

# TESLA



## SUPERCHARGER STATION

SITE NAME: WALCOTT, IA (TRT # 18719)  
 755 W IOWA 80 RD,  
 WALCOTT, IA 52773



3500 DEER CREEK RD  
 PALO ALTO, CA 94304  
 (650) 681-5000



49030 Pontiac Trail, Ste 400  
 Wixom, Michigan 48393  
 PHONE: 248-705-9212

DRAWN BY: RC  
 CHECKED BY: PL

REV	DATE	DESCRIPTION
B	11/09/2021	CD90
A	08/18/2021	CD50

### SITE INFORMATION

**PROPOSED TESLA EV SITE ADDRESS:**  
 755 W IOWA 80 RD,  
 WALCOTT, IA 52773

**EXISTING SITE ADDRESS:**  
 755 W IOWA 80 RD,  
 WALCOTT, IA 52773

**PROPERTY OWNER:**  
 DELIA MEIER - PROPERTY MANAGER  
 (563) 343-0415  
 delia.meier@iowa80group.com

**EQUIPMENT SUPPLIER:**  
 TESLA MOTORS, INC.  
 3500 DEER CREEK RD  
 PALO ALTO, CA 94304  
 (650) 681-5000

**POWER COMPANY:**  
 ALLIANT

**COUNTY:**  
 SCOTT COUNTY

**LATITUDE (NAD83):**  
 41° 37' 11.3" N  
 41.619797°

**LONGITUDE (NAD83):**  
 90° 46' 56.3" W  
 -90.782292°

### APPLICABLE CODES

ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES:

- 2015 INTERNATIONAL BUILDING CODE
- 2017 NATIONAL ELECTRIC CODE

IN THE EVENT OF CONFLICT, THE MOST RESTRICTIVE CODE SHALL PREVAIL

### PROJECT DESCRIPTION

- INSTALL (2) PRE ASSEMBLED SUPERCHARGER UNITS
- INSTALL (8) TESLA CHARGING STATIONS
- INSTALL (1) UTILITY TRANSFORMER
- INSTALL PAD MOUNTED (1) METER, (1) DISCONNECT & (1) CT CABINET

### ZONING INFORMATION

PERMITTING CITY OF WALCOTT, IOWA  
 JURISDICTION:

AHJ CONTACT: SCOTT BENGFORT  
 BUILDING DEPARTMENT  
 BLDG@CITYOFWALCOTT.COM  
 (563) 3702749

**DO NOT SCALE DRAWINGS**

CONTRACTOR SHALL VERIFY ALL PLANS, EXIST'G DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ARCHITECT / ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.

### DRAWING INDEX

SHEET NO:	SHEET TITLE
T-1	TITLE SHEET & PROJECT DATA
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A-2	DEMOLITION PLAN
A-3	PROPOSED SITE PLAN
A-4	SITE ELEVATIONS
E-1	UTILITY PLAN
E-2	ELECTRICAL PLAN & PANEL SCHEDULE 'MDP'
E-3	SYSTEM ONE-LINE & V3 SUPERCHARGER INTERCONNECTION DIAGRAM
G-1	GROUNDING DETAILS
D-1	INSTALLATION DETAILS
D-2	INSTALLATION DETAILS
D-3	INSTALLATION DETAILS
D-4	CONC PAD SPECIFICATION FOR TRANSFORMER
D-5	CONC PAD SPECIFICATION FOR TRANSFORMER
TRAF-1	TRAFFIC PLAN

### AREA MAP



### LOCATION MAP



### FLOOD HAZARD AREA NOTE

THIS SITE IS LOCATED IN FLOOD ZONE "X".  
 NO BASE FLOOD ELEVATION.  
 AREA DETERMINED TO BE OUTSIDE 500-YEAR FLOOD PLAIN.

### CONTRACTOR NOTE


CONTRACTOR SHALL COMPLETE INSTALL PER THE SIGNED AND SEALED SET OF DRAWINGS. ANY NECESSARY DEVIATIONS FROM THE DRAWINGS MUST BE SUBMITTED THROUGH AN RFI REQUEST PROCESS WITH ARCHITECT / ENGINEER FOR AN APPROVAL PRIOR TO CONTRACTOR PROCEEDING WITH A DEVIATION OF THE SIGNED AND SEALED SET OF DRAWINGS.

### ARCHITECT OF RECORD PROJECT ENGINEER

PETER LICHOMSKI, ARCHITECT  
 49030 PONTIAC TRAIL, SUITE 400  
 WIXOM, MI 48393  
 (248) 705-9212  
 peterlichomski@labarchitectsllc.com

CLARK TROMBLEY RANDERS  
 CONSULTING ENGINEERS  
 504 S. CREYTS RD, SUITE B  
 LANSING, MI 48917  
 (517) 886-0550  
 rhymen@ctrmep.com

### CALL BEFORE YOU DIG

 IF YOU DIG IN ANY STATE  
 DIAL 811 FOR THE LOCAL  
 "ONE CALL CENTER" -  
 IT'S THE LAW

THE UTILITIES SHOWN HEREIN ARE FOR THE CONTRACTOR'S CONVENIENCE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS. THE ENGINEER/SURVEYOR ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL THE UTILITIES WITHIN THE LIMITS OF THE WORK. ALL DAMAGE MADE TO THE EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

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SHEET TITLE  
**TITLE SHEET & PROJECT DATA**

SHEET NUMBER  
**T-1**

**NOTES:**

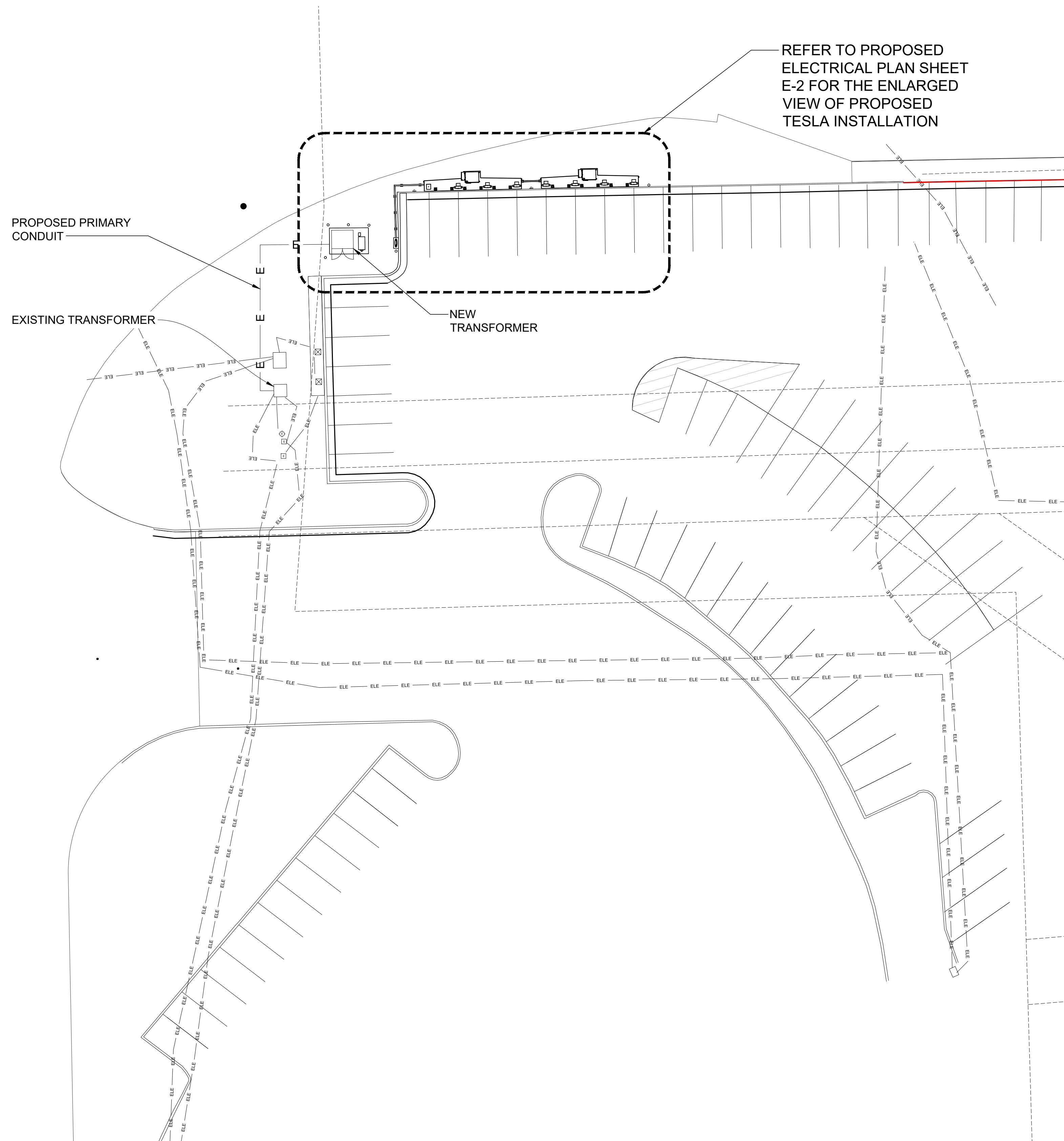
- BIDDING CONTRACTOR TO VERIFY DEPTHS AND LENGTHS IN FIELD.
- THE UTILITY DESIGN DETAILS SUMMARIZED ON THIS SHEET ARE FOR PROPERTY OWNER REVIEW. THE CONTRACTOR SHALL REFERENCE THE UTILITY DESIGN PACKAGE (UDP), PROVIDED WITH THE "ISSUED FOR CONSTRUCTION" DRAWINGS FOR BIDDING. THE CONTRACTOR SHALL INSTALL THE UTILITY RELATED SCOPE OF WORK PER UTILITY CONSTRUCTION SPECIFICATION REQUIREMENTS.
- UTILITY EQUIPMENT INSTALLATIONS AND PREP WORK AND TERMINATION OF SERVICE CONDUCTORS SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY ENGINEER AT TIME OF PRECONSTRUCTION MEETING TO ENSURE ACCURACY OF INSTALLATIONS.
- TRANSFORMER BOLLARD PROTECTION TO BE INSTALLED PER UTILITY SPECIFICATION. ADDITIONAL BOLLARD PROTECTION MAY BE REQUIRED AT THE DISCRETION OF THE UTILITY FIELD INSPECTION PERSONNEL.

ELECTRICAL SCOPE OF WORK RESPONSIBILITIES		
SCOPE	BY UTILITY	BY CONTRACTOR
PROVIDE PRIMARY SIDE TRENCHING	X	
PROVIDE & INSTALL PRIMARY SIDE CONDUITS	X	
PROVIDE & INSTALL PRIMARY SIDE CONDUCTORS	X	
PROVIDE & INSTALL UTILITY TRANSFORMER PAD		X
PROVIDE UTILITY TRANSFORMER	X	
INSTALL UTILITY TRANSFORMER	X	
INSTALL CONNECTIONS AT UTILITY TRANSFORMER (PRIMARY)	X	
INSTALL CONNECTIONS AT UTILITY TRANSFORMER (SECONDARY)	X	
PROVIDE METER BASE (UTILITY TO PROVIDE APPROVED SPECS)		X
INSTALL METER BASE		X
PROVIDE METER	X	
INSTALL METER	X	
PROVIDE CTs	X	
INSTALL CTs (INSIDE CT CABINET)	X	
PROVIDE SECONDARY SIDE TRENCHING		X
PROVIDE & INSTALL SECONDARY SIDE CONDUITS W/ PULLWIRE		X
PROVIDE & INSTALL SECONDARY SIDE CONDUCTORS		X
PROVIDE ROAD CUTS / ROAD BORES / PAVEMENT REPLACEMENT		X
PROVIDE & INSTALL LANDSCAPE REMEDIATION	X	X

NOTE: SCOPE SHOWN ABOVE IS PRELIMINARY. FINAL SCOPE TO BE PROVIDED BY ALLIANT. FIELD VERIFY PRIOR TO CONSTRUCTION.

POWER COMPANY:  
JOHN CARNEY, DESIGNER  
ALLIANT ENERGY  
OFFICE: (563) 288-3322  
EMAIL: johncarney@alliantenergy.com

NOTE: FOR UTILITY SPECIFICATIONS PLEASE CHECK WITH ALLIANT ENERGY MANUALS CHAPTER 4.



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CHECKED BY: RCH

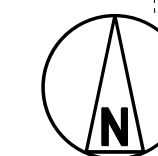
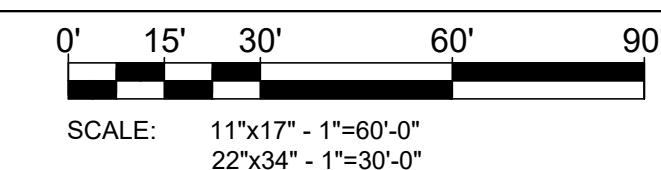
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SHEET TITLE  
**UTILITY PLAN**

SHEET NUMBER  
**E-1**

**UTILITY PLAN**





SITE ID: WALCOTT, IA		WIRE: 4
VOLTAGE: 277/480V		
PHASE: 3Ø		
SERVICE LOAD (kVA)	USAGE FACTOR	LOAD DESCRIPTION
387	1.0	V3 SUPERCHARGER
387	1.0	V3 SUPERCHARGER
0.5	1.0	MASTER CONTROLLER
774.00	CONNECTED kVA	
932.53	CONNECTED AMPS	
932.53	DEMAND AMPS	

- BIDDING CONTRACTOR TO VERIFY DEPTHS AND LENGTHS IN FIELD.
- THE EXACT ROUTING PATH AND CONDUCTOR RUN LENGTHS SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD BASED ON PHYSICAL MEASUREMENTS. CONTRACTOR TO ORDER CONDUCTOR BASED ON FIELD MEASUREMENTS (MUST BE APPROVED BY TESLA INSTALLATION MANAGER).
- 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.
- THE MAXIMUM RUN LENGTH BETWEEN SUPERCHARGER CABINET AND CHARGING POST, INCLUDING BURIED DEPTH IS NOT TO EXCEED 330'.
- SEE SHEET E-3 FOR CONDUIT AND WIRE SIZES.
- ALL UNDERGROUND CONDUIT RUNS SHALL UTILIZE SCHEDULE 40 PVC OR HDPE.
- UTILIZE SLURRY FOR ANY CONDUIT RUNS WHERE MORE THAN (4) CONDUITS ARE PRESENT.



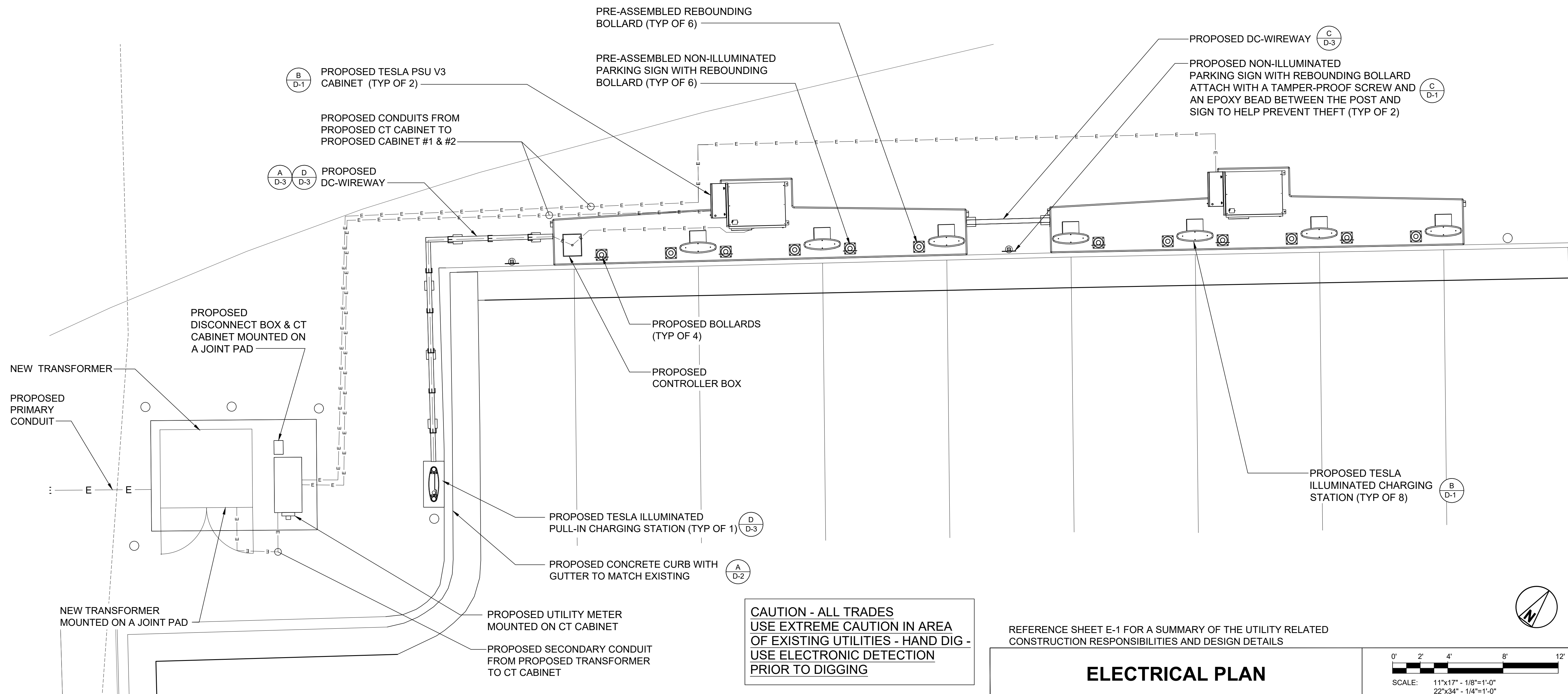
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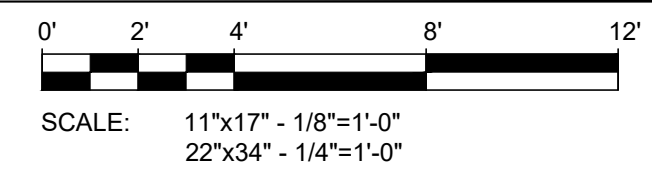
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**CAUTION - ALL TRADES USE EXTREME CAUTION IN AREA OF EXISTING UTILITIES - HAND DIG - USE ELECTRONIC DETECTION PRIOR TO DIGGING**

REFERENCE SHEET E-1 FOR A SUMMARY OF THE UTILITY RELATED CONSTRUCTION RESPONSIBILITIES AND DESIGN DETAILS

**ELECTRICAL PLAN**



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SHEET TITLE  
**ELECTRICAL PLAN & PANEL SCHEDULE 'MDP'**

SHEET NUMBER  
**E-2**

PROJECT AREA STALL COUNT	
EXISTING STALL COUNT	-
PROPOSED TESLA CHARGING STALLS	8

TESLA EQUIPMENT SCHEDULE			
TESLA EQUIPMENT	DESCRIPTION	PART NUMBER	QUANTITY
SUPERCHAR CABINETS	VERSION 3	1450758-00-D	2
CHARGING POST	VERSION 3	1088585-00-D	8

**NOTES**

1. CONTRACTOR SHALL RETURN ALL DISTURBED AREAS OF PROPERTY TO ORIGINAL SITE CONDITION.
2. FOR SIGNAGE INFORMATION SEE SHEET D-2.
3. THE CONTRACTOR SHALL VERIFY ALL DEMOLITION AND CONSTRUCTION QUANTITIES PRIOR TO BIDDING.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR SEAL COAT AND RE-STRIPING OF STALL AREA UPON COMPLETION OF WORK, WHERE APPLICABLE. GC TO VERIFY ALL DEPTHS, DIMENSIONS AND SQUARE FOOTAGE WITH TESLA CM BEFORE CONSTRUCTION.



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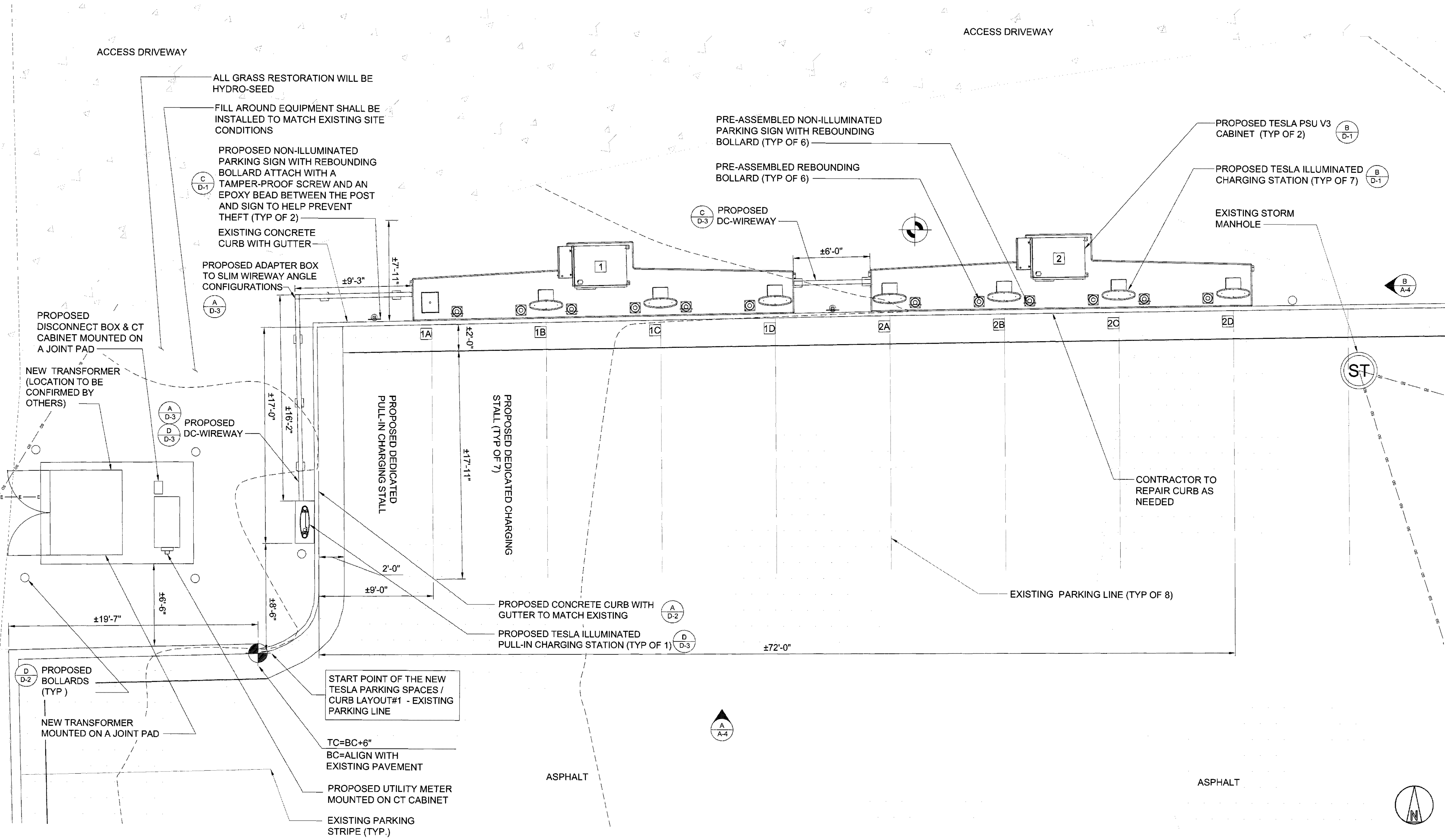
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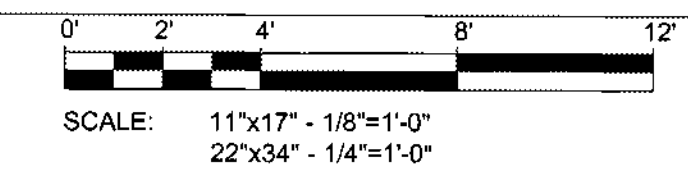
SHEET TITLE  
**PROPOSED SITE PLAN**

SHEET NUMBER

**A-3**

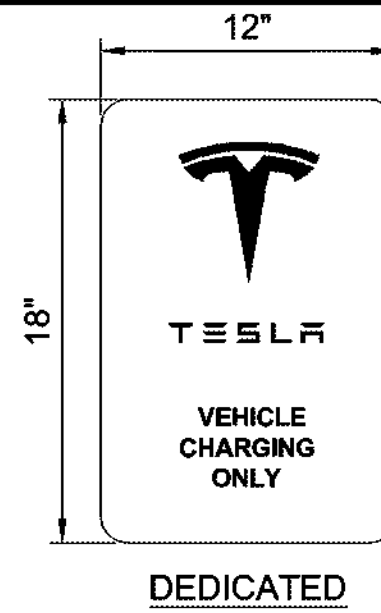


**PROPOSED SITE PLAN**

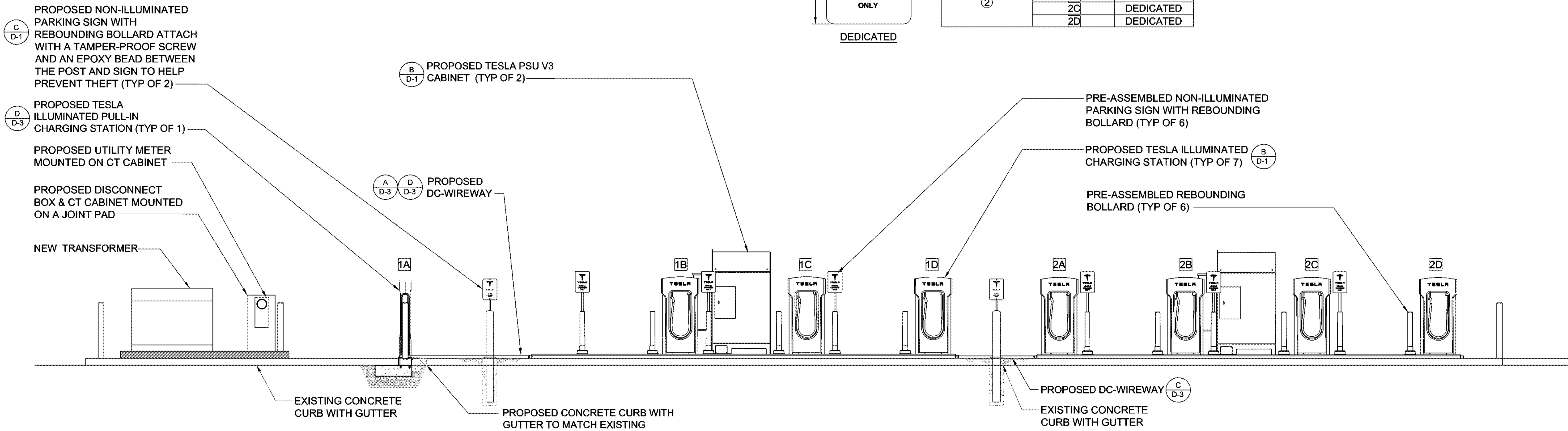


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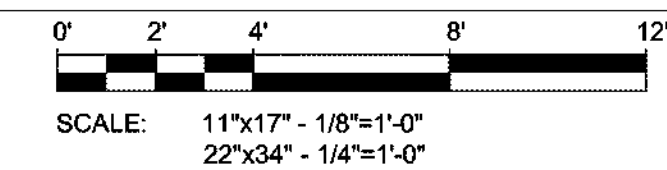
1. BOTTOM OF LOWEST SIGN TO BE INSTALLED 54" ABOVE GRADE.
2. ADDITIONAL PARKING SIGNS TO BE INSTALLED 2" ABOVE TOP OF PREVIOUS SIGN.
3. DO NOT ANCHOR SIGNAGE OR PENETRATE SIDE OF SWITCHGEAR ASSEMBLY.
4. SIGNAGE TO BE REFLECTIVE VINYL.
5. SIGNAGE SHALL BE PRINTED WITH RED LETTERING ON A WHITE BACKGROUND.
6. ALL TEXT SHALL BE CAPITAL LETTERS. LABEL FONT SHALL BE ARIAL (OR SIMILAR) AND IS NOT TO BE BOLD.
7. CONTRAST BETWEEN CHARACTERS, SYMBOLS AND THEIR BACKGROUND SHALL BE 70% MINIMUM AND HAVE A NON GLARE FINISH.



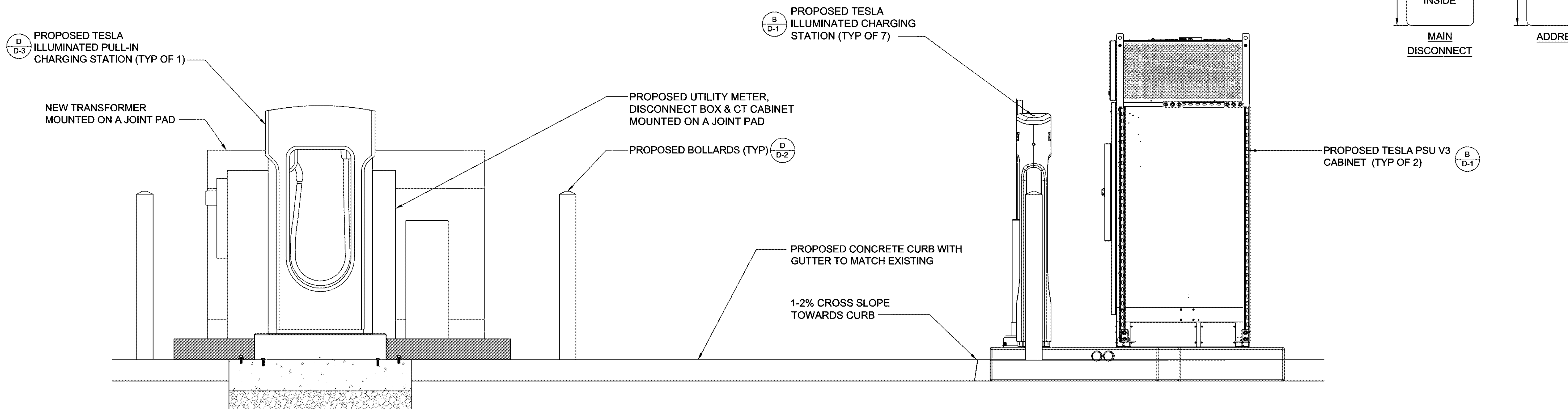
CHARGING POST SIGNAGE SCHEDULE		
SUPERCHARGER	CHARGE POST	SIGN(S) TO INSTALL
①	1A	DEDICATED
	1B	DEDICATED
	1C	DEDICATED
	1D	DEDICATED
②	2A	DEDICATED
	2B	DEDICATED
	2C	DEDICATED
	2D	DEDICATED



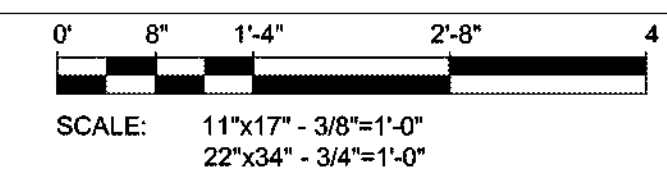
**SITE ELEVATION**



**A**



**SITE ELEVATION**



**B**

**TESLA**

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SHEET TITLE  
**SITE ELEVATION**

SHEET NUMBER  
**A-4**