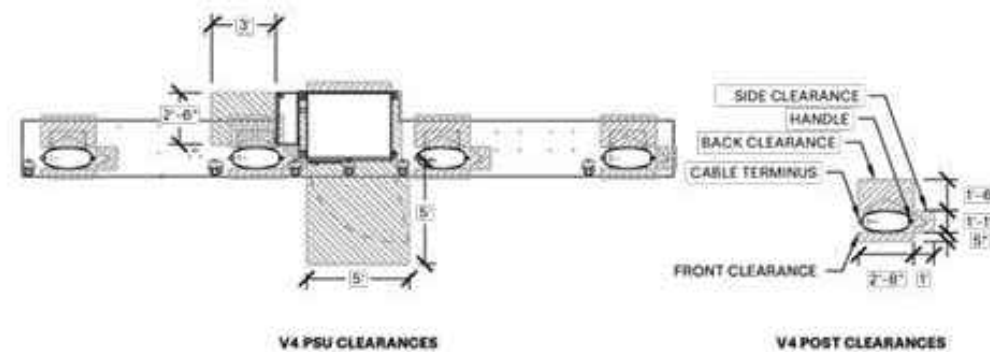
PSU CLEARANCES

THE PSU IS 31'-6" (9.59 M) LONG AND REQUIRES 4'-2" (1.27 M) OF CLEARANCE BEHIND THE CURB AT ITS MAXIMUM. THE ENDS OF THE PSU ARE 2'-9" (0.83 M) WIDE. THERE SHOULD BE ENOUGH SPACE FOR THE ENTIRE PSU TO LAY FLAT.



SERVICE CLEARANCES

THE DESIGNATED SERVICE AREAS BELOW MUST REMAIN CLEAR AND FREE OF ANY OBSTRUCTION.

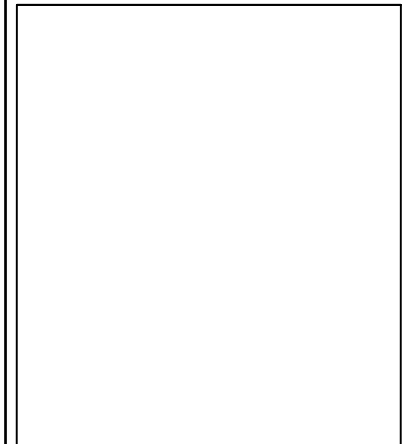


NOTE:
 • DO NOT PLACE CHARGER POSTS REAR CLEARANCES OVER ABRUPT ELEVATION CHANGES OR TRAFFIC ROAD.

MINIMUM DISTANCE REQUIREMENTS FOR SUPERCHARGER POST NEAR FUEL DISPENSERS AND VENTS PER NEC TABLE 514.3(B)(1):

- MAINTAIN A MINIMUM DISTANCE OF 20 FEET FROM MOTOR FUEL DISPENSERS (PUMPS), EXTENDING IN ALL DIRECTIONS.
- MAINTAIN A MINIMUM DISTANCE OF 10 FEET FROM VENTS ASSOCIATED WITH OUTDOOR, UNDERGROUND FUEL TANKS, EXTENDING IN ALL DIRECTIONS.

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SHEET NAME
SPACE REQUIREMENTS

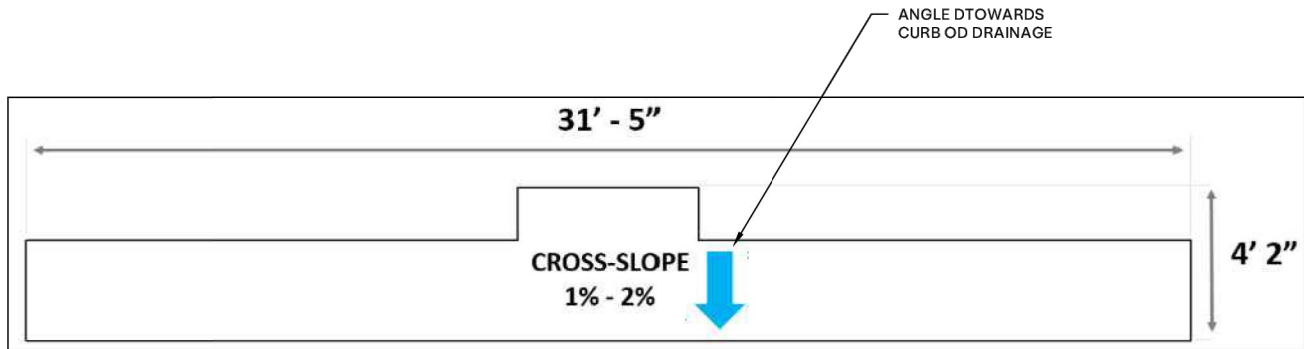
SHEET SIZE
**ANSI B
 11" X 17"**

SHEET NUMBER
EV-6

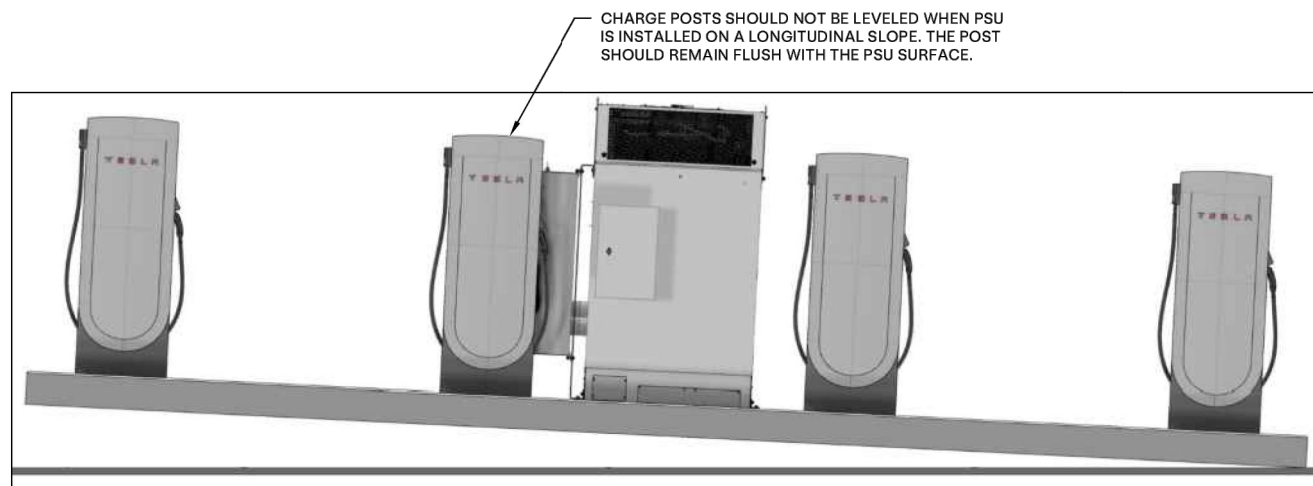
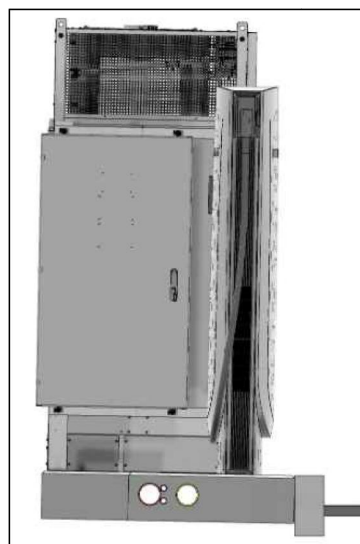
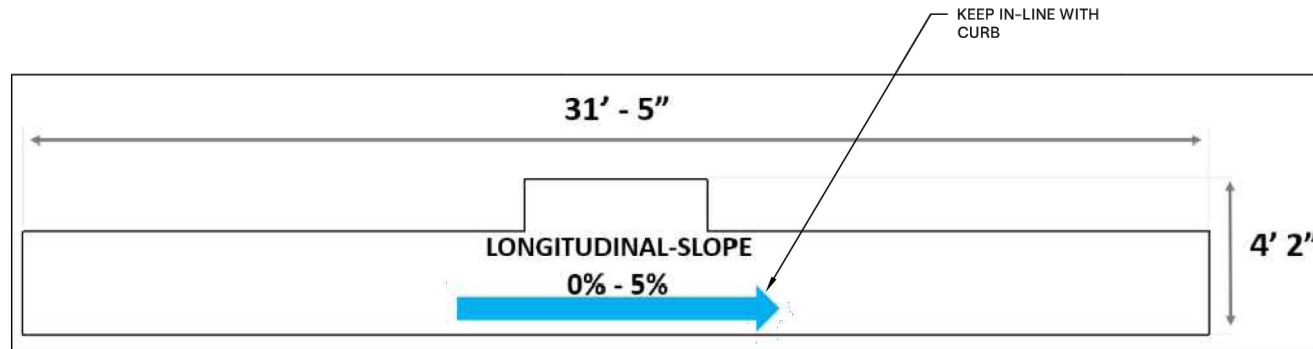
GRADING PLAN

SITE LAYOUT AND SURVEY SHOULD BE REVIEWED TO IDENTIFY ANY POTENTIAL DRAINAGE ISSUES. IF THERE IS A DRAINAGE CONCERN IDENTIFIED OR IF AHJ REQUIRES, A FULL-SITE GRADING PLAN FOR THE SITE SHOULD BE DEVELOPED DURING THE DESIGN PHASE.

THE **CROSS-SLOPE** OF THE PSU SHOULD BE A MINIMUM OF 1% AND MAXIMUM OF 2% TO ALLOW POSITIVE DRAINAGE. IN LOCATIONS WHERE THE PSU IS INSTALLED BEHIND A CURB AND GUTTER, IT IS PREFERABLE TO SLOPE THE PSU TOWARDS THE GUTTER.



THE **LONGITUDINAL SLOPE** OF THE PSU SHOULD FOLLOW THE SLOPE OF THE CURB ON THE SITE. A MAXIMUM OF 5% SLOPE IS ALLOWED IN THE LONGITUDINAL DIRECTION.



GROUND PREPARATION

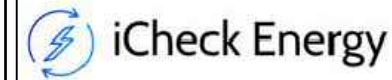
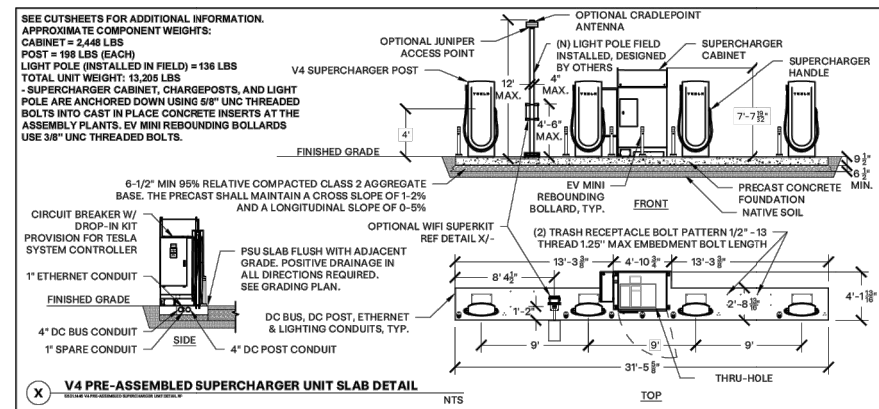
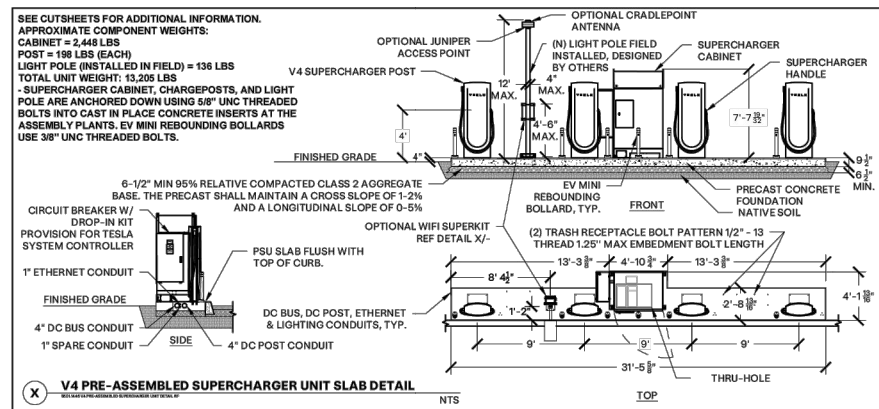
METHOD 1: BEHIND THE CURB

THE PSU SHOULD BE UNIFORMLY AND ENTIRELY SUPPORTED UNDERNEATH BY A LEVEL SURFACE. OTHER ENVIRONMENTAL FACTORS SUCH AS FROST LEVEL, WIND LOADING, AND EARTHQUAKE EXPOSURE SHOULD BE CONSIDERED AS WELL.

METHOD 2: FLUSH WITH GRADE

PRIOR TO FINAL DESIGN APPROVAL, A QUALIFIED CIVIL ENGINEER MUST REVIEW THE SITE SLOPES TO ENSURE THEY ARE DIRECTED AWAY FROM THE PSU EQUIPMENT. IF NECESSARY, THE ENGINEER SHALL PROVIDE A DETAILED GRADING PLAN THAT CONFIRMS WATER WILL NOT FLOW TOWARDS OR ACCUMULATE AROUND THE EQUIPMENT, PREVENTING POTENTIAL FLOODING OR WATER INGRESS ISSUES.

THIS ENSURES PROPER DRAINAGE AND EQUIPMENT PROTECTION IN ACCORDANCE WITH CIVIL ENGINEER BEST PRACTICES. REFER TO SECTION [GRADING PLAN] FOR ADDITIONAL SITE PREPARATION GUIDELINES.



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SHEET NAME
GROUNDING PREPARATIONS

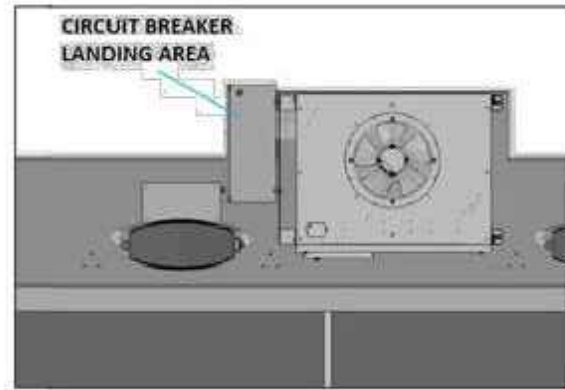
SHEET SIZE
**ANSI B
11" X 17"**

SHEET NUMBER
EV-7

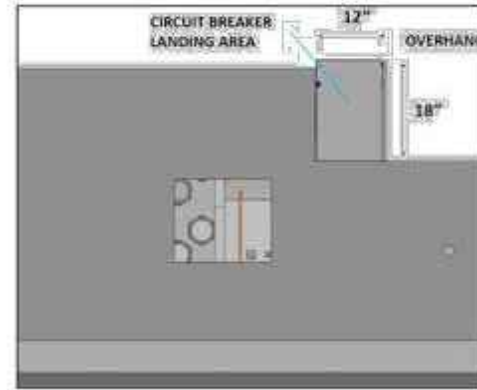
FIELD CONNECTIONS

THE AC INPUT, SHARED DC BUS AND ETHERNET CABLE FROM THE SITE-LEVEL TESLA SITE CONTROLLER ARE THE ONLY REQUIRED FIELD CONNECTIONS FOR A PSU INSTALL. ADDITIONAL FIELD CONNECTIONS FOR ON-SITE LIGHTING MAY ALSO BE NEEDED DEPENDING ON THE SITE DESIGN. IT IS THE RESPONSIBILITY OF THE DESIGN FIRM AND PROFESSIONAL ENGINEER TO SPECIFY AC INPUT AND DC BUS CONDUCTORS AND CONDUIT THAT COMPLY WITH APPLICABLE CODES AND REGULATIONS.

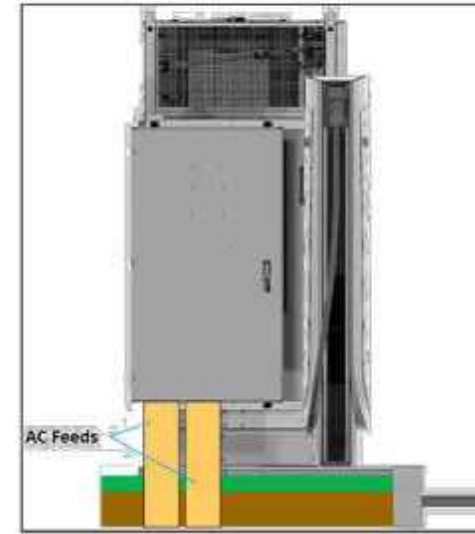
THE PSU HAS AN INTEGRATED 600A CIRCUIT BREAKER. THE LOAD SIDE OF THE BREAKER IS PRE-TERMINATED TO THE AC BUS BARS INSIDE THE CABINET. NEW AC FEEDERS SHOULD BE CONNECTED TO THE LINE-SIDE OF THIS CIRCUIT BREAKER INSTEAD OF THE CABINET DIRECTLY.



CIRCUIT BREAKER AREA - TOP VIEW



CIRCUIT BREAKER AREA - TOP BOTTOM



AC INPUT - SIDE VIEW

SUGGESTED CONDUIT AND CONDUCTOR SIZING:

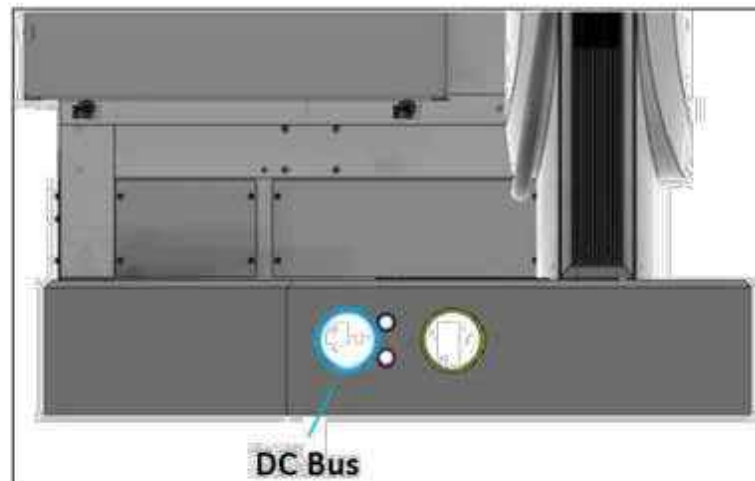
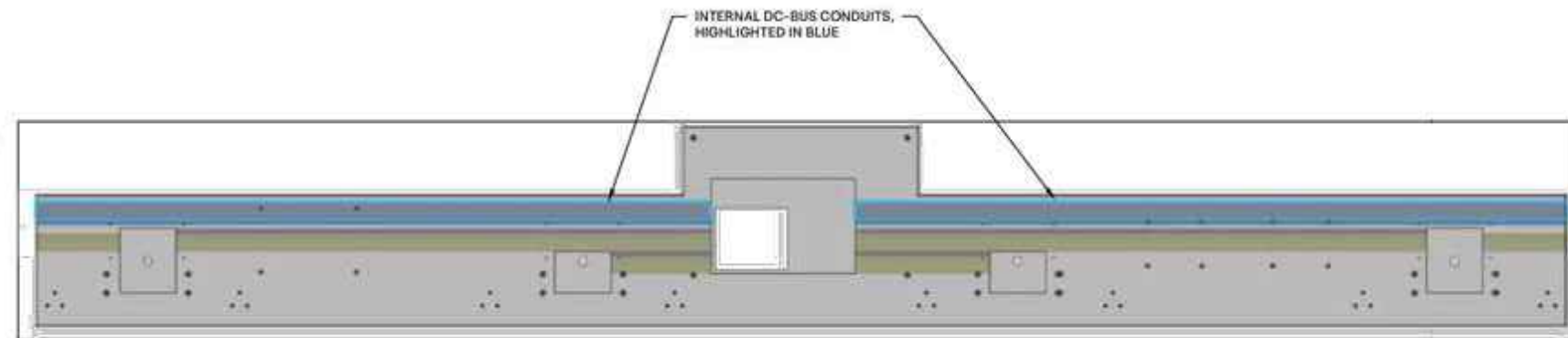
- (2) 4" conduit
- (4) 500 MCM Al (1 per phase/neutral)
- 1 AWG Cu or 2/0 AWG Al EGC

SHARED DC-BUS

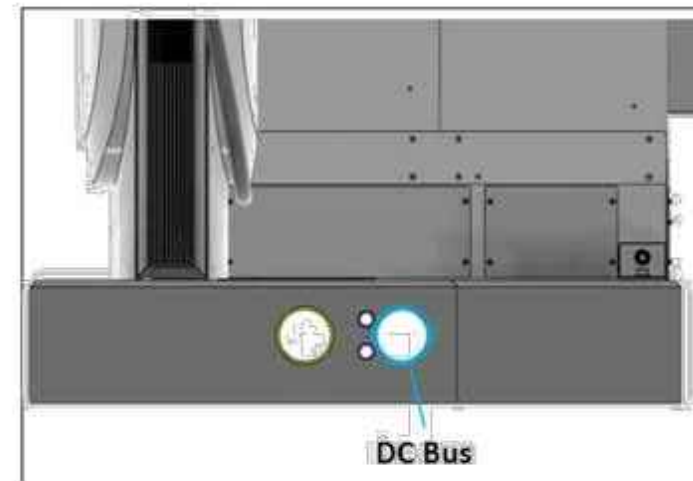
THE PSU COMES WITH EMBEDDED CONDUITS TO FACILITATE DC BUS CONNECTIONS. THERE ARE (2) 4" CONDUITS FOR THE DC BUS - ONE ON EACH END OF THE SLAB THAT ROUTES TO A RECESS BELOW THE CABINET. THE DC BUS CONDUITS HAVE CONDUIT COUPLERS FLUSH WITH THE OUTER SURFACE FOR MATING CONDUITS.

THE RECOMMENDED METHOD FOR CONNECTING THE DC BUS IS TO PLACE A WIREWAY BETWEEN THE PSUS PRIOR TO RESTORING GRADE. THE WIREWAY SHOULD BE PLACED SUCH THAT THE TOP OF THE WIREWAY IS FLUSH WITH THE TOP SURFACE OF THE PSU. OTHER METHODS INCLUDE USING CONDUIT (PVC OR RIGID) AND ENCASE IN POURED CONCRETE.

IMPORTANT! A MAXIMUM OF (3) PSUS CAN BE CONNECTED ON THE SAME BUS WHEN USING THIS INSTALL METHOD. THIS CONFIGURATION IS RECOMMENDED DUE TO THE EXPECTED LOWER COSTS OF INSTALL.

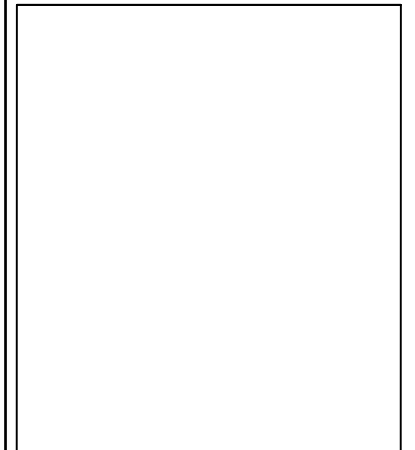


LEFT-SIDE



RIGHT-SIDE

REVISIONS		
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DRAWN BY
ESR

SHEET NAME
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SHEET SIZE
**ANSI B
 11" X 17"**

SHEET NUMBER
EV-8

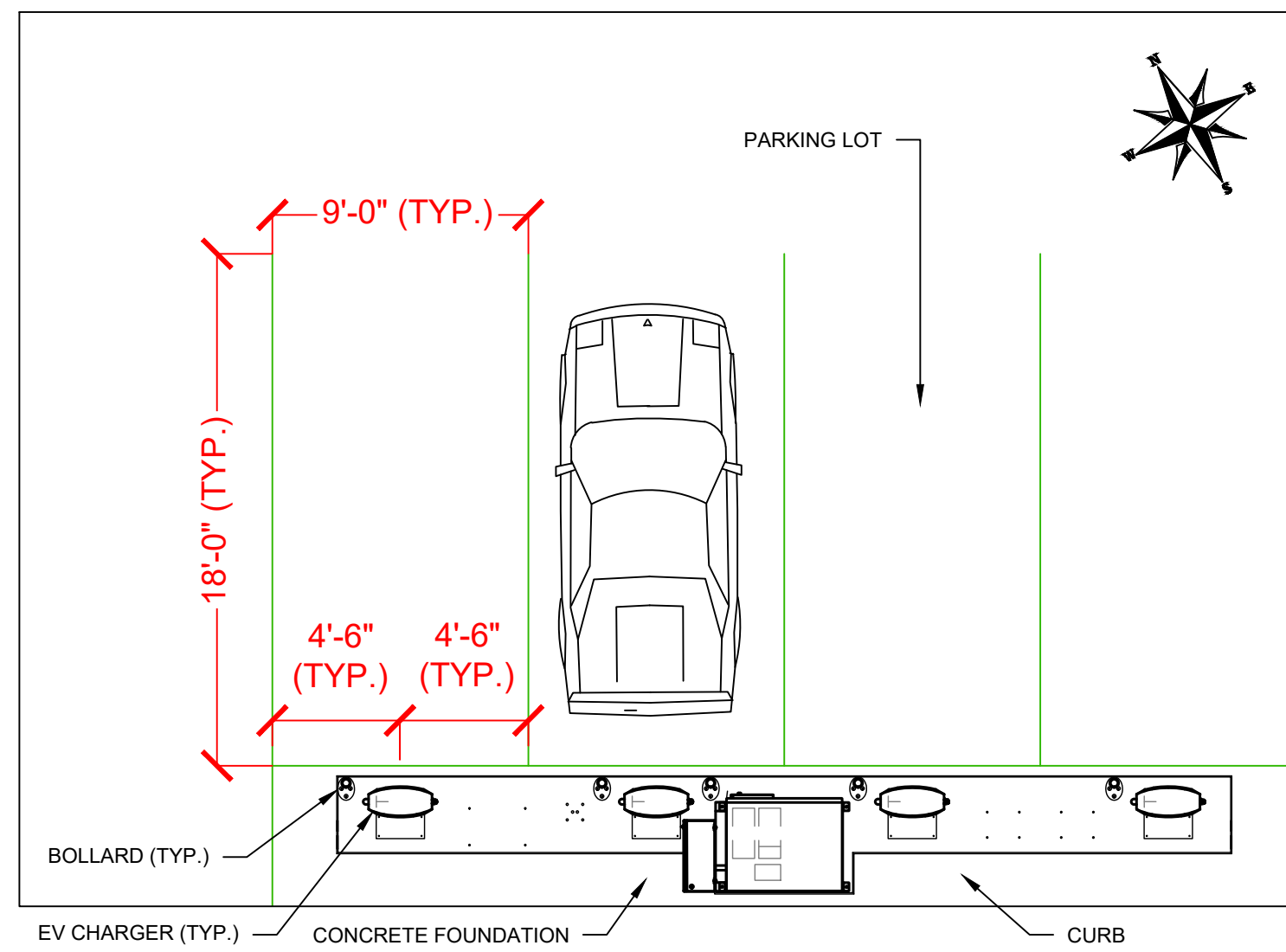
ELECTRICAL SITE PLAN KEYED NOTES: **ELECTRICAL SITE PLAN CONSTRUCTION NOTES:**

1. PROVIDE WIRING AND CONDUIT BACK TO PANEL FOR SHUNT TRIP BREAKERS. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER. COORDINATE EXACT LOCATION OF CAR CHARGERS WITH OWNER. PROVIDE FOR A COMPLETE INSTALLATION.
2. CONTRACTOR TO INSTALL CHARGER ON CONCRETE BASE AT BACK EDGE OF CURB AND ACCORDING TO MANUFACTURERS INSTRUCTIONS. CONSULT WITH ENGINEER OF RECORD IF THIS CANNOT BE ACCOMPLISHED. POSITION CHARGER AS CLOSE TO CURB AS POSSIBLE. RESTORE LANDSCAPE TO ORIGINAL CONDITION OR AS DIRECTED BY THE OWNER. COORDINATE LOCATION WITH OWNER. INSTALL PARKING STOPS AT APPROXIMATE LOCATIONS INDICATED ON DRAWINGS. COORDINATE EXACT LOCATIONS WITH OWNER. PROVIDE FOR A COMPLETE INSTALLATION.

1. ALL CHARGERS ARE TO COMPLY WITH SECTION 308.3.1 'UNOBSTRUCTED' SECTION OF THE ICC, WHICH STATES "WHERE A CLEAR FLOOR SPACE COMPLYING WITH SECTION 305 ALLOWS A PARALLEL APPROACH TO AN ELEMENT AND THE EDGE OF THE CLEAR FLOOR SPACE IS 10 INCHES (255 MM) MAXIMUM FROM THE ELEMENT, THE HIGH SIDE REACH SHALL BE 48 INCHES (1220 MM) MAXIMUM AND THE LOW SIDE REACH SHALL BE 15 INCHES (380 MM) MINIMUM ABOVE THE FLOOR. SEE IMAGE BELOW.
2. ALL CONCRETE DAMAGED OR REMOVED FOR INSTALLATION OF THE EV STATIONS AND ELECTRICAL WIRING SHALL BE REPLACED WITH A MINIMUM OF 6" 3,000 PSI CONCRETE. FINISHED ELEVATIONS SHALL MATCH EXISTING, ADJACENT CONCRETE AND/OR ASPHALT TO ASSURE POSITIVE DRAINAGE AND TO AVOID TRIPPING HAZARDS.

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1. **PARKING LOT DETAILS**
 Foundation shall be level and at same grade as top of curb.
 Foundation shall be placed at back of curb.

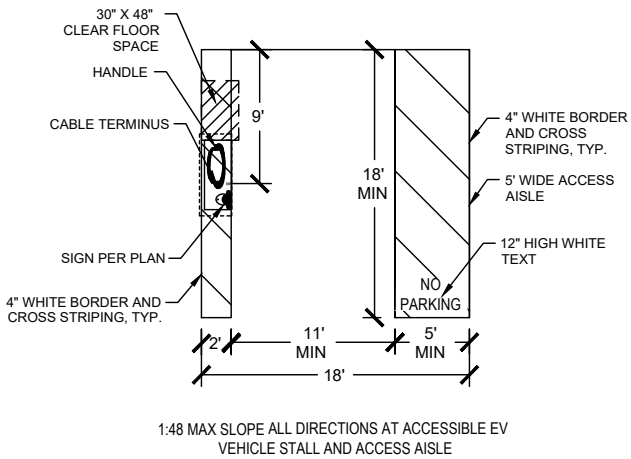
PROJECT NAME & ADDRESS
2215 E ANDERSON LN
2215 E ANDERSON LN.,
AUSTIN, TX 78752

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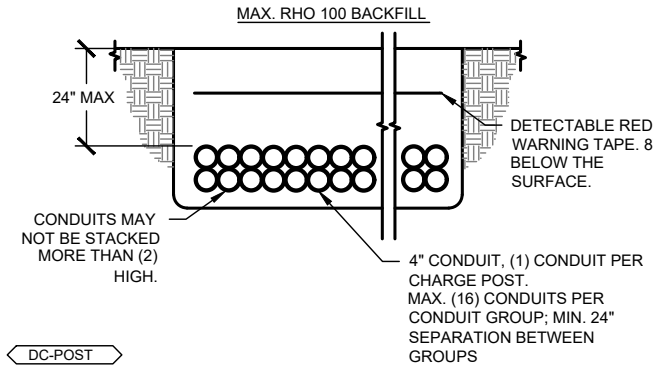
SHEET NAME
**INSTALLATION
 DETAILS**

SHEET SIZE
**ANSI B
 11" X 17"**

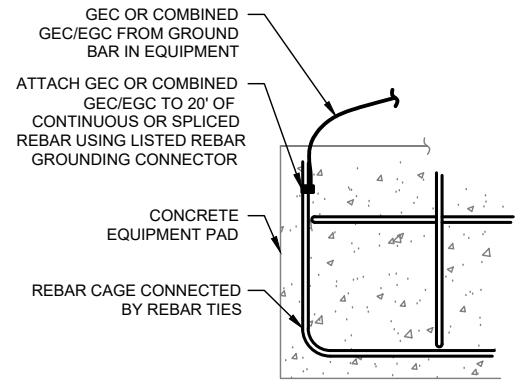
SHEET NUMBER
EV-9



1 ACCESSIBLE EV CHARGE STALL - ON THE LINE - IBC & ADA
NTS



2 "DC-POST" CIRCUIT TRENCH - 4" CONDUITS
NTS



3 CONCRETE-ENCASED ELECTRODE FOR CAST-IN-PLACE PADS ONLY
NTS

TRENCHING NOTES

THE TRENCH DESIGNS FOR ALL VEHICLE CHARGING CIRCUITS REQUIRING RHO VALUES ARE THE RESULT OF A THERMAL ANALYSIS OF THE CONDUCTORS UNDER LOAD. FOR PROPER PROTECTION THEY MUST BE FOLLOWED.

APPROVED BACKFILL REQUIRES DOCUMENTATION THAT SPECIFIES TESTED RHO VALUE. USE THE SPECIFIED BACKFILL LISTED BELOW OR TEST NATIVE SOIL CONDITIONS TO CONFIRM MAX DEFINED RHO VALUES. MINIMUM 2" OF APPROVED BACKFILL COVERAGE AROUND CONDUITS REQUIRED.

RHO 60 BACKFILL - CONCRETE BACKFILL WITH MIN 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI MUST BE USED TO ACHIEVE MAX RHO 60.

RHO 90 BACKFILL - LOW STRENGTH FLUIDIZED THERMAL (SLURRY) BACKFILL WITH MIN 28 DAY COMPRESSIVE STRENGTH OF 150 PSI MUST BE USED TO ACHIEVE MAX RHO 90.

RHO 120 BACKFILL - NATIVE SOILS/SAND.

FOR TRENCHES WITH MIXED CIRCUIT TYPES, APPLY THE CONDUIT SPACING FOR THE CIRCUIT TYPE WITH THE LARGER SPACING REQUIREMENT.

CONDUIT ARE PERMITTED TO HAVE GREATER THAN 24" COVER FOR SHORT DISTANCES WHERE REQUIRED TO CROSS UNDER (E) UTILITY LINES, TO ALLOW FOR NEC REQUIRED MIN RADIUS FOR CONDUIT TURN-UPS INTO PAD-MOUNTED EQUIPMENT, TO AVOID (E) OBSTRUCTIONS, ETC.

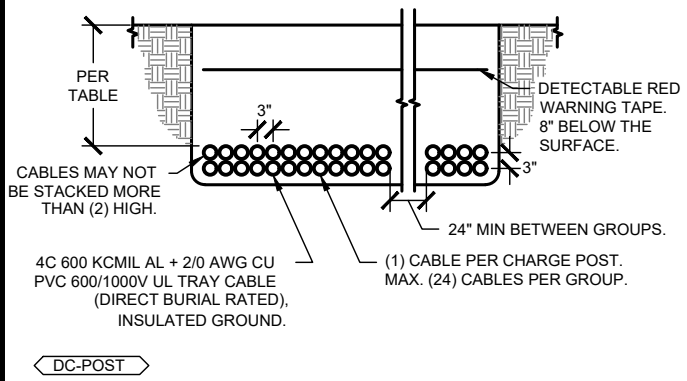
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NO. OF POST CIRCUITS (MAX)	MAX RHO BACKFILL*	MAX DEPTH	MIN DEPTH (VEHICULAR AREA)	MIN DEPTH (NON-VEHICULAR AREA)
16	120	28"	24"	24"
24	90	28"	24"	24"

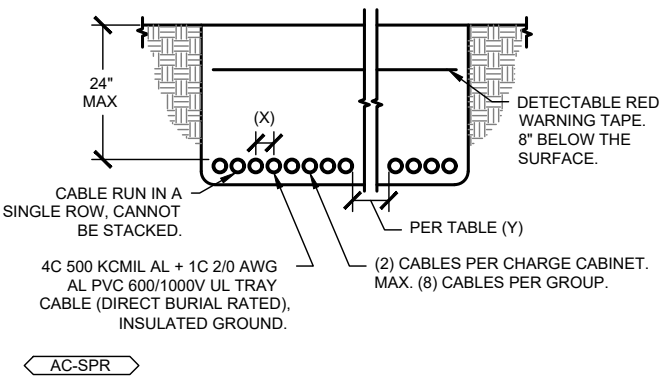
* SEE TRENCHING NOTES.



4 "DC-POST" CIRCUITS TRENCH - DIRECT BURIAL
NTS

MAX RHO BACKFILL*	CABLE SPACING (X)	MIN INTER TRENCH SPACING (Y)
120	3"	2'-6"
90	0"	1'-9"
60	0"	1'-3"

* SEE TRENCHING NOTES.



5 "AC-SPR" CIRCUITS TRENCH - DIRECT BURIAL
NTS

NOTES

REFER TO ONE-LINE DIAGRAM FOR SPECIFIC CIRCUIT IDENTIFIERS BETWEEN EQUIPMENT.

REFER TO AC & DC CIRCUIT SCHEDULES FOR NEUTRAL/GROUND SIZING PER CIRCUIT.

LEGEND

- NEUTRAL BUSBAR
- GROUND BUSBAR
- PRIMARY OR SECONDARY COMMON TERMINAL, AS APPLICABLE
- TERMINAL ON NEUTRAL OR GROUND BUSBAR
- IRREVERSIBLE SPLICE OR CRIMP PER NEC 250.64(C)
- ⊕ NEC 250.52(A)-COMPLIANT GROUNDING ELECTRODE

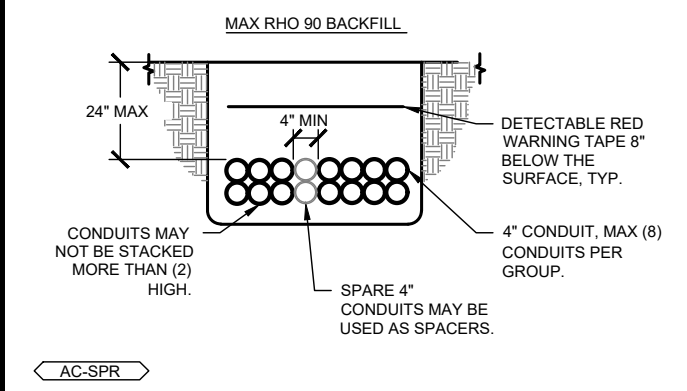
NOTES

REFER TO ONE-LINE DIAGRAM FOR SPECIFIC CIRCUIT IDENTIFIERS BETWEEN EQUIPMENT.

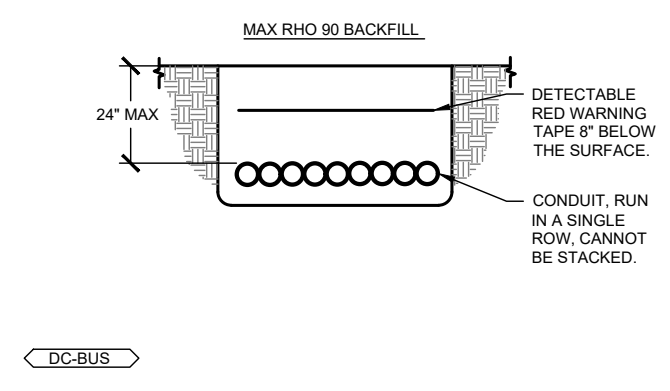
REFER TO AC & DC CIRCUIT SCHEDULES FOR NEUTRAL/GROUND SIZING PER CIRCUIT.

LEGEND

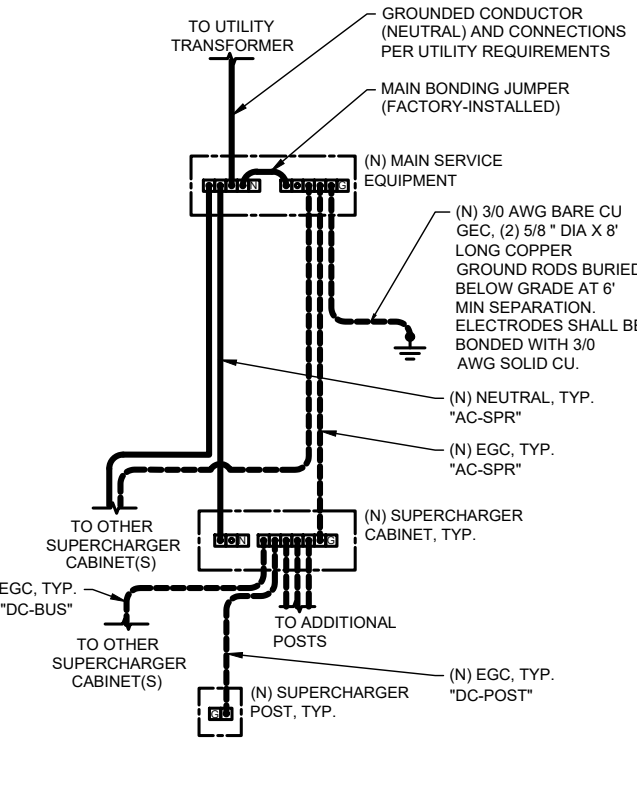
- NEUTRAL BUSBAR
- GROUND BUSBAR
- PRIMARY OR SECONDARY COMMON TERMINAL, AS APPLICABLE
- TERMINAL ON NEUTRAL OR GROUND BUSBAR
- IRREVERSIBLE SPLICE OR CRIMP PER NEC 250.64(C)
- ⊕ NEC 250.52(A)-COMPLIANT GROUNDING ELECTRODE



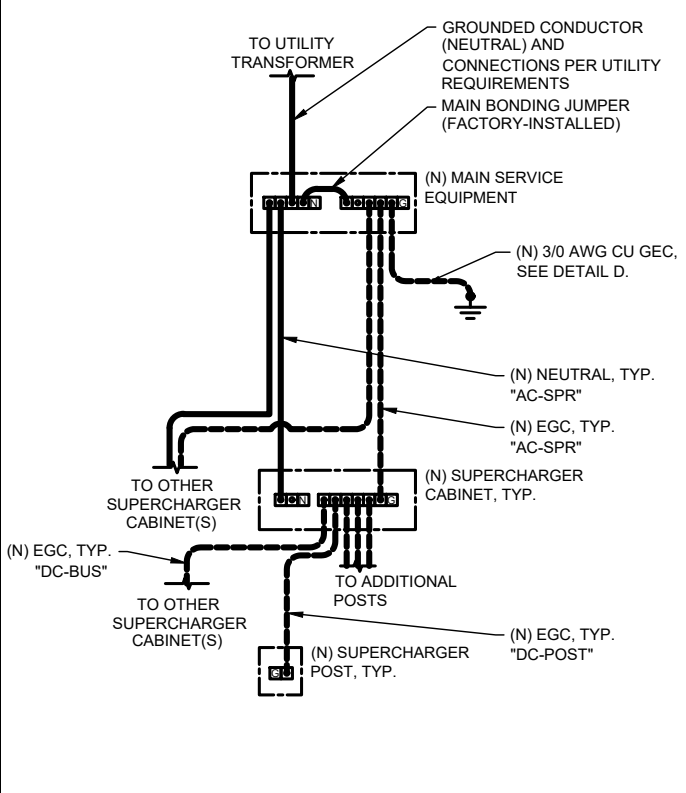
6 "AC-SPR" CIRCUIT TRENCH - 4" CONDUITS
NTS



7 "DC-BUS" CIRCUITS TRENCH - MAX RHO 90
NTS



8 GROUNDING DIAGRAM



9 GROUNDING DIAGRAM

PROJECT NAME & ADDRESS

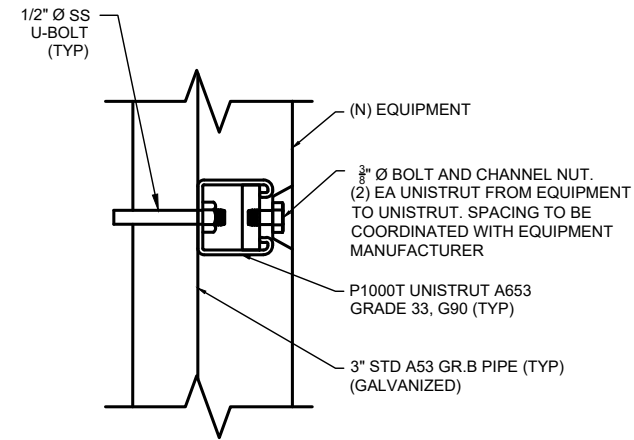
2215 E ANDERSON LN
2215 E ANDERSON LN.,
AUSTIN, TX 78752

DRAWN BY
ESR

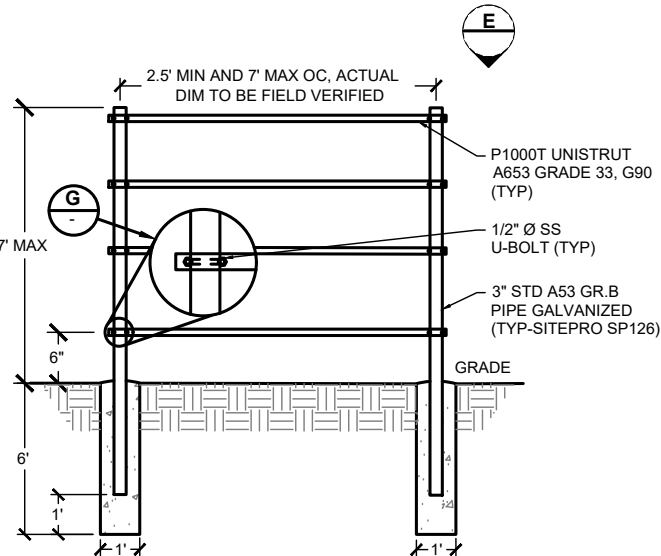
SHEET NAME
INSTALLATION DETAILS

SHEET SIZE
**ANSI B
11" X 17"**

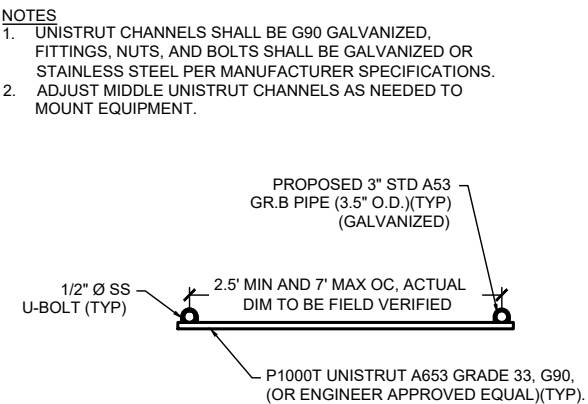
SHEET NUMBER
EV-10



G EQUIPMENT RACK, STRUT MOUNTED EQUIPMENT
NTS



F EQUIPMENT RACK, STRUT (FRONT ELEVATION)
NTS



E EQUIPMENT RACK, STRUT (PLAN VIEW)
NTS

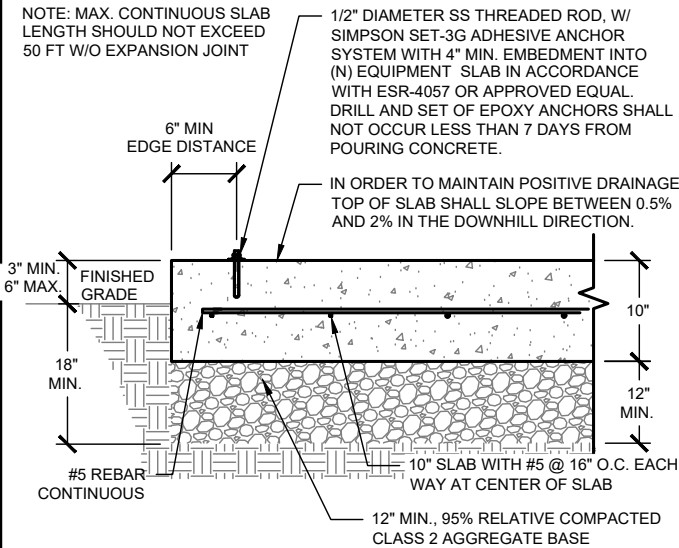
CONCRETE DESIGN (SNOW COUNTRY)

1. ALL CONCRETE SHALL CONFORM TO THE LATEST EDITION OF THE ACI.
2. CONCRETE SHALL BE NORMAL WEIGHT AND SHALL HAVE 4,500 PSI STRENGTH AT 28 DAYS.
3. REINFORCED CONCRETE IN THE FOUNDATION SHALL BE OF NATURAL AGGREGATE CONFORMING TO ASTM C-33.
4. TYPE III CEMENT TO MEET ASTM C150.
5. REINFORCING STEEL - ASTM A615 WITH THE FOLLOWING STRENGTHS:

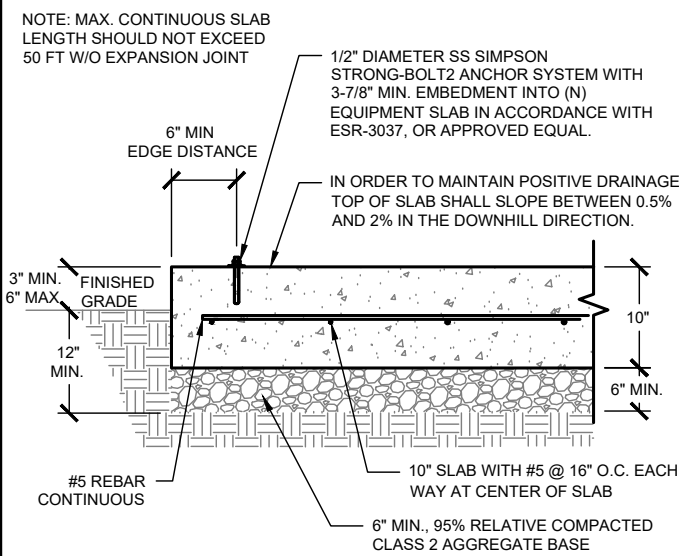
SIZE	STRENGTH:
#4 AND SMALLER	GRADE 60 (fy = 60000 PSI)
#5 AND LARGER	GRADE 60 (fy = 60000 PSI)
6. FABRICATE AND PLACE REINFORCEMENT IN ACCORDANCE WITH ACI PUBLICATION SP-66, ACI DETAILING MANUAL - LATEST EDITION.
7. PLACE CONCRETE IN COMPLIANCE WITH ACI 304. ALL CONCRETE SHALL BE MECHANICALLY VIBRATED.
8. CONFORM TO ASTM C-94 FOR CONCRETE MIXING OPERATIONS.
9. CONCRETE COVER FOR REINFORCEMENT FOR NON-PRESTRESSED, CAST IN PLACE CONCRETE SHALL BE AS FOLLOWS:

CONDITION	COVER
CAST AGAINST EARTH	3"
EXPOSED TO WEATHER	
#5 AND SMALLER	1-1/2"
#6 AND LARGER	2"
SLAB-ON-GRADE	2"

10. EMBEDS - ALL ITEMS TO BE CAST INTO CONCRETE SUCH AS REINFORCING DOWELS, BOLTS, ANCHORS, PIPES, SLEEVES, ETC., SHALL BE SECURELY AND ACCURATELY POSITIONED INTO THE FORMS PRIOR TO PLACING THE CONCRETE.
11. ALL CONCRETE EXPOSED TO THE WEATHER TO BE AIR ENTRAINED AND SHALL CONFORM TO ASTM C-260.
12. PROVIDE CONTINUOUS REINFORCING BARS UNLESS WHERE SPLICES ARE SPECIFICALLY SHOWN ON THE DRAWINGS.
13. CALCIUM CHLORIDE ADMIXTURES OR ADMIXTURES CONTAINING CHLORIDE SALTS SHALL NOT BE ADDED TO THE CONCRETE.



C EQUIPMENT PAD & ANCHOR SECTION (SNOW COUNTRY)
NTS



B EQUIPMENT PAD & ANCHOR SECTION (NO-SNOW)
NTS

CONCRETE DESIGN

1. ALL CONCRETE SHALL CONFORM TO THE LATEST EDITION OF THE ACI.
2. CONCRETE SHALL BE NORMAL WEIGHT AND SHALL HAVE 2,500 PSI STRENGTH AT 28 DAYS.
3. REINFORCED CONCRETE IN THE FOUNDATION SHALL BE OF NATURAL AGGREGATE CONFORMING TO ASTM C-33.
4. TYPE I/II CEMENT TO MEET ASTM C150.
5. REINFORCING STEEL - ASTM A615 WITH THE FOLLOWING STRENGTHS:

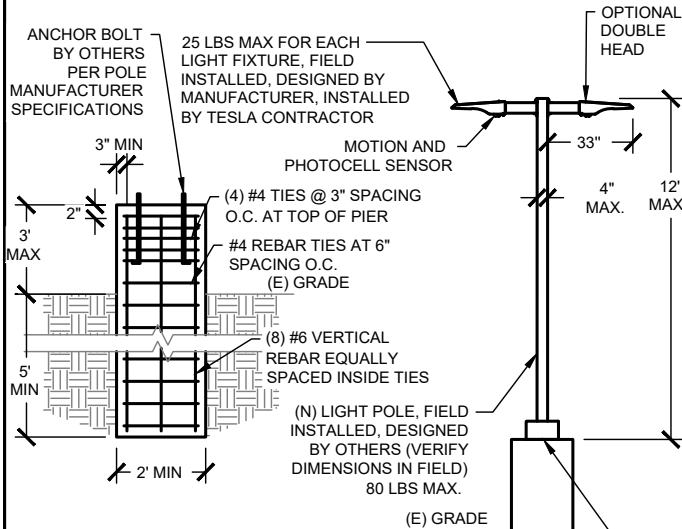
SIZE	STRENGTH:
#4 AND SMALLER	GRADE 60 (fy = 60000 PSI)
#5 AND LARGER	GRADE 60 (fy = 60000 PSI)
6. FABRICATE AND PLACE REINFORCEMENT IN ACCORDANCE WITH ACI PUBLICATION SP-66, ACI DETAILING MANUAL - LATEST EDITION.
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CONDITION	COVER
CAST AGAINST EARTH	3"
EXPOSED TO WEATHER	
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SLAB-ON-GRADE	2"

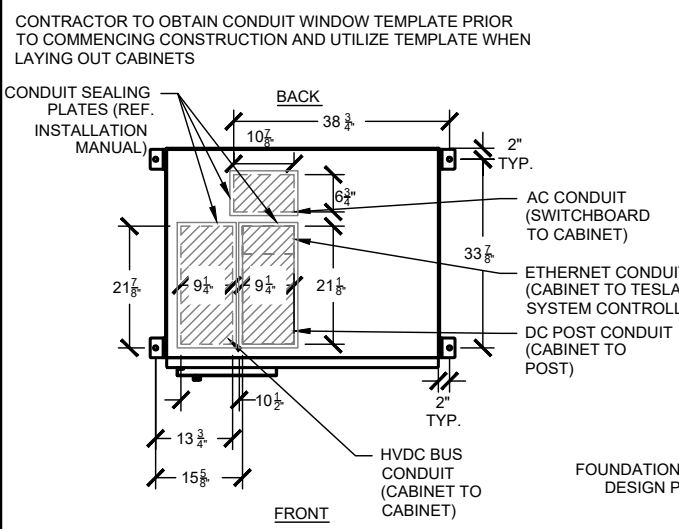
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11. ALL CONCRETE EXPOSED TO THE WEATHER TO BE AIR ENTRAINED AND SHALL CONFORM TO ASTM C-260.
12. PROVIDE CONTINUOUS REINFORCING BARS UNLESS WHERE SPLICES ARE SPECIFICALLY SHOWN ON THE DRAWINGS.
13. CALCIUM CHLORIDE ADMIXTURES OR ADMIXTURES CONTAINING CHLORIDE SALTS SHALL NOT BE ADDED TO THE CONCRETE.

STRUCTURAL DESIGN CRITERIA:

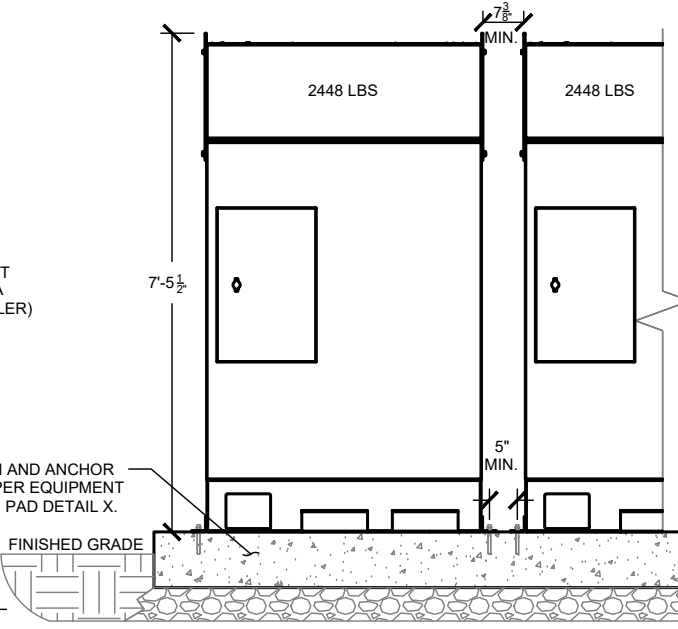
DESIGN CODE:	
- XXXX XBC	- WIND EXPOSURE = X
	4. SEISMIC DESIGN
DESIGN CRITERIA:	
1. GEOTECHNICAL INFORMATION	- RISK CATEGORY = XX
- ALLOWABLE BEARING PRESSURE = 1,500 PSF USED FOR EQUIPMENT FOUNDATION	- SEISMIC IMPORTANCE FACTOR = 1.0
	- SITE CLASS = D
	- Ss = XXXX / S1 = XXXX
2. SNOW LOAD	- Sds = XXXX / Sd1 = XXXX
- GROUND SNOW LOAD = XX PSF	- SEISMIC DESIGN CATEGORY = X
3. WIND DESIGN	- BASIC SEISMIC-FORCE-RESISTING SYSTEM = NON-STRUCTURAL COMPONENT
- DESIGN WIND SPEED = XXX MPH (ULTIMATE)	- R = 2.5 / a_p = 1.0
- RISK CATEGORY = XX	



D LIGHT POLE FOUNDATION
NTS



A V3 SUPERCHARGER CABINET FRONT & CONDUIT OPENINGS
3/4"=1'-0"



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201-986-6181
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REVISIONS		
DESCRIPTION	DATE	REV
INITIAL DESIGN	04/27/2026	

PROJECT NAME & ADDRESS

2215 E ANDERSON LN

2215 E ANDERSON LN.,
AUSTIN, TX 78752

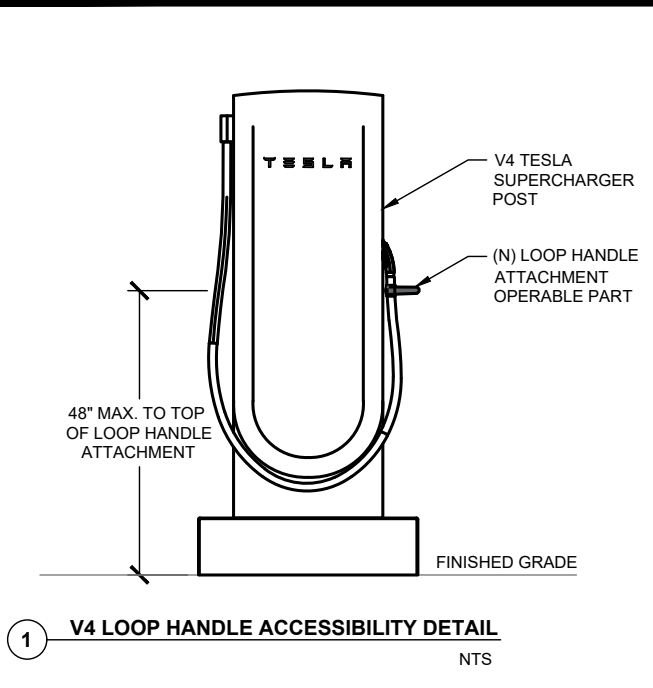
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ESR

SHEET NAME
INSTALLATION DETAILS

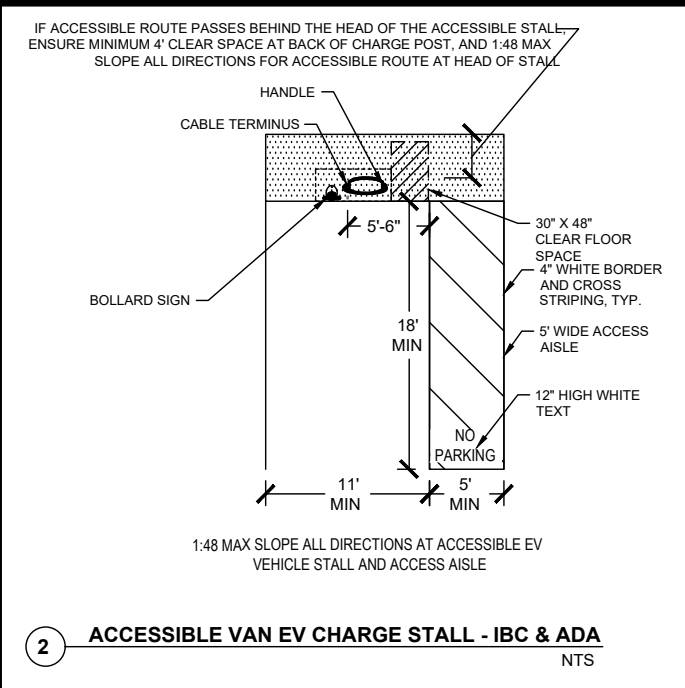
SHEET SIZE
ANSI B
11" X 17"

SHEET NUMBER
EV-11

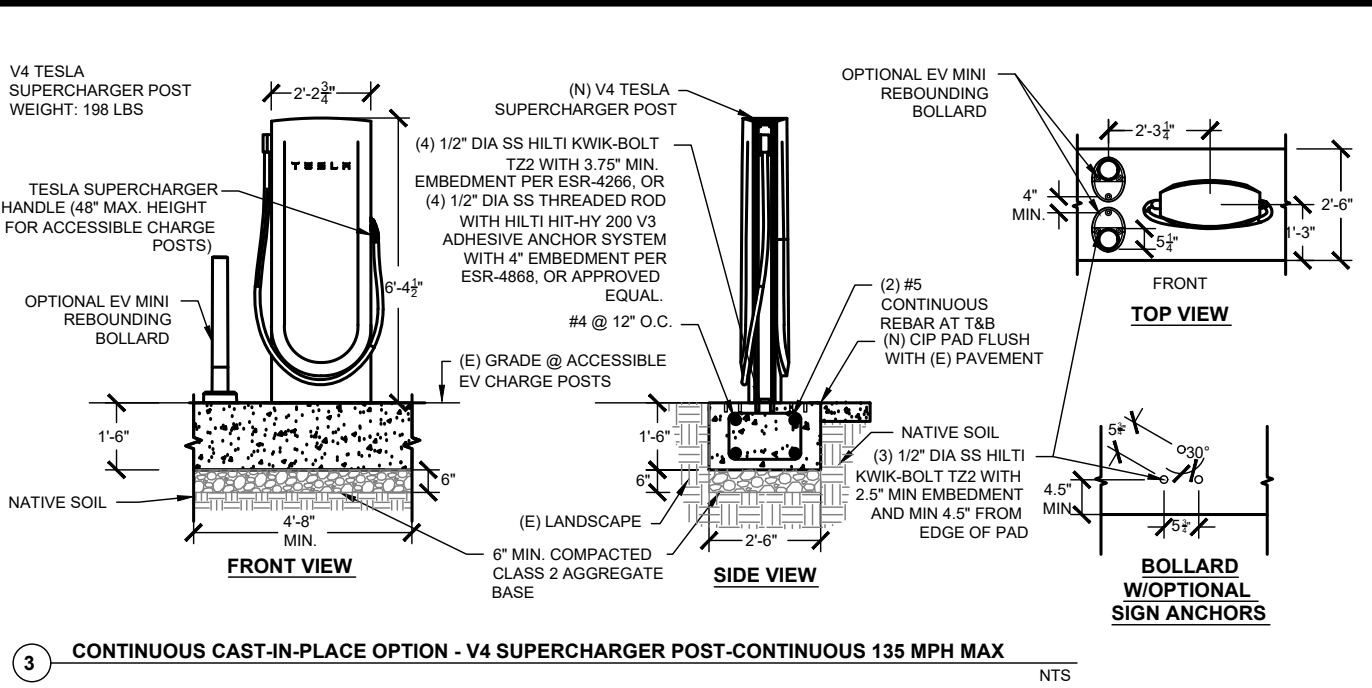
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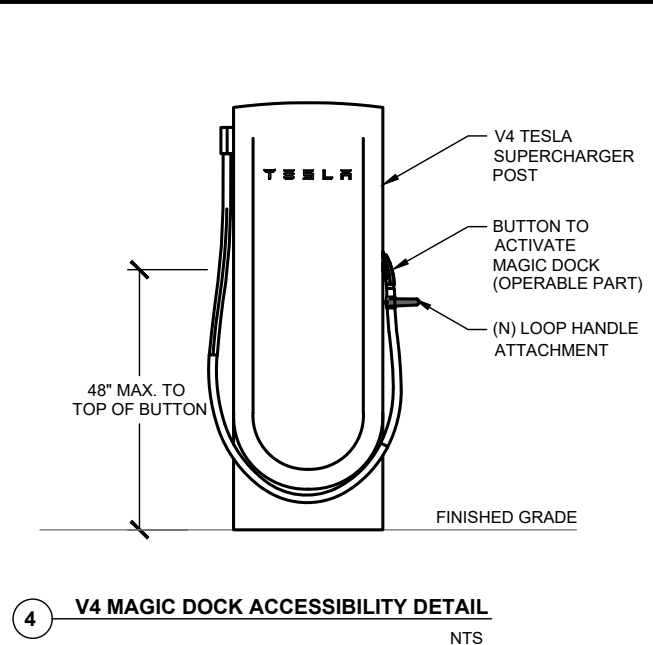
1 V4 LOOP HANDLE ACCESSIBILITY DETAIL
NTS



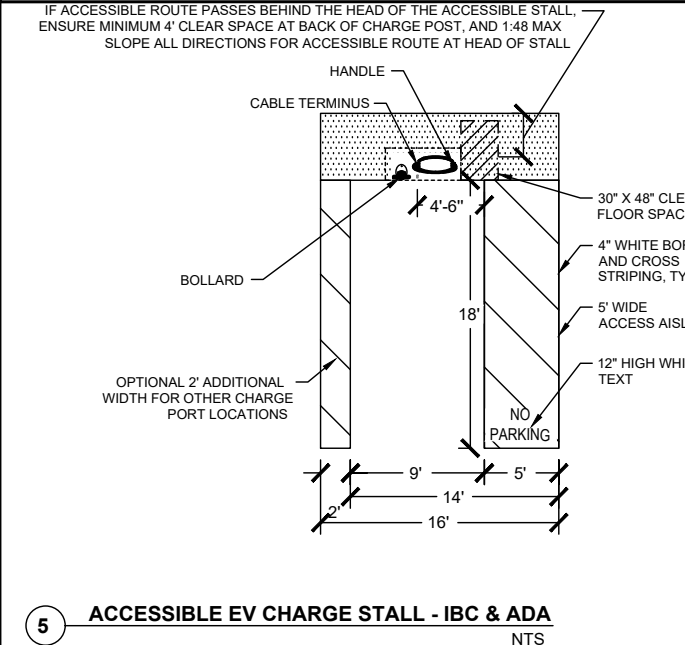
2 ACCESSIBLE VAN EV CHARGE STALL - IBC & ADA
NTS



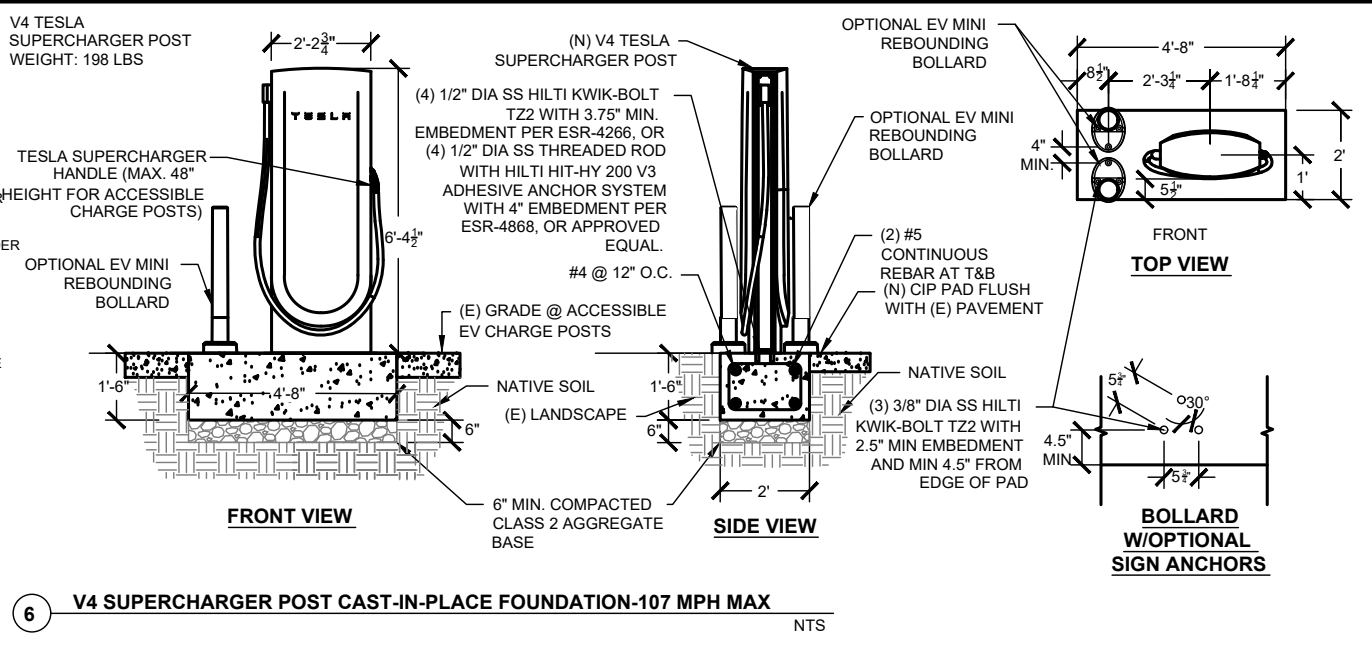
3 CONTINUOUS CAST-IN-PLACE OPTION - V4 SUPERCHARGER POST-CONTINUOUS 135 MPH MAX
NTS



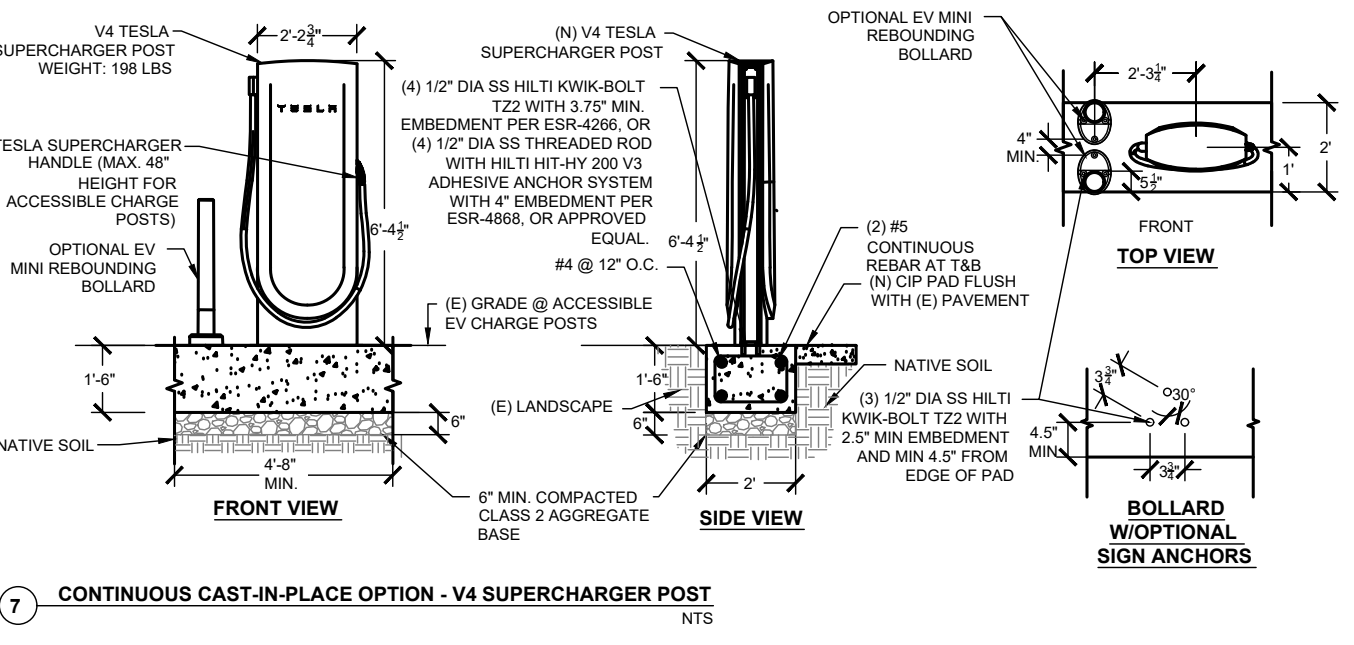
4 V4 MAGIC DOCK ACCESSIBILITY DETAIL
NTS



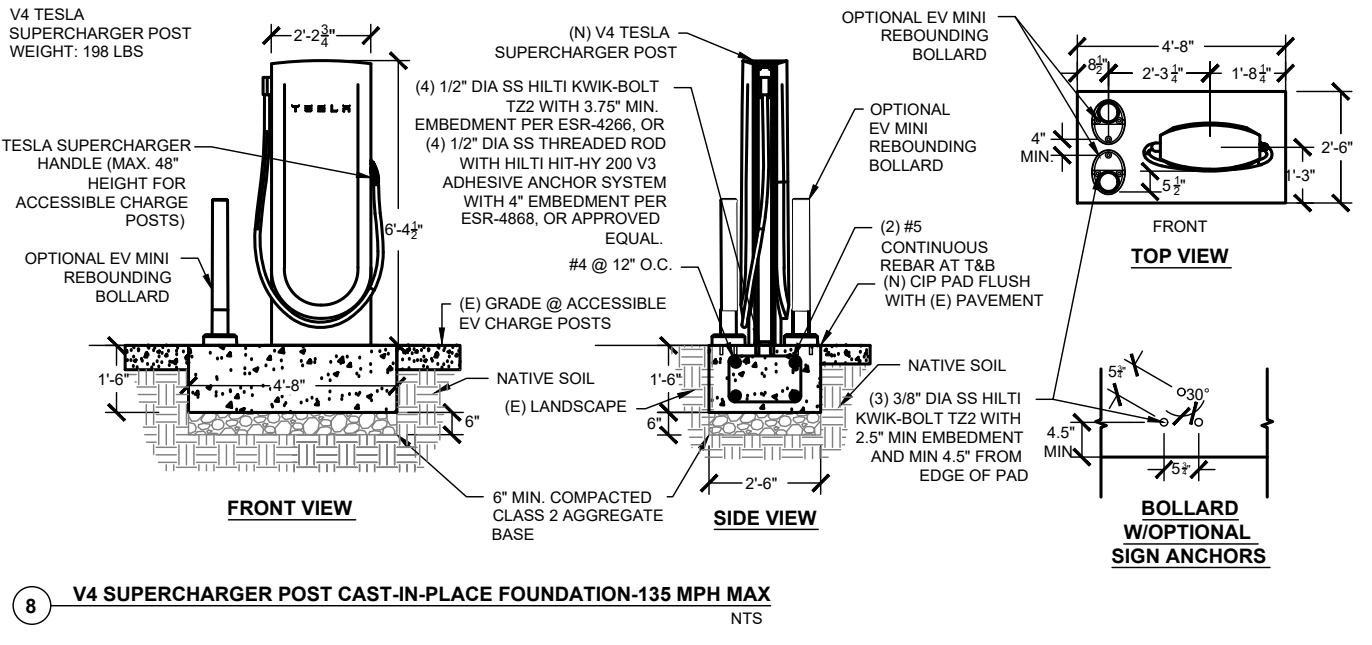
5 ACCESSIBLE EV CHARGE STALL - IBC & ADA
NTS



6 V4 SUPERCHARGER POST CAST-IN-PLACE FOUNDATION-107 MPH MAX
NTS



7 CONTINUOUS CAST-IN-PLACE OPTION - V4 SUPERCHARGER POST
NTS



8 V4 SUPERCHARGER POST CAST-IN-PLACE FOUNDATION-135 MPH MAX
NTS

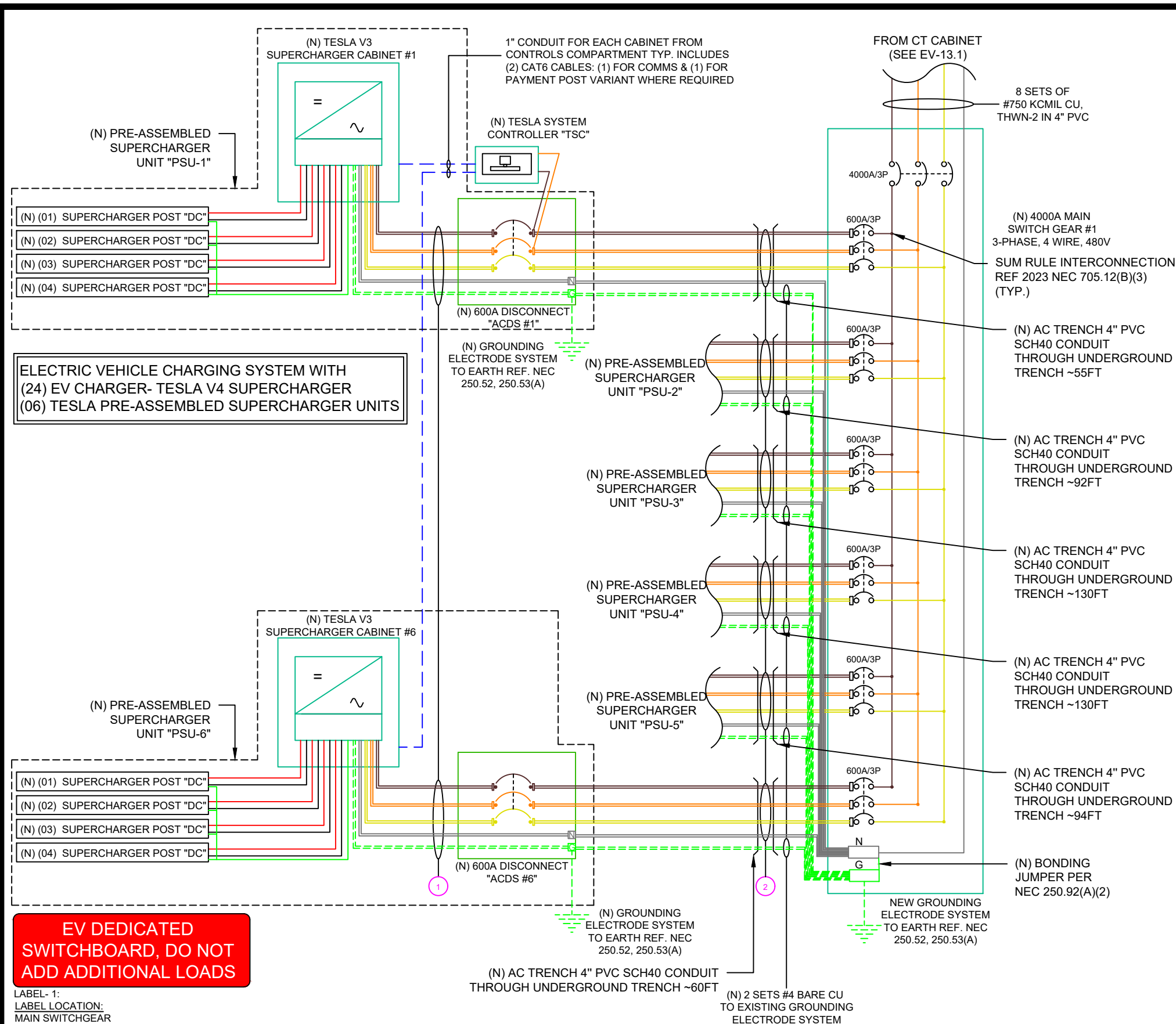
PROJECT NAME & ADDRESS
2215 E ANDERSON LN
2215 E ANDERSON LN.,
AUSTIN, TX 78752

DRAWN BY
ESR

SHEET NAME
INSTALLATION DETAILS

SHEET SIZE
ANSI B
11" X 17"

SHEET NUMBER
EV-12



ELECTRIC VEHICLE CHARGING SYSTEM WITH
 (24) EV CHARGER- TESLA V4 SUPERCHARGER
 (06) TESLA PRE-ASSEMBLED SUPERCHARGER UNITS

EV DEDICATED SWITCHBOARD, DO NOT ADD ADDITIONAL LOADS

LABEL 1:
 LABEL LOCATION:
 MAIN SWITCHGEAR

OCPD CALCULATIONS:
 NEC 690.9(B)
 NO OF CABINET * MAX. CONTINUOUS O/P CURRENT OF CABINET * 1.25 =
 6 * 465A X 1.25 = 3487.50 A

1 ELECTRICAL LINE DIAGRAM
 EV-13 SCALE: NTS

QTY	CONDUCTOR INFORMATION	CONDUIT TYPE	CONDUIT SIZE
(3)	2 SETS OF #350 KCMIL - CU, THWN-2 (L1, L2 & L3)	EMT, LFMC OR PVC	4"
(1)	2 SETS OF #350 KCMIL - CU, THWN-2 N		
(1)	2 SETS OF #4AWG - CU, THWN-2 GND	PVC	4"
(3)	2 SETS OF #350 KCMIL - CU, THWN-2 (L1, L2 & L3)		
(1)	2 SETS OF #350 KCMIL - CU, THWN-2 N		
(1)	2 SETS OF #4AWG - CU, THWN-2 GND		

CONDUIT & WIRING NOTES

(1) CONDUIT TYPES (UNLESS OTHERWISE NOTED):
 - RMC FOR EXTERIOR USE.
 - PVC SCH 40 IN UNDERGROUND TRENCHES, SCH 80 SWEEPS

(2) WIRE COLOR SPECIFICATION: (TAPE AT TERMINATIONS OR INSTALL COLORED WIRE WHERE REQUIRED BY NEC)
 - DC POSITIVE UNGROUNDED WIRING: RED
 - DC NEGATIVE UNGROUNDED WIRING: BLACK
 - DC GROUND: GREEN OR BARE
 - AC PHASE WIRES:
 - AC NEUTRAL:
 - AC GROUND:
 BROWN/ORANGE/YELLOW
 GRAY
 GREEN

(3) WIRE TYPE NOTES:
 - ALL WIRING IS COPPER, UNLESS OTHERWISE NOTED
 - ALL WIRING TO BE STRANDED, UNLESS OTHERWISE NOTED
 - ALL WIRING TO BE RATED FOR 90C IN WET LOCATIONS, UNLESS OTHERWISE NOTED
 - TAPE BOTH POLARITIES OF HOME RUN WIRING AT TERMINATIONS IN TRANSITION BOX. IDENTIFY SOURCE CIRCUIT BY ID NUMBER.

(4) AMPACITY AND AMPERAGE
 - ALL DC CURRENTS ARE SHORT CIRCUIT CURRENT VALUES
 - ALL AC CURRENTS ARE NOMINAL PER-PHASE VALUES
 - WIRE AMPACITY IS BASED ON NUMBER OF WIRES PER CONDUIT AND HEIGHT ABOVE ROOF.
 IF CONDUITS ARE INSTALLED DIFFERENTLY THAN SHOWN, THE WIRE SIZES MAY BE AFFECTED
 - VOLTAGE DROP CALCULATIONS ARE BASED ON THE LONGEST WIRE RUN

(5) GROUNDING
 - ALL CONDUIT TO BE BONDED AS REQUIRED
 - ALL GROUND WIRE IN ≥10 FT OF CONDUIT SHALL BE INSULATED.

(6) LENGTH OF TYPE (1) WIRE TO BE CONFIRMED BASED ON ADDITIONAL PCS LOCATIONS

SERVICE DISCONNECT SWITCH NOTES:

- SWITCH WILL BE SERVICE RATED AND ACCESSIBLE AND LOCKABLE 24/7.
- SWITCH RATED FOR 200kA FAULT CURRENT WITH CLASS R, J, OR L FUSES
- SELECT FUSES TO BE SERIES RATED WITH MAIN PANELBOARD BREAKERS OR KAIC OF BREAKERS TO BE SUFFICIENT FOR AVAILABLE FAULT CURRENT

GROUNDING NOTES

- TRANSFORMER AND SERVICE DISCONNECT GEC TO BE SIZED PER NEC 250.66. COPPER GROUNDING ELECTRODE ROD 3/4" x 10' MIN TO BE USED. FROM TRANSFORMER EARTH GROUND TO COPPER GEC, GROUND SYSTEM RESISTANCE SHALL BE 25 OHMS OR LESS. TWO GROUND RODS TO BE DRIVEN SIX FEET APART IF 25 OHM VALUE IS NOT OBTAINED.
- GROUNDING ELECTRODE SYSTEM FOR BOTH TRANSFORMER AND SERVICE DISCONNECT TO BE BONDED BELOW FINISHED SLAB OR GRADE

ARC FLASH NOTES
 ARC FLASH RISK ASSESSMENT/LABELING REQUIRED PRIOR TO COMMISSIONING

NOTE:

- CABINET WILL BE LIMITED TO MAX OUTPUT OF 465A.
- WALL CONNECTOR INCORPORATES AUTOMATIC LOAD MANAGEMENT.
- REFER TO LOAD CALCULATIONS FOR DETAILED EV-1 PANEL BREAKER CONFIGURATION.
- CIRCUIT BREAKER SIZE IS PROGRAMMED DURING THE COMMISSIONING PROCESS. SEE COMMISSIONING PROCEDURE FROM TESLA INSTALLATION MANUAL.
- EACH WALL CONNECTOR MUST HAVE ITS OWN BRANCH CIRCUIT WITH L1, L2 AND GROUND.
- COPPER WIRE TERMINATIONS ONLY FOR LANDING IN WALL CONNECTOR WIREBOX TERMINALS.
- FOR OUTDOOR INSTALLATIONS, USE WATERTIGHT FITTINGS WHEN SECURING FEEDER WIRES TO THE WIREBOX.

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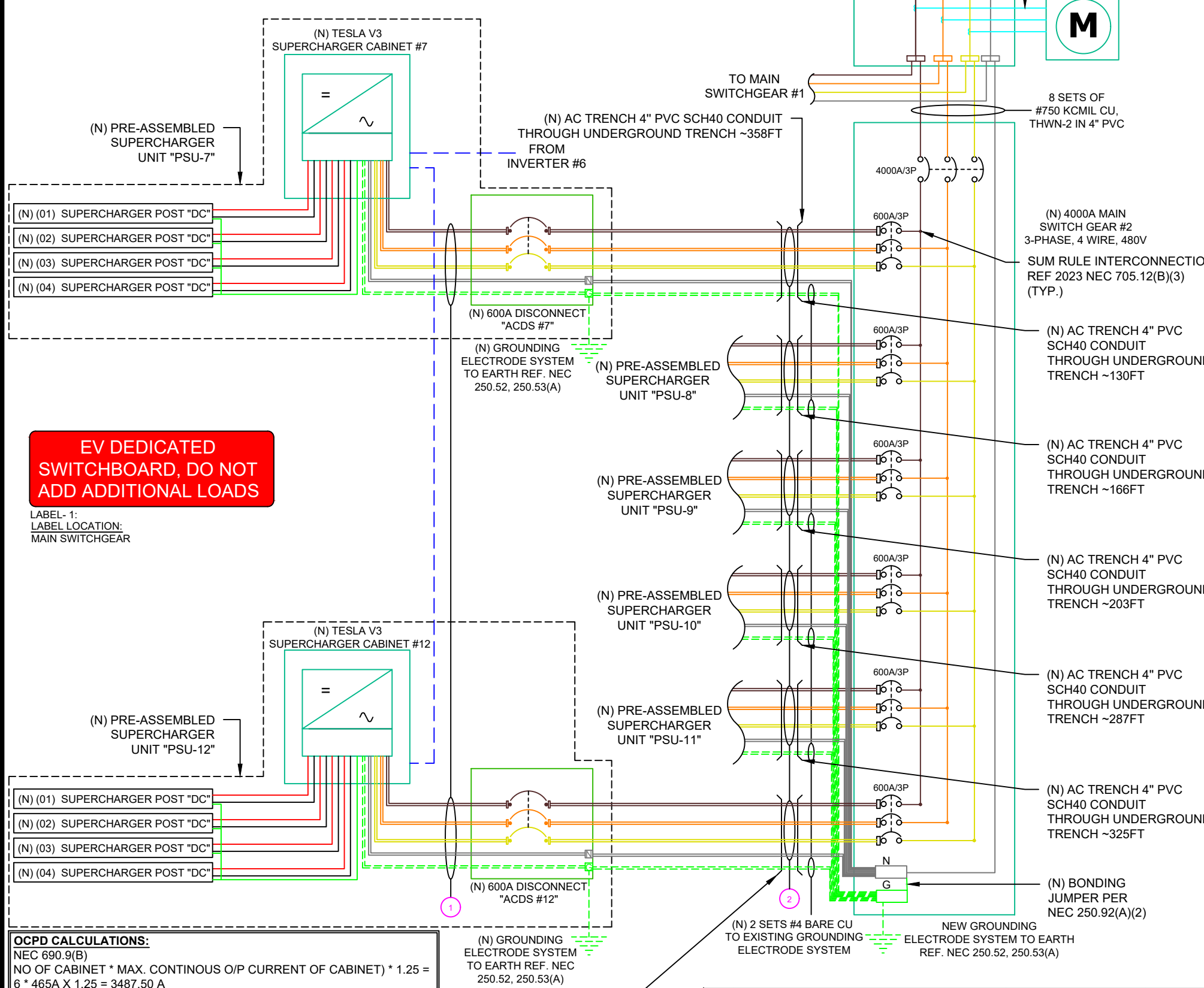
DRAWN BY
ESR

SHEET NAME
ELECTRICAL LINE DIAGRAM

SHEET SIZE
ANSI B
11" X 17"

SHEET NUMBER
EV-13

**ELECTRIC VEHICLE CHARGING SYSTEM WITH
(24) EV CHARGER- TESLA V4 SUPERCHARGER
(06) TESLA PRE-ASSEMBLED SUPERCHARGER UNITS**



EV DEDICATED SWITCHBOARD, DO NOT ADD ADDITIONAL LOADS

LABEL- 1:
LABEL LOCATION:
MAIN SWITCHGEAR

OCPD CALCULATIONS:
NEC 690.9(B)
NO OF CABINET * MAX. CONTINUOUS O/P CURRENT OF CABINET) * 1.25 =
6 * 465A X 1.25 = 3487.50 A

1 ELECTRICAL LINE DIAGRAM
EV-13.1 SCALE: NTS

QTY	CONDUCTOR INFORMATION	CONDUIT TYPE	CONDUIT SIZE
(3)	2 SETS OF #350 KCMIL - CU, THWN-2 (L1, L2 & L3)	EMT, LFMC OR PVC	4"
(1)	2 SETS OF #350 KCMIL - CU, THWN-2 N		
(1)	2 SETS OF #4AWG - CU, THWN-2 GND	PVC	4"
(3)	2 SETS OF #350KCMIL - CU, THWN-2 (L1, L2 & L3)		
(1)	2 SETS OF #350 KCMIL - CU, THWN-2 N		
(1)	2 SETS OF #4AWG - CU, THWN-2 GND		

CONDUIT & WIRING NOTES

(1) CONDUIT TYPES (UNLESS OTHERWISE NOTED):
- RMC FOR EXTERIOR USE.
- PVC SCH 40 IN UNDERGROUND TRENCHES, SCH 80 SWEEPS

(2) WIRE COLOR SPECIFICATION: (TAPE AT TERMINATIONS OR INSTALL COLORED WIRE WHERE REQUIRED BY NEC)
- DC POSITIVE UNGROUNDED WIRING: RED
- DC NEGATIVE UNGROUNDED WIRING: BLACK
- DC GROUND: GREEN OR BARE
- AC PHASE WIRES:
- AC NEUTRAL:
- AC GROUND:
BROWN/ORANGE/YELLOW
GRAY
GREEN

(3) WIRE TYPE NOTES:
- ALL WIRING IS COPPER, UNLESS OTHERWISE NOTED
- ALL WIRING TO BE STRANDED, UNLESS OTHERWISE NOTED
- ALL WIRING TO BE RATED FOR 90C IN WET LOCATIONS, UNLESS OTHERWISE NOTED
- TAPE BOTH POLARITIES OF HOME RUN WIRING AT TERMINATIONS IN TRANSITION BOX. IDENTIFY SOURCE CIRCUIT BY ID NUMBER.

(4) AMPACITY AND AMPERAGE
- ALL DC CURRENTS ARE SHORT CIRCUIT CURRENT VALUES
- ALL AC CURRENTS ARE NOMINAL PER-PHASE VALUES
- WIRE AMPACITY IS BASED ON NUMBER OF WIRES PER CONDUIT AND HEIGHT ABOVE ROOF.
IF CONDUITS ARE INSTALLED DIFFERENTLY THAN SHOWN, THE WIRE SIZES MAY BE AFFECTED
- VOLTAGE DROP CALCULATIONS ARE BASED ON THE LONGEST WIRE RUN

(5) GROUNDING
- ALL CONDUIT TO BE BONDED AS REQUIRED
- ALL GROUND WIRE IN ≥10 FT OF CONDUIT SHALL BE INSULATED.

(6) LENGTH OF TYPE (1) WIRE TO BE CONFIRMED BASED ON ADDITIONAL PCS LOCATIONS

SERVICE DISCONNECT SWITCH NOTES:

- SWITCH WILL BE SERVICE RATED AND ACCESSIBLE AND LOCKABLE 24/7.
- SWITCH RATED FOR 200kA FAULT CURRENT WITH CLASS R, J, OR L FUSES
- SELECT FUSES TO BE SERIES RATED WITH MAIN PANELBOARD BREAKERS OR KAIC OF BREAKERS TO BE SUFFICIENT FOR AVAILABLE FAULT CURRENT

GROUNDING NOTES

- TRANSFORMER AND SERVICE DISCONNECT GEC TO BE SIZED PER NEC 250.66. COPPER GROUNDING ELECTRODE ROD 3/4" x 10' MIN TO BE USED. FROM TRANSFORMER EARTH GROUND TO COPPER GEC, GROUND SYSTEM RESISTANCE SHALL BE 25 OHMS OR LESS. TWO GROUND RODS TO BE DRIVEN SIX FEET APART IF 25 OHM VALUE IS NOT OBTAINED.
- GROUNDING ELECTRODE SYSTEM FOR BOTH TRANSFORMER AND SERVICE DISCONNECT TO BE BONDED BELOW FINISHED SLAB OR GRADE

ARC FLASH NOTES
ARC FLASH RISK ASSESSMENT/LABELING REQUIRED PRIOR TO COMMISSIONING

NOTE:

- CABINET WILL BE LIMITED TO MAX OUTPUT OF 465A.
- WALL CONNECTOR INCORPORATES AUTOMATIC LOAD MANAGEMENT.
- REFER TO LOAD CALCULATIONS FOR DETAILED EV-1 PANEL BREAKER CONFIGURATION.
- CIRCUIT BREAKER SIZE IS PROGRAMMED DURING THE COMMISSIONING PROCESS. SEE COMMISSIONING PROCEDURE FROM TESLA INSTALLATION MANUAL.
- EACH WALL CONNECTOR MUST HAVE ITS OWN BRANCH CIRCUIT WITH L1, L2 AND GROUND.
- COPPER WIRE TERMINATIONS ONLY FOR LANDING IN WALL CONNECTOR WIREBOX TERMINALS.
- FOR OUTDOOR INSTALLATIONS, USE WATERTIGHT FITTINGS WHEN SECURING FEEDER WIRES TO THE WIREBOX.

iCheck Energy

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REVISIONS		
DESCRIPTION	DATE	REV
INITIAL DESIGN	04/27/2026	

PROJECT NAME & ADDRESS

2215 E ANDERSON LN

**2215 E ANDERSON LN.,
AUSTIN, TX 78752**

DRAWN BY
ESR

SHEET NAME
ELECTRICAL LINE DIAGRAM

SHEET SIZE
**ANSI B
11" X 17"**

SHEET NUMBER
EV-13.1

EV- CHARGER SPECIFICATIONS	
MANUFACTURER / MODEL #	TESLA V4 SUPERCHARGER
MAX. RATED POST POWER	250 KW
POST RATED VOLTAGE RANGE	0-500 V
NOMINAL OUTPUT VOLTAGE	880 - 1000 V

CABINET SPECIFICATIONS	
MANUFACTURER / MODEL #	TESLA V3 SUPERCHARGER CABINET
NOMINAL POWER	575KW
NOMINAL OUTPUT VOLTAGE	480V
NOMINAL OUTPUT CURRENT	465A

AMBIENT TEMPERATURE SPECS	
AMBIENT TEMP (HIGH TEMP 2%)	41°
RECORD LOW TEMP	-6°

PERCENT OF VALUES	NUMBER OF CURRENT CARRYING CONDUCTORS IN EMT
.80	4-6
.70	7-9
.50	10-20



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AC FEEDER CALCULATIONS																							
CIRCUIT ORIGIN	CIRCUIT DESTINATION	VOLTAGE (V)	FULL LOAD AMPS "FLA" (A)	FLA*1.25 (A)	OC PD SIZE (A)	NEUTRAL SIZE	GROUND SIZE	CONDUCTOR SIZE	PARALLEL SETS	75°C AMPACITY (A)	AMPACITY CHECK #1	AMBIENT TEMP. (°C)	TOTAL CC CONDUCTORS IN RACEWAY	90°C AMPACITY (A)	DERATION FACTOR FOR AMBIENT TEMPERATURE NEC 310.15(B)(1)	DERATION FACTOR FOR CONDUCTORS PER RACEWAY NEC 310.15(C)(1)	90°C AMPACITY DERATED (A)	AMPACITY CHECK #2	FEEDER LENGTH (FEET)	CONDUCTOR RESISTANCE (OHM/KFT)	VOLTAGE DROP AT FLA (%)	CONDUIT SIZE	CONDUIT FILL (%)
CABINET #1	DISCONNECT #1	480	232.5	290.625	600	CU #350 kcmil	CU #4 AWG	CU #350 kcmil	2	310	PASS	41	3	350	0.87	1	304.5	PASS	5	0.0367	0.02%	4" EMT	22.31%
CABINET #2	DISCONNECT #2	480	232.5	290.625	600	CU #350 kcmil	CU #4 AWG	CU #350 kcmil	2	310	PASS	41	3	350	0.87	1	304.5	PASS	5	0.0367	0.02%	4" EMT	22.31%
CABINET #3	DISCONNECT #3	480	232.5	290.625	600	CU #350 kcmil	CU #4 AWG	CU #350 kcmil	2	310	PASS	41	3	350	0.87	1	304.5	PASS	5	0.0367	0.02%	4" EMT	22.31%
CABINET #4	DISCONNECT #4	480	232.5	290.625	600	CU #350 kcmil	CU #4 AWG	CU #350 kcmil	2	310	PASS	41	3	350	0.87	1	304.5	PASS	5	0.0367	0.02%	4" EMT	22.31%
CABINET #5	DISCONNECT #5	480	232.5	290.625	600	CU #350 kcmil	CU #4 AWG	CU #350 kcmil	2	310	PASS	41	3	350	0.87	1	304.5	PASS	5	0.0367	0.02%	4" EMT	22.31%
CABINET #6	DISCONNECT #6	480	232.5	290.625	600	CU #350 kcmil	CU #4 AWG	CU #350 kcmil	2	310	PASS	41	3	350	0.87	1	304.5	PASS	5	0.0367	0.02%	4" EMT	22.31%
CABINET #7	DISCONNECT #7	480	232.5	290.625	600	CU #350 kcmil	CU #4 AWG	CU #350 kcmil	2	310	PASS	41	3	350	0.87	1	304.5	PASS	5	0.0367	0.02%	4" EMT	22.31%
CABINET #8	DISCONNECT #8	480	232.5	290.625	600	CU #350 kcmil	CU #4 AWG	CU #350 kcmil	2	310	PASS	41	3	350	0.87	1	304.5	PASS	5	0.0367	0.02%	4" EMT	22.31%
CABINET #9	DISCONNECT #9	480	232.5	290.625	600	CU #350 kcmil	CU #4 AWG	CU #350 kcmil	2	310	PASS	41	3	350	0.87	1	304.5	PASS	5	0.0367	0.02%	4" EMT	22.31%
CABINET #10	DISCONNECT #10	480	232.5	290.625	600	CU #350 kcmil	CU #4 AWG	CU #350 kcmil	2	310	PASS	41	3	350	0.87	1	304.5	PASS	5	0.0367	0.02%	4" EMT	22.31%
CABINET #11	DISCONNECT #11	480	232.5	290.625	600	CU #350 kcmil	CU #4 AWG	CU #350 kcmil	2	310	PASS	41	3	350	0.87	1	304.5	PASS	5	0.0367	0.02%	4" EMT	22.31%
CABINET #12	DISCONNECT #12	480	232.5	290.625	600	CU #350 kcmil	CU #4 AWG	CU #350 kcmil	2	310	PASS	41	3	350	0.87	1	304.5	PASS	5	0.0367	0.02%	4" EMT	22.31%
DISCONNECT #1	MAIN SWITCHGEAR #1	480	232.5	290.625	600	CU #350 kcmil	CU #4 AWG	CU #350 kcmil	2	310	PASS	41	3	350	0.87	1	304.5	PASS	55	0.0367	0.20%	4" PVC	22.31%
DISCONNECT #2	MAIN SWITCHGEAR #1	480	232.5	290.625	600	CU #350 kcmil	CU #4 AWG	CU #350 kcmil	2	310	PASS	41	3	350	0.87	1	304.5	PASS	92	0.0367	0.33%	4" PVC	22.31%
DISCONNECT #3	MAIN SWITCHGEAR #1	480	232.5	290.625	600	CU #350 kcmil	CU #4 AWG	CU #350 kcmil	2	310	PASS	41	3	350	0.87	1	304.5	PASS	130	0.0367	0.46%	4" PVC	22.31%
DISCONNECT #4	MAIN SWITCHGEAR #1	480	232.5	290.625	600	CU #350 kcmil	CU #4 AWG	CU #350 kcmil	2	310	PASS	41	3	350	0.87	1	304.5	PASS	130	0.0367	0.46%	4" PVC	22.31%
DISCONNECT #5	MAIN SWITCHGEAR #1	480	232.5	290.625	600	CU #350 kcmil	CU #4 AWG	CU #350 kcmil	2	310	PASS	41	3	350	0.87	1	304.5	PASS	94	0.0367	0.33%	4" PVC	22.31%
DISCONNECT #6	MAIN SWITCHGEAR #1	480	232.5	290.625	600	CU #350 kcmil	CU #4 AWG	CU #350 kcmil	2	310	PASS	41	3	350	0.87	1	304.5	PASS	60	0.0367	0.21%	4" PVC	22.31%
DISCONNECT #7	MAIN SWITCHGEAR #2	480	232.5	290.625	600	CU #350 kcmil	CU #4 AWG	CU #350 kcmil	2	310	PASS	41	3	350	0.87	1	304.5	PASS	130	0.0367	0.46%	4" PVC	22.31%
DISCONNECT #8	MAIN SWITCHGEAR #2	480	232.5	290.625	600	CU #350 kcmil	CU #4 AWG	CU #350 kcmil	2	310	PASS	41	3	350	0.87	1	304.5	PASS	166	0.0367	0.59%	4" PVC	22.31%
DISCONNECT #9	MAIN SWITCHGEAR #2	480	232.5	290.625	600	CU #350 kcmil	CU #4 AWG	CU #350 kcmil	2	310	PASS	41	3	350	0.87	1	304.5	PASS	203	0.0367	0.72%	4" PVC	22.31%
DISCONNECT #10	MAIN SWITCHGEAR #2	480	232.5	290.625	600	CU #350 kcmil	CU #4 AWG	CU #350 kcmil	2	310	PASS	41	3	350	0.87	1	304.5	PASS	287	0.0367	1.02%	4" PVC	22.31%
DISCONNECT #11	MAIN SWITCHGEAR #2	480	232.5	290.625	600	CU #350 kcmil	CU #4 AWG	CU #350 kcmil	2	310	PASS	41	3	350	0.87	1	304.5	PASS	325	0.0367	1.16%	4" PVC	22.31%
DISCONNECT #12	MAIN SWITCHGEAR #2	480	232.5	290.625	600	CU #350 kcmil	CU #4 AWG	CU #350 kcmil	2	310	PASS	41	3	350	0.87	1	304.5	PASS	358	0.0367	1.27%	4" PVC	22.31%

Cabinet 1 Voltage Drop	0.21%
Cabinet 2 Voltage Drop	0.34%
Cabinet 3 Voltage Drop	0.48%
Cabinet 4 Voltage Drop	0.48%
Cabinet 5 Voltage Drop	0.35%
Cabinet 6 Voltage Drop	0.23%
Cabinet 7 Voltage Drop	0.48%
Cabinet 8 Voltage Drop	0.61%
Cabinet 9 Voltage Drop	0.74%
Cabinet 10 Voltage Drop	1.04%
Cabinet 11 Voltage Drop	1.17%
Cabinet 12 Voltage Drop	1.29%

THREE PHASE LOAD CALCULATIONS (EV) (MAIN SWITCHGEAR #1 & #2)														
PANEL NAME: MAIN SWITCH GEAR		PANEL TYPE: MCB												
SERVICE CONFIG: 277/480V	V L-L: 480V	PANEL MAIN BREAKER RATING: 4000 A												
PANEL BUS RATING: 4000 A		MOUNTING: SURFACE												
PANEL AIC RATING: 100KAIC		FEED TYPE: TOP FEED												
Load (VA or Watts)			MCB: 4000 A				Load (VA or Watts)							
A	B	C	Description	LCL	Circuit	A	B	C	Circuit	LCL	Description	A	B	C
128861			CABINET PSU		1				2		CABINET PSU	128861		
	128861		CABINET PSU		3				4		CABINET PSU		128861	
		128861	CABINET PSU		5				6		CABINET PSU			128861
128861			CABINET PSU		7				8		CABINET PSU	128861		
	128861		CABINET PSU		9				10		CABINET PSU		128861	
		128861	CABINET PSU		11				12		CABINET PSU			128861
128861			CABINET PSU		13				14		CABINET PSU	128861		
	128861		CABINET PSU		15				16		CABINET PSU		128861	
		128861	CABINET PSU		17				18		CABINET PSU			128861
-			OTHER		19				20		OTHER	-		
	-		OTHER		21				22		OTHER		-	
		-	OTHER		23				24		OTHER			-
-			OTHER		25				26		OTHER	-		
	-		OTHER		27				28		OTHER		-	
		-	OTHER		29				30		OTHER			-
-			OTHER		31				32		OTHER	-		
	-		OTHER		33				34		OTHER		-	
		-	OTHER		35				36		OTHER			-
-			OTHER		37				38		OTHER	-		
	-		OTHER		39				40		OTHER		-	
		-	OTHER		41				42		OTHER			-
386582	386582	386582	Total load						Total load	386582	386582	386582		
0	0	0	Total cont. load						Total cont. load	0	0	0		
TOTAL LOAD = 773164.8 W (Aø) + 773164.8 W (Bø) + 773164.8 W (Cø)			=	2319494 W	Total =	2319494 W								
TOTAL CONT. LOAD = 0 W (Aø) + 0 W (Bø) + 0 W (Cø) x 25%			=	W		2790.00 A								

ELECTRICAL NOTES

- ALL EQUIPMENT TO BE LISTED BY UL OR OTHER NRTL, AND LABELED FOR ITS APPLICATION.
- ALL CONDUCTORS SHALL BE RATED UPTO 1000 V AND 90 DEGREE C WET ENVIRONMENT.
- WORKING CLEARANCES AROUND ALL NEW AND EXISTING ELECTRICAL EQUIPMENT SHALL COMPLY WITH NEC 110.26.
- DRAWINGS INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS. CONTRACTOR SHALL FURNISH ALL NECESSARY OUTLETS, SUPPORTS, FITTINGS AND ACCESSORIES TO FULFILL APPLICABLE CODES AND STANDARDS.
- WHERE SIZES OF JUNCTION BOX, RACEWAYS, AND CONDUITS ARE NOT SPECIFIED, THE CONTRACTOR SHALL SIZE THEM ACCORDINGLY.
- ALL WIRE TERMINATIONS SHALL BE APPROPRIATELY LABELED AND READILY VISIBLE.
- TEMPERATURE RATINGS OF ALL CONDUCTORS, TERMINATIONS, BREAKERS, OR OTHER DEVICES ASSOCIATED WITH THE SOLAR PV SYSTEM SHALL BE RATED FOR AT LEAST 75 DEGREE C.

PROJECT NAME & ADDRESS

2215 E ANDERSON LN
2215 E ANDERSON LN.,
AUSTIN, TX 78752

DRAWN BY

ESR

SHEET NAME

WIRING CALCULATIONS

SHEET SIZE

ANSI B
11" X 17"

SHEET NUMBER

EV-14

REVISIONS		
DESCRIPTION	DATE	REV
INITIAL DESIGN	04/27/2026	

Tesla V4 Supercharger Post

Tesla's next generation V4 Supercharger Post is designed to deliver best-in-class performance, user experience, and aesthetics. The V4 Supercharger Post brings Tesla's global leadership in EV charging infrastructure deployment to more use cases by enabling support for global charging standards, including NACS, CCS1, CCS2, and GB/T. The V4 Supercharger Post with universal cable reach delivers a vehicle-agnostic experience allowing all users to charge with confidence.

KEY FEATURES

- Supports global charging standards
- Supports open communication standards
- Universal cable reach
- Unparalleled ergonomics and performance
- No high voltage at post when not in use
- Small footprint saves space in parking areas
- Integrated revenue-grade DC energy meter
- Optional payment/display module
- 1m flood tolerance
- ADA / EAA compliant user interfaces



Tesla Supercharger System Specifications

V4 Supercharger Post Technical Specifications

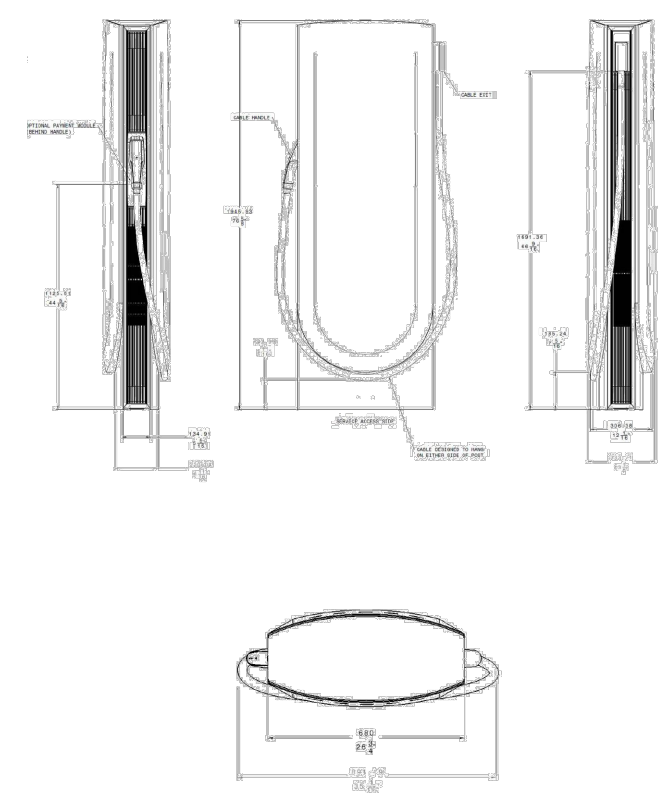
Product	Part Number	1732843
	Model Number	CS-615-A2 (NACS + CCS1), CS-615-E2 (CCS2)
	Maximum Power with V3 Cabinet	325 kW
	Voltage Range with V3 Cabinet	0-500VDC
	Continuous Current with V3 Cabinet	615A
	Protection	Over Current, Over Temperature
	Compliance	UL 2202, CSA 22.2#1071, IEC 61851-1, IEC 61851-23
	Protocol Support	ISO 15118-2, DIN70121, OCPP 2.0.1*
Payment Module (optional)	Payment types	Contactless Payments with Debit Card, Credit Card, and Digital Wallets (Apple Pay, Google Pay, etc.), RFID card
	Display Size	3.5 inch touchscreen
	Compliance	EMVCo L2 contactless, EMVCo L3 PCI PTS V6 unattended
Environmental	Operating Temperature	-30°C to 50°C
	Ingress Protection	IP54 NEMA 3R
	Flood Tolerance	1015 mm
	Maximum Noise Level @ 1m	60 dBA below 40°C, 65 dBA above 40°C
Mechanical	Total Weight	90 kg
	Dimensions	334 x 891 x 1946 mm
	Charging Cable Length	3 m
Site Layout and Installation	Input Lug: V+, V- (2/pole)	Cu/Al, 150 mm ² – 380 mm ² (300MCM – 750MCM)
	PE Lug (2)	Cu/Al, 16 mm ² – 95 mm ² (6AWG – 250MCM)
	24V Power Input: V+, V- (1/pole)	Cu, 10 mm ² (8 AWG)
	Termination Temperature	90°C
	Max Distance From Cabinet	100 m

* See Open Charge Alliance list of certified products

Tesla Supercharger System Specifications

V4 Supercharger Post Technical Specifications

Dimensions



Tesla Supercharger System Specifications

PROJECT NAME & ADDRESS

2215 E ANDERSON LN
 2215 E ANDERSON LN.,
 AUSTIN, TX 78752

DRAWN BY
ESR

SHEET NAME
EV-CHARGER SPECIFICATION

SHEET SIZE
**ANSI B
 11" X 17"**

SHEET NUMBER
EV-15

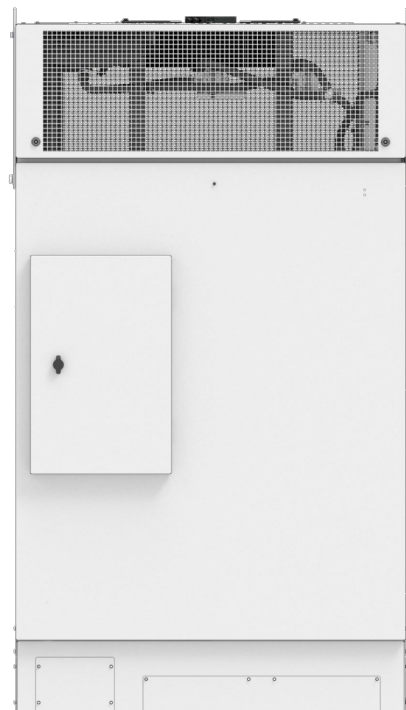
REVISIONS		
DESCRIPTION	DATE	REV
INITIAL DESIGN	04/27/2026	

Tesla V3 Supercharger Cabinet

The Tesla V3 Supercharger Cabinet provides AC/DC power conversion as part of the Supercharger system when deployed with the V4 Supercharger Post. The advanced system architecture includes highly optimized state of the art power electronics, efficient conversion, and enables site-wide power sharing for maximum throughput.

Key Features

- Supports NACS, CCS1, CCS2, GB
- High power density/compact footprint
- UL & IEC Compliance
- High efficiency low noise cooling system
- Wide input voltage range
- Rugged enclosure for all environments
- Surface mount wiring options
- High power factor and low harmonics



V3 Supercharger Cabinet Technical Specifications

AC Input (Electrical)	Input (V _{AC})	480	440	415	400	380
Peak AC Input Power	Power (kVA)	387	354	334	322	306
AC Input Voltage	380 V _{AC} - 480 V _{AC} (-5%, +10%), 4-wire 3AC+N					
AC Input Current	465 A _{AC} Max.					
Frequency	50 Hz /60 Hz					
Power Factor	≥ 0.99					
Current THD	< 3%					
Voltage THD	< 2%					
AC Input (Mechanical)	Conductor Sizes	L1, L2, L3, N: 150 - 400 mm ² , 250 - 750 MCM PE: 10 - 70 mm ² , #8 AWG - 2/0				
	Conductor Material Type	L1, L2, L3, N: Cu, Al PE: Cu/Al				
	Mfr. Termination Temp. Rating	90°C				
Shared DC Bus (Electrical)	Max Rated DC Bus Power	Power (kW)	575			
	Max Rated DC Bus Current	Current (A _{DC})	640			
	DC Bus Voltage Range	880 - 1000 V _{DC}				
Shared DC Bus (Mechanical)	Conductor Sizes	V+, V- (2x/pole): 150 - 300 mm ² , 250 - 600 MCM Mid: 16 - 150 mm ² , 6AWG - 250 MCM PE: 10 - 70 mm ² , #8 AWG - 2/0				
	Conductor Material Type	V+, V-, Mid: Cu, Al PE: Cu/Al				
	Conductor Voltage Rating	1000 V				
	Mfr. Termination Temp. Rating	90°C				
DC Post Output (Electrical)	Max. Rated Post Power	250 kW				
	Post Rated Voltage Range	0-500 V _{DC}				
	Post Rated Current @T _a =35°C	NACS, CCS2 & GB Handle: 615A _{DC}				
	Number of Charge Posts	1-4				
	Max Voltage Drop	10 V _{DC}				
DC Post Output (Mechanical)	Conductor Size	V+, V- (2x/pole):300-600 MCM or 150-300mm ² PE: #8 AWG - 2/0 or 10-70mm ² Certified Equipment Wiring: V4 Post: 600MCM or 300mm ² AL				
	Conductor Material Type	V+, V-, Al, Cu PE: Cu/Al				
	Conductor Voltage Rating	1000 V				
	Mfr. Termination Temp Rating	90°C				

V3 Supercharger Cabinet Technical Specifications

System	Efficiency	> 96%
Noise	Typical noise at 1m	35 dB(A)
	Max noise at 1m @30C	60 dB(A)
Environmental	Operating Temperature	-30°C to 50°C, -22°F to 122°F
	Ingress Protection	IP66 (Cabinet), IP2X (Cooling)
	Ventilation Requirements	Ventilation Not Required
Standards	UL 2202, CSA C22.2#107.1, FCC, ICES-003-B, IEC 61851-1, EN 61000-6-2 EN 55011, GB/T 18487.1, GB/T 27930, NB/T 33008.1, NB/T 33001	
Layout	Max. Distance to Charge Post	100 m, 340 ft.
Weight	Supercharger Cabinet Weight	4 Post Cabinet: 1110 kg (2448 lbs)
Dimensions	Depth, Width, Height	1000, 1250, 2200 mm; 39 _{1/2} , 49 _{3/8} , 86 _{20/32} in.
Mounting	Per-anchor min. Shear Strength	4 kN
	Per-anchor min. Tension Strength	11 kN
DC Post Output (24V)	24V Post Power Supply Conductors	V+, V- (1x/pole):10 mm ² , #8 AWG CU Integrated in signal cable bundle

PROJECT NAME & ADDRESS

2215 E ANDERSON LN

2215 E ANDERSON LN.,
 AUSTIN, TX 78752

DRAWN BY

ESR

SHEET NAME
**EV-CHARGER
 SPECIFICATION**

SHEET SIZE
**ANSI B
 11" X 17"**

SHEET NUMBER

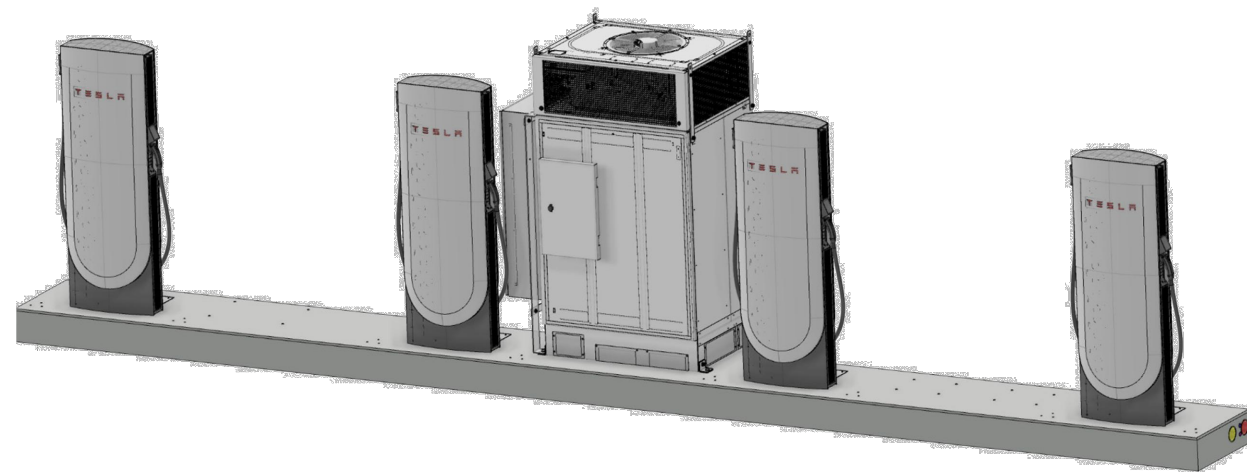
EV-16

Tesla V4 Pre-Assembled Supercharger Unit

The V4 Pre-Assembled Supercharger Unit (abbreviated V4 PSU) is a fully integrated Supercharger system composed of one (1) V3.5 Supercharger cabinet and four (4) V4 Supercharger posts mounted to a precast concrete foundation. The V4 PSU is designed to meet commercial install requirements in North America and comply with global safety standards. The entire Supercharger system is assembled, wired, and commissioned in a factory to ensure a high-quality construction before being deployed to charging sites across North America.

KEY FEATURES

- Fully wired and ready-to-go EVSE system
- Universal cable reach
- Compliant with North American electrical standards
- Easy light pole installation
- Integrated circuit breaker protection
- Supports open communication standards
- Mounting hardware for bollard protection of equipment
- Mounting hardware for auto-transformer and trash & recycling receptacles



V4 PSU Supercharger Technical Specifications

AC Input (Electrical)

AC Input Voltage	Input (V_{AC})	480	(-5%, +10%), 4-wire 3AC+N
Peak AC Input Power	Power (kVA)	387	
Ac Input Current		465 A_{AC}	Max.
Frequency		50 Hz /60 Hz	
Disconnect Enclosure		Suitable for use as service equipment UL 508A, NEMA 3R	
Cabinet Circuit Breaker		600 A/ 3P, 480/277 V, 65 kAIC, 80% Rated Micrologic electronic trip UL 489, IEC 60947-2. CSA C22.2 No. 5, CCC Marked	
Lighting Circuit Breaker		15A/1P, 277 V, 65 kAIC, 80% rated	

AC Input (Mechanical)

Conductor Sizes	L1, L2, L3, N: 150 - 240 mm^2 , 250 - 500 MCM
	PE: 10 - 70 mm^2 , #8 AWG - 2/0
Conductor Material Type	L1, L2, L3, N: Cu, Al PE: Cu/Al
Mfr. Termination Temp. Rating	90°C

Shared DC Bus (Electrical)

Max Rated DC Bus Power	Power (kW)	575
Max Rated DC Bus Current	Current (A_{DC})	640
DC Bus Voltage Range		880 - 1000 V_{DC}

Shared DC Bus (Mechanical)

Conductor Sizes	V+, V- (2x/pole): 150 - 300 mm^2 , 250 - 600 MCM
	Mid: 16 - 150 mm^2 , 6AWG - 250 MCM
	PE: 10 - 70 mm^2 , #8 AWG - 2/0
Conductor Material Type	V+, V-, Mid: Cu, Al PE: Cu/Al
Conductor Voltage Rating	1000 V
Mfr. Termination Temp. Rating	90°C

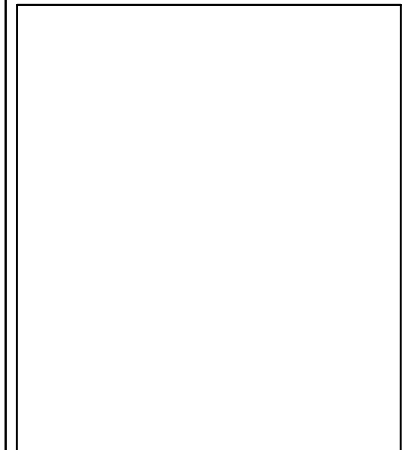
Supercharger Post (Electrical)

Max. Rated Post Power	250 kW
Post Rated Voltage Range	0-500 V_{DC}
Certified Continuous Current	615A $_{DC}$
Number of Charge Posts	4
Max Voltage Drop	10 V_{DC}
Protection	Over Current, Over Temperature



iCheck Energy Solutions
30 S Doughty Ave, St 2
Somerville NJ 08876
201-986-6181
contact@icheckenergy.com

REVISIONS		
DESCRIPTION	DATE	REV
INITIAL DESIGN	04/27/2026	



PROJECT NAME & ADDRESS	
2215 E ANDERSON LN	2215 E ANDERSON LN., AUSTIN, TX 78752

DRAWN BY ESR

SHEET NAME TESLA PEDESTAL SPECIFICATION

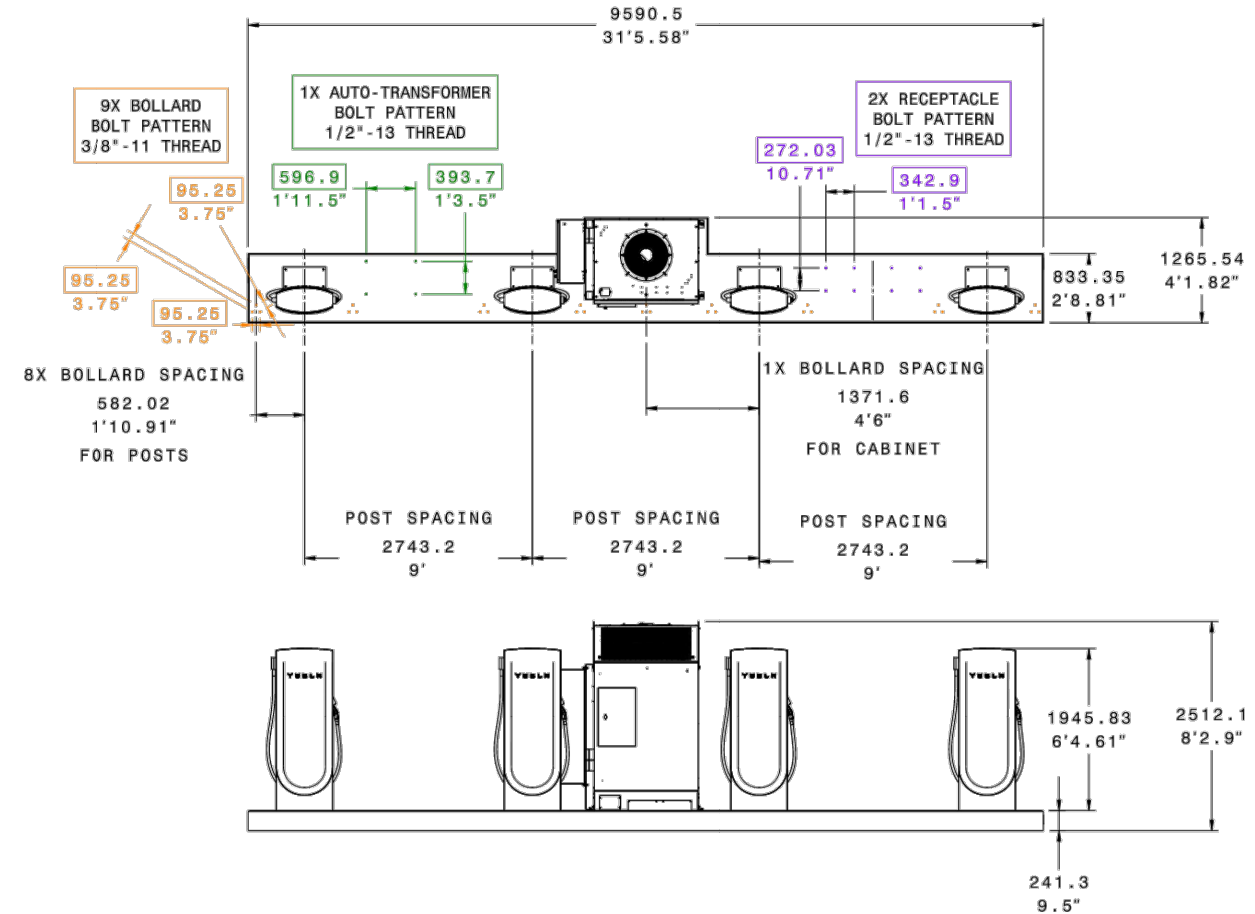
SHEET SIZE ANSI B 11" X 17"

SHEET NUMBER EV-17

V4 PSU Supercharger Technical Specifications

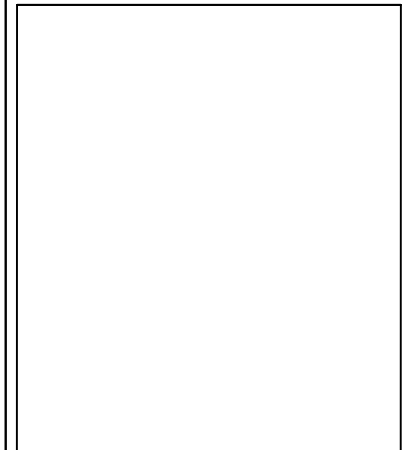
Supercharger Post (Mechanical)	Charging Cable Length	3m
System	Efficiency	96%
Protection	AC Input side: Class 1	Isolated DC Output
	Over Voltage/Current/Temperature, Surge Protection, Isolation Monitoring	
	Short-Circuit Protection	External Electronic Trip Circuit Breaker
	Short-Circuit Current Rating	85 kA RMS symmetrical
Environmental	Operating Temperature	-30°C to 50°C, -22°F to 122°F
	Ingress Protection	IP66 (Cabinet), IP2X (Cooling)
	Ventilation Requirements	Ventilation Not Required
Noise	Typical noise at 1m	60 dBA below 40°C, 65 dBA above 40°C
Standards	Cabinet	UL 2202, CSA C22.2#107.1, FCC, ICES-003-B, IEC 61851-1, EN 61000-6-2 EN 55011, GB/T 18487.1, GB/T 27930, NB/T 33008.1, NB/T 33001
	Post	UL 2202, CSA 22.2#107.1, IEC 61851-1, IEC 61851-2
Weight	V4 Pre-Assembled Supercharger Unit	6350 kg (14,000 lbs)
Dimensions	Supercharger V3.5 Cabinet	1000, 1250, 2200 mm; 39 ^{12/32} , 49 ^{7/8} , 86 ^{20/32} in.
	Supercharger V4 Post	334 x 891 x 1946 mm (13 ^{5/32} x 35 ^{3/32} x 76 ^{29/32} in)
	V4 Pre-Assembled Supercharger Unit	1304 x 9591 x 2512 mm (49 ^{13/16} x 377 ^{19/32} x 98 ^{29/32} in)

V4 PSU Dimensions



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PROJECT NAME & ADDRESS

2215 E ANDERSON LN

2215 E ANDERSON LN.,
AUSTIN, TX 78752

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ESR

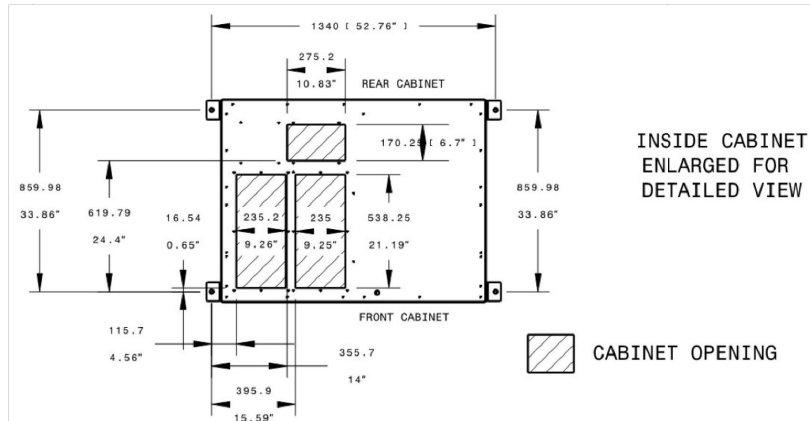
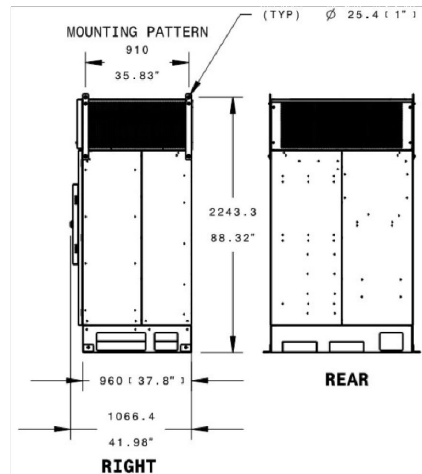
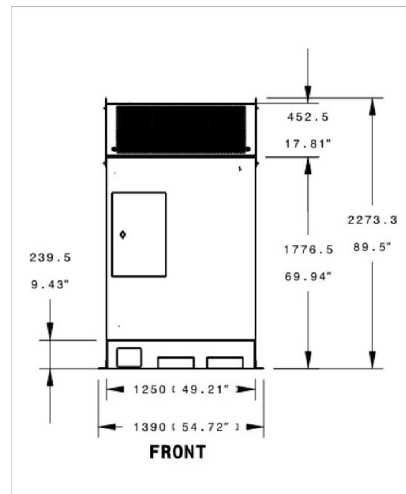
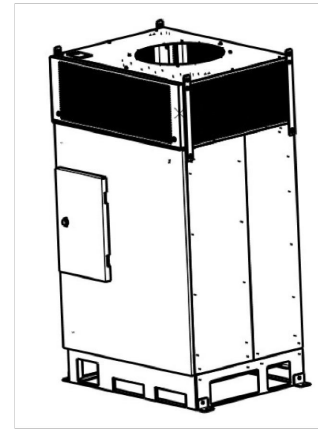
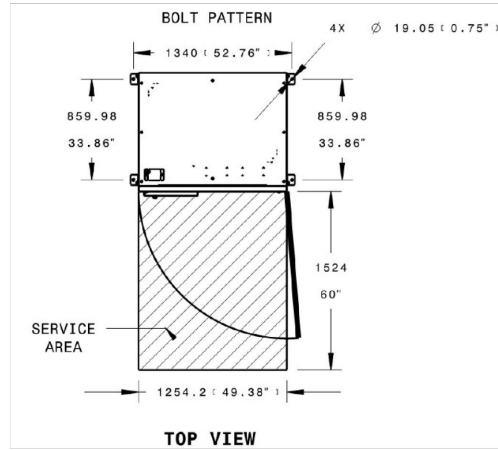
SHEET NAME
TESLA PEDESTAL SPECIFICATION

SHEET SIZE
ANSI B
11" X 17"

SHEET NUMBER
EV-18

V3.5 Supercharger Dimensions

V3 SUPERCHARGER DATASHEET

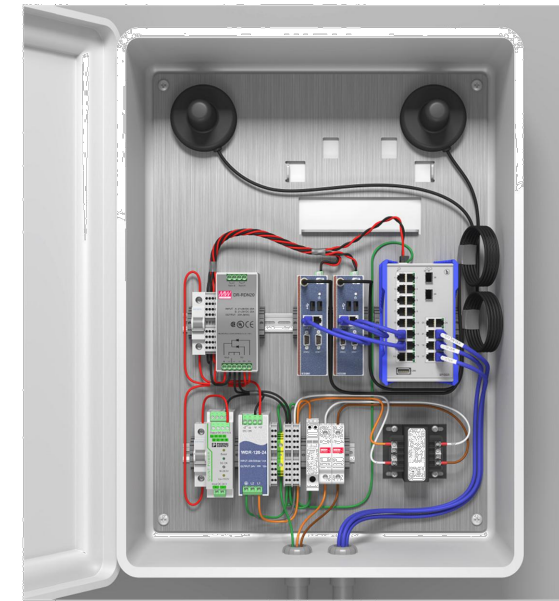


STANDARD TESLA SYSTEM CONTROLLER ENCLOSURE

The **Standard Tesla System Controller Enclosure** houses the **Standard Tesla System Controller**, overseeing commercial Tesla DC and AC charging systems. The controller connects to Supercharger cabinets and Wall Connectors, collecting data and using algorithms for improved system efficiency. It communicates with power modules through cabinets and/or Wall Connectors, controlling the entire site's energy flow.

The Standard Tesla System Controller:

- Optimizes charging operations hosting advanced algorithms
- Streamlines engagement with external parties, serving as the primary interaction point
- Supports diverse site setups, like power sharing and limiting.
- Expandable enclosure, allowing for a second controller installation



Fully Loaded Standard Tesla System Controller Enclosure

ELECTRICAL

Nominal Input Voltage Range: 120–480 VAC

Nominal Frequency: 50 or 60 Hz

Operating Power Consumption: 100 W maximum

Overvoltage Protection: Category III

COMMUNICATIONS

Protocol: Modbus TCP, DNP3, Rest API

Connectivity: Ethernet, Cellular

MECHANICAL AND MOUNTING

Enclosure: IP67 / NEMA 4

Dimensions: Width: 560 mm (22 in), Depth: 255 mm (10 in), Height: 724 mm (29.2 in)

Weight: 22.4 kg (49.4 lbs)

Operating Ambient Temperature: -30°C to 50°C (-22°F to 122°F)

Maximum Altitude: 3000 m (9842 ft)

Relative Humidity: 100% condensing, wet location rated

REGULATORY

Safety Certifications: UL 61010-1, CSA-22.2, IEC-61010-1



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REVISIONS		
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INITIAL DESIGN	04/27/2026	

PROJECT NAME & ADDRESS

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2215 E ANDERSON LN.,
AUSTIN, TX 78752

DRAWN BY
ESR

SHEET NAME
TESLA PEDESTAL
SPECIFICATION

SHEET SIZE
ANSI B
11" X 17"

SHEET NUMBER
EV-19