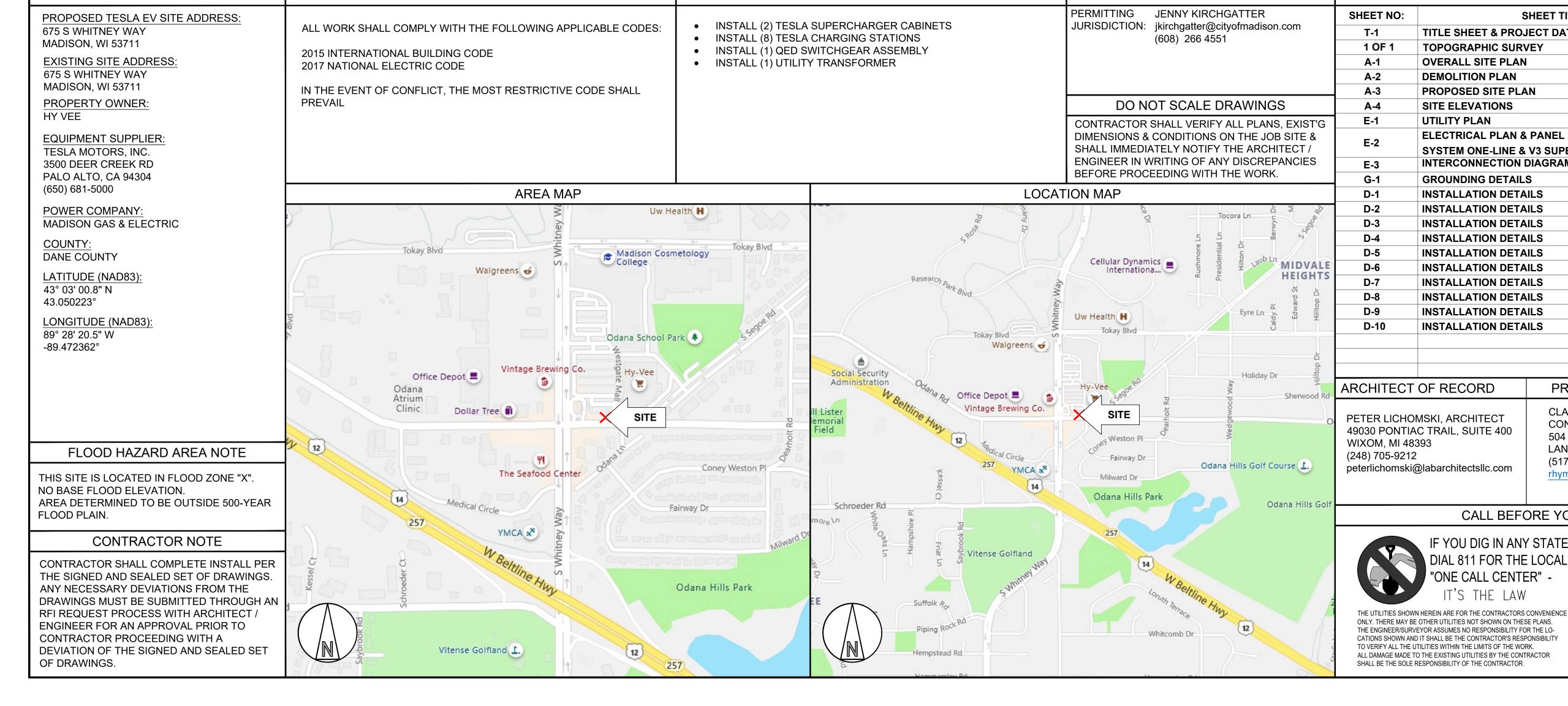


SUPERCHARGING STATION

MADISON, WI - S WHITNEY WAY **HY-VEE MADISON #2** SITE NAME: MADISON, WI (TRT#12707) 675 S WHITNEY WAY MADISON, WI 53711

PROJECT DESCRIPTION

ZONNING INFORMATION



APPLICABLE CODES

SITE INFORMATION

PALO ALTO, CA 94304



49030 Pontiac Trail. Ste 400 248-705-9212

DRAWN BY: RC **CHECKED BY:**

DRAWING INDEX

ELECTRICAL PLAN & PANEL SCHEDULE 'MDP'

PROJECT ENGINEER

CONSULTING ENGINEERS

LANSING, MI 48917

rhymen@ctrmep.com

(517) 886-0550

CALL BEFORE YOU DIG

IF YOU DIG IN ANY STATE

DIAL 811 FOR THE LOCAL

"ONE CALL CENTER"

504 S. CREYTS RD, SUITE B

CLARK TROMBLEY RANDERS

SYSTEM ONE-LINE & V3 SUPERCHARGER

TITLE SHEET & PROJECT DATA

INTERCONNECTION DIAGRAM

TOPOGRAPHIC SURVEY

OVERALL SITE PLAN

PROPOSED SITE PLAN

GROUNDING DETAILS

INSTALLATION DETAILS

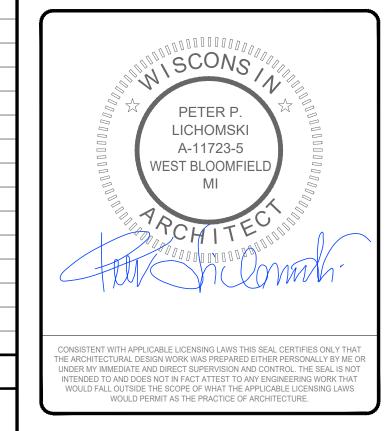
DEMOLITION PLAN

SITE ELEVATIONS

UTILITY PLAN

SHEET TITLE

D 10/20/2020 CD90 C 07/30/2020 CD90 B 01/20/2020 REVISED CD50 A 01/06/2020 CD50 REV DATE **DESCRIPTION**



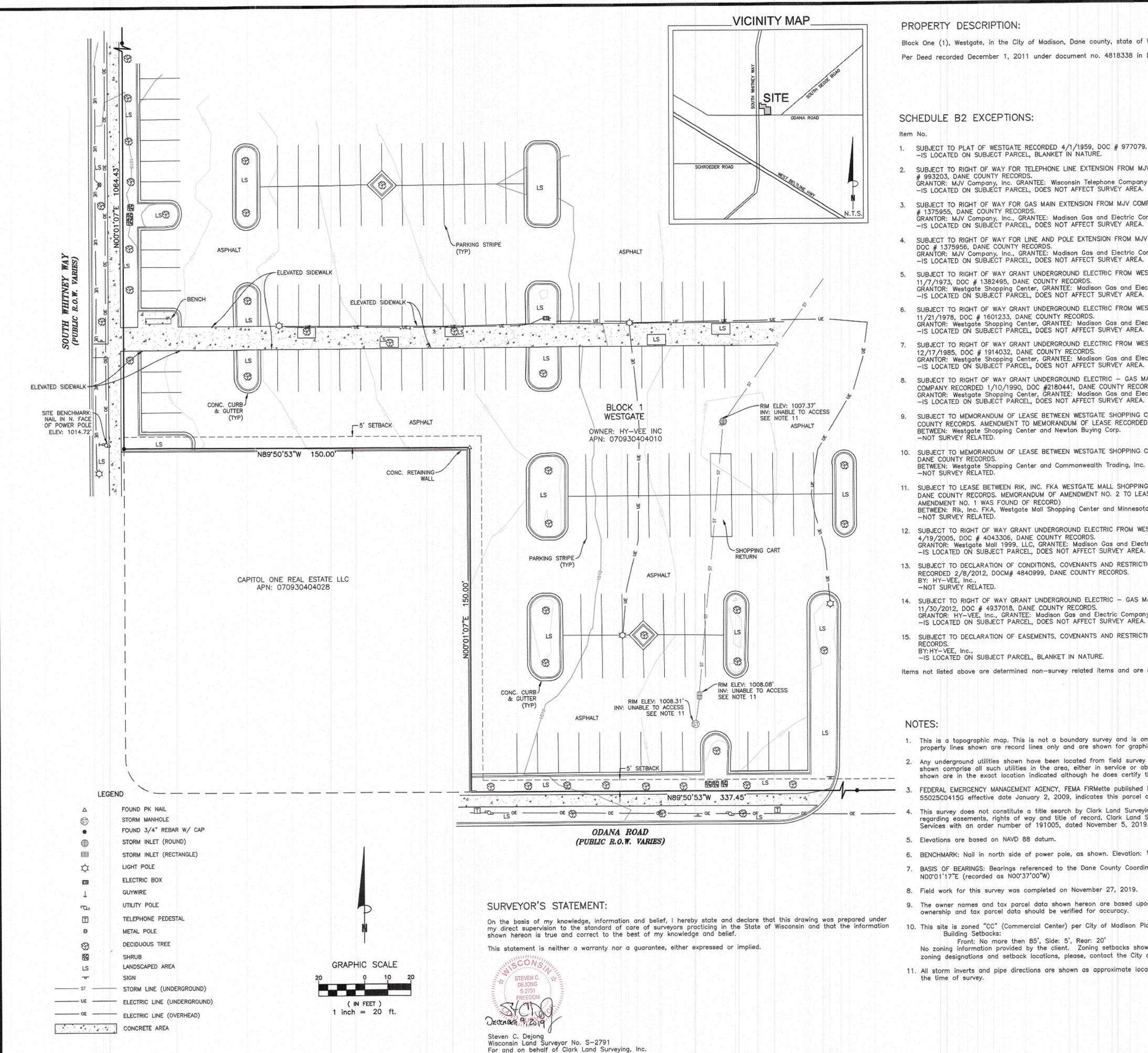
SITE NAME: MADISON, WI (TRT#12707) 675 S WHITNEY WAY. MADISON, WI 53711

SHEET TITLE

TITLE SHEET & PROJECT DATA

SHEET NUMBER

T-1



PROPERTY DESCRIPTION:

Block One (1), Westgate, in the City of Madison, Dane county, state of Wisconsin, except the southerly 150.0 feet of the westerly 150.0 feet thereof. Per Deed recorded December 1, 2011 under document no. 4818338 in Dane County, Wisconsin

SCHEDULE B2 EXCEPTIONS:

Item No.

- 1. SUBJECT TO PLAT OF WESTGATE RECORDED 4/1/1959, DOC # 977079. DANE COUNTY RECORDS. -IS LOCATED ON SUBJECT PARCEL, BLANKET IN NATURE.
- 2. SUBJECT TO RIGHT OF WAY FOR TELEPHONE LINE EXTENSION FROM MJV COMPANY, INC. TO WISCONSIN TELEPHONE COMPANY RECORDED 12/7/1959, DOC # 993203, DANE COUNTY RECORDS. GRANTOR: MJV Company, Inc. GRANTEE: Wisconsin Telephone Company -IS LOCATED ON SUBJECT PARCEL, DOES NOT AFFECT SURVEY AREA.
- SUBJECT TO RIGHT OF WAY FOR GAS MAIN EXTENSION FROM MJV COMPANY, INC. TO MADISON GAS AND ELECTRIC COMPANY RECORDED 8/23/1973, DOC # 1375955, DANE COUNTY RECORDS. GRANTOR: MJV Company, Inc., GRANTEE: Madison Gas and Electric Company -IS LOCATED ON SUBJECT PARCEL, DOES NOT AFFECT SURVEY AREA.
- 4. SUBJECT TO RIGHT OF WAY FOR LINE AND POLE EXTENSION FROM MJV COMPANY, INC. TO MADISON GAS AND ELECTRIC COMPANY RECORDED 8/23/1973, DOC # 1375956, DANE COUNTY RECORDS. GRANTOR: MJV Company, Inc., GRANTEE: Madison Gas and Electric Company -IS LOCATED ON SUBJECT PARCEL, DOES NOT AFFECT SURVEY AREA.
- 5. SUBJECT TO RIGHT OF WAY GRANT UNDERGROUND ELECTRIC FROM WESTGATE SHOPPING CENTER TO MADISON GAS AND ELECTRIC COMPANY RECORDED 11/7/1973, DOC # 1382495, DANE COUNTY RECORDS. GRANTOR: Westgate Shopping Center, GRANTEE: Madison Gas and Electric Company
- 6. SUBJECT TO RIGHT OF WAY GRANT UNDERGROUND ELECTRIC FROM WESTGATE SHOPPING CENTER. TO MADISON GAS AND ELECTRIC COMPANY RECORDED 11/21/1978, DOC # 1601233, DANE COUNTY RECORDS. GRANTOR: Westgate Shopping Center, GRANTEE: Madison Gas and Electric Company
 -IS LOCATED ON SUBJECT PARCEL, DOES NOT AFFECT SURVEY AREA.
- 7. SUBJECT TO RIGHT OF WAY GRANT UNDERGROUND ELECTRIC FROM WESTGATE SHOPPING CENTER. TO MADISON GAS AND ELECTRIC COMPANY RECORDED 12/17/1985, DOC # 1914032, DANE COUNTY RECORDS. GRANTOR: Westgate Shopping Center, GRANTEE: Madison Gas and Electric Company -IS LOCATED ON SUBJECT PARCEL, DOES NOT AFFECT SURVEY AREA.
- 8. SUBJECT TO RIGHT OF WAY GRANT UNDERGROUND ELECTRIC GAS MAIN FROM WESTGATE SHOPPING CENTER RIK, INC., TO MADISON GAS AND ELECTRIC COMPANY RECORDED 1/10/1990, DOC #2180441, DANE COUNTY RECORDS. GRANTOR: Westgate Shopping Center, GRANTEE: Madison Gas and Electric Company -IS LOCATED ON SUBJECT PARCEL, DOES NOT AFFECT SURVEY AREA.
- 9. SUBJECT TO MEMORANDUM OF LEASE BETWEEN WESTGATE SHOPPING CENTER AND NEWTON BUYING CORP. RECORDED 10/26/1982, DOC # 1756222, DANE COUNTY RECORDS. AMENDMENT TO MEMORANDUM OF LEASE RECORDED 1/18/1995, DOC # 2656028, DANE COUNTY RECORDS. BETWEEN: Westgate Shopping Center and Newton Buying Corp. -NOT SURVEY RELATED.
- 10. SUBJECT TO MEMORANDUM OF LEASE BETWEEN WESTGATE SHOPPING CENTER AND COMMONWEALTH TRADING, INC. RECORDED 8/17/1983, DOC# 1795883, DANE COUNTY RECORDS. BETWEEN: Westgate Shopping Center and Commonwealth Trading, Inc. -NOT SURVEY RELATED.
- 11. SUBJECT TO LEASE BETWEEN RIK, INC. FKA WESTGATE MALL SHOPPING CENTER AND MINNESOTA FABRICS, INC. RECORDED 12/22/1999, DOC # 3180433, DANE COUNTY RECORDS. MEMORANDUM OF AMENDMENT NO. 2 TO LEASE RECORDED 12/1/2011, DOC # 4818339, DANE COUNTY RECORDS. (NO AMENDMENT NO. 1 WAS FOUND OF RECORD) BETWEEN: Rik, Inc. FKA, Westgate Mall Shopping Center and Minnesota Fabrics, Inc, -NOT SURVEY RELATED.
- 12. SUBJECT TO RIGHT OF WAY GRANT UNDERGROUND ELECTRIC FROM WESTGATE MALL 1999, LLC, TO MADISON GAS AND ELECTRIC COMPANY RECORDED 4/19/2005, DOC # 4043306, DANE COUNTY RECORDS. GRANTOR: Westgate Mall 1999, LLC, GRANTEE: Madison Gas and Electric Company -IS LOCATED ON SUBJECT PARCEL, DOES NOT AFFECT SURVEY AREA.
- 13. SUBJECT TO DECLARATION OF CONDITIONS, COVENANTS AND RESTRICTIONS FOR MAINTENANCE OF STORMWATER MANAGEMENT MEASURES BY HY-VEE, INC. RECORDED 2/8/2012, DOCM# 4840999, DANE COUNTY RECORDS. BY: HY-VEE, Inc., -NOT SURVEY RELATED.
- 14. SUBJECT TO RIGHT OF WAY GRANT UNDERGROUND ELECTRIC GAS MAIN FROM HY-VEE, INC. TO MADISON GAS AND ELECTRIC COMPANY RECORDED GRANTOR: HY-VEE, Inc., GRANTEE: Madison Gas and Electric Company -IS LOCATED ON SUBJECT PARCEL, DOES NOT AFFECT SURVEY AREA.
- 15. SUBJECT TO DECLARATION OF EASEMENTS, COVENANTS AND RESTRICTIONS BY HY-VEE, INC. RECORDED. 10/9/2019, DOC # 5529388, DANE COUNTY BY: HY-VEE, Inc., -IS LOCATED ON SUBJECT PARCEL, BLANKET IN NATURE.

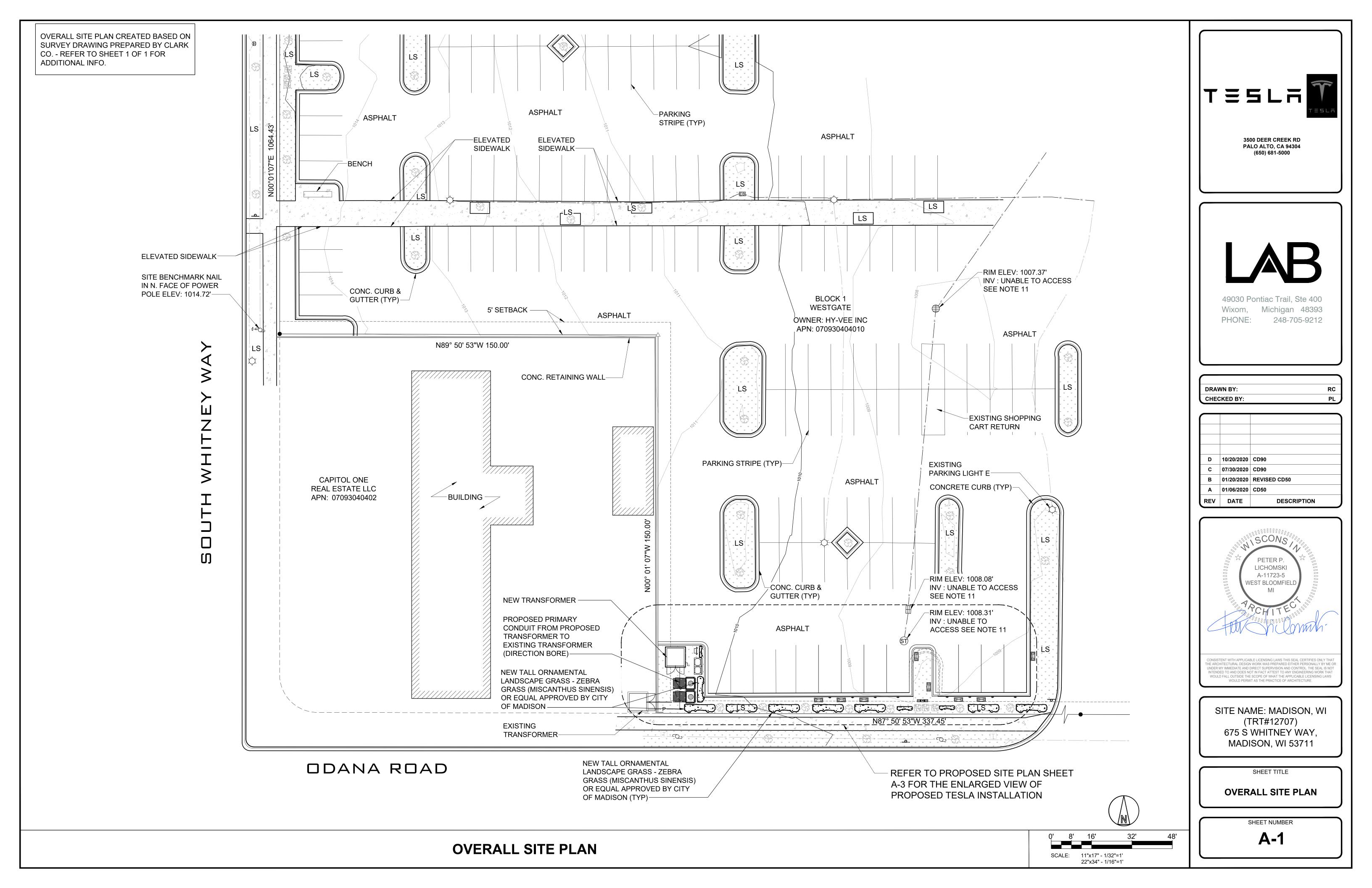
Items not listed above are determined non-survey related items and are not plotted hereon.

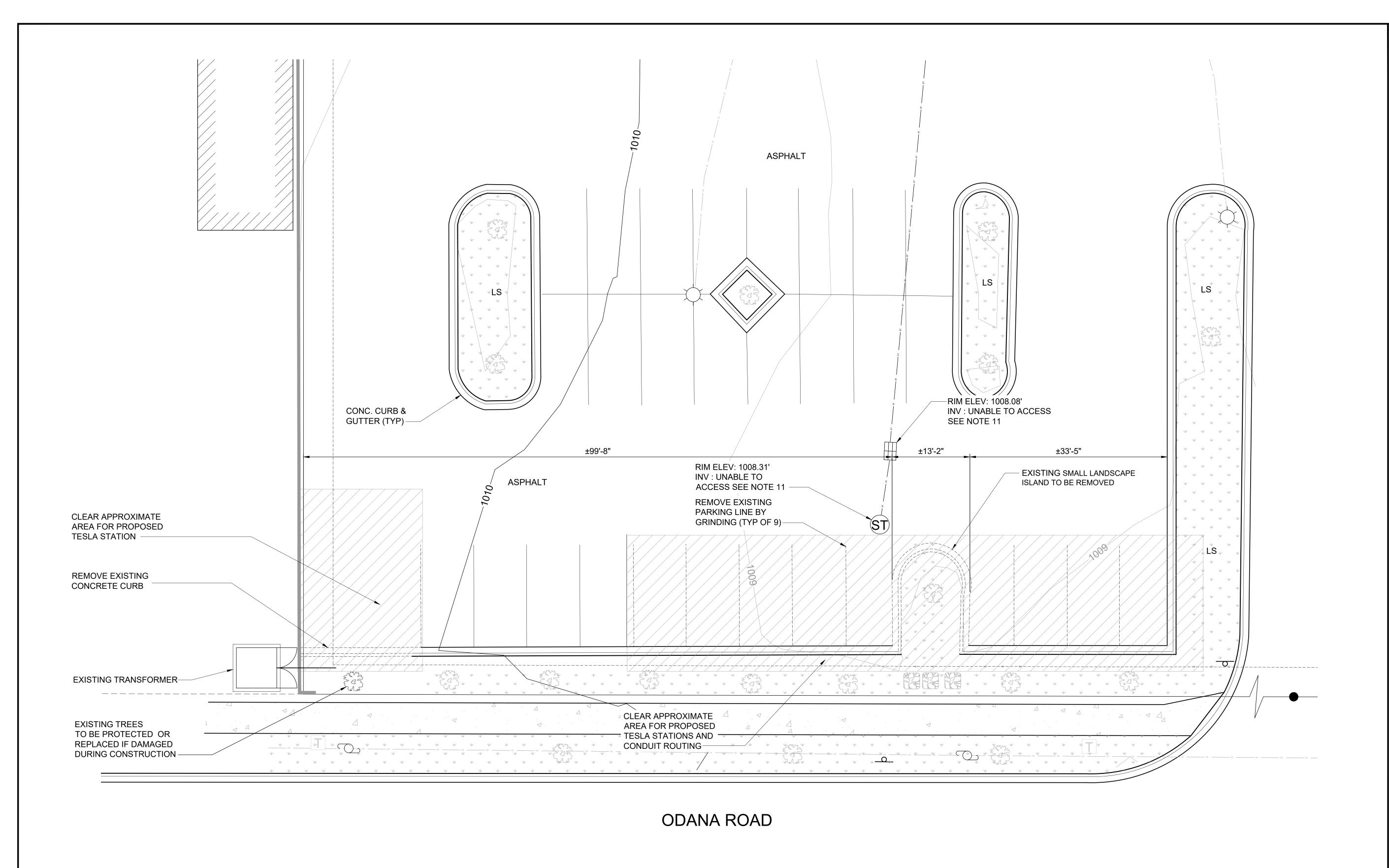
- 1. This is a topographic map. This is not a boundary survey and is only intended to depict those topographic features or improvements shown. The property lines shown are record lines only and are shown for graphical reference only.
- 2. Any underground utilities shown have been located from field survey information. The surveyor makes no guarantee that the underground utilities shown comprise all such utilities in the area, either in service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated although he does certify that they are located as accurately as possible from the information available.
- FEDERAL EMERGENCY MANAGEMENT AGENCY, FEMA FIRMette published December 6, 2019, referencing Flood Insurance Rate Map, Map Number 55025C0415G effective date January 2, 2009, indicates this parcel of land is located in Zone X (Area of minimal flood hazard).
- This survey does not constitute a title search by Clark Land Surveying, Inc. to determine ownership or easements of record. For all information regarding easements, rights of way and title of record, Clark Land Surveying, Inc. relied upon a Search Report, prepared by AMC Settlement Services with an order number of 191005, dated November 5, 2019.
- 5. Elevations are based on NAVD 88 datum.
- 6. BENCHMARK: Nail in north side of power pole, as shown. Elevation: 1014.72' (NAVD 88).
- BASIS OF BEARINGS: Bearings referenced to the Dane County Coordinate System and the west line of Lot 1, Westgate. Assumed to bear N00°01'17"E (recorded as N00°37'00"W)
- 8. Field work for this survey was completed on November 27, 2019.
- 9. The owner names and tax parcel data shown hereon are based upon the public records available at the original date of this survey. Current ownership and tax parcel data should be verified for accuracy.
- 10. This site is zoned "CC" (Commercial Center) per City of Madison Planning Department. Building Setbacks:
- Front: No more then 85', Side: 5', Rear: 20' No zoning information provided by the client. Zoning setbacks shown hereon are the interpretation of the surveyor. For clarification of exact zoning designations and setback locations, please, contact the City of Madison Planning and Zoning Department at (608)266-4551.
- 11. All storm inverts and pipe directions are shown as approximate locations as all storm inlets had metal screens attached for debris collection at the time of survey.

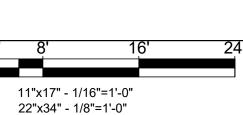


SURVE SIGN

 $\overline{\Box}$

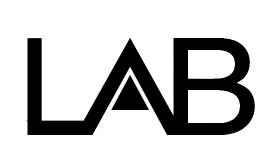








3500 DEER CREEK RD PALO ALTO, CA 94304 (650) 681-5000

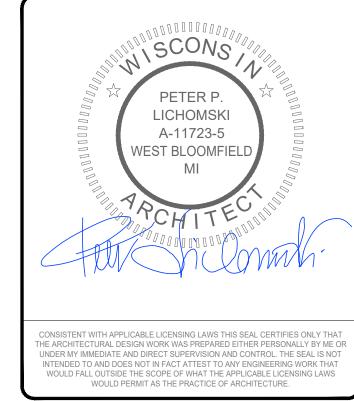


49030 Pontiac Trail, Ste 400 Wixom, Michigan 48393 PHONE: 248-705-9212

DRAWN BY: RC
CHECKED BY: PL

D 10/20/2020 CD90
C 07/30/2020 CD90
B 01/20/2020 REVISED CD50
A 01/06/2020 CD50

REV DATE DESCRIPTION



SITE NAME: MADISON, WI (TRT#12707) 675 S WHITNEY WAY, MADISON, WI 53711

SHEET TITLE

DEMOLITION PLAN

SHEET NUMBER

A-2

NOTES

- 1. THE CONTRACTOR SHALL VERIFY ALL DEMOLITION AND CONSTRUCTION QUANTITIES PRIOR TO BIDDING.
- 2. TRANSFORMER TO BE INSTALLED PER MANUFACTURER INSTRUCTIONS.

| PROJECT AREA STALL COU | | | | | | | | |
|--------------------------------|----|--|--|--|--|--|--|--|
| EXISTING STALL COUNT | 13 | | | | | | | |
| PROPOSED TESLA CHARGING STALLS | 8 | | | | | | | |
| EXISTING STALLS TO REMAIN | 4 | | | | | | | |

| TESLA EQUIPMENT SCHEDULE | | | | | | | | | | |
|--------------------------|----------------------------|--------------|---------|--|--|--|--|--|--|--|
| TESLA EQUIPMENT | DESCRIPTION | PART NUMBER | QUANTIT | | | | | | | |
| SUPERCHARGING CABINETS | VERSION 3 | 1450758-00-D | 2 | | | | | | | |
| CHARGING POST | VERSION 3 | 1088585-00-D | 8 | | | | | | | |
| SITE MASTER CONTROLLER | INDUSTRIAL SITE CONTROLLER | 1137202-02-C | 1 | | | | | | | |

NOTES

- 1. CONTRACTOR SHALL RETURN ALL DISTURBED AREAS OF PROPERTY TO ORIGINAL SITE CONDITION.
- 2. FOR SIGNAGE INFORMATION SEE SHEET A-5.
- 3. THE CONTRACTOR SHALL VERIFY ALL DEMOLITION AND CONSTRUCTION QUANTITIES PRIOR TO BIDDING.





248-705-9212

DRAWN BY: RC
CHECKED BY: PL

PHONE:

D 10/20/2020 CD90
C 07/30/2020 CD90
B 01/20/2020 REVISED CD50

 A
 01/06/2020
 CD50

 REV
 DATE
 DESCRIPTION

CONSISTENT WITH APPLICABLE LICENSING LAWS THIS SEAL CERTIFIES ONLY THAT THE ARCHITECTURAL DESIGN WORK WAS PREPARED EITHER PERSONALLY BY ME OR UNDER MY IMMEDIATE AND DIRECT SUPERVISION AND CONTROL. THE SEAL IS NOT INTENDED TO AND DOES NOT IN FACT ATTEST TO ANY ENGINEERING WORK THAT WOULD FALL OUTSIDE THE SCOPE OF WHAT THE APPLICABLE LICENSING LAWS WOULD PERMIT AS THE PRACTICE OF ARCHITECTURE.

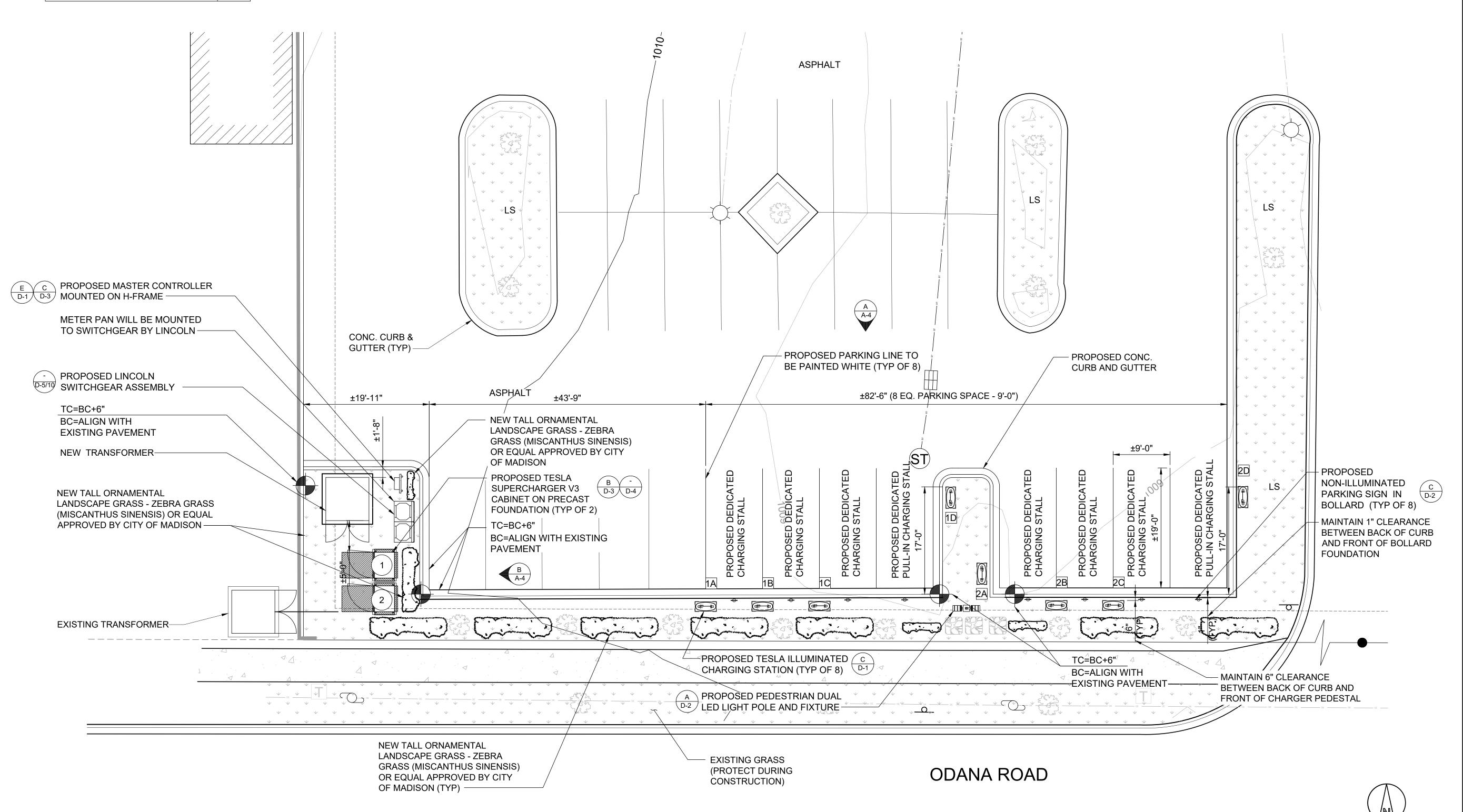
SITE NAME: MADISON, WI (TRT#12707) 675 S WHITNEY WAY, MADISON, WI 53711

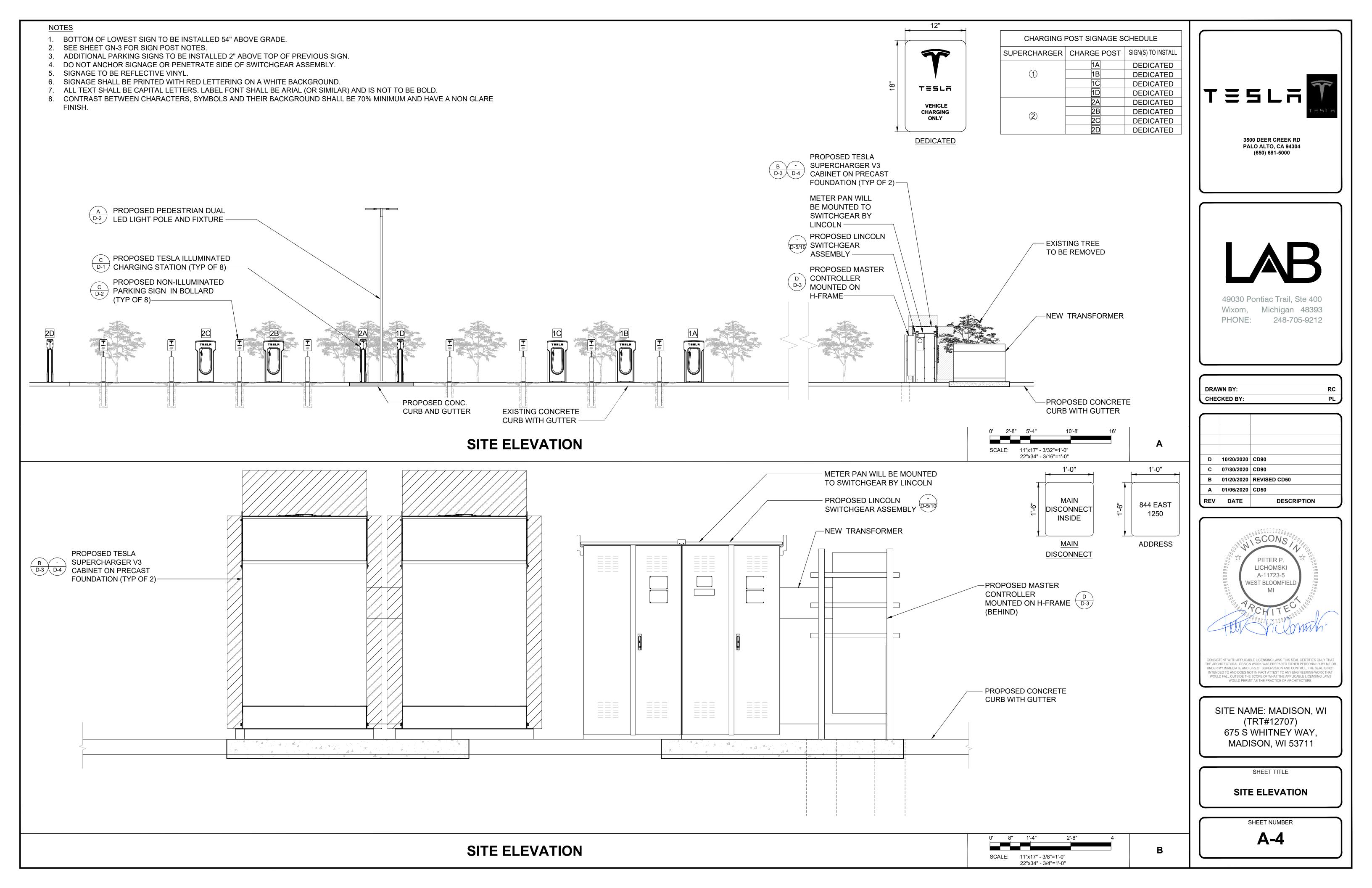
SHEET TITLE

PROPOSED SITE PLAN

SHEET NUMBER

11"x17" - 1/16"=1'-0" 22"x34" - 1/8"=1'-0" **A-3**





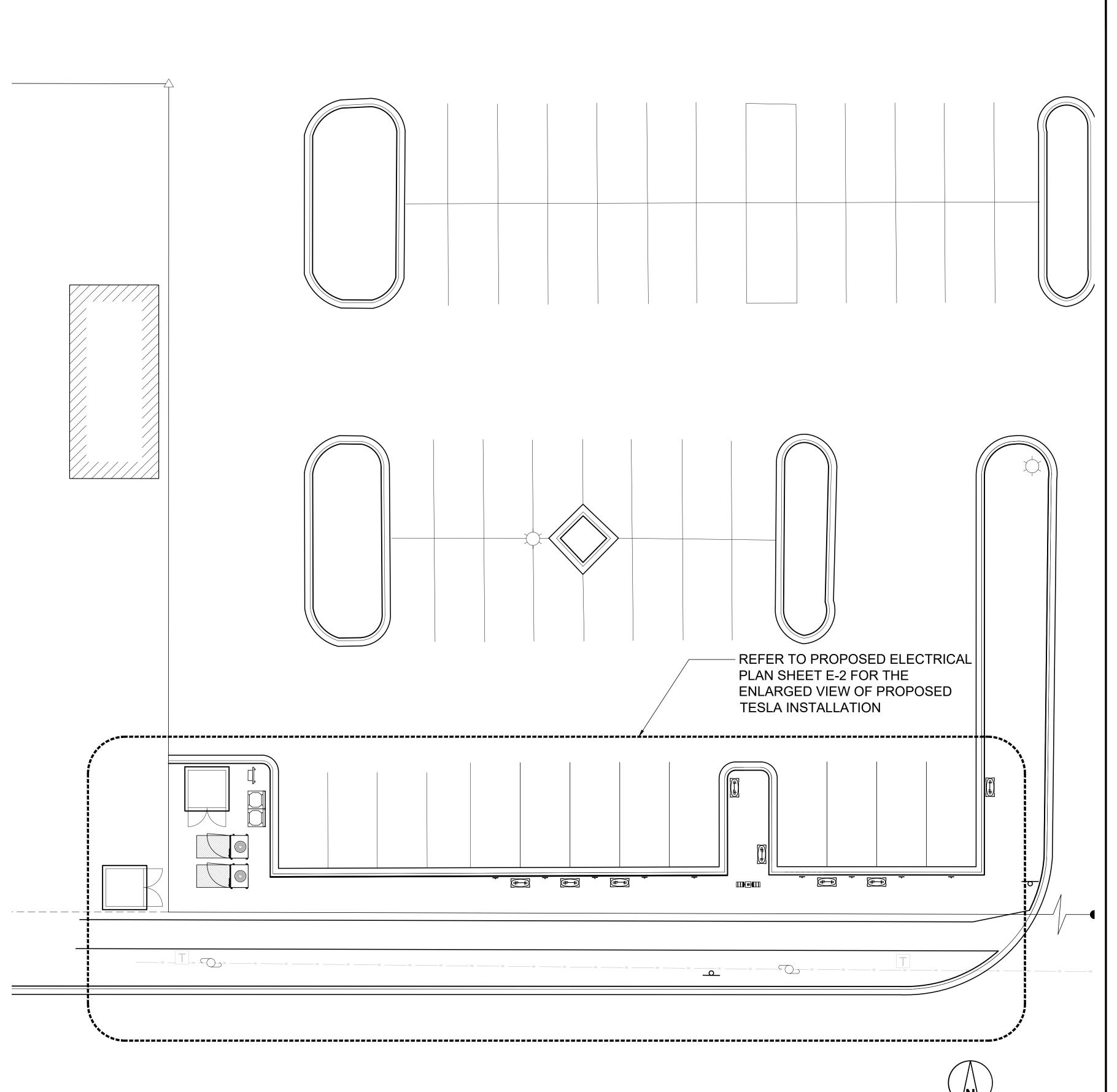
NOTES:

- 1. 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.
- 3. TRANSFORMER BOLLARD PROTECTION TO BE INSTALLED PER UTILITY SPECIFICATION. ADDITIONAL BOLLARD PROTECTION MAY BE REQUIRED AT THE DISCRETION OF THE UTILITY FIELD INSPECTION PERSONNEL.

| SCOPE | BY UTILITY | BY CONTRACTOR |
|---|---------------|------------------|
| PROVIDE PRIMARY SIDE TRENCHING | X | |
| PROVIDE & INSTALL PRIMARY SIDE CONDUITS W/ PULLWIRE | Х | |
| PROVIDE & INSTALL PRIMARY SIDE CONDUCTORS | Х | |
| PROVIDE & INSTALL UTILITY TRANSFORMER PAD | | Х |
| PROVIDE UTILITY TRANSFORMER | Х | |
| INSTALL UTILITY TRANSFORMER | Х | |
| INSTALL CONNECTIONS AT UTILITY TRANSFORMER (PRIMARY) | Х | |
| INSTALL CONNECTIONS AT UTILITY TRANSFORMER (SECONDARY) | | Х |
| PROVIDE METER PEDESTAL | | Х |
| INSTALL METER PEDESTAL | | Х |
| PROVIDE METER BASE | Х | |
| INSTALL METER BASE | | Х |
| PROVIDE METER | Х | |
| INSTALL METER | Х | |
| PROVIDE CTs | Х | |
| INSTALL CTs | Х | |
| PROVIDE SECONDARY SIDE TRENCHING | | Х |
| PROVIDE & INSTALL SECONDARY SIDE CONDUITS W/ PULLWIRE | | Х |
| PROVIDE & INSTALL SECONDARY SIDE CONDUCTORS | | Х |
| PROVIDE ROAD CUTS / ROAD BORES FOR UTILITY WORK | Х | |
| PROVIDE & INSTALL PAVEMENT REPLACEMENT FOR UTILITY WORK | Х | |

NOTE: SCOPE SHOWN ABOVE WAS PROVIDED BY AEP. FIELD VERIFY PRIOR TO CONSTRUCTION.

UTILITY PLAN





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: JSR
CHECKED BY: RCH

D 10/20/2020 CD90
C 07/30/2020 CD90
B 01/20/2020 REVISED CD50
A 01/06/2020 CD50
REV DATE DESCRIPTION



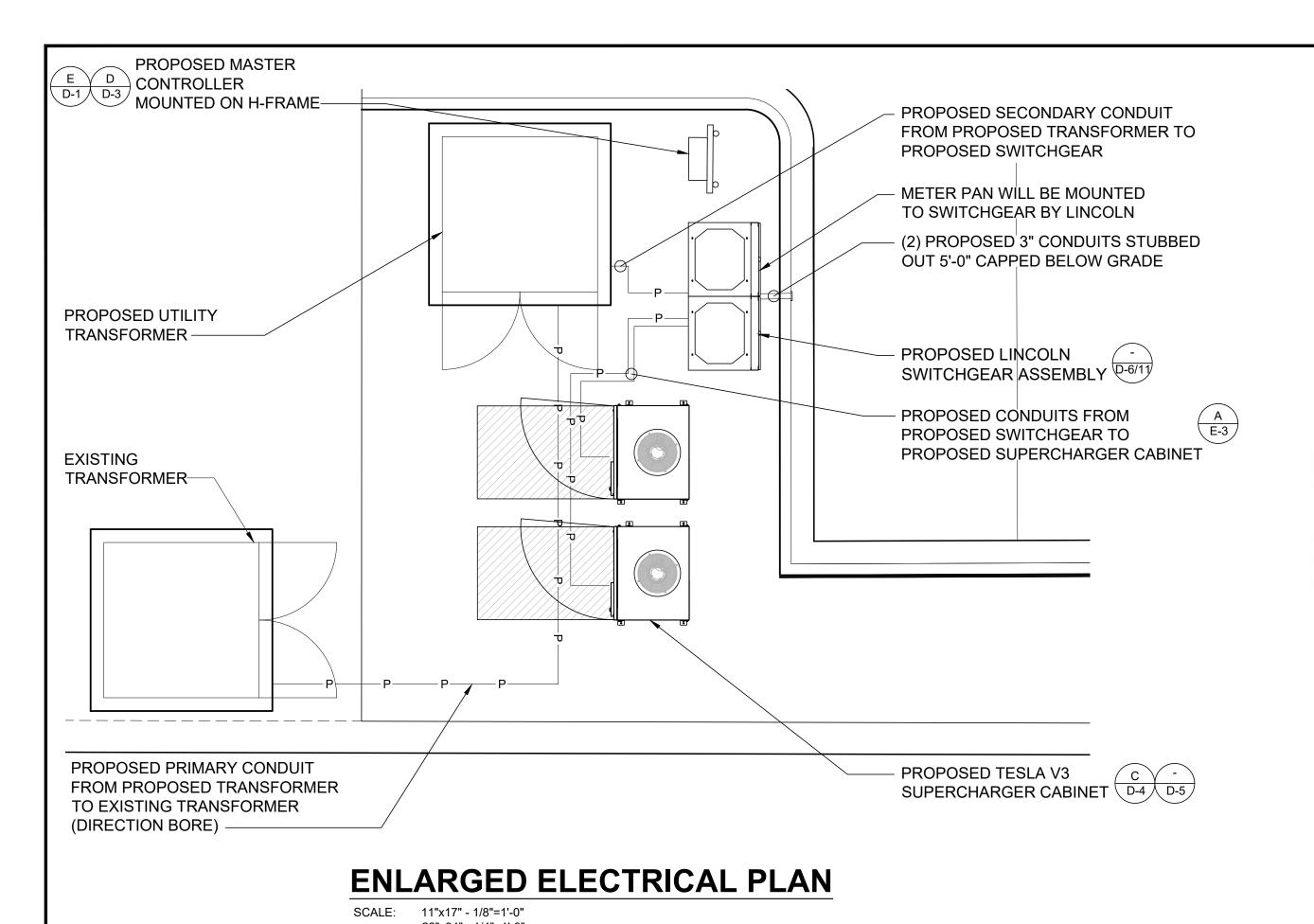
SITE NAME: MADISON, WI (TRT#12707) 675 S WHITNEY WAY, MADISON, WI 53711

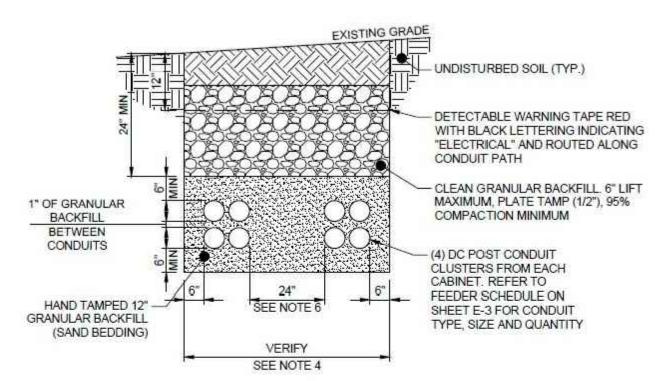
SHEET TITLE

UTILITY PLAN

SHEET NUMBER

11"x17" - 3/64"=1'-0" 22"x34" - 3/32"=1'-0" E-1





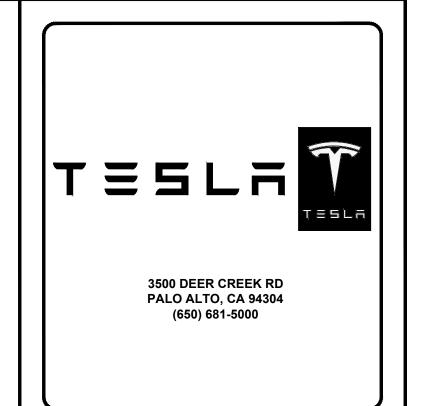
OTES:

- ANY EXCAVATION LEFT OPEN SHOULD BE SECURELY FENCED OFF.
- ANY PAVEMENT DAMAGE DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO PRECONSTRUCTION CONDITIONS OR BETTER.
- CONTRACTOR SHALL INSTALL CONDUITS BELOW LOCAL FROST LINE. SHOULD FIELD CONDITIONS VARY, CONTRACTOR SHALL COORDINATE WITH CONTACT ENGINEER LISTED ON SHEET T-1.
- 4. VERIFY WIDTH OF TRENCH REQUIRED. REFER TO SITE ELECTRICAL DRAWING ON SHEET E-2 FOR
- DC POST CONDUIT DUCT BANK DESIGN BY TESLA BASED ON RHO90 SOIL TYPE & BACKFILL.
 CONTRACTOR CAN REDUCE SPACING AS REQUIRED BASED ON TESLA THERMAL MODELING
- CALCULATIONS. DC CONDUIT MAY BE ENCASED IN SLURRY TO DECREASE REQUIRED SPACING.

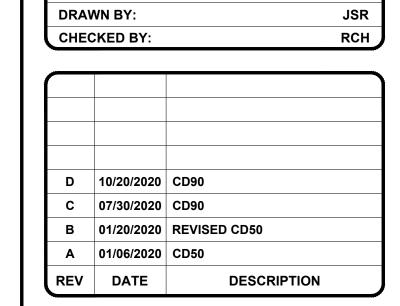
NOTES:

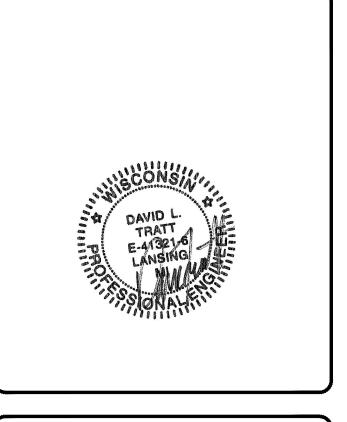
- 1. BIDDING CONTRACTOR TO VERIFY DEPTHS AND LENGTHS IN FIELD.
- THE EXACT ROUTING PATH AND CONDUCTOR RUN LENGTHS SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD BASED ON PHYSICAL MEASUREMENTS. CONTRACTOR TO ORDER CONDUCTOR BASED ON FIELD MEASUREMENTS (MUST BE APPROVED BY TESLA INSTALLATION MANAGER).
- 3. 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.
- 4. THE MAXIMUM RUN LENGTH BETWEEN SUPERCHARGER CABINET AND CHARGING POST, INCLUDING BURIED DEPTH IS NOT TO EXCEED 330'.
- 5. SEE SHEET E-3 FOR CONDUIT AND WIRE SIZES.

| SITE ID: MADIS | SON, WI: S WHIT | NEY WAY | MODEL #: LINCO | LN | WIRE: 4 | | | |
|-----------------------|-------------------|-------------------|-----------------|--------------|------------------------------|--|--|--|
| VOLTAGE: 277, | /480V | | BUSS RATING: 12 | 200 AMP | GND BAR: YES | | | |
| PHASE: 3Ø | | | NEU BAR: YES | | N TO G BOND: YES; SEE A/E-3 | | | |
| SERVICE LOAD (kVA) | USAGE FACTOR | BREAKER STATUS | BREAKER POLES | BREAKER AMPS | LOAD DESCRIPTION | | | |
| | | ON | 3 | 1200 | MAIN BREAKER | | | |
| 433 | 1.0 | ON | 3 | 600 | V3 SUPERCHARGER | | | |
| 433 | 1.0 | ON | 3 | 600 | V3 SUPERCHARGER | | | |
| 0.5 | 1.0 | ON | 2 | 20 | MASTER CONTROLLER POLE LIGHT | | | |
| 0.131 | 1.25 | ON | 1 | 15 | | | | |
| 866.63 | CONNECTED kVA | | • | | | | | |
| 1044.13 | CONNECTED AMPS | | | | | | | |
| 1044.17 | DEMAND AMPS | | | | | | | |









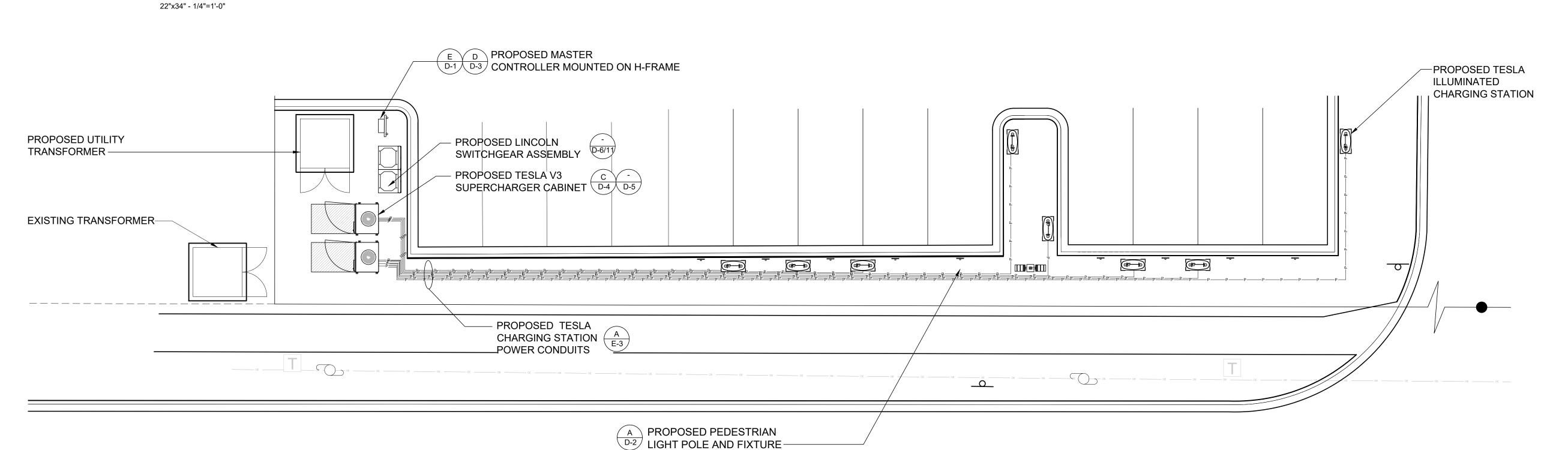
SITE NAME: MADISON, WI (TRT#12707) 675 S WHITNEY WAY, MADISON, WI 53711

SHEET TITLE

ELECTRICAL PLAN & PANEL SCHEDULE 'MDP'

SHEET NUMBER

E-2



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

0' 4' 8' 16' 24'

SCALE: 11"x17" - 1/16"=1'-0"
22"x34" - 1/8"=1'-0"

| NO | FROM | ТО | CONFIGURATION | | | |
|-----|--|-----------------------------|---|--|--|--|
| 110 | 1110141 | 10 | (3) 500MCM AI (XHHW-2) | | | |
| | UTILITY TRANSFORMER/ | PROPOSED SERVICE EQUIPMENT; | (1) 500MCM AI (XHHW-2) NEUT | | | |
| 1 | METERING | INCOMING | IN EACH OF (4) 4" PVC CONDUIT | | | |
| | WETEKING | INCOMING | + (1) SPARE 4" PVC CONDUIT | | | |
| | | | +(1) SPARE 4 PVC CONDOIT | | | |
| 2 | PROPOSED SERVICE | PROPOSED SERVICE EQUIPMENT; | FACTORY INSTALLED 1200A BUSS | | | |
| | EQUIPMENT; INCOMING | 1200A TRIP MAIN BREAKER | TACTORT INSTALLED 1200A BOSS | | | |
| | PROPOSED SERVICE | | | | | |
| 3 | EQUIPMENT; 1200A TRIP MAIN | PROPOSED SERVICE EQUIPMENT; | FACTORY INSTALLED 1200A BUSS | | | |
| | BREAKER | DISTRIBUTION PANEL | | | | |
| | PROPOSED SERVICE | | (3) 500MCM AI (XHHW-2, THWN-2, OR RW90) | | | |
| 4 | EQUIPMENT; DISTRIBUTION | PROPOSED TESLA | (1) 500MCM AI (XHHW-2, THWN-2, OR RW90) NEU | | | |
| 4 | , and the second | V3 CHARGING CABINETS | (1) #2/0 AWG Cu GND | | | |
| | PANEL | | IN EACH OF (2) 4" PVC CONDUIT | | | |
| | PROPOSED SERVICE | | (2) #10 AWG Cu (THWN-2) | | | |
| 5 | EQUIPMENT; DISTRIBUTION | SITE MASTER CONTROLLER | (1) #10 AWG Cu (THWN-2) GND | | | |
| | PANEL | | IN 1" PVC CONDUIT | | | |
| | | | | | | |
| | | DDODOCED TECHA | CAT5e, SHIELDED, WEATHPROOF, | | | |
| 6 | SITE MASTER CONTROLLER | PROPOSED TESLA | COMMUNICATIONS CABLE. BELDEN 7919A OR | | | |
| | | CHARGING CABINETS | EQUAL. INSTALL WITH METAL CONNECTOR AT SIT | | | |
| | | | MASTER END. (4) 350MCM AT (1000V) | | | |
| | PROPOSED TESLA | PROPOSED TESLA | (4) 350MCM AI (1000V) | | | |
| 7 | V3 CHARGING CABINET | | (1) #1 AWG Cu GND | | | |
| | V3 CHARGING CABINET | CHARGING POST | (1) 600V COMM CABLE IN 4" PVC CONDUIT | | | |
| | | | (2) 600MCM AI (XHHW-2, THWN-2, OR RW90) | | | |
| | CENTER CHARGING CABINET | DC BUS OF EACH | (1) #1/0 AWG Cu GND, (1) #3/0 AWG AI DC MID | | | |
| 8 | | | | | | |
| | (SHARED DC BUS CABINET) | CHARGING CABINET | IN EACH OF (2) 3" PVC CONDUIT OR PRECAST CONCRETE WIREWAY | | | |
| | | | CONCRETE WINEWAY | | | |
| | PROPOSED SERVICE | PROPOSED INTERNAL | FACTORY INSTALLED CABLING | | | |
| 9 | EQUIPMENT; DISTRIBUTION | EQUIPMENT HEATER | (BY MANUFACTURER) | | | |
| | PANEL | EQUITIVILINT HEATEN | (DI MANOI ACTOREN) | | | |
| | DD000050 0551 1105 | | (1) #12 AWG Cu (THWN-2) | | | |
| 16 | PROPOSED SERVICE | | (1) #12 AWG Cu (THWN-2) NEUT | | | |
| 10 | EQUIPMENT; DISTRIBUTION | PROPOSED LIGHT POLE | (1) #12 AWG Cu (THWN-2) GND | | | |
| | PANEL | | IN 3/4" PVC CONDUIT | | | |

GENERAL SHEET NOTES

- 1. NEUTRAL MUST BE INCLUDED FOR PROPER OPERATION OF TESLA SUPERCHARGERS.
- 2. PROPOSED UTILITY PTS & CTS SHALL BE LOCATED IN SWITCHGEAR. PROPOSED METER SHALL BE MOUNTED ON H-STAND BY ELECTRICAL CONTRACTOR. COORDINATE EXACT REQUIREMENTS WITH UTILITY.
- 3. SEE SHEET E-2 FOR LOAD SCHEDULE.
- 4. ALL CONDUIT FURNISHED AND INSTALLED BY CONTRACTOR. ALL WIRING FURNISHED BY TESLA AND INSTALLED BY CONTRACTOR. SEE SHEET E-1 FOR UTILITY/CONTRACTOR SCOPE OF WORK.
- 5. ALL CONDUITS ACCESSIBLE TO THE GENERAL PUBLIC OR WHICH CONDUITS CAN BE DAMAGED SHALL BE RIGID GALVANIZED STEEL.
- 6. ALL BUSHINGS AND INTERNAL WIRING OF PROPOSED SERVICE EQUIPMENT PROVIDED BY MANUFACTURER. ANY MODIFICATIONS SHALL REQUIRE ENGINEERING APPROVAL PRIOR TO ANY CHANGES BEING MADE.
- 7. CONTRACTOR SHALL PERFORM ARC FLASH CALCULATIONS AS REQUIRED IN THE FOLLOWING: NFPA 70; NFPA 70E; OSHA 29; AND IEEE STANDARDS 1584. CONTRACTOR SHALL OBTAIN ALL NECESSARY INFORMATION FROM POWER COMPANY TO CALCULATE FLASH PROTECTION BOUNDARIES, INCIDENT ENERGY LEVELS, AND SHALL DETERMINE MINIMUM PPE REQUIREMENTS FOR COMPLETING THE WARNING LABELS. PROVIDE WARNING LABELS CONTAINING ALL THE LATEST INFORMATION AS REQUIRED BY LOCAL JURISDICTION, STATE AND FEDERAL CODES AND LAWS.
- 8. ALL SERVICE ENTRANCE DISCONNECTS SHALL BE GROUPED TOGETHER AND MARKED TO INDICATE THE LOAD SERVED.

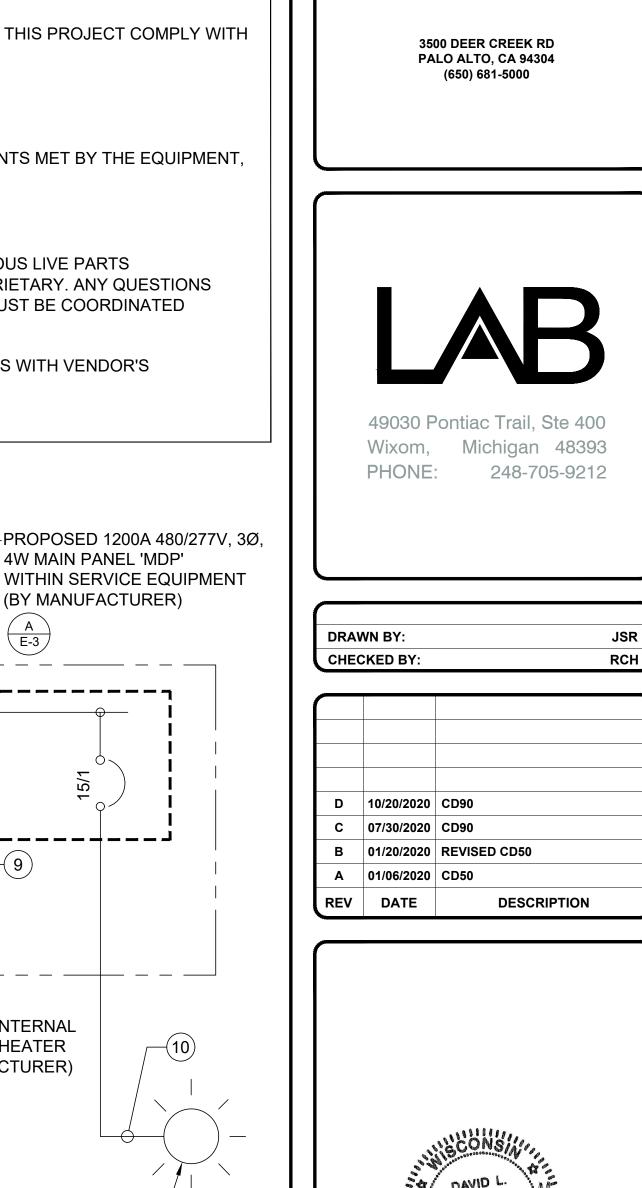
UTILITY PAD MOUNTED

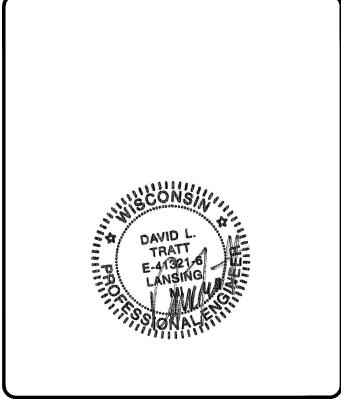
- 9. VERIFY AVAILABLE FAULT CURRENT AT THE SECONDARY OF THE UTILITY TRANSFORMER WITH THE POWER COMPANY. CONDUCT A FAULT CURRENT ANALYSIS TO DETERMINE THE INTERRUPTING CAPACITY (AIC RATING) OF THE ELECTRICAL EQUIPMENT. AIC RATING OF EQUIPMENT SHALL BE BASED UPON CONTRACTOR'S FAULT CURRENT ANALYSIS.
- 10. ALL ALUMINUM (AI) CONDUCTORS TO RECEIVE ANTI-OXIDATIVE COATING DURING INSTALLATION. ALL OTHER CONDUCTORS ARE COPPER UNLESS NOTED OTHERWISE.
- 11. THE CHARGING CABINETS AND THE CHARGING POSTS USED ON THIS PROJECT COMPLY WITH THE FOLLOWING STANDARDS:
 - UL 2202

SERVICE ENTRANCE

- CSA 22.2 NO 107.1-16
- UL 1998 PENDING
- 11. THE AFOREMENTIONED STANDARDS IDENTIFY THE REQUIREMENTS MET BY THE 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.
- 12. CONTRACTOR SHALL VERIFY AC AND DC WIRING REQUIREMENTS WITH VENDOR'S SCHEMATIC WIRING DRAWINGS.

PROPOSED 1200A



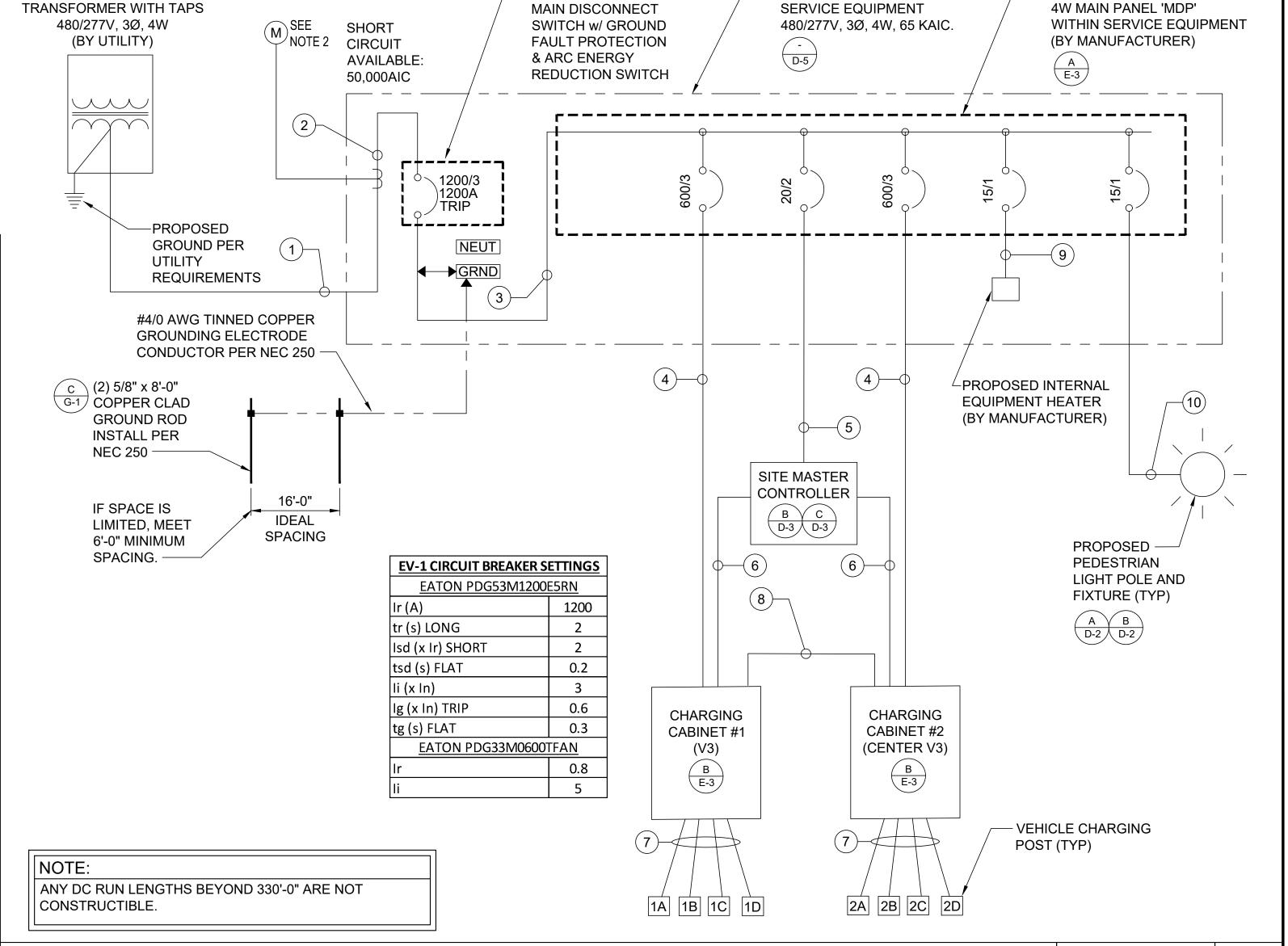


SITE NAME: MADISON, WI (TRT#12707) 675 S WHITNEY WAY. MADISON, WI 53711

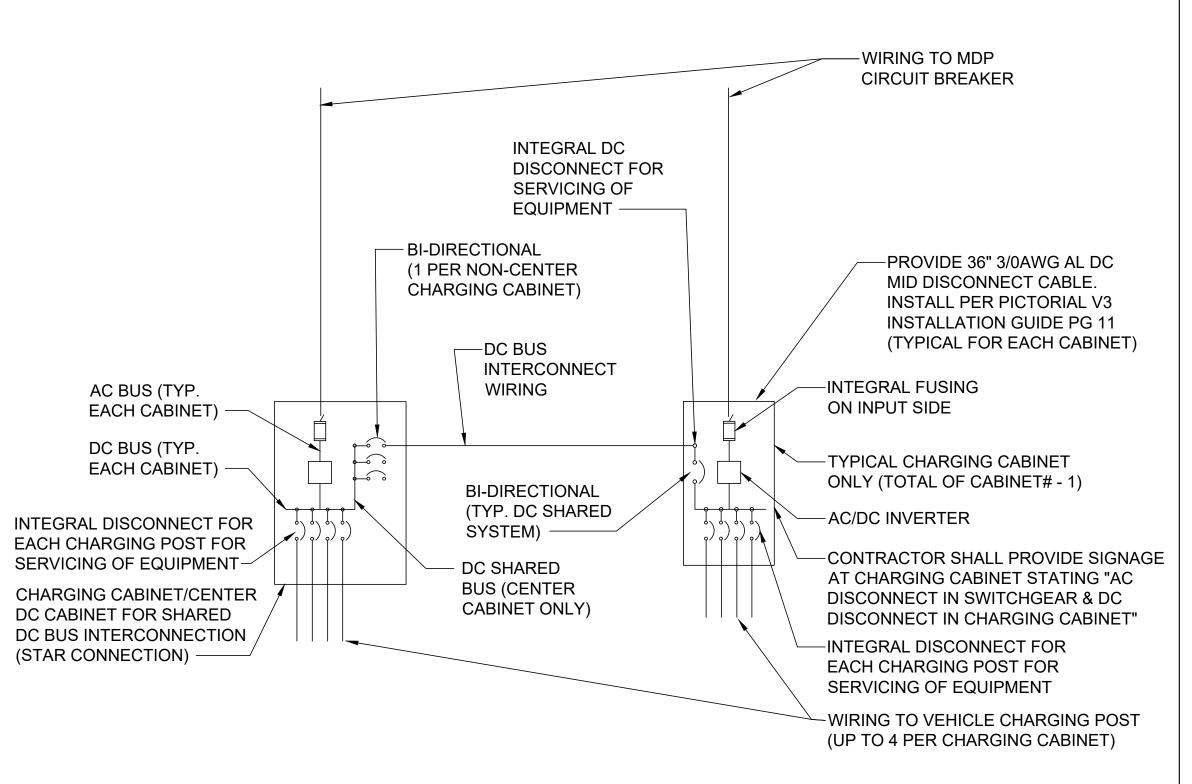
SHEET TITLE POWER ONE-LINE & **V3 SUPERCHARGER** INTERCONNECTION DIAGRAM

> SHEET NUMBER **E-3**

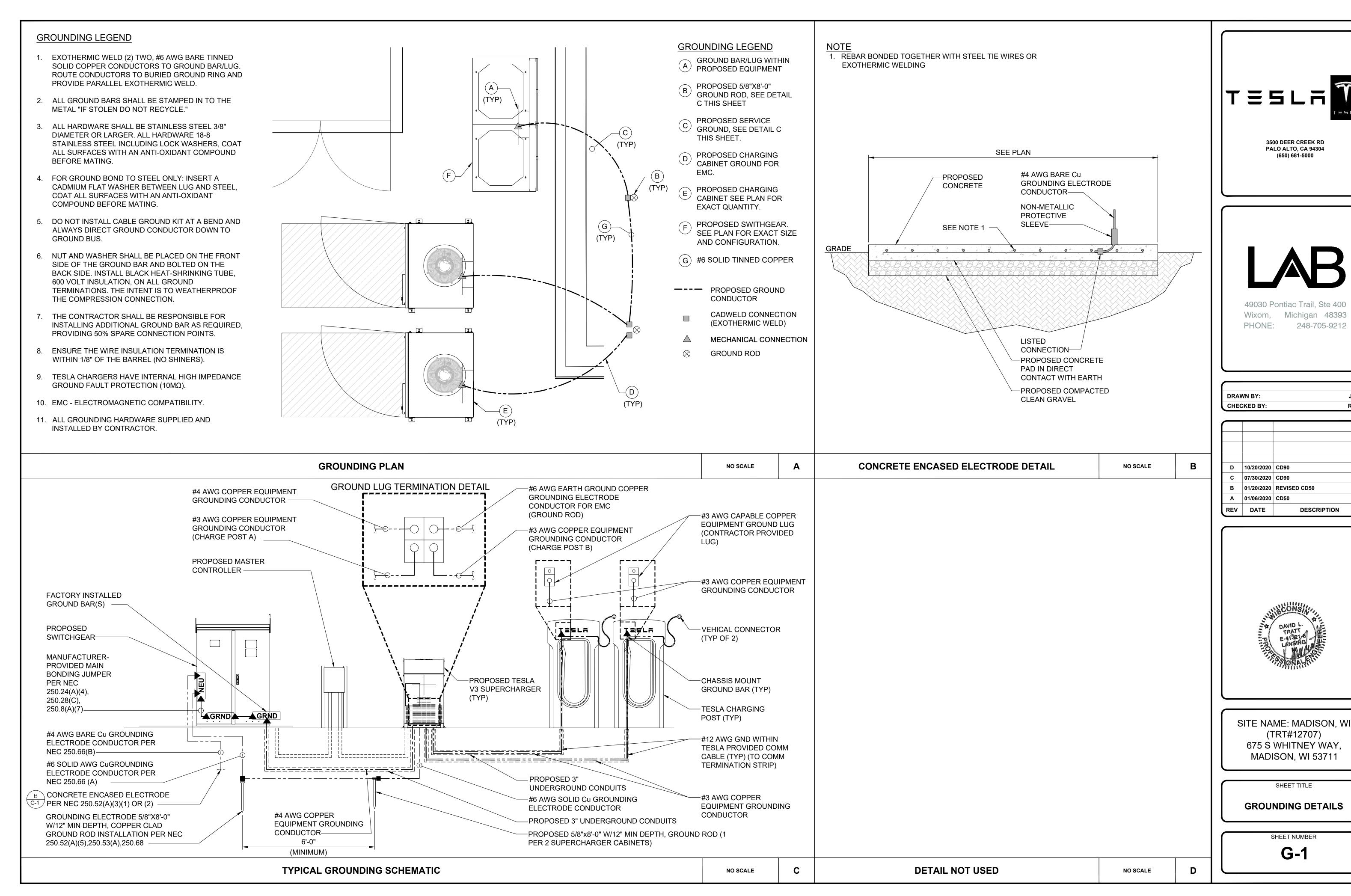
NO SCALE



POWER ONE-LINE DIAGRAM

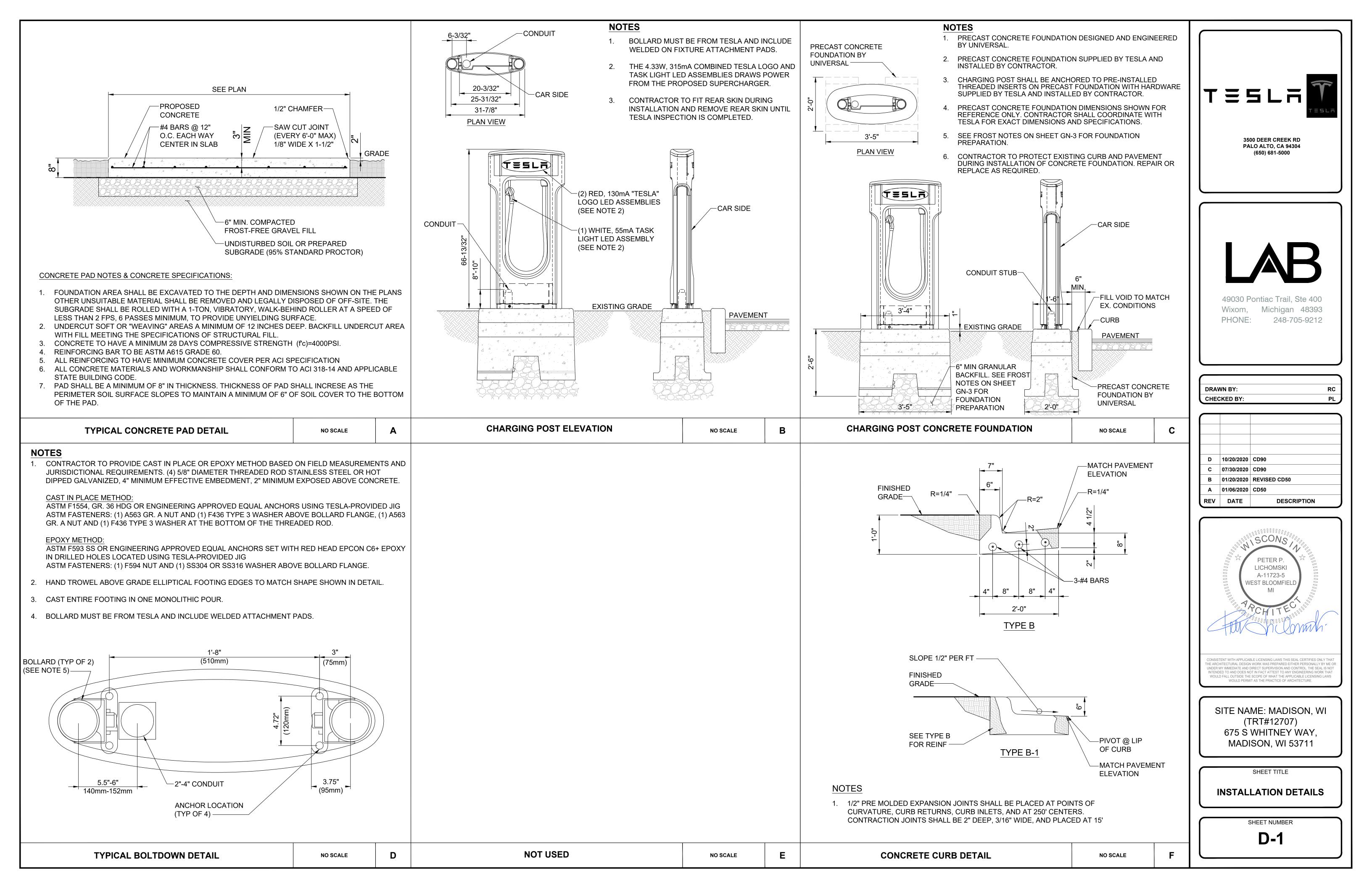


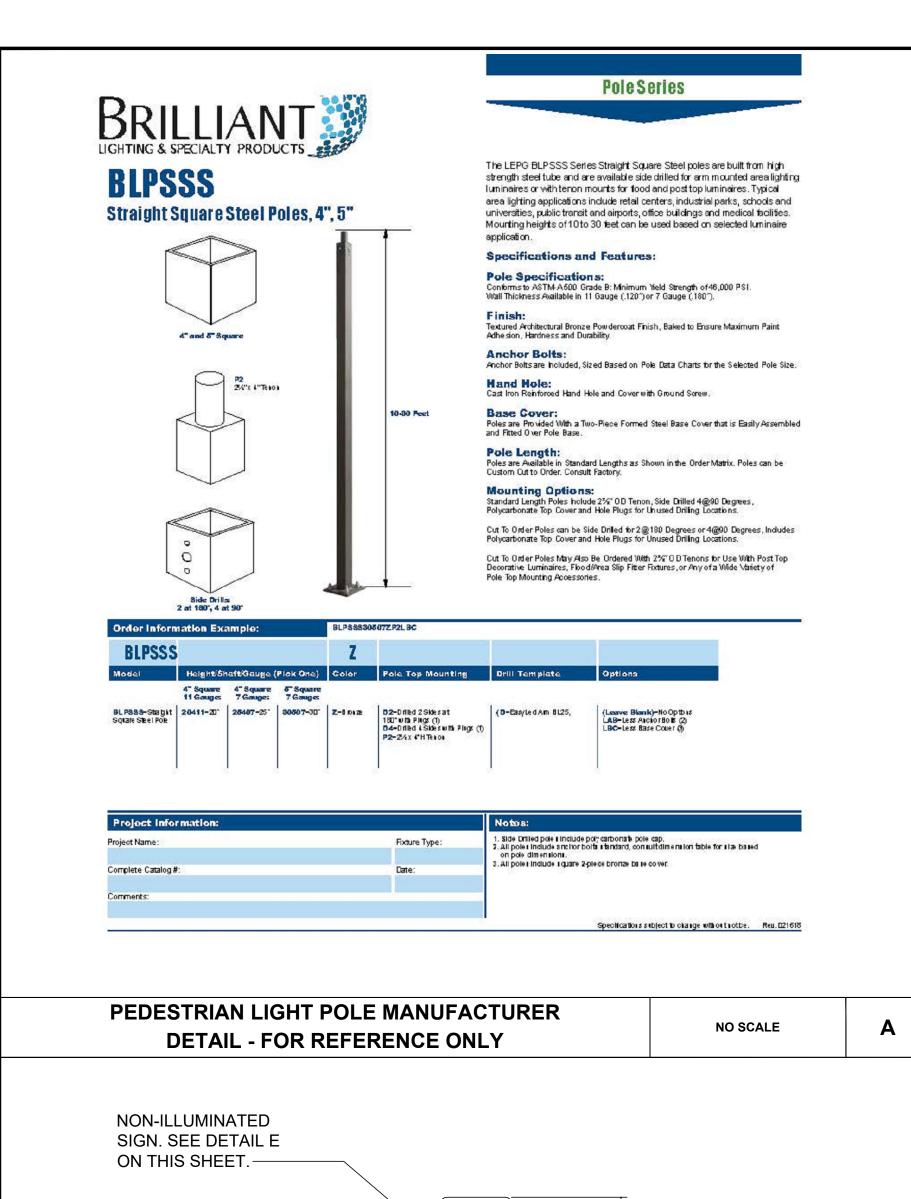
TYPICAL V3 SUPERCHARGER INTERCONNECTION DIAGRAM



JSR

RCH





6" STD. GALV. STEEL PIPE FILLED WITH

RED SLIP COVER

SLOPE TO DRAIN

CONCRETE FOOTING-

EXISTING GRADE

1'-0"

FRONT VIEW

CONCRETE-





Example

150W 25272 25019 25196

300W 47424 46950 47282

Straight Arm

*Lumens are based on 5000K

Lumen Packages

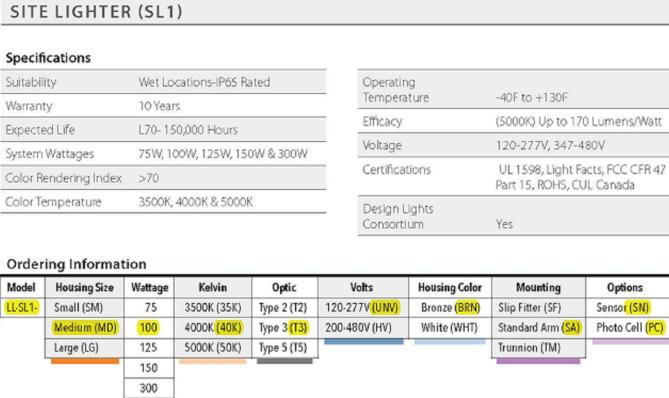
LL-SL1-SM-75W-50K-T2-UNV-BRN-SF-SN

T2 T3 T5 Housing Type

For EPA information go to: www.linmoreled.com/support

Medium





Size (WxLxH)

10.75 x 17 x 4 (taper to 1.5)

10.75 x 17 x 4 (taper to 1.5)

12.62 x 17 x 4 (taper to 1.5)

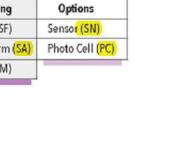
12.62 x 17 x 4 (taper to 1.5)

20 x 17 x 4 (taper to 1.5)

Linmore LED Labs | 2360 S Orange Ave, Fresno CA 93725 | 559-485-6010 | www.linmoreled.com | info@linmoreled.com

Weight

14



000000000

NO SCALE



3500 DEER CREEK RD

PALO ALTO, CA 94304

(650) 681-5000

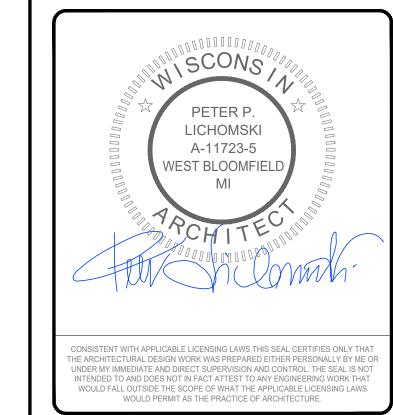
Wixom,

PHONE:

Michigan 48393

248-705-9212

DRAWN BY: RC **CHECKED BY:** D 10/20/2020 CD90 C 07/30/2020 CD90 B 01/20/2020 REVISED CD50 A 01/06/2020 CD50 REV DATE **DESCRIPTION**



SITE NAME: MADISON, WI (TRT#12707) 675 S WHITNEY WAY, MADISON, WI 53711

SHEET TITLE

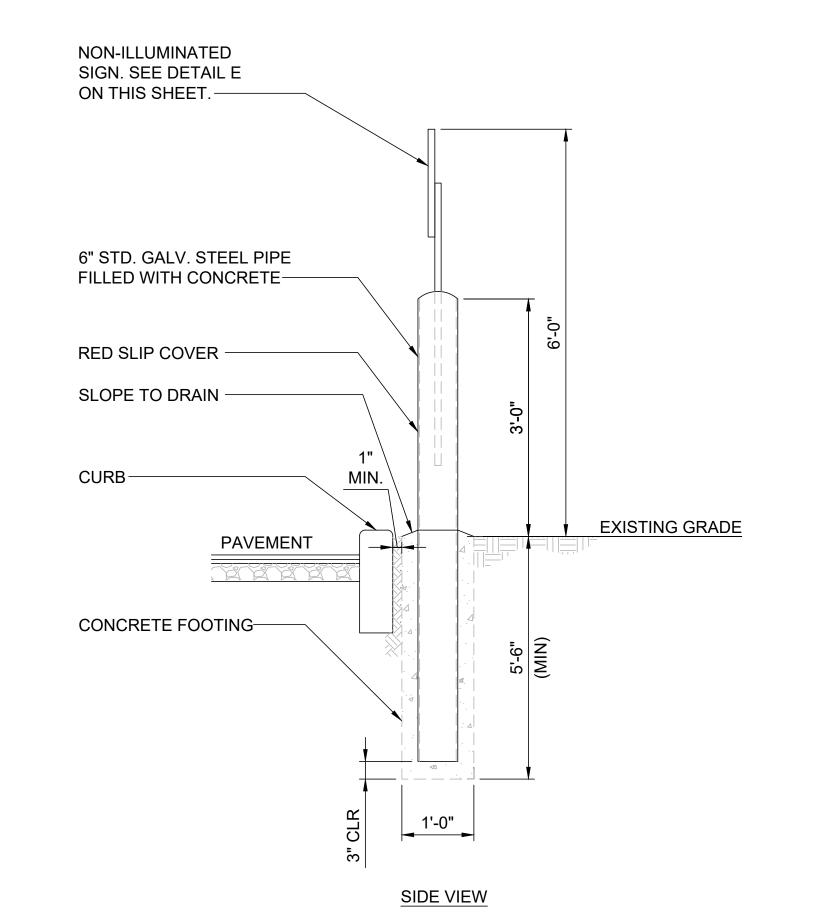
INSTALLATION DETAILS

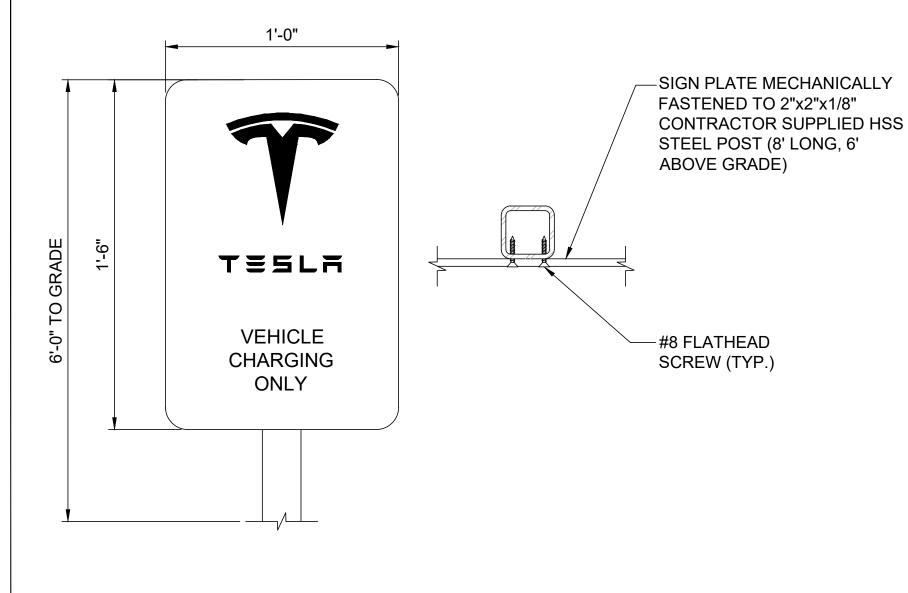
SHEET NUMBER **D-2**

D

NO SCALE



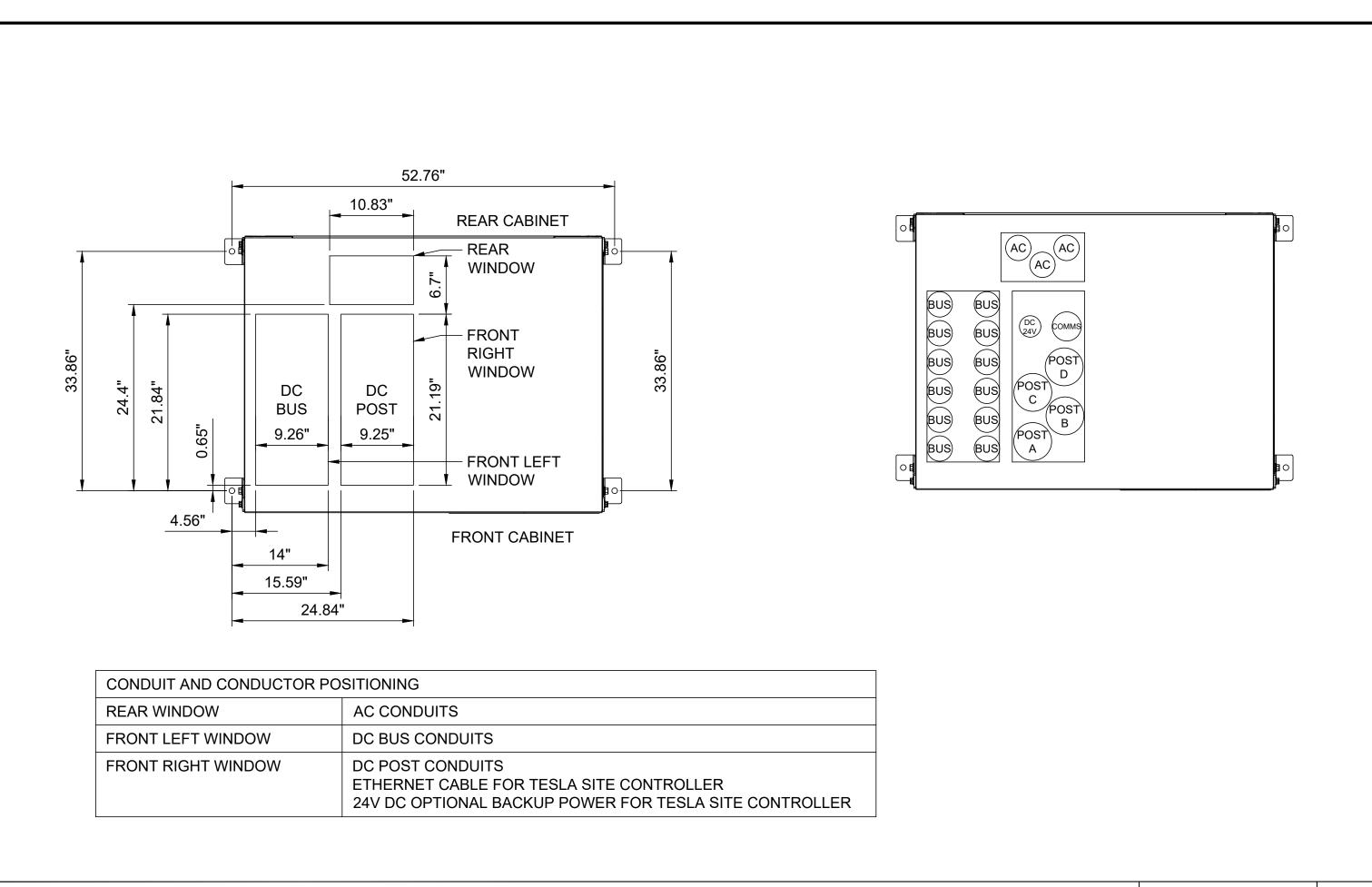


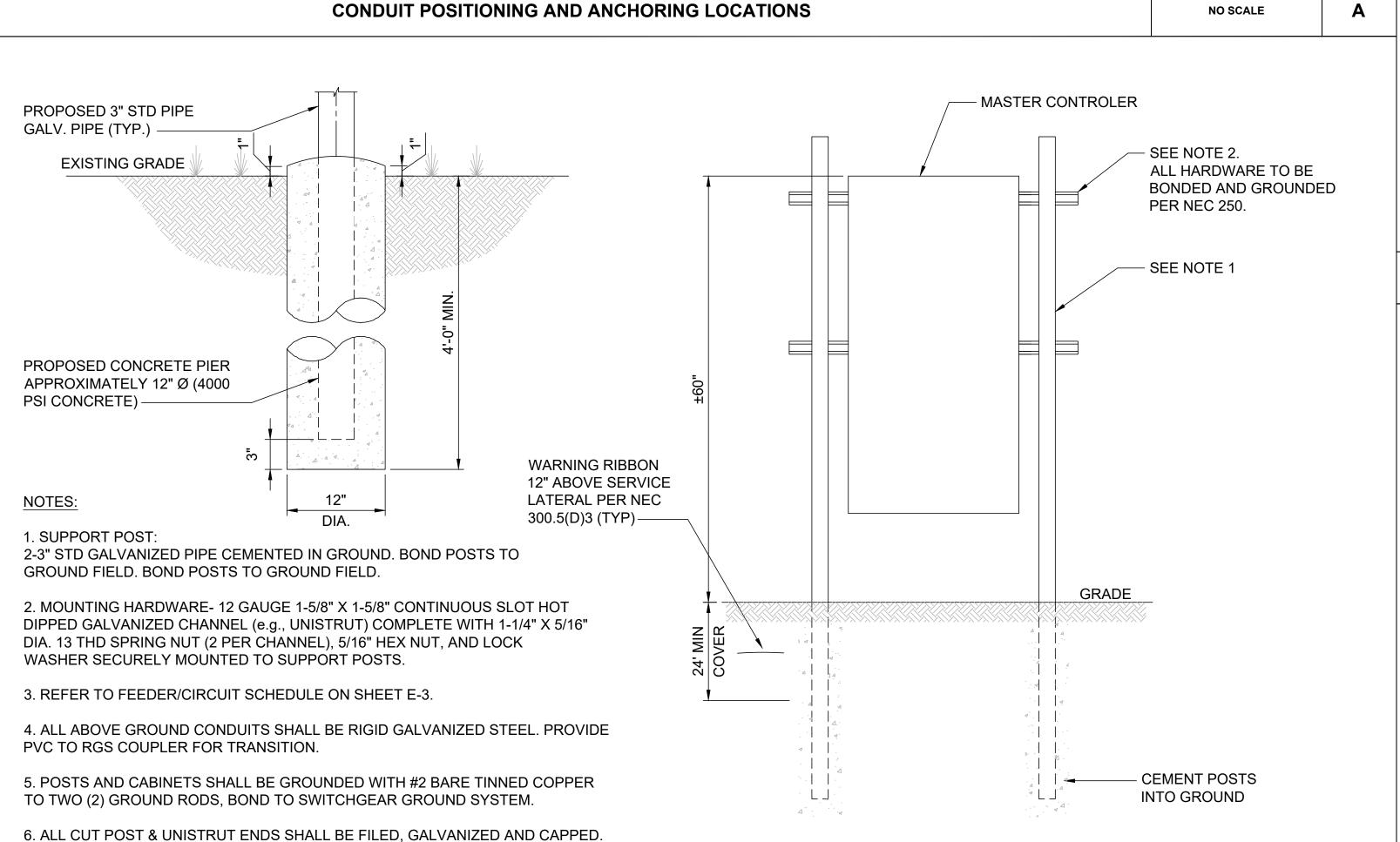


NOTES

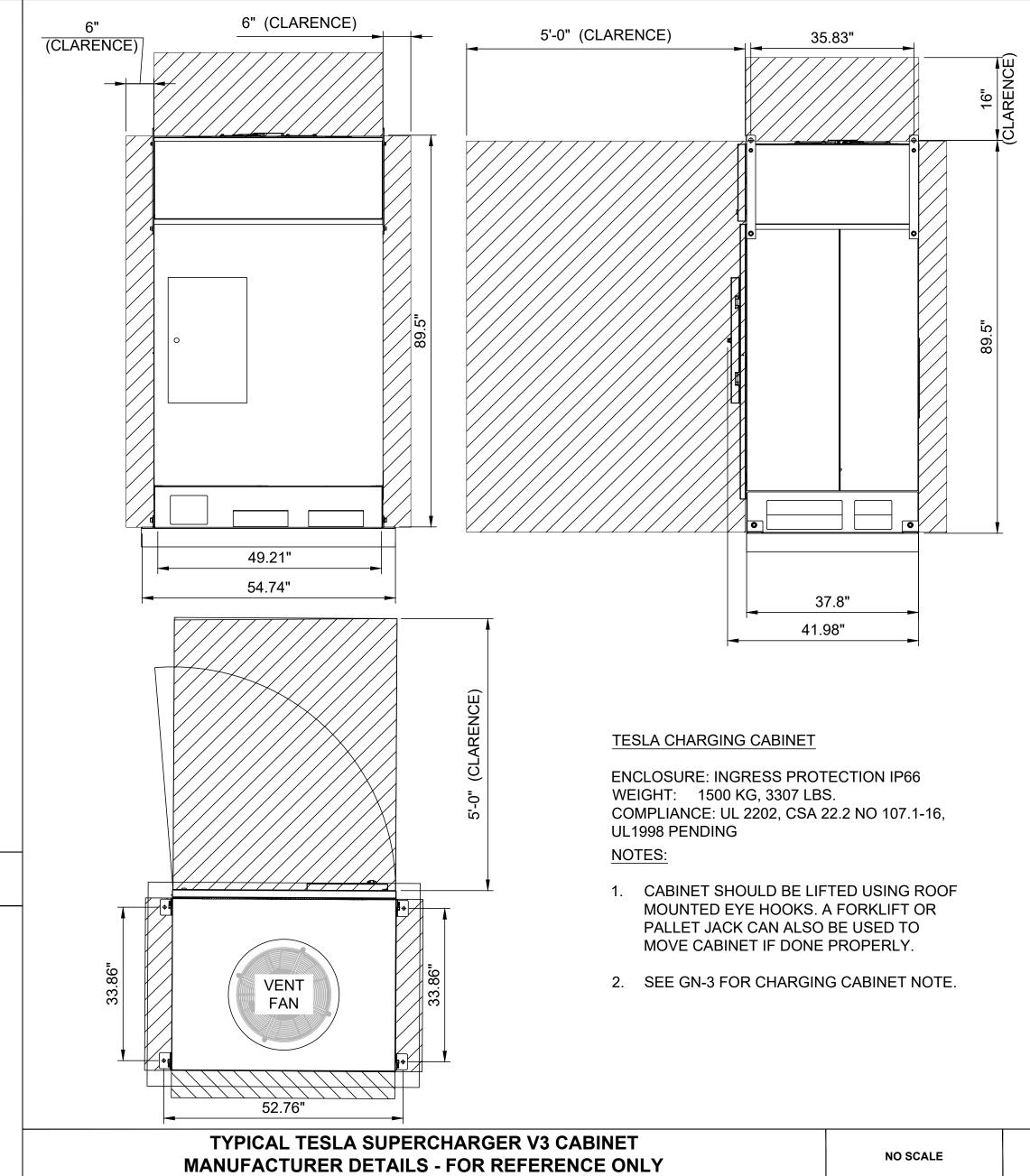
- 1. SIGN AND TAMPER PROOF HARDWARE SHALL BE PROVIDED BY TESLA.
- 2. POST SHALL BE PROVIDED BY CONTRACTOR.
- 3. IF PAINT FINISH IS DAMAGED DURING INSTALLATION, CONTRACTOR SHALL REPAINT AS REQUIRED.
- 4. NON-ILLUMINATED POLE MOUNT PARKING SIGN FACES AND RETURNS TO BE 0.090" ALUMINUM PANELS WITH #680-82 RED REFLECTIVE VINYL APPLIED (VERIFY REFLECTIVITY WITH OWNER).
- 5. LOGO TO BE #280-10 REFLECTIVE WHITE VINYL (VERIFY REFLECTIVITY WITH OWNER).
- 6. SEE TYPICAL TESLA PARKING SIGNAGE DETAIL FOR SIGNAGE VARIATION (IF APPLICABLE).
- SEE TYPICAL TESLA PARKING SIGNAGE DETAIL FOR SIGNAGE VARIATION (IF APPLICABLE).
- 8. SIGN POST SHALL BE POWDER COATED, COLOR MEDIUM/DARK GREY
- 9. SIGN POST SHALL BE PLUGGED/CAPPED TO PREVENT WATER INTRUSION FROM TOP.
- 10. SIGN POST SHALL BE MOUNTED TO LIGHT POLE WHERE APPLICABLE. SEE PLAN.

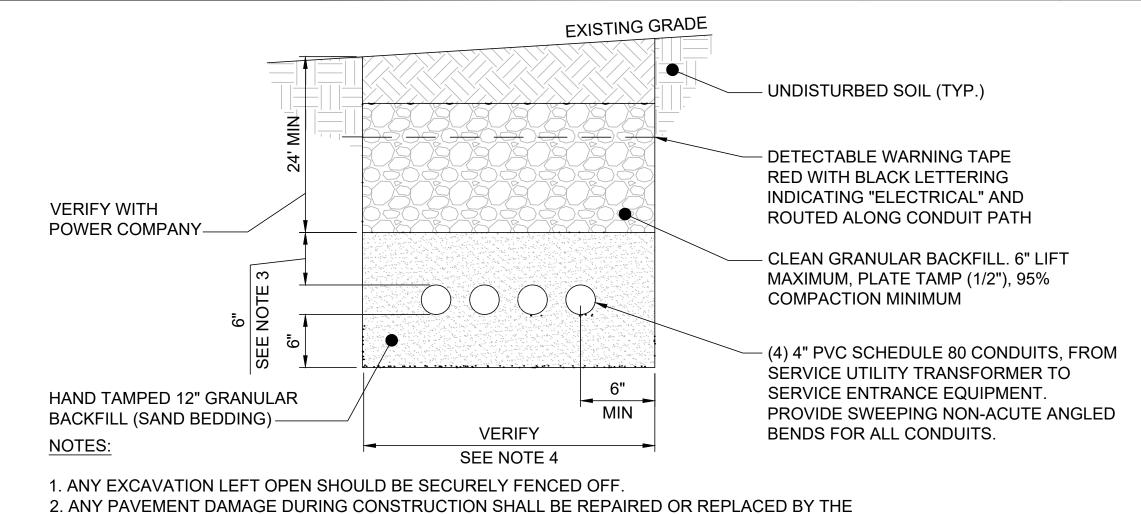
BOLLARD WITH SIGN INSTALLATION DETAIL C TESLA DEDICATED NON-ILLUMINATED PARKING SIGN DETAIL NO SCALE





METER& CT CABINET MOUNTED H-FRAME DETAIL





CONTRACTOR TO PRECONSTRUCTION CONDITIONS OR BETTER

5. VERIFY ALL REQUIREMENTS WITH POWER COMPANY

D

NO SCALE

3. CONTRACTOR SHALL INSTALL CONDUITS BELOW LOCAL FROST LINE. SHOULD FIELD CONDITIONS

4. VERIFY WIDTH OF TRENCH REQUIRED. REFER TO SITE ELECTRICAL DRAWING ON SHEET E-2 FOR

VARY, CONTRACTOR SHALL COORDINATE WITH CONTACT ENGINEER LISTED ON SHEET T-1.

TYPICAL SECONDARY FEEDERS TRENCH DETAIL

(TRT#12707) 675 S WHITNEY WAY, MADISON, WI 53711

SHEET TITLE

SITE NAME: MADISON, WI

3500 DEER CREEK RD PALO ALTO, CA 94304

(650) 681-5000

49030 Pontiac Trail, Ste 400

Michigan 48393

248-705-9212

DESCRIPTION

RC

Wixom,

PHONE:

DRAWN BY:

CHECKED BY:

D 10/20/2020 CD90

C 07/30/2020 CD90

A 01/06/2020 CD50

REV DATE

B 01/20/2020 REVISED CD50

PETER P.

LICHOMSKI A-11723-5

WEST BLOOMFIELD

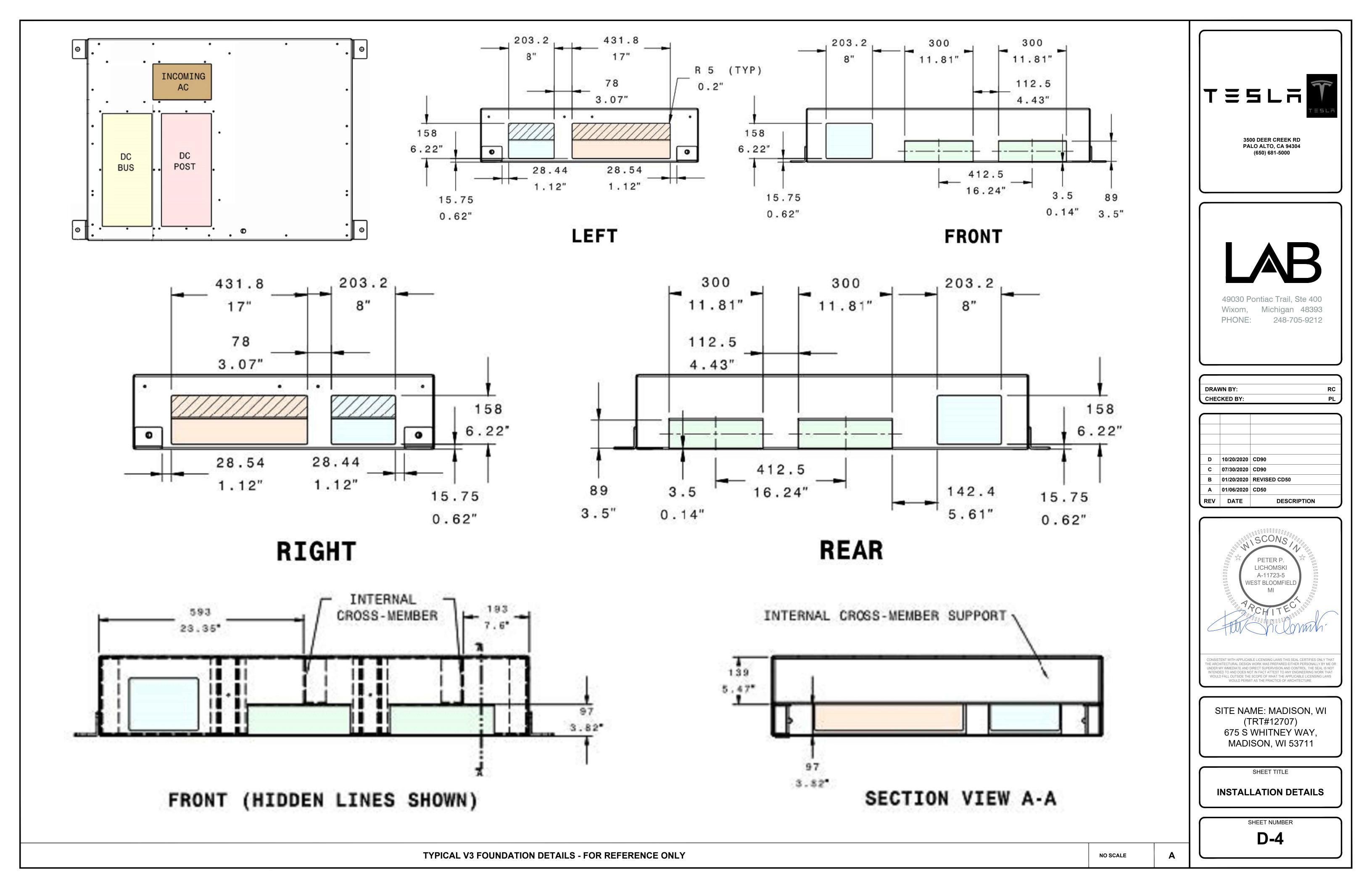
INSTALLATION DETAILS

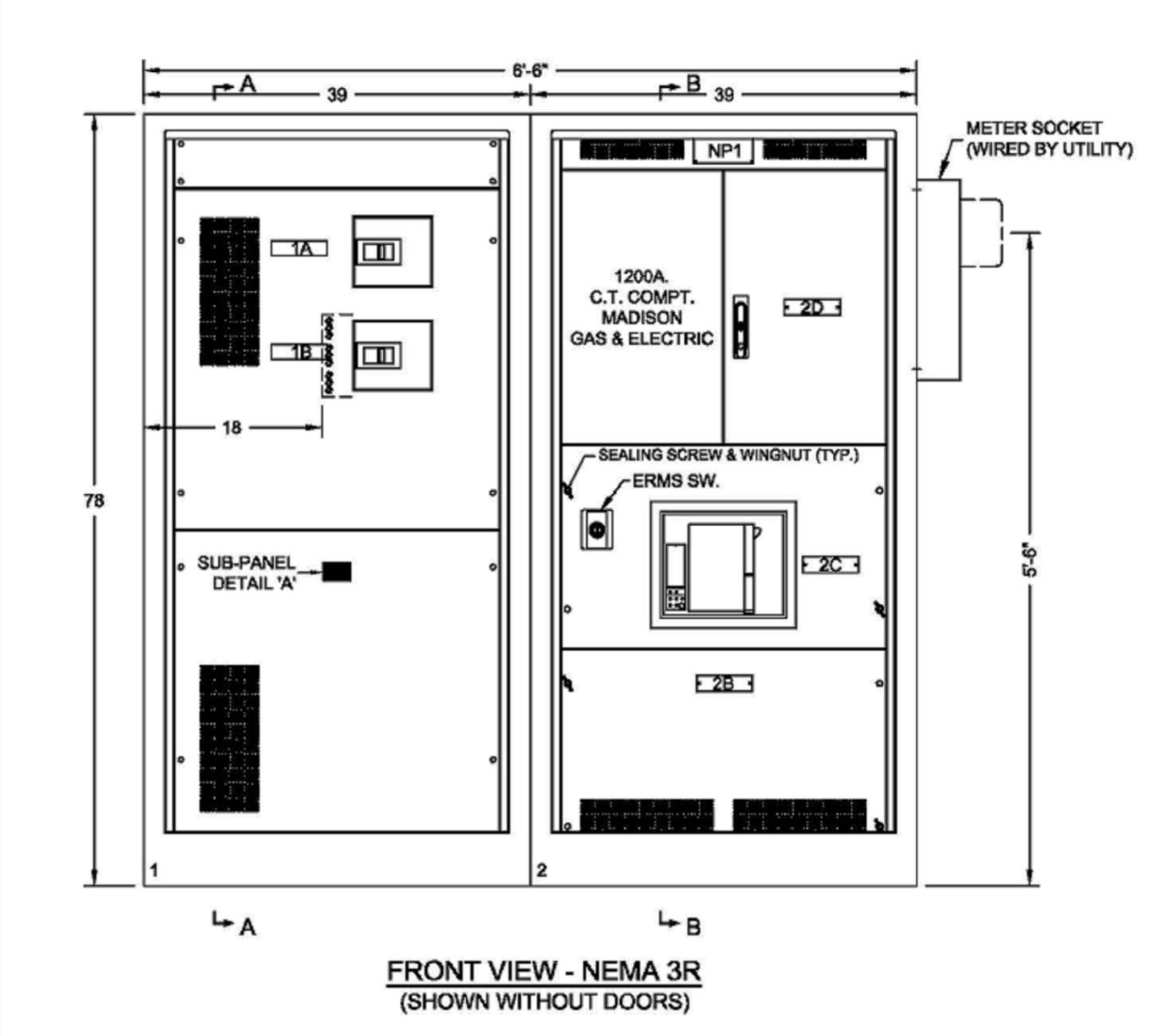
SHEET NUMBER

D-3

Ε

NO SCALE





PRODUCT DESCRIPTION & RATINGS:

PRODUCT TYPE

- EV-2 (SERVICE SWITCHBOARD)
- V3 CHARGING

UTILITY INFORMATION

- MGE (MADISON GAS & ELECTRIC)
- METER AFTER DISCONNECT (COLD SEQUENCE)
 UTILITY COMPARTMENT DOORS SHALL HAVE MANUAL DOOR STAYS

POWER SYSTEM DATA

- 3Ø, 4W., 480Y/277 VOLTS
- 65KA SHORT CIRCUIT RATING
- INCOMING SECTION 2, BOTTOM FEED

BUS SYSTEM DATA

- 1200A. SILVER PLATED COPPER MAIN BUS
- DENSITY RATED AT 1000A PER SQUARE INCH
- 98% CONDUCTIVITY RATED IN ACCORDANCE w/ UL891
- BRACED FOR 65,000 AMPS (ms) SHORT CIRCUIT CURRENT
- (1) 1/4" X 2" CU GROUND BUS

ENCLOSURE DATA

- #12 GAUGE, FORMED STEEL COVERS & DOORS
- ENCLOSURE SHALL CONFORM TO INGRESS PROTECTION REQUIREMENTS IN ACCORDANCE WITH NEMA 3R RATING.
- COVERS SHALL HAVE TAMPER-RESISTANT S.S. SCREWS AND DOOR HANDLES SHALL BE EQUIPPED WITH PADLOCK HASP.
- A DOUBLE PADLOCK HASP ATTACHMENT SHALL BE PROVIDED FOR THE EXTERIOR UTILITY SECTION DOOR.
- FINISH SHALL BE WHITE
- FRONT ACCESSIBLE ONLY
- ALL UN-METERED BE HAVE RESTRICTIVE BARRIERS AND/OR COVERS WITH SEALING PROVISIONS.

CODE STANDARDS

- UL891

<u>LUGS</u>

- CU/AL MECHANICAL

NAMEPLATES

- LAMICOID TYPE WHITE W/BLACK LETTERS, UNLESS OTHERWISE NOTED

ACCESSORIES

- STRIP HEATERS & CONTROLLER TO BE INSTALLED INSIDE ENCLOSURE.

REFERENCES:

- SECTION VIEWS SEE SHT-02
- FOR NAMEPLATE DESIGNATIONS SEE 'SERVICE SWITCHBOARD SCHEDULE' SHT-04

| 2 | ADDED NOTE FOR UTILITY COMPARTMENT DOOR STAYS | JSS | 2/28/2020 | | | | | |
|-----------|---|-----|-----------|--|--|--|--|--|
| 1 | REVISED PER UTILITY COMMENTS | JSS | 2/21/2020 | | | | | |
| NO. | DESCRIPTION | BY | DATE | | | | | |
| REVISIONS | | | | | | | | |

TESLA 3500 DEER CREEK ROAD PALO ALTO, CA 94304

MADISON, WI



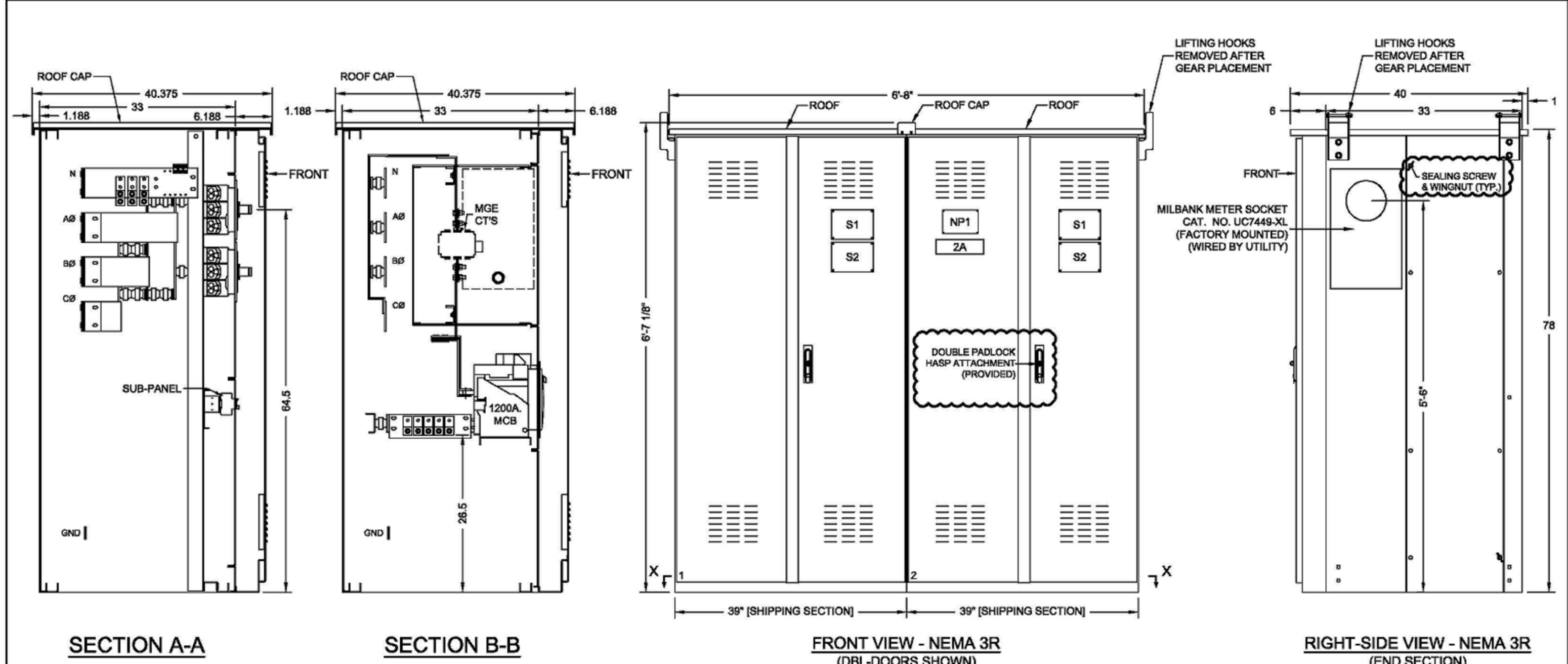
LINCOLN ELECTRIC PRODUCTS CO., INC.

947 LEHIGH AVE., UNION, N.J. 08869 (908) 688-2900 FAX (908) 688-8549 Website: www.leproduct.com

| PLOT 1=1 | s.o. T-24XXX | | | |
|-------------|-----------------|--|--|--|
| JSS | 2/11/2020 | | | |

DWG. NO.

24XXXSB40-01



(DBL-DOORS SHOWN)

(END SECTION)

SIGNAGE:

NP1 -LINCOLN NAMEPLATE (2.5" x 8" ALUMINUM) NP2 -LINCOLN NAMEPLATE (4" x 6" ALUMINUM) S1 -DANGER 480 VOLTS (BI-LINGUAL) S2 -DANGER ARC FLASH (BI-LINGUAL)

REFERENCES:

- FOR NAMEPLATE DESIGNATIONS SEE 'SERVICE SWITCHBOARD SCHEDULE' SHT-04
- FOR SECTION VIEW 'X-X' SEE SHT-05

| | | | | TESLA 3500 DEER CREEK ROAD | |
|-----|------------------------------|-----|-----------|-------------------------------|--|
| 1 | REVISED PER UTILITY COMMENTS | JSS | 2/21/2020 | PALO ALTO, CA 94304 | |
| NO. | DESCRIPTION | BY | DATE | MADISON, WI | |
| | REVISIONS | | | | |

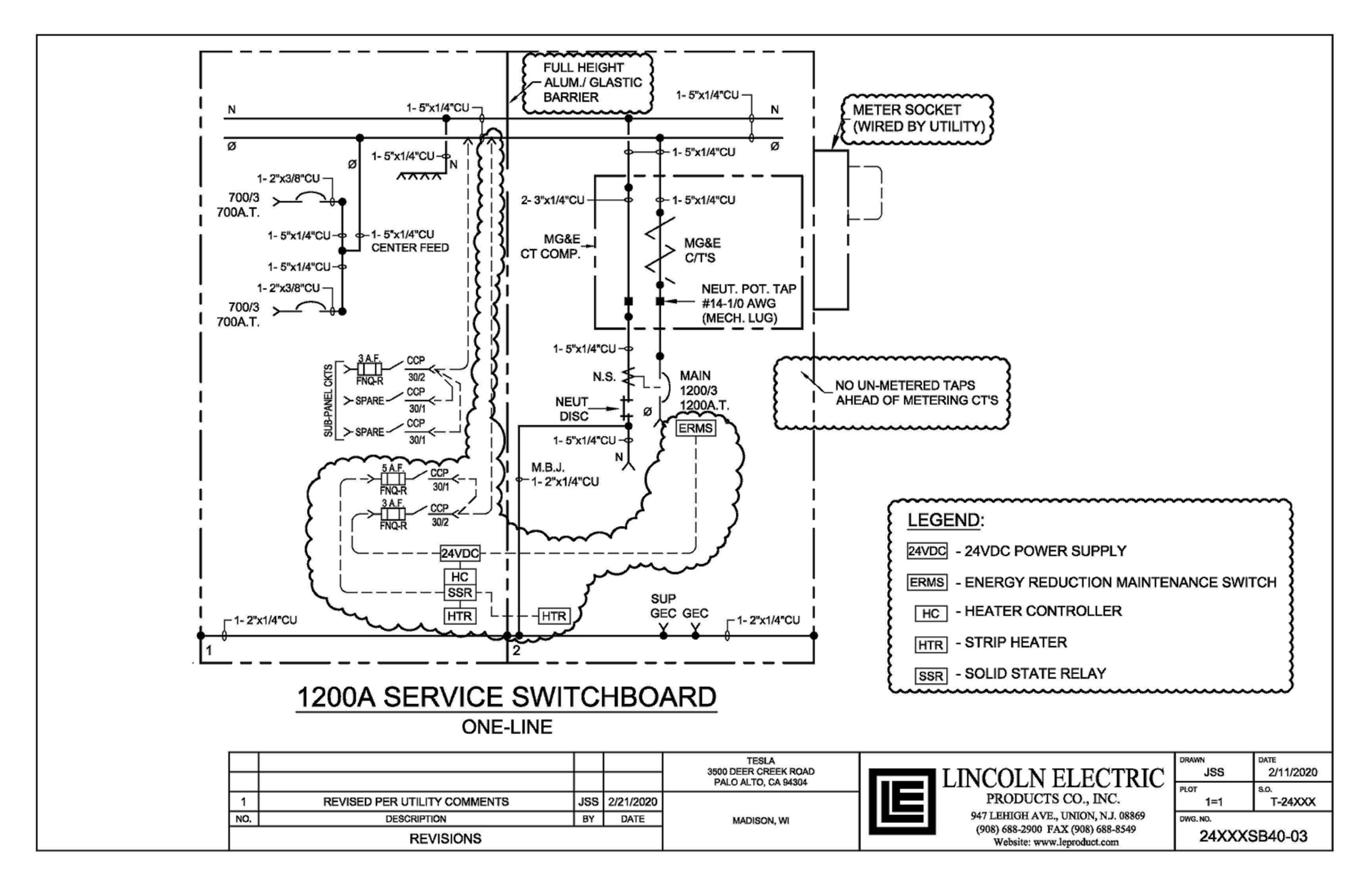
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LINCOLN ELECTRIC PRODUCTS CO., INC.

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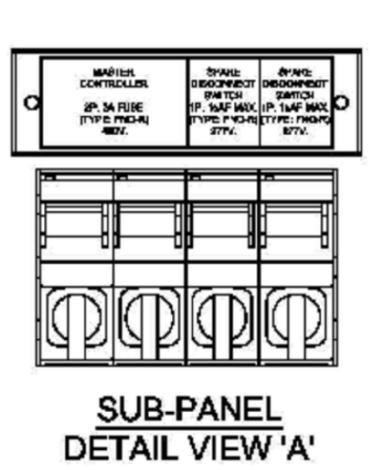
| DRAWN JSS | 2/11/2020 |
|--------------|-----------|
| PLOT | S.O. |
| 1=1 | T-24XXX |

24XXXSB40-02



| | SERVICE SWITCHBOARD SCHEDULE | | | | | | | | | | | | | | | |
|----|------------------------------|---|--------------|----------------|----------------------------------|-------|---------------------|-----------------|----------------|----------------|--------------|------------------|----------|--------|--|--|
| | UB. | DESIGNATION | DEVICE | FRAME | TRIP # OF DEVICE LUG INFORMATION | | | LUG INFORMATION | | | | CABLE CONDUCTOR | CABLE | NOTES | | |
| LS | CN. | 5-5.00.00.00.00 | MANUFACTURER | RATING | TYPE | POLES | CAT. NO. | QTY. | PHASES | NEUTRAL | GROUND | TYPE | MATERIAL | ENTRY | | |
| t | 1A | SUPERCHARGER #1 | SCHNEIDER | 700/3 'MJP' | 700A LI | 3 | MJP36700YP | 3 | #3/0-500 KCMIL | #2-600 KCMIL | #6-350 KCMIL | MECHANICAL | ALUMINUM | воттом | - PADLOCK HASP (CAT. #: S32831) - DOOR ESCUTCHEON (CAT. #: S33718) - MECHANICAL LUGS (CAT. #: AL800M23K) | |
| | 1B | SUPERCHARGER #2 | SCHNEIDER | 700/3 'MJP' | 700A LI | 3 | MJP36700YP | а | #3/0-500 KCMIL | #2-600 KCMIL | #6-350 KCMIL | MECHANICAL | ALUMINUM | воттом | | |
| , | 2A | SERVICE SWITCHBOARD 1200A., 3Ø, 4W., 480Y/277V | | | | | | | v | | | | | | | |
| | 2B | INCOMING | | | | | | 4 | #3/0-500 KCMIL | #3/0-500 KCMIL | #6-350 KCMIL | MECHANICAL | ALUMINUM | воттом | | |
| | 2C | MAIN | SCHNEIDER | 1200/3 'NW | 1200A LSIG | 3 | WL1CCV64A3\$XXXXXXX | | | | | BUS CONNECTED | | | - ERMS (ENERGY REDUCTION MAINTENANCE SWITCH) - PADLOCK HASP | |
| | 2D | C.T. COMPT. MADISON GAS & ELECTRIC | | | | | | | | | | BUS CONNECTED | | | - NEUTRAL BUS POT. TAP #14-1/0 AWG (MECH. LUG) - PADLOCK HASP | |

| SUB-PANEL SCHEDULE | | | | | |
|--------------------|-------------------|------------------------|---|--------------------|-----------------------------------|
| CKT NO. | DESIGNATION | DEVICE MANUFACTURER | BREAKER TYPE & TRIP | DEVICE CAT. NO. | LUG (QTY & SIZE) |
| DISC. SW1 | MASTER CONTROLLER | BUSSMANN | CCP 2-POLE 480 VAC. FUSE FNQ-R 3A FUSE | CCP-2-30CC | (1) #18 - 6 AWG / \$ & N |
| DISC. SW2 | SPARE | BUSSMANN | CCP 1-POLE 277 VAC. FUSE FNQ-R 15A. (MAX.) | CCP-1-30CC | (1) #18 - 6 AWG / |
| DISC. SW3 | SPARE | BUSSMANN | CCP 1-POLE 277 VAC. FUSE FNQ-R 15A. (MAX.) | CCP-1-30CC | (1) #18 - 6 AWG / 4 & N |

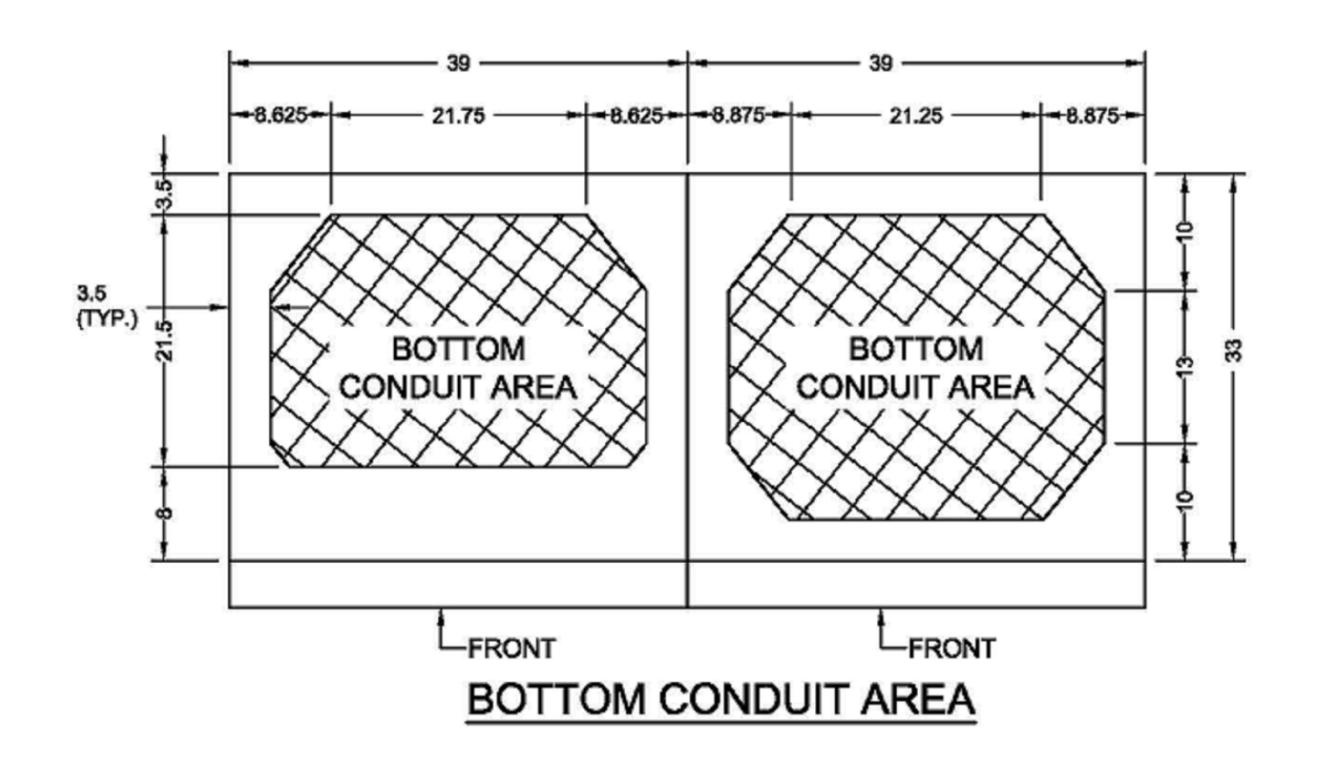


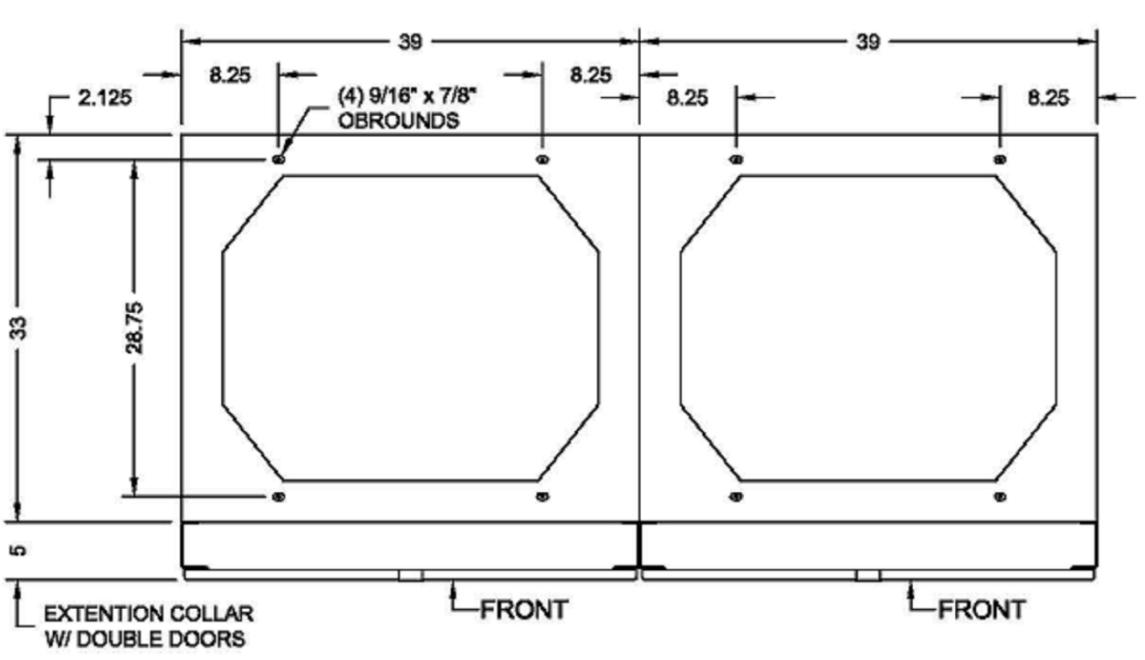
| 2 | | | | TESLA 3500 DEER CREEK ROAD PALO ALTO, CA 94304 |
|-----|------------------------------|-----|-----------|--|
| 1 | REVISED PER UTILITY COMMENTS | JSS | 2/21/2020 | |
| NO. | DESCRIPTION | BY | DATE | MADISON, WI |
| | REVISIONS | | | |



| C^{-1} | JSS | DATE 2/11/2020 | | |
|----------|-------------|-------------------|--|--|
| • | PLOT 1=1 | s.o. T-24XXX | | |

(908) 688-2900 FAX (908) 688-8549 Website: www.leproduct.com 24XXXSB40-04





SECTION X-X ANCHOR BOLT LOCATIONS

| | | | | TESLA 3500 DEER CREEK ROAD PALO ALTO, CA 94304 | |
|-----|------------------------------|-----|-----------|--|--|
| 1 | REVISED PER UTILITY COMMENTS | JSS | 2/21/2020 | | |
| NO. | DESCRIPTION | BY | DATE | MADISON, WI | |
| | REVISIONS | | | | |



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| \mathcal{C} | DRAWN JSS | 2/11/2020 |
|---------------|--------------|-----------------|
| | PLOT 1=1 | s.o. T-24XXX |
| | DWC ND | |

DWG. NO.

24XXXSB40-05

