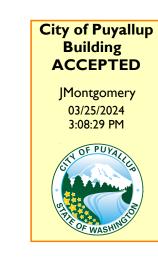
control and erosion inspection with a City Engineering Inspector through the CityView portal at least 48 hours in vance of job start. See City Standards 02.03.02 & 05.02.01

Sediment control and erosion procedures shall be practiced eliminating and preventing off site damage. Stormwater runoff originating upgrade of exposed areas shall be controlled to reduce erosion and sediment loss during the period of exposure. Refer to the Stormwater Fact Sheet and City standard details 02.03.02 & 05.02.01 for typical erosion and sedimentation control methods. Attached in CityView

> Call Before You Dig. It's the law. ocate all utilities prior to starting work Dial 811 or call 1-800-424-5555.



FULL SIZED LEDGIBLE COLOR PLANS ARE REQUIRED TO BE PROVIDED BY THE PERMITTEE ON SITE FOR ALL INSPECTIONS (MIN. PLAN SIZE 24" X 36")







PRCNC20231632



STATION ERCHARGER) GER A SUPE

ST. (TESLA S R

DESIGNER

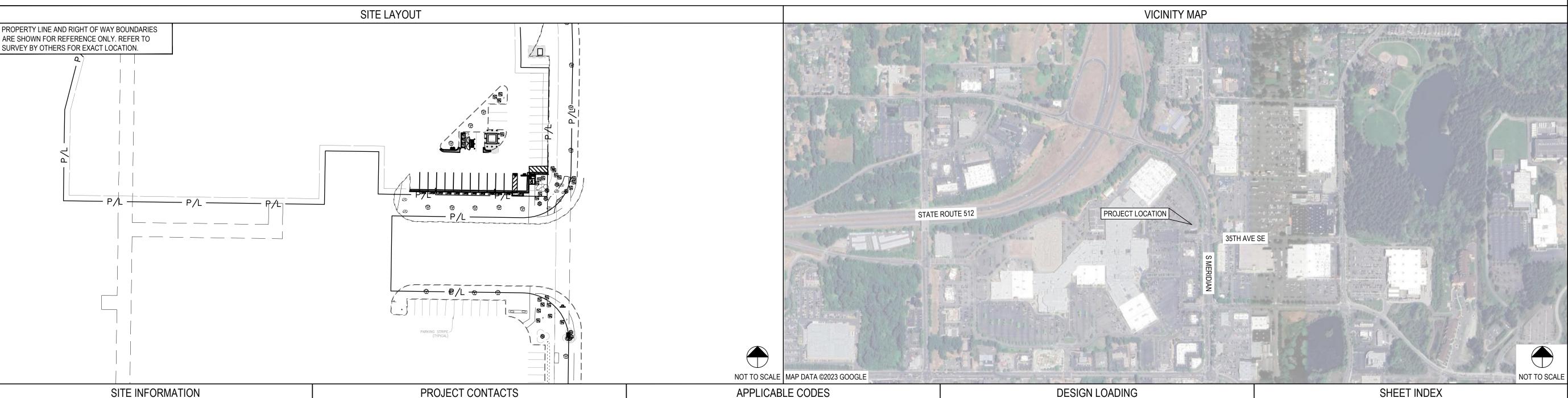
SHE

COVER

2023241.47

SUPERCHARGER STATION

3310 S MERIDIAN ST. PUYALLUP, WA 98373 TRT27473 TARGET STORE ID: T0342



SITE INFORMATION LATITUDE (NAV88) N 47°09'31.57" 47.15877°

LONGITUDE (NAV88) W 122°17'37.28" -122.29369°

UTILITY COMPANY PUGET SOUND ENERGY CONTACT: LONNIE ADAMS (360) 764-6738 LONNIE.ADAMS@PSE.COM

(614) 588-8946 IMAHAM@GPDGROUP.COM

EOR CONTACTS:

PROJECT MANAGER

ISAAC MAHAM, PE - OH# 82452

DAYTON HUDSON CORPORATION TESLA DESIGN MANAGER

AELI FURTADO (425) 681-6891 AFURTADO@TESLA.COM

TESLA CONSTRUCTION MANAGER MATT FERGUSON (951) 288-3372 MAFERGUSON@TESLA.COM

PERMITTING JURISDICTION CITY OF PUYALLUP CONTACT: TBD

Washington Call

INSTALL (3) V3.5 SUPERCHARGER CABINETS

INSTALL (1) SWITCHGEAR ASSEMBLY WITH INTEGRATED TESLA SITE CONTROLLER AND INSTALL (1) UTILITY TRANSFORMER, (1) METER, AND OTHER ASSOCIATED UTILITY EQUIPMENT INSTALLATION OF (2) POLE MOUNTED LUMINAIRES

FLOOD HAZARD NOTE

THE SITE IS LOCATED IN FLOOD ZONE "X" (AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER FLOOD INSURANCE MAP NUMBER 53053C0341E, EFFECTIVE DATE - 03/07/2017.

PLAN REPRODUCTION WARNING

CONTRACTORS SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS, AND FIELD CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY OWNER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

SNOW LOADS:

GROUND SNOW LOAD (Pg)

LATERAL LOAD DESIGN DATA:

WIND DESIGN DATA (ASCE 7-16): BASIC WIND SPEED (V_{ULT}) RISK CATEGORY EXPOSURE CATEGORY SEISMIC DESIGN DATA (ASCE 7-16): 1.0 SEISMIC IMPORTANCE FACTOR (I) RISK CATEGORY SITE CLASS (ASSUMED) MAPPED SPECTRAL RESPONSE SHORT PERIODS (S_S) 1.262 1 SEC. PERIODS (S₁) 0.435 SPECTRAL RESPONSE COEFF SHORT PERIODS (S_{DS}) 1.01 1 SEC. PERIODS (SD1) 0.541 SEISMIC DESIGN CATEGORY

FROST DEPTH

10 IN

20 PSF

REFERENCED DOCUMENTS SUPERCHARGER INSTALLATION MANUAL

ELECTRICAL EQUIPMENT CUTSHEETS

Before You Dig

811 or 1-800-424-5555

CIVIL

C-002

C-003

C-101

C-111

C-201

C-202

C-203

C-301

ELECTRICAL

E-001

E-101

E-201

E-301

E-401

COVER SHEET

CIVIL SITE PLAN

CIVIL DETAILS

CIVIL DETAILS

CIVIL DETAILS

EASEMENT PLAN

SHEET TITLE

SHEET TITLE

ENGINEERING DESIGN SURVEY 1 OF 2 (BY OTHERS)

ENGINEERING DESIGN SURVEY 2 OF 2 (BY OTHERS)

TESLA DATASHEET (FOR REFERENCE ONLY)

EXISTING CONDITIONS AND DEMOLITION PLAN

CIVIL CONSTRUCTION NOTES

ELECTRICAL GENERAL NOTES

SINGLE LINE DIAGRAM & PANEL SCHEDULE

ELECTRICAL SITE PLAN

ELECTRICAL DETAILS

CONDUIT SPECIFICATIONS

APPLICABLE CODES

ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES: 2021 WASHINGTON STATE BUILDING CODE 2021 WASHINGTON STATE ENERGY CODE 2020 NATIONAL ELECTRIC CODE

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

AS USED HEREIN, IBC SHALL REFER TO INTERNATIONAL BUILDING CODE AND NEC SHALL REFER TO NATIONAL ELECTRIC CODE. WA DEPT OF TRANSPORTATION SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF WA, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS SHALL GOVERN THIS IMPROVEMENT.

PROJECT DESCRIPTION

INSTALL (12) V4 PAYMENT VARIANT SUPERCHARGER POSTS

INSTALLATION OF (1) WIRELESS ACCESS POINT

SUPERCHARGER POST INSTALLATION MANUAL UTILITY DESIGN DOCUMENTS

6021010030

CITY OF PUYALLUP

PROJECT MANAGER

EASEMENTS & ENCUMBRANCES:

Construction, Operating and Reciprocal Easement Agreement 12/23/1987 Book: 463 Page: 1599

-IS LOCATED ON THE SURVEY AREA, BLANKET IN NATURE.

First Amended to Construction, Operating and Reciprocal Easement Agreement 10/11/1989 Book: 570 Page: 2670
—IS LOCATED ON THE SURVEY AREA, BLANKET IN NATURE.

Second Amended to Construction, Operating and Reciprocal Easement Agreement 10/10/1995 Book: 1163 Page: 558

-IS LOCATED ON THE SURVEY AREA, BLANKET IN NATURE.

4A Release 04/25/1994 Book: 1016 Page: 836 -MAY BE LOCATED ON SURVEY AREA, DOCUMENT RELEASES CONSTRUCTION OPERATION AND RECIPROCAL EASEMENT RECORDED IN RECORDING

5A Easement Agreement 05/03/1991 Book: 681 Page: 3172 -IS NOT LOCATED ON THE SURVEY AREA.

Easement Deed 07/28/1992 Book: 796 Page: 1291
—IS NOT LOCATED ON THE SURVEY AREA.

TAL Easement 09/27/1991 Book: 714 Page: 2279
—IS NOT LOCATED ON THE SURVEY AREA.

Easement Deed 07/20/1994 Book: 1044 Page: 1952
-IS NOT LOCATED ON THE SURVEY AREA.

Maintenance Agreement 07/27/1994 Book: 1046 Page: 1005 -IS NOT LOCATED ON THE SURVEY AREA.

Easement Agreement 10/03/1994 Book: 1065 Page: 2595
-IS NOT LOCATED ON THE SURVEY AREA.

Easement Agreement 10/03/1994 Book: 1065 Page: 2602
-IS NOT LOCATED ON THE SURVEY AREA.

Easement Agreement 03/17/1995 Book: 1106 Page: 1627 -MAY BE LOCATED ON THE SURVEY AREA, INSUFFICIENT MATHEMATICAL DESCRIPTION.

Easement for Underground Electric System 11/01/1995 Book: 1170 Page: 282

—IS NOT LOCATED ON THE SURVEY AREA.

Amendment to Easement 07/20/1994 Book: 1270 Page: 1482

-IS NOT LOCATED ON THE SURVEY AREA.

Amendment to Easement Agreement 10/01/1996 Book: 1270 Page: 1494

—IS LOCATED ON THE SURVEY AREA, AS SHOWN HEREON.

Declaration of Easements, Covenants and Conditions 07/19/1999 Document No. 9907190771

—IS LOCATED ON THE SURVEY AREA, BLANKET IN NATURE.

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

Easement for Underground Electric System 11/13/1987 Book: 457 Page: 2916
-IS LOCATED ON THE SURVEY AREA, AS SHOWN HEREON.

Memorandum of Agreement 04/17/1989 Book: 539 Page: 1950
—IS LOCATED ON THE SURVEY AREA, AS SHOWN HEREON.

South Hill Mall 05/28/1993 Book: 891 Page: 3852
—IS LOCATED ON THE SURVEY AREA, BLANKET IN NATURE AND AS SHOWN HEREON.

EASEMENTS & ENCUMBRANCES:

Easement Deed 08/18/1988 Book: 502 Page: 2577

—IS NOT LOCATED ON THE SURVEY AREA.

Amendment to Easement 10/01/1996 Book: 1270 Page: 1530 —IS NOT LOCATED ON THE SURVEY AREA.

Second Amendment to Easement Agreement 04/28/2003 Document No. 200304280865

—IS NOT LOCATED ON THE SURVEY AREA.

Edsement Agreement 05/08/1991 Book: 681 Page: 3172 - IS NOT LOCATED ON THE SURVEY AREA.

Easement Deed 07/28/1992 Book: 796 Page: 1291
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Amendment to Easement 07/20/1994 Book: 1270 Page: 1482

Amendment to Easement Agreement 10/01/1996 Book: 1270 Page: 1494 AMENDMENT TO EUSENISM AND AREA, AS SHOWN HEREON.

Declaration of Easements, Covenants and Conditions 07/19/1999 Document No. 9907190771

—IS LOCATED ON THE SURVEY AREA, BLANKET IN NATURE.

Declaration of Covenants, Conditions and Restrictions 07/19/1999 Document No. 9907190772

—IS LOCATED ON THE SURVEY AREA, BLANKET IN NATURE

Water Utility Easement 03/06/2019 Document No. 201903060135
—IS NOT LOCATED ON THE SURVEY AREA.

Easement 09/17/2021 Document No. 202109170921

—IS NOT LOCATED ON THE SURVEY AREA.

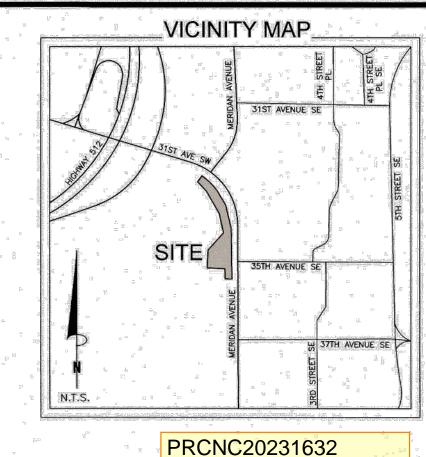
Memorandum of Agreement 04/17/1989 Book: 539 Page: 1950
–IS LOCATED ON THE SURVEY AREA, AS SHOWN HEREON.

South Hill, Phase I 05/28/1993 Book: 891 Page: 3852
—IS LOCATED ON THE SURVEY AREA, BLANKET IN NATURE AND AS SHOWN HEREON.

Boundary Line Adjustments 07/25/1994 Document No. 9407250271

—IS LOCATED ON THE SURVEY AREA, BLANKET IN NATURE.

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



PARENT PARCEL DESCRIPTION:

Lot 3, South Hill Mall, Phase I, recorded in Reception No. 9305281172, on May 28, 1993, and Parcel B, Boundary Line Revision, recorded in Document No. 9407250271, on April 4, 1994, City of Puyallup, Pierce County, Washington.

- 1. This is not intended to be a full boundary survey, the property lines depicted here on are based upon record information provided in Service Reports, prepared by First Corporate Solutions, order numbers ORD-1574685-W8L4D1 and ORD-1574711-R4Y3N2, with effective index dates of March 7, 2023 and March 13, 2023, respectively, and rotated
- 2. Subsurface information provided, if any, has been shown on this survey. No representation is made as to the accuracy, currency or completeness of said information. Visible at grade utilities have been located hereon. line locate services provided by Diamondback Line Locating Services, LLC.
- 3. FEDERAL EMERGENCY MANAGEMENT AGENCY, FEMA FIRMette published April 12, 2023, referencing Flood Insurance Rate Map, Map Number 53053C0341E, with an effective date of March 7, 2023, indicates this survey area is located in Zone X (Area of minimal flood hazard).
- 4. This survey does not constitute a title search to determine ownership or easements of record. For all information regarding easements, rights of way and title of record, the surveyor relied upon Service Reports, prepared by First Corporate Solutions, order numbers ORD-1574685-W8L4D1 (A) and ORD-1574711-R4Y3N2 (B), with effective index dates of March 7, 2023 and March 13, 2023, respectively.
- 5. BENCHMARK: MAG nail & washer stamped "APEX LS18902" in sidewalk, as shown. Elevation: 447.12' (NAVD 88).
- 6. BASIS OF BEARINGS: Bearings are relative to NAD83, Washington State Plane Coordinate System, South Zone (4602).
- 7. Field work for this survey was completed on April 5, 2023.
- 8. 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. Owner information for adjacent parcels is from a third party source due to no available information from the County Assessor.
- 9. This site is zoned "UCX" (Urban Center Mixed Use) per City of Puyallup Planning Department.

Front: 20 feet, Interior Side: 6 feet, Street Side: 20 feet, Rear: 10 feet No zoning information provided by the client. Any zoning setbacks shown hereon are the interpretation of the surveyor. For clarification of exact zoning designations and setback locations, please, contact the City of Puyallup Planning and Zoning Department at (253) 841-5480.

AREAS OF CONCERN:

No apparent areas of concern.

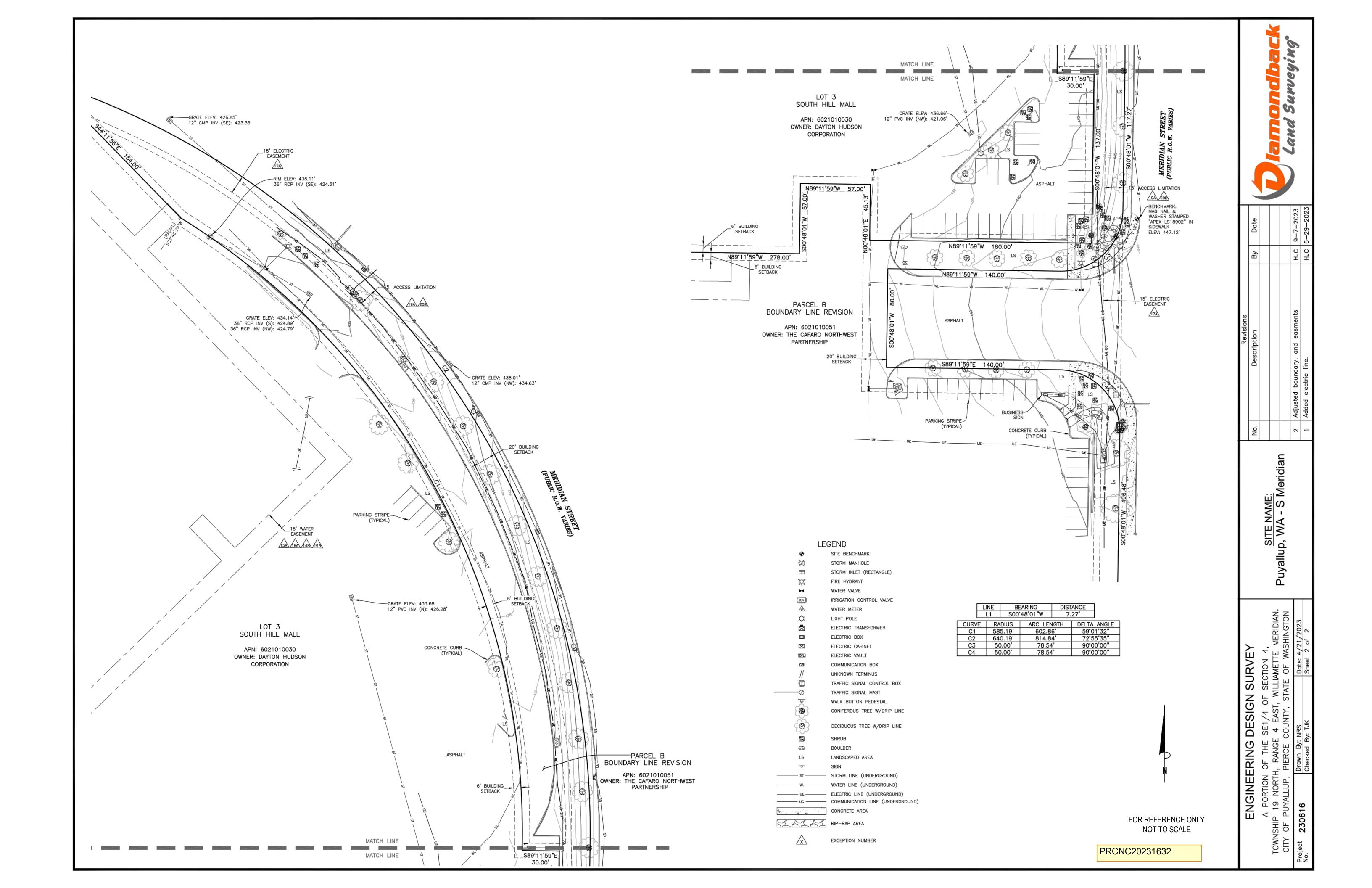
SURVEYOR'S STATEMENT:

On the basis of my knowledge, information and belief, I hereby state and declare that this drawing was prepared under my direct supervision to the standard of care of surveyors practicing in the State of Washington and that the information shown hereon is true and correct to the best of my knowledge and belief.

This statement is neither a warranty nor a guarantee, either expressed or implied

PON 9

Washington Professional Land Surveyor No. 49281



V4 SUPERCHARGER POST DATASHEET

TESLA

/3.5 SUPERCHARGER	CABINET									
		Input (V _{AC})	480	440	415	400	380			
	Peak AC Input Power	Power (kVA)	387	354	334	322	300			
	AC Input Voltage	380 Vac – 480 Va	c (-5%,	+10%), 4-wir	e 3AC+	N			
AC INPUT	AC Input current	4	165 Aa	Max.						
(Electrical)	Frequency	5	60 Hz /	60 Hz						
	Power Factor	≥ 0.99								
	Current THD		< 3	%						
	Voltage THD		< 2	%						
	Condustor Sizos	L1, L2, L3, N: 150 -	400 m	m², 250	мсм	– 750 N	исм			
AC INPUT	Conductor Sizes	PE: 10 – 7	70 mm ²	², #8 A\	NG - 2	0				
(Mechanical)	Conductor Material Type	L1, L2, L3,	N: Cu,	Al	PE:	Cu				
	Mfr. Termination Temp Rating		90°	С						
		Input (VAC)	480	440	415	400	38			
SHARED DC BUS	Max Rated DC Bus Power	Power (kW)	575	575	575	575	57			
(ELECTRICAL)	Max Rated DC Bus Current	Current (A _{DC)}	640	640	640	640	64			
	DC Bus Voltage Range	8								
SHARED DC BUS		V+, V- (2x/pole): 150 - 300 mm ² , 250 MCM - 600 MC								
	Conductor Sizes	Mid: 16 – 150 mm ² , 6 AWG – 250 MCM								
		PE: 10 – 70 mm², #8 AWG - 2/0								
(MECHNICAL)	Conductor Material Type	V+, V-, Mid: Cu, Al PE: Cu								
	Conductor Voltage Rating	1000 V								
	Mfr. Termination Temp Rating	90° C								
	Max. Rated Post Power		250	kW						
	Post Rated Voltage Range		0-500	VDC						
DC POST (ELETRICAL)	Post Output Rated Current @T _s =35° C		631 /	A _{DC} ,						
	Number of Charge Posts	1 - 4								
	Max Voltage Drop									
DC POST (MECHANICAL)	Conductor Size	V+, V- (2x/pole): 350 MCM or 185 mm² AL (certified equipment wiring)								
		PE: 10 - 70 mm ² , #8 AWG - 2/0								
	Conductor Material Type	V+,V-: Al, Cu PE: Cu								
	Conductor Voltage Rating	1000 V								
	Mfr. Termination Temp Rating	90°C								
DC POST (24V)	24V Post Power Supply Conductors	V+, V- (1x/po	-							
SYSTEM	Efficiency	96%								
PROTECTION	AC Input side: Class 1	DC Output s	side: Is	olated	DC Out	tput				
PROTECTION	Over Voltage/Current/Te	mperature, Surge Protec	tion, Is	olation	Monito	ring				

V4 SUPERCHARGER POST DATASHEET

TESLA

January 2023

CHARGING INFRASTRUCTURE DEPLOYMENT

	Short-Circuit Protection	External Electronic Trip Circuit Breaker
	Short Circuit Current Rating	85 kA RMS symmetrical
	Operating Temperature	-30°C to 50°C, -22°F to 122°F
ENVIRONMENTAL	Ingress Protection	IP66 (Cabinet), IP2X (Cooling)
	Ventilation Requirements	Ventilation Not Required
NOISE	Typical noise at 1m	35 dB(A)
STANDARDS	UL 2202, CSA C22.2#107.1, FCC, 18487.1, GB/T 27930, NB/T 33008.1, NB/T 33001	ICES-003-B, IEC 61851-1, EN 61000-6-2 EN 55011, GB/T
LAYOUT	Max. Distance to Charge Post	100 m, 330 ft.
WEIGHT	Cunaraharaar Cabinat Waisht	4 Post Cabinet: 1110 kg (2448 lbs)
WEIGHT	Supercharger Cabinet Weight	3 Post Cabinet: 1039kg (2291 lbs)
DIMENSIONS	Depth, Width, Height	1000, 1250, 2200 mm; 39 12/32, 49 7/8, 86 20/32 in.

V4 SUPERCHARGER POST DATASHEET

TESLA

January 2023

CHARGING INFRASTRUCTURE DEPLOYMENT

V4 SUPERCHARGER	RPOST						
	Max. Rated Post Power	250 kW					
	Post Rated Voltage Range	0 – 1000 V _{DC}					
	Post Rated Current @Ta=35° C	615A _{DC}					
DOOT	Power Conductor Lug Size	V+, V- (2x/pole): 300MCM – 750MCM (150mm² – 380mm²)					
POST INPUT/OUPUT	PE Conductor	PE: 16 – 95mm², 6AWG – 250MCM					
(ELECTRICAL	Conductor Material Type	V+, V- : Al, Cu PE: Al, Cu					
(====	24V Power Conductors	24V+, 24V- (1x/pole): 10 mm², 8 AWG Cu 3.5A – 13A					
	Conductor Voltage Rating	1000 V					
	Mfr. Termination Temp Rating	90° C					
PROTECTION		Over Current/Temperature					
	Operating Temperature	-30°C to 50°C, -22°F to 122°F					
ENVIRONMENTAL	Ingress Protection	IP54					
ENVIRONMENTAL	Flood Tolerance	1015mm (40")					
	Typical logo light luminance at 1m	Pending					
STANDARDS		ding: UL 2202, CSA 22.2#107 ng: IEC 61851-1, IEC 61851-23					
SITE LAYOUT	Max. Distance to Cabinet	100 m, 330 ft.					
SITE LATOUT	Cable Length	3.0 m, 9.8 ft.					
WEIGHT	Charge Post Weight	90 kg, 200 lbs.					
DIMENSIONS	Depth, Width, Height	328, 759, 1945mm; 12.9, 29.7, 76.6 in.					

	I						
DESCRIPTION	ISSUED FOR 50% REVIEW	ISSUED FOR 50% REVIEW	ISSUED FOR 90% REVIEW	ISSUED FOR SIGN & SEAL	ISSUED FOR SIGN & SEAL - UTILITY UPDATES		
DATE	08/11/2023	09/11/2023	09/13/2023	10/30/2023	01/19/2024		
REV.	∢	В	O	٥	ш		

PRCNC20231632

FOR REFERENCE ONLY

TESLA SUPERCHARGER STATION 3310 S MERIDIAN ST. (TESLA SUPERCHARGER) PUYALLUP, WA 98373

TESLA DATASHEET

DESIGNER

JOB NO. 2023241.47

C-002

PROPERTY OWNER: DAYTON HUDSON CORPORATION

- GENERAL CONSTRUCTION NOTES THE TOPOGRAPHIC SURVEY BY OTHERS SHALL BE REFERENCED WITH THESE PLANS. THE G.C. IS RESPONSIBLE FOR LOCATING PROPOSED IMPROVEMENTS PER THESE
- THE LOCATIONS OF UNDERGROUND FACILITIES SHOWN ON THE PLAN ARE BASED ON FIELD SURVEYS. DUE TO THE LIMITATIONS IN TECHNOLOGY AND GROUND CONDITIONS, NOT ALL UNDERGROUND UTILITIES ARE ABLE TO BE LOCATED. IT SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES TO LOCATE THEIR FACILITIES PRIOR TO STARTING CONSTRUCTION. NO ADDITIONAL COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR DAMAGE AND REPAIR TO THESE FACILITIES CAUSED BY HIS WORK FORCE.
- ALL PROPERTY LINES, RIGHT OF WAYS, CENTERLINES, DIMENSIONS, GRADES, AND UTILITY LOCATIONS SHOWN ON THESE PLANS WERE BASED ON A TOPOGRAPHIC SURVEY. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY CONSTRUCTION/PROJECT MANAGER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO INFORMATION SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
- PRIOR TO COMMENCEMENT OF ANY WORK, THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND NOTIFY THE DESIGN PROFESSIONAL IN CHARGE FOR THE OWNER OF ANY DISCREPANCIES. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS SHALL BE CORRECTED AT THE CONTRACTOR'S SOLE EXPENSE.
- CONTRACTOR INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE OWNER FOR APPROVAL BEFORE MAKING ANY CHANGES. DEVIATION FROM PLANS BEFORE WRITTEN APPROVAL FROM OWNER PLACES LIABILITY ON THE CONTRACTOR.
- UNLESS OTHERWISE NOTED, ALL SURFACES SHALL BE PATCHED AND PAINTED AROUND THE PROPOSED IMPROVEMENTS TO MATCH EXISTING FINISHES.
- APPROVALS FROM BUILDING INSPECTORS SHALL NOT CONSTITUTE AUTHORITY TO DEVIATE FROM THE DRAWINGS.
- THE GENERAL CONTRACTOR SHALL VISIT THE SITE AND SHALL FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE ARRANGEMENTS FOR THE PROPOSED SCOPE OF WORK. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH ALL CONTRACT DOCUMENTS, FIELD DOCUMENTS, DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. GENERAL CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF WORK.
- ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND FEDERAL, STATE AND LOCAL JURISDICTION CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS OTHERWISE NOTED. DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS THE MINIMUM REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK, DETAILS ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF WORK AND PREPARED BY THE ENGINEER PRIOR TO PROCEEDING WITH WORK.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED
- IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE OWNER PRIOR TO PROCEEDING.
- THE GENERAL CONTRACTOR SHALL COORDINATE WORK AND SCHEDULE WORK ACTIVITIES WITH OTHER DISCIPLINES.
- CONSTRUCTION SHALL BE DONE IN A WORKMANLIKE MANNER BY COMPETENT EXPERIENCED WORKMAN IN ACCORDANCE WITH APPLICABLE CODES AND THE BEST ACCEPTED PRACTICE.
- THE CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE CONSTRUCTION MANAGER 48 HOURS PRIOR TO COMMENCEMENT OF WORK.
- THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE PROPERTY OWNER.
- THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
- THE GENERAL CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS FOR ALL TRADES AND CONTRACTORS TO THE SITE AND/OR BUILDING.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY OF THE SITE FOR THE DURATION OF CONSTRUCTION UNTIL JOB COMPLETION. PROVIDE AND MAINTAIN ALL TEMPORARY FENCING, BARRICADES, WARNING SIGNALS AND SIMILAR DEVICES NECESSARY TO PROTECT AGAINST THEFT FROM PROPERTY DURING THE ENTIRE PERIOD 5. OF CONSTRUCTION. GRAFFITI ON TEMPORARY FENCING SHALL BE PAINTED OVER WITHIN ONE DAY OF DISCOVERY. REMOVE ALL SUCH DEVICES UPON COMPLETION OF THE WORK.
- THE GENERAL CONTRACTOR SHALL MAINTAIN IN GOOD CONDITION ONE COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDENDA, AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES.
- ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY THE ENGINEER. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. THE CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS SHALL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION, B) CONFINED SPACE, C) ELECTRICAL SAFETY, AND D) TRENCHING & EXCAVATION.

- 24. ONLY ITEMS SPECIFICALLY CALLED OUT TO BE REMOVED OR DEMOLISHED SHALL BE AFFECTED. ANY ITEMS INCLUDING, BUT NOT LIMITED TO, CURBS, PAVEMENT, UTILITY ITEMS, LANDSCAPING, ETC. SHALL REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION. CONTRACTOR IS RESPONSIBLE TO REPAIR OR REPLACE ANY AFFECTED ITEMS AT OWNERS DISCRETION.
- 25. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED, CAPPED, PLUGGED OR OTHERWISE DISCONNECTED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.
- 26. THE AREAS OF THE OWNER'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED 2. TO PREVENT EROSION.
- CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES SHALL BE IN CONFORMANCE WITH THE EPA AND FEDERAL, STATE, LOCAL JURISDICTIONS FOR EROSION AND SEDIMENT CONTROL. THE 3 WORK AREA SHALL BE CONSTRUCTED AND MAINTAINED IN SUCH CONDITION THAT IN THE EVENT OF RAIN THE SITE WILL BE DRAINED AT ALL TIMES.
- NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
- 29. THE SUBGRADE SHALL BE BROUGHT TO A SMOOTH UNIFORM GRADE AND COMPACTED TO 98 PERCENT STANDARD PROCTOR DENSITY UNDER PAVEMENT, SIDEWALKS, STRUCTURES AND OPEN SPACES. ALL TRENCHES IN PUBLIC RIGHT OF WAY SHALL BE BACKFILLED WITH FLOWABLE FILL OR OTHER MATERIAL PRE-APPROVED BY THE LOCAL JURISDICTION.
- ALL NECESSARY RUBBISH, STUMPS, DEBRIS, STICKS, STONES, AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LAWFUL MANNER.
- ALL BROCHURES, OPERATING AND MAINTENANCE MANUALS, CATALOGS, SHOP DRAWINGS, AND OTHER DOCUMENTS SHALL BE TURNED OVER TO THE OWNER AT COMPLETION OF CONSTRUCTION AND PRIOR TO PAYMENT.
- 32. THE CONTRACTOR SHALL SUBMIT A COMPLETE SET OF AS-BUILT REDLINES TO THE OWNER UPON COMPLETION OF PROJECT AND PRIOR TO FINAL PAYMENT.
- 33. AT THE END OF EACH WORK DAY AND FINAL TURNOVER TO OWNER, THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS IN A LAWFUL MANNER AND LEAVE PREMISES IN A CLEAN CONDITION. CONTRACTOR SHALL REMOVE ANY METAL SHAVING FROM WORK SITE WHERE OXIDIZED OR CONDUCTIVE SHAVINGS MAY CAUSE RUST, ELECTRICAL SHORT CIRCUITS, OR OTHER DAMAGE.
- CONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS REQUIRED FOR CONSTRUCTION. IF CONTRACTOR CANNOT OBTAIN A PERMIT, THEY MUST NOTIFY THE GENERAL CONTRACTOR AND OWNER IMMEDIATELY.
- 35. CONTRACTOR IS RESPONSIBLE FOR CLEARING, GRUBBING, STRIPPING, EROSION CONTROL, SURVEY, LAYOUT, SUBGRADE PREPARATION AND FINISH GRADING AS REQUIRED TO COMPLETE THE PROPOSED WORK SHOWN IN THESE PLANS.
- FIELD TESTING OF EARTHWORK COMPACTION AND CONCRETE CYLINDERS SHALL BE PERFORMED BY AN INDEPENDENT TESTING LAB. THIS WORK TO BE COORDINATED BY THE CONTRACTOR.
- EXISTING UTILITIES: DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED BY THE OWNER OR OTHERS, EXCEPT WHEN PERMITTED IN WRITING BY THE STAKEHOLDER AND THEN ONLY AFTER ACCEPTABLE TEMPORARY UTILITY SERVICES HAVE BEEN PROVIDED.
- 38. GRANULAR BACKFILL: SHALL MEET THE FOLLOWING GRADATION PER THE TABLE BELOW:

TOTAL PERCENT PASSING
100
75 TO 100
80 TO 100
35 TO 75
30 TO 60
7 TO 30
3 TO 15

- 39. GRANULAR BEDDING AND TRENCH BACKFILL: WELL-GRADED SAND MEETING THE GRADATION REQUIREMENTS OF ASTM D2487 (SW-SM).
- UNSUITABLE MATERIAL: HIGH AND MODERATELY PLASTICS SILTS AND CLAYS (LL>45). MATERIAL CONTAINING REFUSE, FROZEN LUMPS, DEMOLISHED BITUMINOUS MATERIAL, VEGETATIVE MATTER, WOOD, STONES IN EXCESS OF 3 INCHES IN ANY DIMENSION, AND DEBRIS AS DETERMINED BY THE CONSTRUCTION MANAGER. TYPICAL THESE WILL BE SOILS CLASSIFIED BY ASTM AS PT, MH, CH, OH, ML, AND OL.
- 41. REMOVE TOPSOIL MATERIAL COMPLETELY FROM THE SURFACE UNTIL THE SOIL NO LONGER MEETS THE DEFINITION OF TOPSOIL. AVOID MIXING TOPSOIL WITH SUBSOIL OR OTHER UNDESIRABLE MATERIALS.
- NO STRUCTURAL ELEMENTS ARE TO BE CUT UNLESS OTHERWISE SPECIFICALLY APPROVED BY THE ENGINEER.

PAVEMENT MARKING NOTES

- ALL PAVEMENT MARKINGS TO MATCH EXISTING CONDITIONS, UNLESS STATED OTHERWISE. ALL PAVEMENT MARKINGS WITHIN ADA AREAS SHALL BE PAINTED BLUE EXCEPT FOR COLORS DEFINED ON THE ADA PAVEMENT SYMBOL OR WHERE LOCAL AHJ CODE DICTATES NO FROST DESIGN NOTES OTHERWISE.
- MARKING (STRIPING) PAINT FOR PARKING SPACES, TRAFFIC ARROWS, ADA PARKING AND SYMBOLS, ETC., PER LOCAL REQUIREMENTS AND AS FOLLOWS:
- PAVEMENT MARKINGS PAINT SHALL BE WATER BASE FAST DRYING 100% ACRYLIC TYPE: WATER BASE TO MEET FEDERAL SPECIFICATION TTP-01952B. FOR COLD WEATHER APPLICATION PAINT PRODUCT SHALL BE IN ACCORDANCE WITH ASTM-D2369, D1394, D3723, D1475, D562 AND D711.
- PROVIDE A NON-SLIP AGGREGATE ADDITIVE TO MARKING PAINT USED AT ADA ACCESS
- APPLY 2 COATS WITHIN THE SAME DAY, UTILIZING STRAIGHT EDGES, YELLOW ON CONCRETE/WHITE ON ASPHALT EXCEPT WHEN MATCHING ADJACENT OR EXISTING COLOR WHEN THE PAVING IS AN EXPANSION OR SEGMENT OF A LARGER LOT.

LEGEND

EX. FENCING

EX. PROPERTY LINE

EX. UG ELECTRICAL LINE

EX. OH ELECTRICAL LINE

EX. UG FIBER LINE

EX. UG GAS LINE

GENERAL FOUNDATION NOTES

- THE CONTRACTOR SHALL RETAIN AN OWNER APPROVED AND QUALIFIED SOILS ENGINEER REGISTERED WITHIN THE STATE TO MAKE GEOTECHNICAL RECOMMENDATIONS BASED ON FIELD CONDITIONS, AND ENSURE THAT ALL SHORING AND DEWATERING MEANS AND METHODS WILL NOT COMPROMISE THE STABILITY OF EXISTING OR PROPOSED FOOTINGS/FOUNDATIONS. THE OWNER SHALL RECEIVE COMPACTION REPORTS PREPARED BY THE CONTRACTOR'S GEOTECHNICAL ENGINEER, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH BY SAID GEOTECHNICAL ENGINEER. NOTIFY PROJECT CONSTRUCTION MANAGER IF ANY UNSUITABLE SOILS ARE FOUND.
- AT A MINIMUM ALL FILLED AND SUBGRADE AREAS SHALL BE COMPACTED TO 98% OF STANDARD PROCTOR MAXIMUM DRY DENSITY PER A.S.T.M TEST D-698. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL NOT EXCEED 2% ABOVE NOR 2% BELOW OPTIMUM.
- DETERMINATION OF FINAL BEARING ELEVATIONS, TOPSOIL AND EXCAVATION STRIPPING DEPTH, INSPECTION OF ALL SUBSOIL EXPOSED DURING STRIPPING, SITE GRADING, EXCAVATION OPERATIONS, APPROVAL OF FILL MATERIALS, DENSITY TESTING OF FILLS TO ENSURE PLACEMENT PER SPECIFICATION REQUIREMENTS, INSPECTION OF FOUNDATION BEARING SURFACES, AND VERIFICATION OF ALLOWABLE BEARING PRESSURES ARE THE TESTING LABORATORY'S RESPONSIBILITY.
- ALL FOUNDATIONS ARE TO REST ON FIRM UNDISTURBED SOIL OR COMPACTED FILL FREE FROM ORGANIC MATTER. IF POOR SOIL CONDITIONS ARE ENCOUNTERED AT FOUNDATION DEPTHS SHOWN, NOTIFY OWNER'S REPRESENTATIVE BEFORE PROCEEDING WITH CONSTRUCTION.
- CONTRACTOR SHALL COMPACT SUBGRADE. SEE FROST/NO FROST DESIGN NOTES THIS
- FOUNDATIONS HAVE BEEN DESIGNED BASED ON AN ASSUMED ALLOWABLE SOIL BEARING CAPACITY OF 1500 PSF UNLESS NOTED OTHERWISE.
- NEW FOOTINGS PLACED ADJACENT TO EXISTING FOOTINGS SHALL BEAR AT THE SAME ELEVATION, UNLESS NOTED OTHERWISE.
- STEP FOOTINGS AT A RATIO OF ONE (1) VERTICAL TO TWO (2) HORIZONTAL WITH A MAXIMUM VERTICAL STEP OF 2'-0" UNLESS NOTED OTHERWISE.
- INUNDATION AND LONG TERM EXPOSURE OF BEARING SURFACES, WHICH WILL RESULT IN DETERIORATION OF BEARING FORMATIONS, SHALL BE PREVENTED. FOOTINGS SHALL BE PLACED IMMEDIATELY FOLLOWING FOOTING EXCAVATIONS AND BEARING SURFACE INSPECTION.
- UTILITY LINES SHALL NOT BE PLACED THROUGH OR BELOW FOUNDATIONS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.
- 11. GROUNDWATER ASSUMED TO BE BELOW EXCAVATION DEPTH. IF GROUNDWATER IS ENCOUNTERED DURING EXCAVATION ON SITE, CONTRACTOR SHALL PROVIDE FOR ANY SITE DRAINAGE AND DE-WATERING REQUIRED.
- 12. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING PUBLIC AND PRIVATE UTILITIES PRIOR TO EXCAVATION. IF NECESSARY, UTILITIES SHALL BE RELOCATED PRIOR TO FOUNDATION INSTALLATION.

FROST DESIGN NOTES

(BOTTOM OF FOUNDATIONS ABOVE FROST LEVEL)

- CONCRETE FOUNDATIONS SHOULD BEAR DIRECTLY ON A PROPERLY COMPACTED FREE-DRAINING GRANULAR FILL CONSISTING OF NO. 57 STONE OR AN APPROVED
- GRANULAR FILL SHOULD EXTEND VERTICALLY TO THE MINIMUM RECOMMENDED REGIONAL FROST DEPTH AND LATERALLY 2/3RD FROM THE FOUNDATION PERIMETER (EXCLUDING SIDE OF PERIMETER ADJACENT TO CURB). GRANULAR FILL SHOULD BE PLACED IN 8 INCH LOOSE LIFTS AND COMPACTED WITH A VIBRATORY COMPACTOR. THE COMPACTION EQUIPMENT SHOULD BE OPERATED OVER THE FULL WIDTH OF THE FOUNDATION UNDERCUT AREA UNTIL VISIBLE DEFORMATION OF THE BACKFILL CEASES. LOCAL FROST DEPTH IS LISTED ON SHEET C-001. CONTRACTOR SHALL VERIFY LOCAL FROST DEPTH WITH AHJ PRIOR TO CONSTRUCTION.
- GEOTEXTILE (FILTER FABRIC) SHOULD BE PLACED BETWEEN THE GRANULAR BACKFILL AND COHESIVE SOILS TO PRECLUDE THE INFILTRATION OF FINES. SPEC AS FOLLOWS:
 - SEPARATION GEOTEXTILE: WOVEN GEOTEXTILE FABRIC, MANUFACTURED FOR SEPARATION APPLICATIONS, MADE FROM POLYOLEFINS OR POLYESTERS: WITH
 - ELONGATION LESS THAN 50 PERCENT: COMPLYING WITH AASHTO M 288 AND THE FOLLOWING, MEASURED PER TEST METHODS REFERENCED: SURVIVABILITY: CLASS 2; AASHTO M 288.
 - GRAB TENSILE STRENGTH: 247 LBF (1100 N); ASTM D 4632. SEWN SEAM STRENGTH: 222 LBF (990 N); ASTM D 4632. TEAR STRENGTH: 90 LBF (400 N); ASTM D 4533.
- PUNCTURE STRENGTH: 90 LBF (400 N); ASTM D 4833. APPARENT OPENING SIZE: NO. 60 (0.250-MM) SIEVE, MAXIMUM; ASTM D 4751.
- PERMITTIVITY: 0.02 PER SECOND, MINIMUM; ASTM D 4491. UV STABILITY: 50 PERCENT AFTER 500 HOURS' EXPOSURE; ASTM D 4355.

BOTTOM OF FOUNDATIONS BELOW FROST LEVEL).

- CONCRETE FOUNDATIONS SHOULD BE SUPPORTED ON A 6 INCH COMPACTED LAYER OF APPROVED FREE-DRAINING GRANULAR MATERIAL
- APPROVED MATERIAL SHOULD BE COMPACTED OVER THE FULL WIDTH OF THE INFILL AREA UNTIL VISIBLE DEFORMATION OF THE BACKFILL CEASES.

SPECIAL INSPECTIONS

—— E —— E —— EX. UG WATER LINE

THE CLIENT SHALL BE RESPONSIBLE FOR SCHEDULING AND OVERSEEING OF ALL SPECIAL INSPECTIONS REQUIRED BY THE AUTHORITY HAVING JURISDICTION. SPECIAL INSPECTIONS MUST BE COMPLETED PRIOR TO FINAL INSPECTION APPROVAL.

EX. UG SANITARY SEWER LINE

EX. UTILITY POLE

EX. IRRIGATION VALVE (ICV)

EX. SANITARY MANHOLE SS EX. WATER METER

EX. UG STORM SEWER LINE

EX. TELEPHONE LINE

EX. WATER VALVE

EX. CATCH BASIN

EX. LIGHT POLE

CONCRETE

- 1. ALL CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 301-16, "STANDARD SPECIFICATION FOR STRUCTURAL CONCRETE" AND ACI 302, 305 AND 306 UNLESS NOTED
- ALL DETAILING, FABRICATION AND PLACING OF CONCRETE SHALL CONFORM TO ACI 318-14. "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" AND THE LATEST ACI "MANUAL OF STANDARD PRACTICE FOR DETAIL REINFORCED CONCRETE STRUCTURES" UNLESS NOTED OTHERWISE.
- 3. SAFETY AND PERFORMANCE OF THE STRUCTURE ARE THE RESPONSIBILITY OF THE CONTRACTOR INSOFAR AS THEY ARE AFFECTED BY THE LOCATION AND DETAILS OF CONSTRUCTION JOINTS. SHOP DRAWINGS OF THE PROPOSED CONSTRUCTION JOINT LOCATIONS AND DETAILS ARE TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL.
- MAXIMUM SIZE OF AGGREGATE SHALL NOT EXCEED SIZE SUITABLE FOR INSTALLATION METHOD UTILIZED OR 1/3 CLEAR DISTANCE BEHIND OR BETWEEN REINFORCING. MAXIMUM SIZE MAY BE INCREASED TO 2/3 CLEAR DISTANCE PROVIDED WORKABILITY AND METHODS OF CONSOLIDATION SUCH AS VIBRATING WILL PREVENT HONEYCOMBS OR VOIDS.
- ALL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS AS FOLLOWS: ALL CONCRETE -4500 PSI. ALL CONCRETE EXPOSED TO WEATHER SHALL CONTAIN 6% (± 1%) AIR ENTRAINMENT.
- 6. REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60.
- WELDED WIRE FABRIC REINFORCING SHALL CONFORM TO ASTM A1064 AND BE FURNISHED IN FLAT SHEETS AND INSTALLED ON CHAIRS OR PRECAST CONCRETE BLOCKS.
- 8. NO TACK WELDING OF REINFORCING IN THE FIELD IS PERMITTED.
- PROVIDE CORNER BARS AT ALL LOCATIONS WHERE REINFORCEMENT CHANGES DIRECTION.
- 10. PROVIDE STRAIGHT AND DIAGONAL BARS AT EDGES OF ALL OPENINGS REINFORCING EMBEDMENT AND LAP SPLICES (INCHES) FOR 4500 PSI CONCRETE.

	<u>OTHER</u>		TOP*	
	ANCHORAGE	SPLICE	ANCHORAGE	SPLICE
#3	15	19	19	24
#4	19	25	25	33
#5	24	31	31	41
#6	29	37	37	49

- *HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE BELOW BAR
- 11. NON-SHRINK GROUT SHALL MEET A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 6000 PSI.
- 12. ADD 100% TIES FOR REBAR OVERLAY. NO COLD JOINTS SHALL BE PERMITTED DURING CONSTRUCTION.

STRUCTURAL STEEL

- MATERIAL PROPERTIES:
 - PLATE: ASTM A36 UNO PIPE: ASTM A53, TYPE E OR S, GRADE TUBE: ASTM A1085 GRADE A (Fy = 50 KSI) WIDE FLANGE: ASTM A992 (Fy = 50 KSI)
- 2. DETAILING, FABRICATION, AND ERECTION SHALL CONFORM TO THE 2016 AISC (360-16) SPECIFICATIONS.
- ALL WELDING SHALL BE DONE USING E-70XX ELECTRODES IN ACCORDANCE WITH AWS D1.1
- 4. FIELD VERIFY ALL CONDITIONS AT AND CONNECTIONS TO THE EXISTING CONSTRUCTION BEFORE FABRICATION.
- ALL EXPOSED STRUCTURAL STEEL, ANCHOR RODS AND BOLTS SHALL BE HOT DIP GALVANIZED PER ASTM A123.
- UNLESS NOTED OTHERWISE ON THE DRAWING, ALL ANCHOR RODS SHALL CONFORM TO ASTM F1554 Gr 55 WITH HEAVY HEXAGONAL NUT.
- SUBMIT FABRICATION AND ERECTION DRAWINGS SHOWING ALL DETAILS, CONNECTIONS, MATERIAL DESIGNATIONS, AND TOP STEEL ELEVATIONS FOR APPROVAL. THE SHOP DRAWINGS WILL BE REVIEWED FOR GENERAL CONFORMANCE TO THE CONTRACT DRAWINGS. SUCH APPROVAL SHALL NOT RELIEVE THE FABRICATOR/CONTRACTOR OF THE RESPONSIBILITY FOR EITHER THE ACCURACY OF THE DETAILED DIMENSIONS IN THE SHOP AND ERECTION DRAWINGS OR THE GENERAL FIT-UP OF PARTS THAT ARE TO BE ASSEMBLED IN THE FIELD.

TRAFFIC CONTROL NOTES

EX. FIRE HYDRANT

EX. GAS VALVE

EX. GAS METER

- DURING THE CONSTRUCTION PERIOD; SIDEWALKS, SHOULDERS, TRAVEL LANE(S), OR STREETS MAY HAVE TO BE TEMPORARILY CLOSED OR RESTRICTED FOR THE UNLOADING / LOADING OF EQUIPMENT OR AS A RESULT OF CONSTRUCTION ACTIVITIES THEMSELVES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE DIRECTLY WITH THE LOCAL GOVERNING AUTHORITIES ON ANY SUCH CLOSURES AND MUST OBTAIN WRITTEN PERMISSION FROM THE APPROPRIATE AUTHORITIES PRIOR TO IMPLEMENTING SUCH CLOSURES OR RESTRICTIONS. ANY CLOSURE OR RESTRICTION MUST COMPLY WITH THE STATE MANUAL OF UNIFORM CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS (LATEST EDITION AND REVISION), AND WITH ANY AND ALL ADDITIONAL APPLICABLE CITY VILLAGE, OR COUNTY REQUIREMENTS. THE CONTRACTOR SHALL PREPARE AND SUBMIT A FORMAL TRAFFIC CONTROL / MOT PLAN TO THE LOCAL GOVERNING AUTHORITIES IF REQUESTED. ALL REQUIRED CONSTRUCTION TRAFFIC MAINTENANCE DEVICES SHALL BE PROVIDED, ERECTED AND MAINTAINED, AND ULTIMATELY REMOVED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL MAINTAIN SAFE AND SATISFACTORY ACCESS TO ALL ABUTTING PROPERTIES AND INTERSECTING STREET AT ALL TIMES DURING THE CONSTRUCTION OF THE IMPROVEMENTS ANTICIPATED. DRIVEWAYS MUST BE MAINTAINED AND ALL TRENCHES SHALL BE BACKFILLED AT THE END OF EACH WORK DAY. PER THE STATE MUTCD AND OTHER APPLICABLE APPROPRIATE GOVERNING REQUIREMENTS, THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SAFEGUARDS SUCH AS BARRICADES SATISFACTORY BARRIERS, CONES, SIGNAGE, BARRELS, MESSAGE BOARDS, LIGHTING, FLAGMEN, LAW ENFORCEMENT OFFICERS, ETC. TO AVOID DAMAGE AND / OR INJURY TO VEHICLES AND PERSONS TRAVERSING THE CONSTRUCTION AREA.

EX. TELEPHONE MANHOLE

EX. ELECTRIC TRANSFORMER

EX. FIRE DEPARTMENT CONNECTION

EX. STORM MANHOLE ST EX. ELECTRIC HANDHOLE/VAULT

WVL EX. SIGN

EX. TREE

EX. WATER MANHOLE (W) EX. A/C UNIT

LANDSCAPE NOTES GENERAL

LANDSCAPE WORK SHALL BE ACCORDING TO THE WORKMANLIKE STANDARDS ESTABLISHED FOR LANDSCAPE CONSTRUCTION AND PLANNING IN THE STANDARDIZED

PLANT GUARANTEE: CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM DATE OF PROJECT ACCEPTANCE BY THE OWNER.

LANDSCAPE SPECIFICATIONS (ASLA) AND ANY LOCAL LANDSCAPE ORDINANCE.

- ALL DISTURBED AND PROPOSED LANDSCAPE PLANTING BED AREAS SHALL MATCH EXISTING GROUND CONDITIONS IN TYPE AND DEPTH UNLESS OTHERWISE STATED ON
- IF NECESSARY, CONTRACTOR SHALL PRUNE EXISTING TREES TO MAINTAIN NECESSARY CLEARANCES, EQUIPMENT MANUFACTURER CLEARANCES, AND UTILITY REQUIRED CLEARANCES. CONTRACTOR SHALL MAKE TREE SHAPELY AND TYPICAL OF SPECIES PER ANSI A300 AND HORTICULTURAL STANDARDS.
- IF NECESSARY, CONTRACTOR SHALL ROOT PRUNE EXISTING TREES AS FOLLOWS: ENDS OF BROKEN ROOTS OVER 1/4" IN DIAMETER SHOULD BE PRUNED WITH A CLEAN CUT, REMOVING OVER INJURED PORTION.

- TRENCHED EDGING: TRENCH AROUND LANDSCAPE BEDS TO CREATE SHARP, 45
- DEGREE EDGE. TYPICAL AT ALL PLANTING BED EDGES WHERE THEY MEET LAWNS METAL EDGING: SHALL BE 4" STEEL EDGING WITH THREE (3) METAL ANCHOR STAKES PER 20 FOOT SECTION. ALL MASS PLANTING BEDS SHALL HAVE EDGING PLACED BETWEEN LANDSCAPE STONE AND ADJACENT LANDSCAPE AREA NOT TO CONTAIN
- LANDSCAPE STONE
- CONTRACTOR SHALL MATCH EXISTING LANDSCAPE STONE IN TYPE, SIZE, COLOR
- IF THERE IS NO LANDSCAPE STONE ON EXISTING SITE, CONTRACTOR SHALL INSTALL RIVER ROCK PER PLAN. RIVER ROCK SHALL BE 3/4"-2" IN SIZE, WASHED AND
- ROUNDED. RIVER ROCK SHALL BE INSTALLED AT A MINIMUM DEPTH OF 3 INCHES. IF SITE IS IN SOUTHERN CALIFORNIA, ARIZONA, NEW MEXICO, OR TEXAS, AND THERE IS NO LANDSCAPE STONE ON SITE, CONTRACTOR SHALL INSTALL DECOMPOSED GRANITE PER PLAN. CRUSHED GRANITE SHALL BE 1/2" SCREENED, AND BE INSTALLED AT A MINIMUM 2" DEPTH. COLOR TO BE DETERMINED BY TESLA.
- WEED BARRIER POLYETHYLENE FILTER FABRIC DESIGNED TO PERMIT WATER INFILTRATION WHILE PREVENTING WEED GROWTH-TO BE INSTALLED IN ALL PLANTING BEDS UNDER AGGREGATE.
- PLANTING SOIL MIX SHALL BE CLEAR OF ALL STONES AND DEBRIS 1" OR LARGER, AND CONSIST OF THE FOLLOWING: 25% ORGANIC COMPOST, 75% ACCEPTABLE TOPSOIL.

SOD SHALL BE SELECTED PER HARDINESS ZONE AND MATCHED TO EXISTING SITE. SOD SHALL BE A FIRST GRADE CERTIFIED BLEND CONTAINING NO MORE THAN 30 PERCENT OF OTHER GRASSES AND CLOVERS, AND FREE FROM ALL NOXIOUS WEEDS.

- ZONES 3, 4 & 5: APPROVED BLUE GRASS BLEND ZONE 6: APPROVED FESCUE BLEND
- ZONES 7 & 8: APPROVED BERMUDA BLEND ZONES 9 & 10: APPROVED ST AUGUSTINE FLORATAM BLEND
- CONTRACTOR SHALL INSTALL SOD PER INDUSTRY STANDARDS. ALL SODDED AREAS INCLUDING SUBGRADE, SHALL BE KEPT THOROUGHLY MOIST FOR 30 DAYS AFTER SODDING. THE CONTRACTOR SHALL REPAIR ANY AREAS DAMAGED FOLLOWING INSTALLATION AS DIRECTED BY THE ENGINEER. SOD SHALL BE IN PLACE AT LEAST 30 DAYS BEFORE FINAL ACCEPTANCE.

(MAINTENANCE PERIOD TO COMMENCE AFTER FINAL INSPECTION.)

MAINTENANCE PERIOD FOR THIS CONTRACT SHALL BE 90 CALENDAR DAYS COMMENCING AFTER FINAL INSPECTION OF CONSTRUCTION.

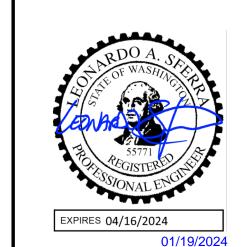
IRRIGATION RELOCATION: CONTRACTOR SHALL VERIFY IF EXISTING IRRIGATION IS PRESENT, DETERMINE POINT OF CONNECTION, SYSTEM PRESSURE, FIXTURE TYPES, AND POTENTIAL FOR EXPANSION. IF FOUND THAT THE EXISTING IRRIGATION SYSTEM IS CAPABLE OF EXPANSION AND REUSE THEN IT SHALL BE MODIFIED TO PROVIDE 100% COVERAGE OF THE LANDSCAPE AREA. IF THE EXISTING IRRIGATION SYSTEM IS NOT CAPABLE OF EXPANSION, CONTRACTOR TO INSTALL A NEW CONTROLLER, BOOSTER PUMP, AND OTHER APPARATUSES NEEDED FOR A COMPLETE IRRIGATION SYSTEM. IRRIGATED AREAS SHALL BE IRRIGATED BY DRIP IRRIGATION OR SIMILAR FIXTURES BY THE SAME SUPPLIER. CONTRACTOR SHALL ENSURE BUILDING WALLS AND WINDOWS WILL NOT BE DAMAGED OR STAINED BY IMPROPER IRRIGATION INSTALLATION OR POOR SELECTION OF FIXTURES. SYSTEM SHALL INCLUDE ALL SPRINKLER FIXTURES, DRIP TUBING, PIPING, VALVES, WIRING AND CONTROLS TO PROVIDE A COMPLETE FUNCTIONAL SYSTEM THAT SHALL COMPLY WITH CITY CODE. PRIOR TO UPDATING THE IRRIGATION SYSTEM, A CERTIFIED IRRIGATION DESIGNER SHALL PROVIDE SHOP DRAWINGS TO OWNER FOR APPROVAL. UPON APPROVAL OF SHOP DRAWINGS, THE UPDATED IRRIGATION SYSTEM SHALL BE APPROVED BY OWNER FOR FINAL ACCEPTANCE.





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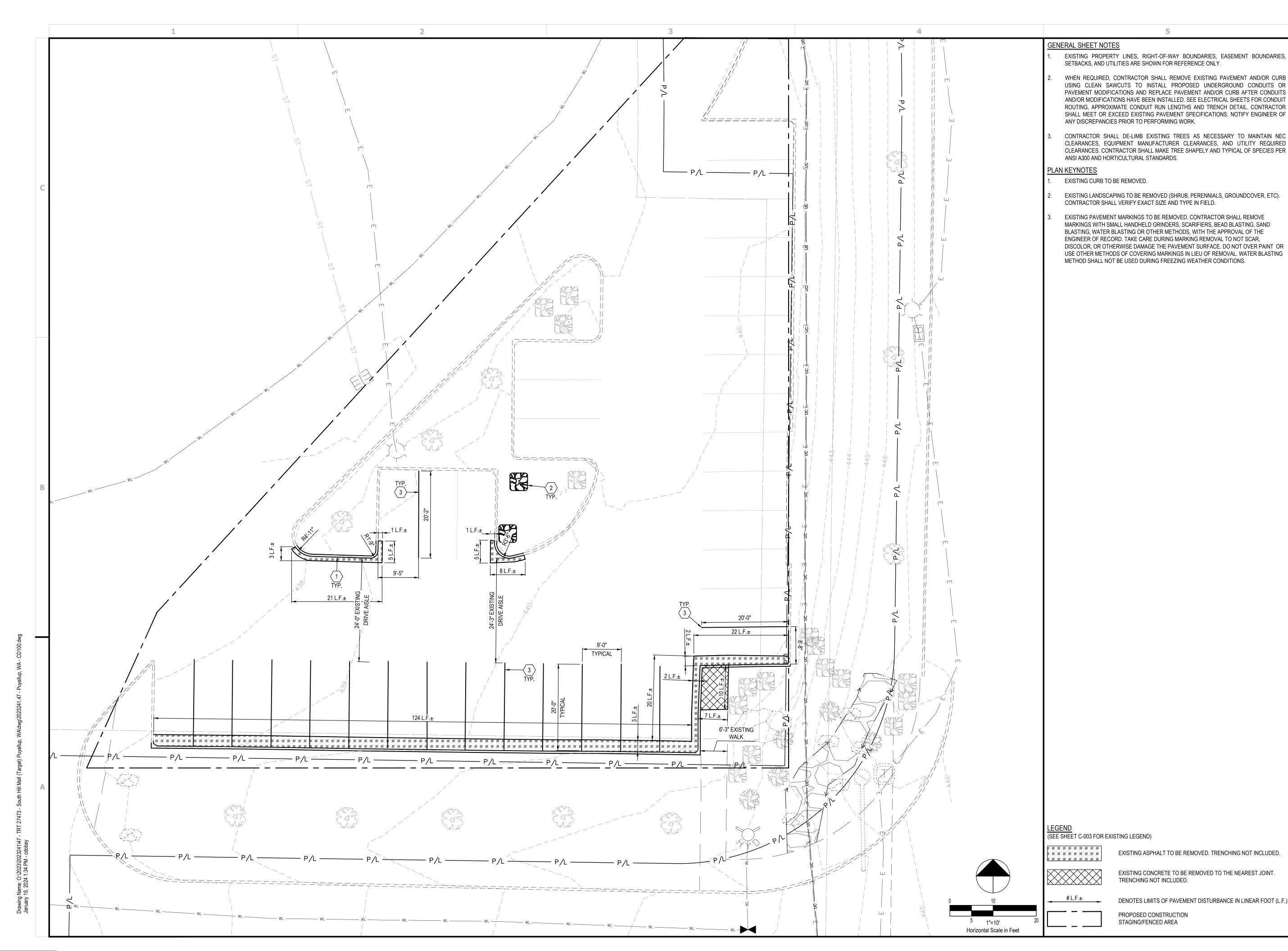
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PROJECT MANAGER DESIGNER

JOB NO.

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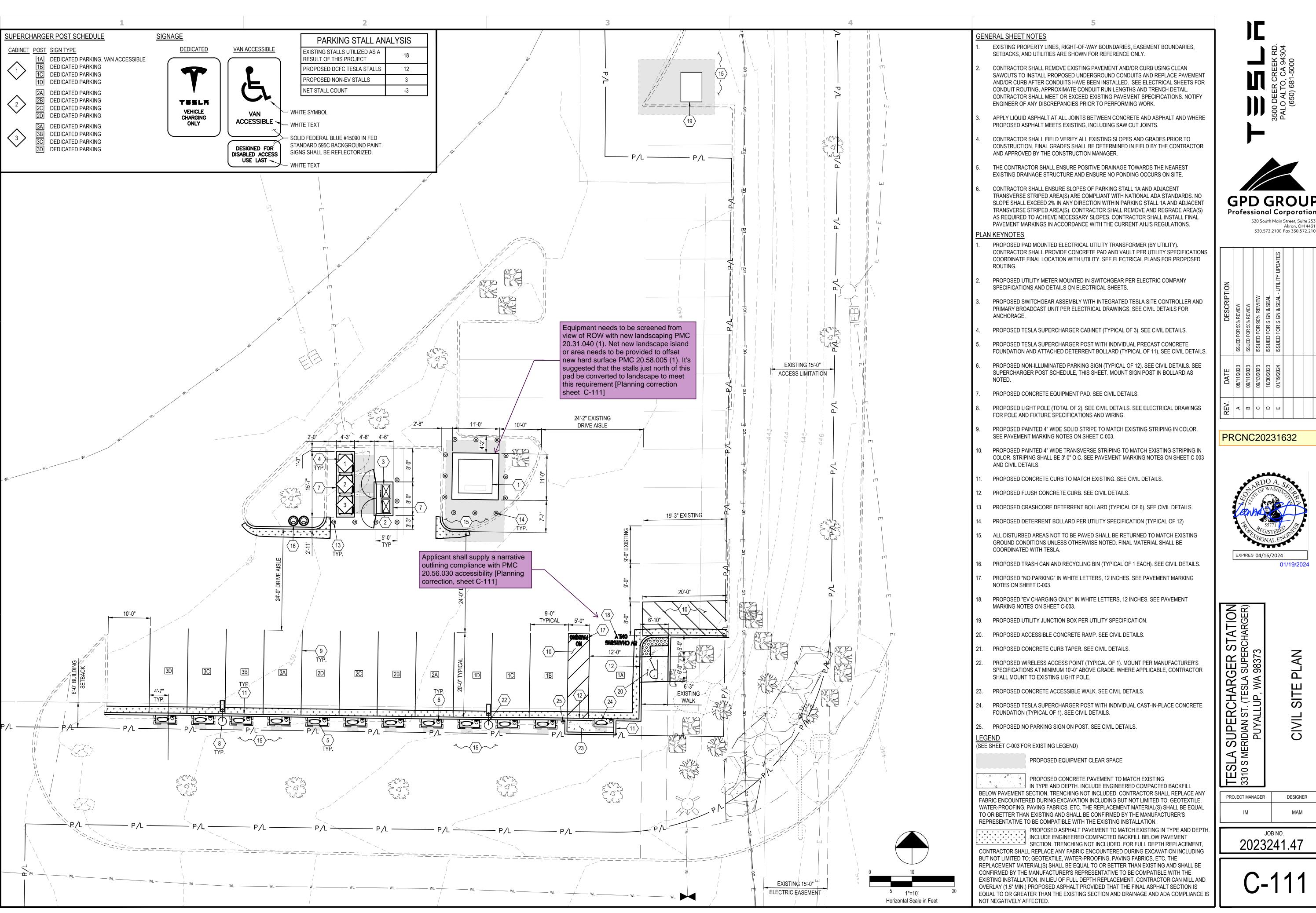


TESLA SUPERCHARGER STATION
3310 S MERIDIAN ST. (TESLA SUPERCHARGER)
PUYALLUP, WA 98373

PROJECT MANAGER DESIGNER

EXISTING CONDITIONS AND DEMOLITION PLAN

JOB NO. 2023241.47





330.572.2100 Fax 330.572.2101

DATE DESCRIPTION	08/11/2023 ISSUED FOR 50% REVIEW	09/11/2023 ISSUED FOR 50% REVIEW	09/13/2023 ISSUED FOR 90% REVIEW	10/30/2023 ISSUED FOR SIGN & SEAL	01/19/2024 ISSUED FOR SIGN & SEAL - UTILITY UPDATES		
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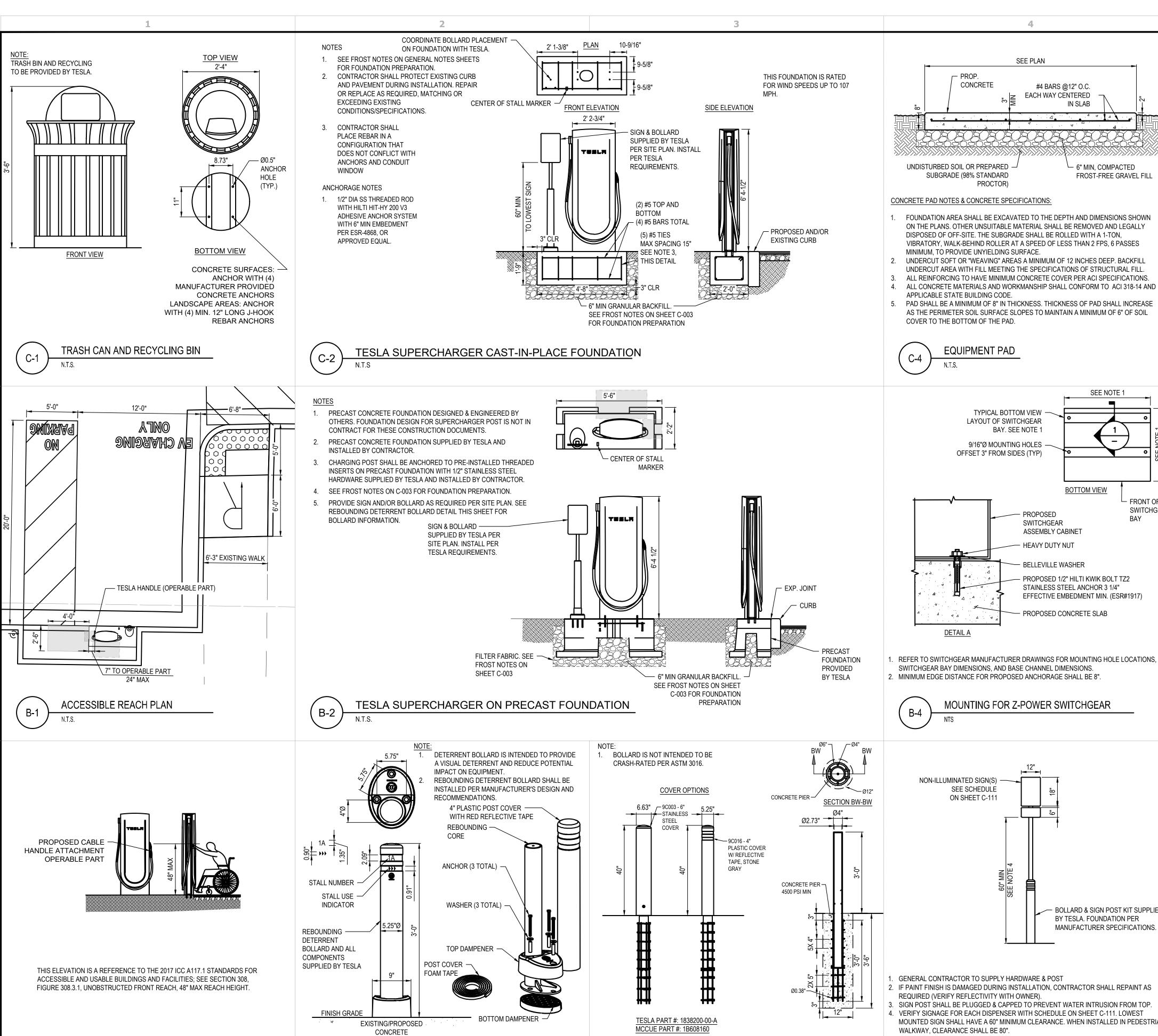
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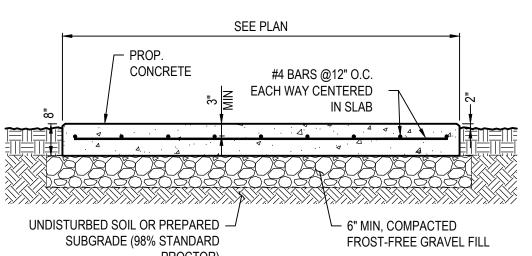
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REBOUNDING DETERRENT BOLLARD

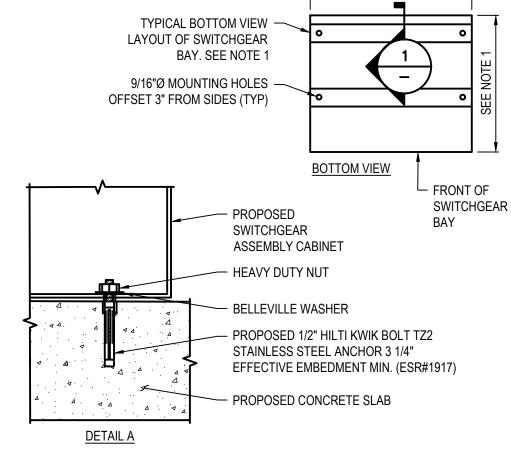


CONCRETE PAD NOTES & CONCRETE SPECIFICATIONS:

- FOUNDATION AREA SHALL BE EXCAVATED TO THE DEPTH AND DIMENSIONS SHOWN ON THE PLANS. OTHER UNSUITABLE MATERIAL SHALL BE REMOVED AND LEGALLY DISPOSED OF OFF-SITE. THE SUBGRADE SHALL BE ROLLED WITH A 1-TON, VIBRATORY, WALK-BEHIND ROLLER AT A SPEED OF LESS THAN 2 FPS, 6 PASSES MINIMUM, TO PROVIDE UNYIELDING SURFACE.
- UNDERCUT SOFT OR "WEAVING" AREAS A MINIMUM OF 12 INCHES DEEP. BACKFILL UNDERCUT AREA WITH FILL MEETING THE SPECIFICATIONS OF STRUCTURAL FILL. ALL REINFORCING TO HAVE MINIMUM CONCRETE COVER PER ACI SPECIFICATIONS.
- APPLICABLE STATE BUILDING CODE. PAD SHALL BE A MINIMUM OF 8" IN THICKNESS. THICKNESS OF PAD SHALL INCREASE AS THE PERIMETER SOIL SURFACE SLOPES TO MAINTAIN A MINIMUM OF 6" OF SOIL

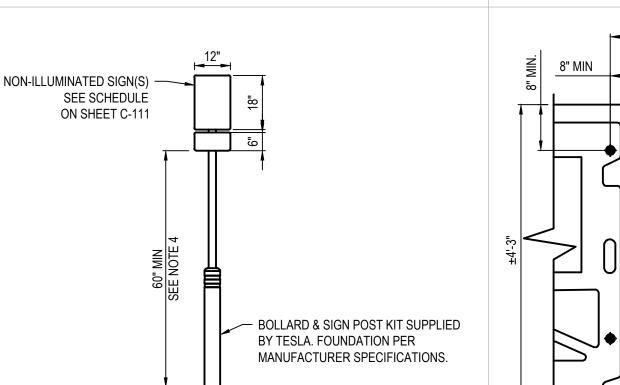
SEE NOTE 1





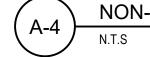
1. REFER TO SWITCHGEAR MANUFACTURER DRAWINGS FOR MOUNTING HOLE LOCATIONS, SWITCHGEAR BAY DIMENSIONS, AND BASE CHANNEL DIMENSIONS. 2. MINIMUM EDGE DISTANCE FOR PROPOSED ANCHORAGE SHALL BE 8".





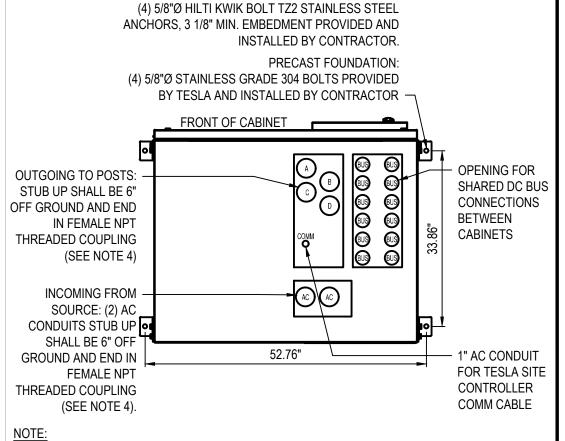
1. GENERAL CONTRACTOR TO SUPPLY HARDWARE & POST

- 2. IF PAINT FINISH IS DAMAGED DURING INSTALLATION, CONTRACTOR SHALL REPAINT AS REQUIRED (VERIFY REFLECTIVITY WITH OWNER).
- . SIGN POST SHALL BE PLUGGED & CAPPED TO PREVENT WATER INTRUSION FROM TOP. . VERIFY SIGNAGE FOR EACH DISPENSER WITH SCHEDULE ON SHEET C-111. LOWEST MOUNTED SIGN SHALL HAVE A 60" MINIMUM CLEARANCE. WHEN INSTALLED IN PEDESTRIAN WALKWAY, CLEARANCE SHALL BE 80".



CRASHCORE DETERRENT BOLLARD

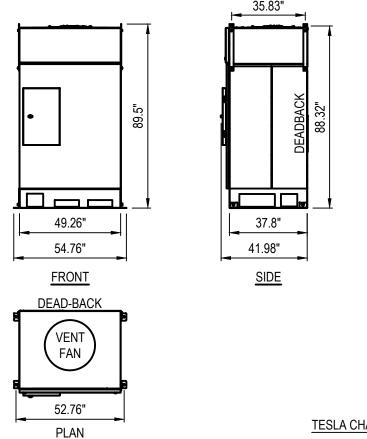
NON-ILLUMINATED SIGN



CAST-IN-PLACE FOUNDATION:

- TESLA PROVIDED TEMPLATE PLATE TO BE USED TO LAYOUT CHARGING CABINET ANCHORING BOLT LOCATIONS AND CONDUIT STUB UP LOCATIONS. BOLT HOLES FOR REFERENCE ONLY.
- USE DOTTIE DUCT SEAL COMPOUND PC 6130 (CAT NO LHD1) TO SEAL ENDS OF CONDUIT (TYP. ALL CONDUITS FOR CHARGING CABINETS AND CHARGE POSTS)
- USE BELL FITTINGS ON ALL AC AND DC CONDUIT STUBS SEE DETAIL THIS SHEET FOR FOUNDATION DETAIL IF APPLICABLE

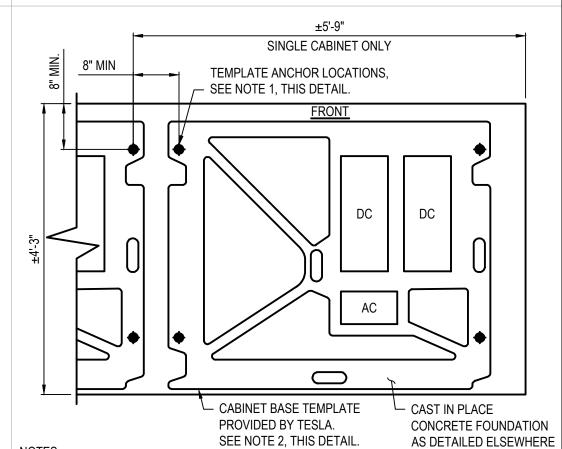




TESLA CHARGING CABINET **ENCLOSURE: INGRESS PROTECTION IP66** WEIGHT: 1110 kg, 2448 lbs. COMPLIANCE: UL 2202

- 1. CABINET SHOULD BE LIFTED USING ROOF MOUNTED EYE HOOKS. A FORKLIFT OR PALLET JACK CAN ALSO BE USED TO MOVE CABINET IF DONE PROPERLY.
- VERIFY CABINET PART# AND ASSOCIATED DIMENSIONS PRIOR TO CONSTRUCTION.





CHARGING CABINET SHALL BE ANCHORED TO CAST-IN-PLACE FOUNDATION WITH ANCHORS AS DENOTED IN DETAIL C-5, THIS SHEET. PROVIDED AND INSTALLED BY CONTRACTOR. PROVIDE 8" MIN. EDGE DISTANCE AND 8" MIN. BOLT SPACING. CHARGING CABINET BASE TEMPLATE SHOWN FOR REFERENCE ONLY. CONTRACTOR

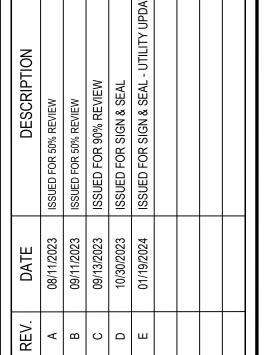
SHALL COORDINATE WITH TESLA FOR EXACT DIMENSIONS AND SPECIFICATIONS.

SEE SITE PLAN FOR OVERALL PAD SIZE AND CABINET QUANTITIES.

TESLA SUPERCHARGER CABINET DIMENSIONS



330.572.2100 Fax 330.572.2101



PRCNC20231632



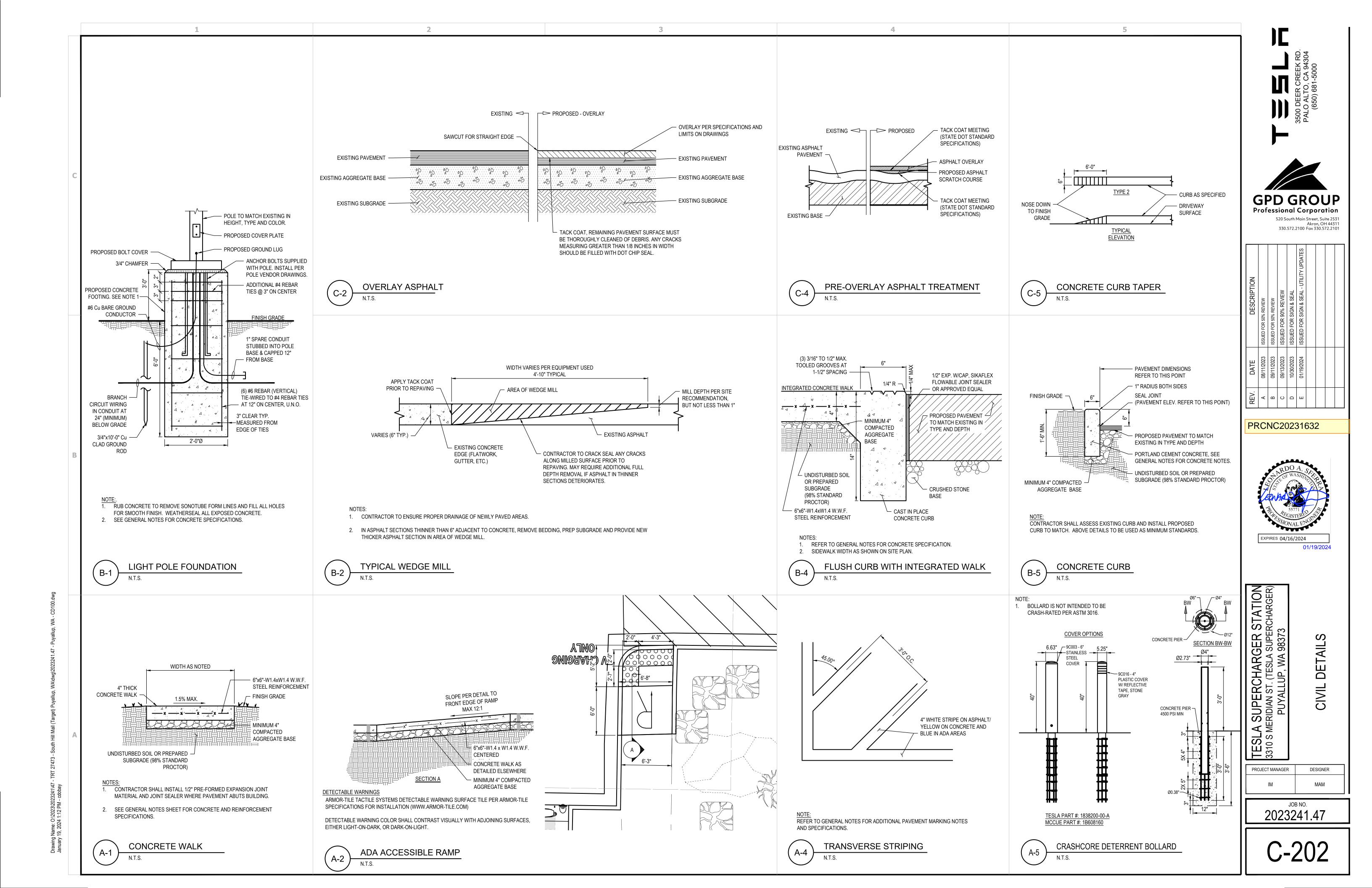
STATION ERCHARGER)

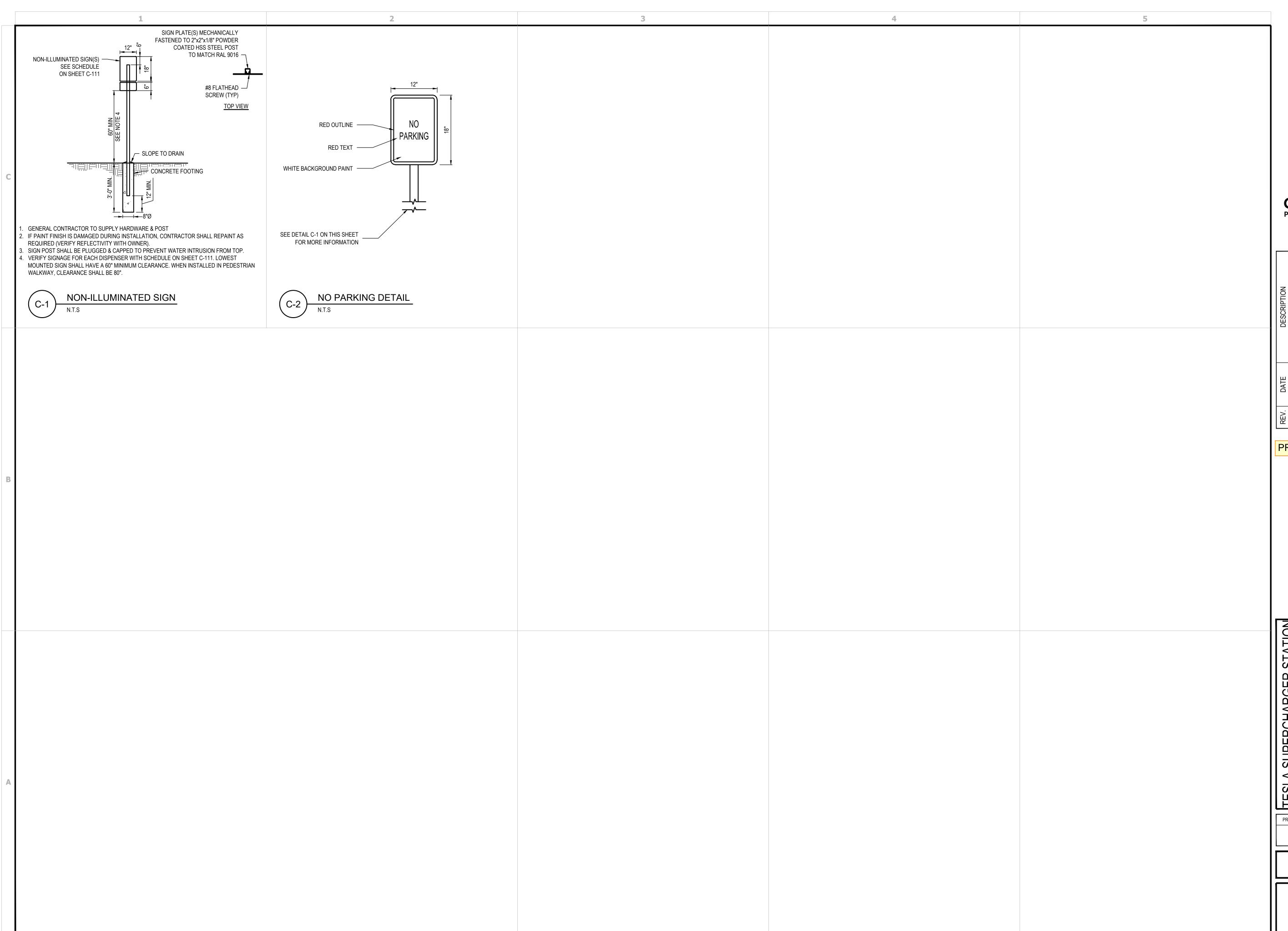
ERCHARGER OF THE SUPER SUPEI ERIDIAN (**TESL**/

PROJECT MANAGER DESIGNER

> JOB NO. 2023241.47

ACCESSIBLE REACH ELEVATION





3500 DEER CREEK RD.
PALO ALTO, CA 94304



DESCRIPTION	ISSUED FOR 50% REVIEW	ISSUED FOR 50% REVIEW	ISSUED FOR 90% REVIEW	ISSUED FOR SIGN & SEAL	ISSUED FOR SIGN & SEAL - UTILITY UPDATES		
DATE	08/11/2023	09/11/2023	09/13/2023	10/30/2023	01/19/2024		
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TESLA SUPERCHARGER STATION
3310 S MERIDIAN ST. (TESLA SUPERCHARGER)
PUYALLUP, WA 98373

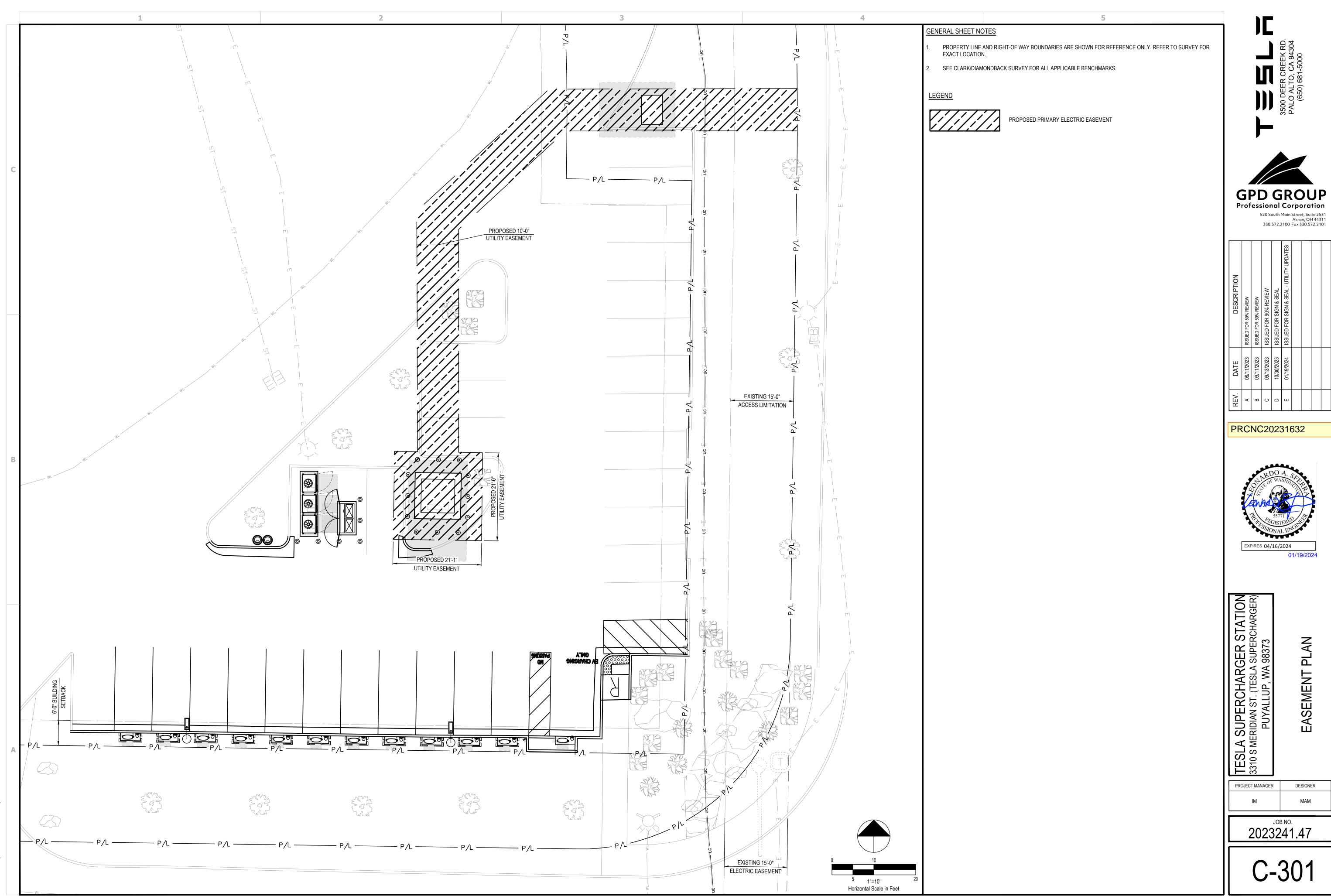
PROJECT MANAGER DESIGNER

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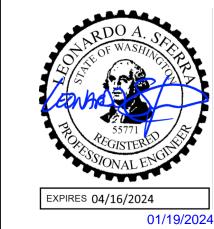
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DATE DESCRIPTION	08/11/2023 ISSUED FOR 50% REVIEW	09/11/2023 ISSUED FOR 50% REVIEW	09/13/2023 ISSUED FOR 90% REVIEW	10/30/2023 ISSUED FOR SIGN & SEAL	01/19/2024 ISSUED FOR SIGN & SEAL - UTILITY UPDATES		
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EASEMENT PLAN

DESIGNER

- IMPORTANT NOTE: "CONTRACTOR" REFERENCED IN THESE SPECIFICATIONS SHALL INDICATE WORK BY ELECTRICAL CONTRACTOR OR ANY OF HIS CONTRACTORS UNLESS NOTED OTHERWISE.
- DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT ONLY. COORDINATE INSTALLATION WITH OTHER TRADES TO VERIFY THE ACTUAL SPACE CONDITIONS THAT ARE TO BE MAINTAINED. NO ADDITIONAL PAYMENT WILL BE APPROVED FOR FAILURE TO COMPLY.
- ALL SYMBOLS AND ABBREVIATIONS USED ON THE DRAWINGS ARE CONSIDERED CONSTRUCTION STANDARDS. IF THE CONTRACTOR HAS QUESTIONS REGARDING THEIR EXACT MEANING, THE ENGINEER SHALL BE NOTIFIED FOR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
- CONTRACTOR SHALL NOT SCALE ELECTRICAL DRAWINGS. REFER TO SITE PLANS AND ELEVATIONS FOR EXACT LOCATIONS OF ALL EQUIPMENT AND CONFIRM WITH CONSTRUCTION MANAGER ANY SIZES AND LOCATIONS WHEN NEEDED.
- CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE ALL ITEMS DEFINED IN THE CONTRACT DOCUMENTS. THE CONTRACT DOCUMENTS INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING: THE CONTRACT, SPECIFICATIONS, AND CONSTRUCTION DRAWINGS. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO INSTALL ALL ELECTRICAL EQUIPMENT, CONDUIT, WIRING ETC. AS SHOWN OR IMPLIED ON THE DRAWINGS AND TO PROVIDE A COMPLETE OPERATIVE SYSTEM TO THE SATISFACTION OF OWNER.
- CONTRACTOR SHALL PROVIDE ON-SITE SUPERVISION AT ALL TIMES WHILE THE WORK IS BEING PERFORMED AND SHALL DIRECT ALL WORK, USING HIS BEST SKILL AND ATTENTION. HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES AND SEQUENCES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- INSTALLATION OF ALL ELECTRICAL EQUIPMENT, DEVICES, CONDUITS, ETC. MUST BE COORDINATED WITH ALL OTHER TRADES. COORDINATE SHUTDOWN TIMES AND WORKING HOURS WITH BUILDING OWNER, INCLUDING OFF HOURS, WEEKEND, AND HOLIDAY WORK AS REQUIRED.
- ANY DISCREPANCIES FOUND WITHIN THE CONTRACT DOCUMENTS SHALL BE REPORTED TO THE OWNER IN WRITING PRIOR TO THE AWARD OF THE CONTRACT AND AN ADDENDUM WILL BE ISSUED TO
- GUARANTEE CONTRACTOR SHALL FURNISH OWNER WITH A WRITTEN GUARANTEE TO PROMPTLY REMEDY ALL DEFECTS OF WORK OR MATERIALS WITHOUT CHARGE FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE AND INSPECTION.
- MATERIALS ALL MATERIALS AND EQUIPMENT SHALL BE NEW, IN ORIGINAL CONTAINERS/WRAPPINGS, SHALL BE SPECIFICATION GRADE, AND LABELED OR LISTED BY U.L. OR AN ACCREDITED TESTING ORGANIZATION AS REQUIRED BY LOCAL INSPECTORS.
- CONTRACTOR SHALL PROVIDE ADEQUATE AND REQUIRED LIABILITY INSURANCE FOR PROTECTION AGAINST PUBLIC LOSS AND ANY/ALL PROPERTY DAMAGE FOR THE DURATION OF WORK
- ALL EQUIPMENT SHALL BE DESIGNED TO OPERATE ON VOLTAGE AND PHASE SPECIFIED. CONTRACTOR FURNISHING EQUIPMENT OTHER THAN INDICATED SHALL BE RESPONSIBLE FOR ANY CHANGES IN CONDUCTORS, RACEWAYS, SWITCHES, MAIN FEEDERS, AND APPURTENANCES AND PAY ALL ASSOCIATED COSTS. REQUIREMENTS FOR ANY INCREASE IN CAPACITIES SHALL BE REVIEWED BY ENGINEER.
- CONTRACTOR SHALL CONFIRM WITH LOCAL UTILITY COMPANY ANY/ALL REQUIREMENTS SUCH AS THE: LUG SIZE RESTRICTIONS, CONDUIT ENTRY, SIZE OF TRANSFORMERS, SCHEDULED DOWNTIME FOR THE OWNERS' CONFIRMATION, ETC. ANY/ALL CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER, PRIOR TO BEGINNING ANY WORK.
- ANY METAL SHAVINGS FROM SITE WORK SHALL BE CLEANED FROM ALL SURFACES WHERE OXIDIZED OR CONDUCTIVE METAL SHAVINGS MAY CAUSE RUST, ELECTRICAL SHORT CIRCUITS, OR OTHER

ICENSES, CERTIFICATIONS OF INSPECTION.

- CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF ALL GOVERNING AGENCIES THAT REQUIRE SITE INSPECTION OF THE WORK AND/OR SIMPLY NOTIFICATION. THE CONTRACTOR SHALL OBTAIN AND PAY FOR PERMITS, LICENSES AND INSPECTIONS NECESSARY FOR PERFORMANCE OF
- CONTRACTOR AND ALL OF HIS CONTRACTORS THAT PERFORM ANY WORK ON THIS PROJECT SHALL BE CURRENTLY LICENSED BY ALL AGENCIES WHICH GOVERN OVER THE LAND(S) ON WHICH CONSTRUCTION IS TO TAKE PLACE. CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS AS REQUIRED, ALL COSTS SHALL BE BORNE BY CONTRACTOR.
- THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, LICENSES AND INSPECTIONS INCIDENTAL TO WORK UNDER THIS CONTRACT. WHEN THE WORK IS COMPLETED, THE REQUIRED CERTIFICATES OF APPROVAL SHALL BE FURNISHED TO THE BUILDING OWNER. CONTRACTOR MUST BE LICENSED IN THE STATE, COUNTY AND CITY OF THE PROJECT SITE.

ODES AND ORDINANCES

- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH LATEST EDITION OF NEC AND ALL APPLICABLE CODES AND ORDINANCES, INCLUDING SUCH AS PERTAIN TO THE SAFETY AND HEALTH RELATIONS. CODES AND ORDINANCES SHALL TAKE PRECEDENCE OVER THE DRAWINGS AND SPECIFICATIONS ONLY IN CASE OF CONFLICT AND SHALL INCLUDE BUT NOT BE LIMITED TO:
- A. UL UNDERWRITERS LABORATORIES
- NEC NATIONAL ELECTRICAL CODE
- NEMA NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
- OSHA OCCUPATIONAL SAFETY AND HEALTH ACT
- SBC STANDARD BUILDING CODE NFPA - NATIONAL FIRE CODES

POST CONSTRUCTION AND PROJECT CLOSEOUT DOCUMENTATION

AS-BUILT REQUIREMENTS: DO NOT USE RECORD DOCUMENTS FOR CONSTRUCTION PURPOSES. TO PROTECT RECORD DOCUMENTS FROM DETERIORATION AND LOSS, STORE IN A SECURE, FIRE-RESISTANT LOCATION. PROVIDE ACCESS TO RECORD DOCUMENTS FOR THE OWNER'S REFERENCE DURING NORMAL WORKING HOURS. MAINTAIN A CLEAN, UNDAMAGED SET OF BLUE OR BLACK LINE PRINTS OF CONTRACT DRAWINGS AND SHOP DRAWINGS. MARK THE SET TO SHOW THE ACTUAL INSTALLATION WHERE THE INSTALLATION VARIES SUBSTANTIALLY FROM THE WORK AS ORIGINALLY SHOWN. MARK DRAWINGS THAT ARE MOST CAPABLE OF SHOWING CONDITIONS FULLY AND ACCURATELY. WHERE SHOP DRAWINGS ARE USED, RECORD A CROSS-REFERENCE AT THE CORRESPONDING LOCATION ON THE CONTRACT DRAWINGS. GIVE PARTICULAR ATTENTION TO CONCEALED ELEMENTS THAT WOULD BE DIFFICULT TO MEASURE AND RECORD AT A LATER DATE MARK RECORD SETS WITH RED ERASABLE PENCIL. USE OTHER COLORS TO DISTINGUISH BETWEEN VARIATIONS IN SEPARATE CATEGORIES OF THE WORK. MARK NEW INFORMATION THAT IS IMPORTANT TO THE OWNER BUT WAS NOT SHOWN ON THE CONTRACT DRAWINGS, DETAILS OR SHOP DRAWINGS. NOTE RELATED CHANGE ORDER NUMBERS WHERE APPLICABLE. NOTE RELATED RECORD DRAWING INFORMATION AND PRODUCT DATA. UPON COMPLETION OF THE WORK, SUBMIT ONE (1 COMPLETE SET OF RECORD DOCUMENTS TO THE CONSTRUCTION MANAGER FOR THE OWNER'S RECORDS. CONTRACTOR SHALL SUBMIT AS-BUILT SET OF PLANS TO THE ENGINEER WITHIN 7 DAYS OF COMPLETION OF CONSTRUCTION.

EXISTING CONDITIONS AND DEMOLITION

- SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR. BEFORE PROCEEDING WITH THE DEMOLITION WORK, THE CONTRACTOR SHALL OBTAIN FROM THE BUILDING OWNER A LIST OF ANY REMOVED ITEMS TO BE SALVAGED. ALL OTHER REMOVED MATERIALS AND 2. EQUIPMENT SHALL BE PROPERLY DISCARDED OFF THE PREMISES.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING PROPERTY RESULTING FROM THE CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL REMOVE ALL DEBRIS FROM THE SITE AT THE COMPLETION OF WORK.
- 3. EXISTING UTILITIES AND CONDITIONS ARE SHOWN FROM FIELD DATA AND EXISTING 3. FIRESTOPPING MATERIALS SHALL BE INTUMESCENT SAFETY BARRIERS DESIGNED TO 4. DOCUMENTS AND ARE NOT NECESSARILY COMPLETE OR ACCURATE. ALL FIELD CONDITIONS SHALL BE VERIFIED BY CONTRACTOR BEFORE START OF CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE, EXPOSE, AND DETERMINE IF CONFLICTS EXIST WITH THE PROPOSED IMPROVEMENTS. CONTRACTOR SHALL NOTIFY THE OWNER IN ORDER TO RESOLVE ANY CONFLICTS. EXISTING ELECTRICAL CONDUIT, WIRING ETC. DAMAGED DURING RENOVATION SHALL BE REPLACED IN LIKE KIND AND CHARACTER, 4. AND AT THE EXISTING UTILITY LINES, DRAIN OR FIELD TILE DAMAGED SHALL BE REPAIRED OR REPLACED, AS NEEDED, IN LIKE KIND AND CHARACTER. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING CONDUITS, CONTROL WIRING, ETC., WHETHER SHOWN HEREON OR NOT, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSES FOR REPAIR OR REPLACEMENT OF 1. PROPERTY DAMAGED IN CONJUNCTION WITH THE EXECUTION OF WORK.
- 5. THE CONTRACTOR SHALL NOTIFY THE OWNER OF ANY CONFLICTS OR DISCREPANCIES IN 2. REFER TO SHEET E-301 FOR ARC FLASH LABEL DETAILS. CONTRACTOR SHALL LABEL ALL THE CONTRACT DOCUMENTS OR FIELD CONDITIONS PRIOR TO EXECUTING THE WORK IN QUESTION. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER IF DETAILS ARE CONSIDERED UNSOUND, UNSAFE, NOT WATERPROOF, OR NOT WITHIN CUSTOMARY TRADE PRACTICE. IF WORK IS PERFORMED, IT WILL BE ASSUMED THAT THERE IS NO OBJECTION TO THE DETAIL. DETAILS ARE INTENDED TO SHOW THE END RESULT OF THE DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB CONDITIONS, AND SHALL BE INCLUDED AS PART OF THE WORK.
- 6. SITE VISIT CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING HIS WORK. NO EXTRAS WILL BE PERMITTED FOR LACK OF KNOWLEDGE OF EXISTING CONDITIONS. QUANTITIES OF MATERIALS SHALL BE PER CONTRACTOR'S MEASUREMENTS.

BASIC ELECTRICAL MATERIALS AND METHODS

- WHERE STRUCTURAL OPENINGS ARE NOT AVAILABLE, THE CONTRACTOR SHALL CORE DRILL OR CUT CHASES IN WALLS AND FLOORS AS REQUIRED. ALL NEW OPENINGS SHALL BE COORDINATED WITH THE ENGINEER. ALL PENETRATIONS OF THE BUILDING WALLS, 6. CEILING AND FLOORS, THE CONTRACTOR SHALL SEAL WITH QUALITY CAULK, FIRE RATED AND WATERTIGHT, SUBMITTED FOR APPROVAL BY THE OWNER.
- TRASH REMOVAL: CONTRACTOR SHALL REMOVE ALL TRASH CREATED BY HIMSELF OR HIS CONTRACTORS DUE TO DEMOLITION OR CONSTRUCTION. THE CONTRACTOR SHALL ALSO REMOVE TRASH CREATED BY OTHER CONTRACTORS INCLUDING CABLE REELS. CARDBOARD BOXES AND PACKING. PROMPTLY CLEAN-UP ALL SOILING, DEBRIS AND OTHER UNSIGHTLY OR HAZARDOUS CONDITIONS, CAUSED BY WORK OR DELIVERIES UNDER THIS 7. CONTRACT, FROM THE BUILDING GROUNDS, ENTRIES, CORRIDORS, STAIRWAYS, ELEVATORS OR OTHER PUBLIC AREAS. ALL SHALL BE REMOVED FROM THE SITE IN A TIMELY FASHION TO A LEGAL DISPOSAL FACILITY.
- SIGNAGE: CONTRACTOR SHALL MAINTAIN SECURITY AROUND PERIMETER OF CONSTRUCTION SITE DURING ALL HOURS BY INSTALLING A TEMPORARY RIBBON FOR INTERIOR WORK TO IDENTIFY CONSTRUCTION AREAS AS REQUIRED. SIGNAGE SHALL BE 9. POSTED WITH NOTIFICATIONS OF "NO TRESPASSING" AND "CONSTRUCTION AREA".
- CHECK ACCURACY OF ALL DIMENSIONS IN THE FIELD. UNLESS SPECIFICALLY NOTED, DO NOT FABRICATE ANY MATERIALS OFF SITE, NOR DO ANY CONSTRUCTION UNTIL THE 10. ENSURE THE WIRE INSULATION TERMINATION IS WITHIN 1/8" OF THE BARREL (NO SHINERS). ACCURACY OF DRAWING DIMENSIONS HAVE BEEN VERIFIED AGAINST ACTUAL FIELD DIMENSIONS.
- 5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CUTTING, SUBSEQUENT ELECTRICAL IDENTIFICATION PATCHING, AND REQUIRED FLASHING FOR ALL ITEMS NECESSARY FOR ELECTRICAL PART OF THE CONTRACT. PATCH, PAINT, AND REPAIR ANY AREA DAMAGED TO THE SATISFACTION OF THE BUILDING OWNER.
- THE EXACT LOCATIONS OF ALL ELECTRICAL DEVICES, EQUIPMENT AND CONDUIT, AS SHOWN ON THE DRAWING, IS APPROXIMATE. WHEN NOT SHOWN IN DETAIL, THE EXACT LOCATION OR ROUTING SHALL BE DETERMINED BY THE CONTRACTOR, SUBJECT TO THE APPROVAL OF OWNER.
- 7. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BLOCKING, BACKING, FRAMING, HANGERS OR OTHER SUPPORT FOR THE MOUNTING AND SUPPORT OF ALL ITEMS REQUIRING THE SAME AS REQUIRED BY N.E.C.
- 8. TRENCHING AND BACK FILL: CONTRACTOR SHALL PROVIDE FOR ALL UNDERGROUND INSTALLED CONDUIT AND/OR CABLES INCLUDING EXCAVATION AND BACKFILLING AND
- WHEN DIRECTIONAL BORING IS REQUIRED, CONTRACTOR SHALL INSTALL A LOOSE TONING WIRE WITHIN INSTALLED CONDUIT TO ALLOW FOR IDENTIFICATION OF UNDERGROUND
- 10. ALL BOLTS SHALL BE STAINLESS STEEL.
- 11. FOR UNDERGROUND RACEWAYS, PROVIDE ADDITIONAL SLACK IN CONDUCTORS AND 2. WIRE SIZE OF BRANCH CIRCUITS SHALL BE ADJUSTED TO COMPENSATE FOR VOLTAGE CONDUIT EXPANSION JOINTS IN ORDER TO ALLOW FOR EARTH MOVEMENT FROM SETTLEMENT, FROST, ETC. IN ORDER TO PREVENT DAMAGE TO THE CONDUCTORS OR TO THE EQUIPMENT CONNECTED TO THE RACEWAYS PER THE NEC.

ELECTRICAL EQUIPMENT

- ALL EQUIPMENT SHALL BE DESIGNED TO OPERATE ON VOLTAGE AND PHASE SPECIFIED. CONTRACTOR FURNISHING EQUIPMENT OTHER THAN INDICATED SHALL BE RESPONSIBLE FOR ANY CHANGES IN CONDUCTORS, RACEWAYS, SWITCHES, MAIN FEEDERS, AND APPURTENANCES AND PAY ALL ASSOCIATED COSTS. REQUIREMENTS FOR ANY INCREASE IN CAPACITIES SHALL BE REVIEWED BY ENGINEER.
- ALL ELECTRICAL EQUIPMENT SHALL BE LABELED, LISTED, OR CERTIFIED BY A NATIONALLY RECOGNIZED TESTING LABORATORY ACCREDITED BY THE UNITED STATES OCCUPATIONAL SAFETY HEALTH ADMINISTRATION.

Separate electrical permit is required

with Washington State Department of Labor & Industries. https://lni.wa.gov/licensing-permits/ele ctrical/electrical-permits-fees-and-insp ections or Licensing information: Call 1-800-647-0982

FIRESTOPPING AND SEALING ELECTRICAL PENETRATIONS

- ALL ELECTRICAL DEMOLITION WORK, INCLUDING MATERIAL REMOVAL FROM THE SITE, 1. CONTRACTOR SHALL FURNISH AND INSTALL FIRESTOPPING FOR SEALING AROUND 1. ALUMINUM CONDUCTOR GRADE SHALL BE MINIMUM AA-8000 OR THE NEWEST ALUMINUM ELECTRICAL PENETRATIONS THROUGH FIRE OR SMOKE BARRIERS, AND FLOORS.
 - PROPOSED UL SYSTEMS MATERIALS, ANCHORAGE, METHODS OF INSTALLATION, AND ACTUAL ADJACENT CONSTRUCTION. SUBMITTAL PACKAGE SHALL ALSO INCLUDE A COPY APPROVED MODIFICATIONS (IF APPLICABLE) AND THE MANUFACTURER'S SPECIFICATIONS. RECOMMENDATIONS, INSTALLATION INSTRUCTIONS, AND MAINTENANCE INSTRUCTIONS.
 - BLOCK THE SPREAD OF FIRE AND SMOKE THROUGH PENETRATIONS CREATED BY ELECTRICAL INSTALLATIONS IN FIRE RATED WALLS AND FLOORS. MATERIALS SHALL BE FLAME, TOXIC FUME, AND WATER RESISTANT AND SHALL HAVE A MINIMUM 3 HOUR FIRE 5. RATING. FIRE RATING SHALL BE DEFINED BY TESTS CONDUCTED BY ASTM, UL OR OTHER TESTING AND INSPECTION AGENCIES ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.
 - PROVIDE MATERIALS BY THE FOLLOWING MANUFACTURERS TO SUIT THE APPLICATION: SPECIFIED TECHNOLOGIES, INC (STI), SOMERVILLE, NJ; TREMCO, INC., BEACHWOOD, OH; OR 3M INC., MINNEAPOLIS, MN

FAULT CURRENT, COORDINATION STUDY, AND ARC FLASH

- REFER TO SHEET E-201 FOR FAULT CURRENT CALCULATIONS. CONTRACTOR SHALL MARK ON ALL EQUIPMENT AS REQUIRED PER NEC
- EQUIPMENT AS REQUIRED PER NEC

GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

- ALL RACEWAYS AND EQUIPMENT SHALL BE GROUNDED IN ACCORDANCE WITH THE N.E.C. AND ANY LOCAL CODES.
- 2. ALL CONDUITS SHALL CONTAIN A CODE SIZE GROUNDING CONDUCTOR.
- EQUIPMENT GROUNDING CONDUCTORS SHALL BE INSULATED WITH GREEN-COLORED INSULATION.
- GROUNDING ELECTRODE CONDUCTORS SHALL BE STRANDED CABLE.
- MATERIALS AND CONNECTION COMPONENTS FOR GROUNDING AND BONDING SHALL BE MANUFACTURED BY ERICO, THOMAS & BETTS, OR BURNDY.
- GROUND-FAULT PROTECTION OF EQUIPMENT SHALL BE PROVIDED FOR SERVICE DISCONNECTS RATED 1000A OR MORE. THE GROUND-FAULT PROTECTION SYSTEM SHALL BE PERFORMANCE TESTED WHEN FIRST INSTALLED ON SITE AND PRIOR TO EQUIPMENT ENERGIZATION PER NEC 230.95. THE TEST SHALL BE CONDUCTED IN ACCORDANCE WITH INSTRUCTIONS THAT SHALL BE PROVIDED WITH THE EQUIPMENT. A WRITTEN RECORD OF THIS TEST SHALL BE MADE AND SHALL BE AVAILABLE TO THE AUTHORITY HAVING JURISDICTION.
- ALL HARDWARE SHALL BE STAINLESS STEEL 3/8" DIAMETER OR LARGER. ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING LOCK WASHERS, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
- 8. FOR GROUND BOND TO STEEL ONLY: INSERT A CADMIUM FLAT WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
- NUT & WASHER SHALL BE PLACED ON THE FRONT SIDE OF THE GROUND BAR AND BOLTED ON THE BACK SIDE. INSTALL BLACK HEAT-SHRINKING TUBE, ON ALL GROUND TERMINATIONS. THE INTENT IS TO WEATHERPROOF THE COMPRESSION CONNECTION.
- ALL GROUNDING HARDWARE SUPPLIED AND INSTALLED BY CONTRACTOR.

- PROVIDE NAMEPLATES FOR ALL MAJOR ELECTRICAL EQUIPMENT AND ON EQUIPMENT AS
- PROVIDE ALL FEEDERS AND BRANCH CIRCUIT WIRING WITH COLOR CODED VINYL TAPE WRAPPED A MINIMUM OF 1.5 TIMES AROUND CIRCUMFERENCE OF JACKET/SHIELDING TO DESIGNATE PHASE.
- COLOR CODING OF CONDUCTORS SHALL BE PER NEC REQUIREMENTS.
- CONTRACTOR SHALL PLACE TWO LENGTHS OF WARNING TAPE AT A DEPTH OF 12" BELOW GROUND AND DIRECTLY ABOVE ELECTRICAL SERVICE CONDUITS. CAUTIONS TAPE TO READ "CAUTION BURIED ELECTRIC"

CONDUCTORS AND CABLES

- WIRING ALL CONDUCTORS SHALL BE EQUAL TO OR BETTER THAN MINIMUM #12 AWG FOR POWER, #14 AWG FOR CONTROL WITH 98% CONDUCTIVITY STRANDED COPPER, 600V, COLOR CODED, UNLESS NOTED ALUMINUM (AL). REFER TO "ALUMINUM CONDUCTOR REQUIREMENTS" THIS SHEET. PROVIDE 75°C RATED CONDUCTORS FOR AMPACITIES ABOVE 100A AND 60°C RATED CONDUCTORS FOR AMPACITIES OF 100 AMPS OR LESS. PROVIDE SOLID OR STRANDED FOR #10 AWG AND SMALLER, STRANDED FOR #8 AWG AND LARGER. UNLESS NOTED OTHERWISE ON DRAWINGS.
- DROP BASED UPON ACTUAL CONDUIT ROUTING. CONTRACTOR SHALL MAINTAIN VOLTAGE DROP AS RECOMMENDED BY N.E.C. (NOT TO EXCEED 3%).
- PROVIDE A SEPARATE NEUTRAL FOR EACH BRANCH CIRCUIT, FEEDER, ETC. NEUTRALS ARE NOT PERMITTED TO BE SHARED.
- CONNECTORS FOR POWER CONDUCTORS: CONTRACTOR SHALL USE PRESSURE TYPE INSULATED TWIST-ON CONNECTORS FOR NO. 10 AWG AND SMALLER. USE SOLDERLESS MECHANICAL TERMINAL LUGS FOR NO. 8 AWG AND LARGER.
- 5. ALL CONNECTIONS SHALL BE MADE WITH A PROTECTIVE COATING OF AN ANTI-OXIDE COMPOUND SUCH AS "NO-OXIDE A" BY DEARBORNE CHEMICAL CO. COAT ALL WIRE SURFACES BEFORE CONNECTING. EXPOSED COPPER SURFACES, INCLUDING GROUND BARS, SHALL BE TREATED - NO SUBSTITUTIONS.

CABLES - MC CABLE IS NOT PERMITTED.

- PROVIDE WIRE AND CABLE MANUFACTURED BY ONE OF THE FOLLOWING: AMERICAN INSULATED WIRE CORPORATION; NEXANS; CERROWIRE; SOUTHWIRE; OR ENCORE WIRE.
- PROVIDE CONNECTORS MANUFACTURED BY ONE OF THE FOLLOWING: AMP INCORPORATED; GENERAL SIGNAL, O-Z/GEDNEY UNIT; SQUARE D COMPANY, ANDERSON; FUSES ILSCO; OR BURNDY

ALUMINUM CONDUCTOR REQUIREMENTS

- CONDUCTOR SPECIFICATION BEING USED BY THE INDUSTRY.
- PROVIDE SHOP DRAWINGS OF EACH CONDITION REQUIRING PENETRATION SEALS AND THE 2. THE CONTRACTOR SHALL ABIDE BY ALL ARTICLES RELATED TO ALUMINUM CONDUCTORS IN THE LATEST ISSUE OF THE NEC.
- OF THE UL ILLUSTRATION OF EACH PROPOSED SYSTEM INDICATING MANUFACTURER 3. ALUMINUM CONDUCTORS SHALL ONLY BE TERMINATED USING ALUMINUM RATED CONNECTIONS. CONTRACTOR SHALL VERIFY TERMINATIONS ON EACH DEVICE OR EQUIPMENT BEFORE START OF WORK FOR RATED ALUMINUM CONNECTORS.
 - ALL ALUMINUM (AI) CONDUCTORS TO RECEIVE ANTI-OXIDATIVE COATING DURING INSTALLATION. ALL OTHER CONDUCTORS ARE COPPER UNLESS NOTED OTHERWISE.
 - THE CONTRACTOR SHALL ABIDE BY ALL ALUMINUM WIRING INSTALLATION STANDARDS AS REQUIRED BY THE NEIS (NATIONAL ELECTRICAL INSTALLATION STANDARDS) PUBLISHED BY THE NECA (NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION). THE CONTRACTOR SHALL ABIDE BY ALL STANDARDS IN THE NECA / AA - 2006, WHICH DEFINES MINIMUM STANDARDS OF QUALITY AND WORKMANSHIP. A SUMMARY OF SOME OF THE REQUIREMENTS FOLLOW:
 - A. TERMINATE WITH COMPRESSION CONNECTORS, NO RING CUTS OF THE INSULATION, CRIMP ONLY WITH A CRIMP TOOL AND THE CORRECT DIE AS REQUIRED BY THE MANUFACTURER.
 - B. ALL CONDUCTORS TO RECEIVE ANTI-OXIDATIVE COATING DURING INSTALLATION. C. TERMINATING WITH A SET SCREW CONNECTOR, THE SCREW SHALL BE TIGHTENED
 - D. NECA / AA RECOMMENDS BELLVILLLE WASHERS WHEN CONNECTING ALUMINUM CONNECTORS TO COPPER BUS BARS. ABIDE BY ALL NECA / AA RECOMMENDATIONS
 - E. DO NOT USE PIN CONNECTORS (WIRE ADAPTERS) UNLESS ABSOLUTELY NECESSARY. USE ALL/ANY OTHER OPTIONS, AND IF REQUIRED, PROVE TO ENGINEER BEFORE INSTALLING, IF USED, FOLLOW UL GUIDE FOR WIRE CONNECTORS (ZMOW), AND PROVIDE THE SPECIAL TOOLS REQUIRED BY THE MANUFACTURER. DIE-LESS CRIMPERS WILL NOT BE ACCEPTED.

RACEWAY AND BOXES

RACEWAYS: UNLESS NOTED OTHERWISE, ALL EXPOSED CONDUIT SHALL BE R.G.S. AND COVERED 6" BELOW FINISHED GRADE TO BE PVC, HDPE, OR LFNC. SEE NOTES A & B BELOW. PROVIDE WEATHERPROOF FLEX CONNECTIONS WHERE REQUIRED. CONTRACTOR SHALL PROVIDE JUNCTION AND/OR PULL BOXES WHERE SHOWN ON THE DRAWINGS, OR AS REQUIRED, WHETHER SHOWN ON THE DRAWINGS OR NOT, AND SIZED PER N.E.C. PROVIDE NON-METALLIC ENCLOSURE WITH OPEN BOTTOM AND GASKETED COVER MANUFACTURED BY QUAZITE OR EQUIVALENT WITH DRIVE-OVER COVER ABLE TO WITHSTAND OCCASIONAL NON-DELIBERATE LIGHT VEHICULAR TRAFFIC. LABEL COVER TO SUIT INSTALLATION (I.E. "POWER" "COMMUNICATIONS", "LIGHTING", ETC.) AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

A. OUTDOOR:

ABOVE GRADE: R.M.C.

USING ONLY A TORQUE WRENCH.

 BELOW GRADE: DURALINE SMOOTH-COR FLEX, SCH 40 PVC, SCH 40 HDPE, OR NON-METALLIC FLEXIBLE CONDUIT LISTED FOR DIRECT BURIAL. ALL UNDERGROUND CONDUIT SHALL BE 90°C WET RATED AND INSTALLED 24" MIN. BELOW GRADE. VERIFY APPROVED USE OF HDPE WITH AHJ PRIOR TO ROUGH-IN AND INSTALL PER NEC & MFR RECOMMENDATIONS.

B. PARKING GARAGES:

- RMC: 8'-0" OR LESS ABOVE GRADE OR PARKING GARAGE FLOOR LEVEL
- EMT: 8'-0" MINIMUM ABOVE PARKING GARAGE FLOOR LEVEL AND WHERE NOT SUBJECT TO DAMAGE. CONTRACTOR SHALL VERIFY WITH ELECTRICAL INSPECTOR IF EMT IS APPROVED AT THIS PROJECT PRIOR TO ROUGH-IN.
- ALL WIRING SHALL BE INSTALLED IN CONDUIT. ALL CONDUIT SHALL BE A MINIMUM OF 3/4".
- 3. CONTRACTOR SHALL PLUG AND CAP EACH END OF SPARE AND EMPTY CONDUITS AND PROVIDE TWO SEPARATE PULL STRINGS - 200 LBS TEST POLYETHYLENE CORD. CONTRACTOR SHALL PROVIDE MANUFACTURED LONG RADIUS BENDS FOR ALL CONDUITS. RGS CONDUITS WHEN SPECIFIED, SHALL MEET UL-6 FOR GALVANIZED STEEL. ALL FITTINGS SHALL BE SUITABLE FOR USE WITH THREADED RIGID CONDUIT. COAT ALL THREADS WITH 'BRITE ZINC' OR 'GOLD GALV'.
- OUTLET BOXES SHALL BE CAST ALLOY WITH THREADED HUBS IN WET/DAMP LOCATIONS AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.
- PROVIDE METAL CONDUIT AND TUBING MANUFACTURED BY ONE OF THE FOLLOWING ALFLEX CORPORATION; ANAMET INCORPORATED, ANACONDA METAL HOSE; ANIXTER BROTHERS INCORPORATED: CAROL CABLE COMPANY INCORPORATED: ELECTRI-FLEX COMPANY; GRINNELL COMPANY, ALLIED TUBE AND CONDUIT DIVISION; MONOGRAM COMPANY, AFC; REPUBLIC CONDUIT; OR WHEATLAND TUBE COMPANY.
- PROVIDE NONMETALLIC CONDUIT AND TUBING MANUFACTURED BY ONE OF THE FOLLOWING: ANAMET INCORPORATED, ANACONDA METAL HOSE; CANTEX INDUSTRIES HARSCO CORPORATION; CONDUX INTERNATIONAL, ELECTRICAL PRODUCTS; HUBBELL INCORPORATED, RACO, INCORPORATED; THOMAS & BETTS CORPORATION, CARLON ELECTRICAL PRODUCTS; OR O-Z/GEDNEY, UNIT OF GENERAL SIGNAL
- PROVIDE CONDUIT BODIES AND FITTINGS MANUFACTURED BY ONE OF THE FOLLOWING: CROUSE-HINDS, DIVISION OF COOPER INDUSTRIES; EMERSON ELECTRIC COMPANY, APPLETON ELECTRIC COMPANY; HUBBELL INCORPORATED, KILLARK ELECTRIC MANUFACTURING COMPANY; THOMAS & BETTS CORPORATION, CARLON ELECTRICAL PRODUCTS; OR O-Z/GEDNEY, UNIT OF GENERAL SIGNAL
- PROVIDE METAL WIREWAYS MANUFACTURED BY ONE OF THE FOLLOWING: HOFFMAN ENGINEERING COMPANY; KEYSTONE/REES, INCORPORATED; OR SQUARE D COMPANY.
- PROVIDE BOXES, ENCLOSURES, AND CABINETS MANUFACTURED BY ONE OF THE FOLLOWING: CROUSE-HINDS, DIVISION OF COOPER INDUSTRIES; HOFFMAN ENGINEERING COMPANY, FEDERAL-HOFFMAN INCORPORATED; HUBBELL INCORPORATED, RACO INCORPORATED; THOMAS & BETTS, CARLON ELECTRICAL PRODUCTS; O-Z/GEDNEY, UNIT OF GENERAL SIGNAL; ROBROY INDUSTRIES INCORPORATED, ELECTRICAL DIVISION; OR SCOTT FETZER COMPANY, ADALET-PLM.

SAFETY SWITCHES

ALL DISCONNECT SWITCHES SHALL BE HEAVY-DUTY CONSTRUCTION WITH LOCKABLE HANDLES SIZED AS NOTED ON THE DRAWINGS AND/OR RISER DIAGRAM. PROVIDE NEMA ENCLOSURE AS REQUIRED BY EXPOSURE TYPE. ALL FUSIBLE SWITCHES SHALL BE PROVIDED WITH DUAL ELEMENT FUSES SIZED PER THE EQUIPMENT MANUFACTURER'S

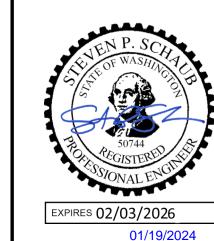
 FUSES SHALL BE DUAL ELEMENT, TIME DELAY CURRENT LIMITING. CONTRACTOR SHALL COORDINATE FUSE SIZES WITH EQUIPMENT MANUFACTURER'S REQUIREMENTS AND PER THE N.E.C. PROVIDE FUSES MANUFACTURED FROM ONE OF THE FOLLOWING: COOPER BUSSMAN, INCORPORATED; EAGLE ELECTRIC MANUFACTURING COMPANY INCORPORATED, COOPER INDUSTRIES INCORPORATED; FERRAZ SHAWMUT INCORPORATED.





DESCRIPTION	ISSUED FOR 50% REVIEW	ISSUED FOR 50% REVIEW	ISSUED FOR 90% REVIEW	ISSUED FOR SIGN & SEAL	ISSUED FOR SIGN & SEAL - UTILITY UPDATES		
DATE	08/11/2023	09/11/2023	09/13/2023	10/30/2023	01/19/2024		
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ST. 2 ELECTRICAL ENERAL NOTES GER A SUPE CHAR(ST ST Ш

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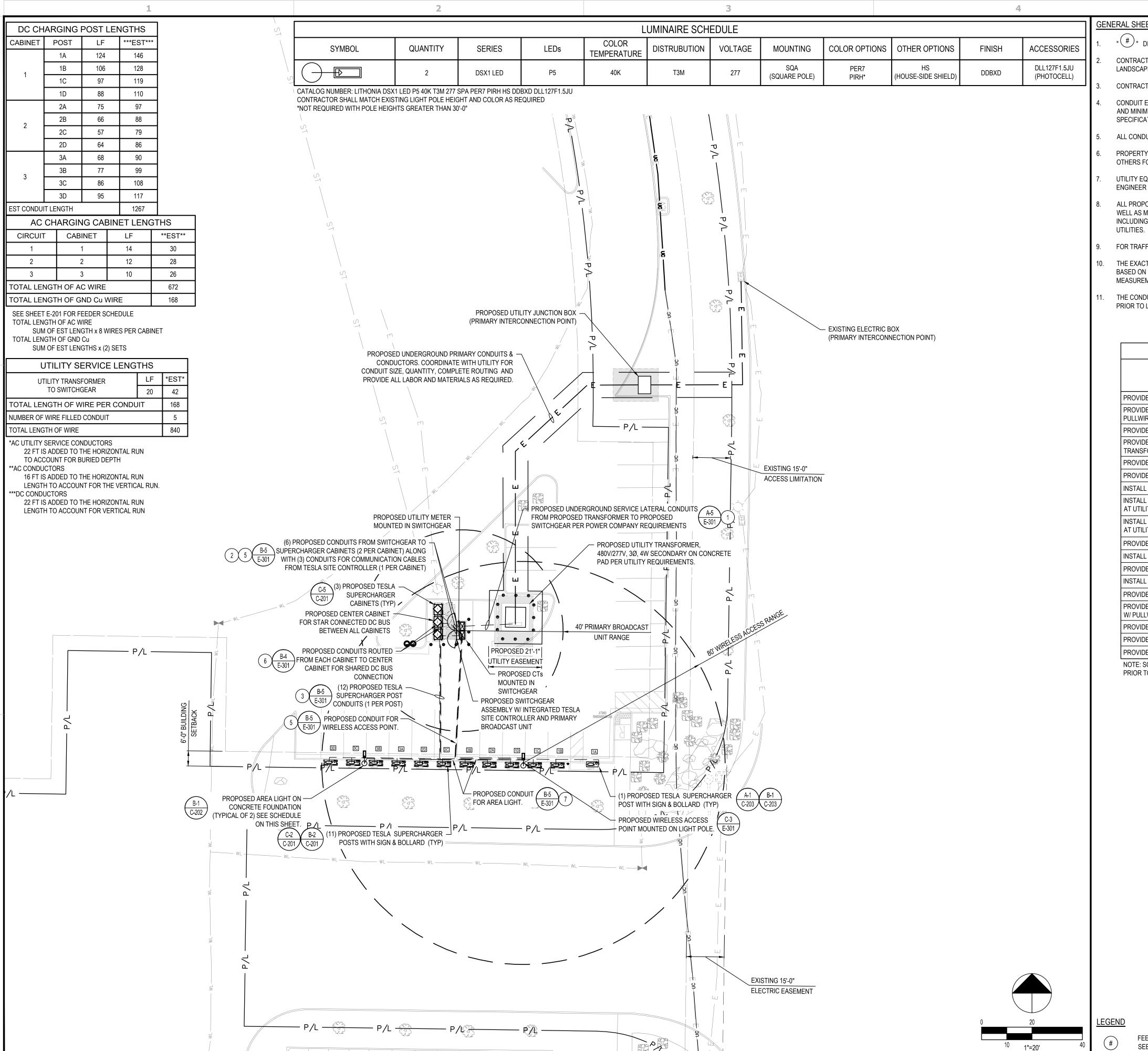
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JOB NO.



GENERAL SHEET NOTES

- "(#)" DENOTES FEEDER REFERENCE. REFER TO SHEET E-201 FOR FEEDER/CIRCUIT SCHEDULE.
- CONTRACTOR SHALL REFER TO CIVIL SHEETS FOR EXISTING LANDSCAPING TO REMAIN AND PROPOSED LANDSCAPING.
- CONTRACTOR SHALL HAND DIG AROUND ALL EXISTING UTILITIES.
- CONDUIT ELBOWS SHALL BE SIZED PER NEC. CONTRACTOR SHALL VERIFY MANUFACTURER ALLOWABLE FILL AND MINIMUM CONDUCTOR BENDING RADIUS. SEE FEEDER SCHEDULE FOR CONDUIT & CONDUCTOR SPECIFICATIONS.
- ALL CONDUITS ACCESSIBLE TO THE PUBLIC OR WHICH CAN BE DAMAGED SHALL BE RIGID GALVANIZED STEEL.
- PROPERTY LINE AND RIGHT-OF-WAY BOUNDARIES ARE SHOWN FOR REFERENCE ONLY. REFER TO SURVEY BY OTHERS FOR EXACT LOCATION.
- UTILITY EQUIPMENT INSTALLATIONS AND PREP WORK SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY ENGINEER TO ENSURE ACCURACY OF INSTALLATION.
- ALL PROPOSED CONDUITS MUST MEET MINIMUM DEPTH REQUIREMENTS AS OUTLINED IN TRENCH DETAILS, AS WELL AS MAINTAIN A MINIMUM OF 18" VERTICAL AND 12" HORIZONTAL CLEARANCE OF ALL OBSTRUCTIONS INCLUDING (BUT NOT LIMITED TO) STORM PIPES, SANITARY PIPES, WATER LINES AND OTHER UNDERGROUND
- FOR TRAFFIC CONTROL PROCEDURES (IF APPLICABLE), SEE TRAFFIC CONTROL NOTES ON SHEET C-003.
- THE EXACT ROUTING PATH AND CONDUCTOR RUN LENGTHS SHALL BE DETERMINED BY CONTRACTOR IN FIELD BASED ON PHYSICAL MEASUREMENTS. CONTRACTOR SHALL ORDER CONDUCTORS BASED ON FIELD MEASUREMENTS (MUST BE APPROVED BY TESLA PROJECT MANAGER).
- THE CONDUIT ROUTING SHOWN IS DIAGRAMMATICAL ONLY, CONTRACTOR SHALL FIELD VERIFY EXACT ROUTING PRIOR TO LAYING CONDUIT.

ELECTRICAL SCOPE OF WORK RESPONSIBILITIES								
SCOPE	BY UTILITY	BY CONTRACTOR						
PROVIDE PRIMARY SIDE TRENCHING/BORING		Х						
PROVIDE & INSTALL PRIMARY SIDE CONDUITS W/ PULLWIRE		Х						
PROVIDE & INSTALL PRIMARY SIDE CONDUCTORS	Х							
PROVIDE EXCAVATION FOR VAULT AND TRANSFORMER PAD		Х						
PROVIDE CONCRETE VAULT FOR TRANSFORMER	Х							
PROVIDE UTILITY TRANSFORMER	Х							
INSTALL UTILITY TRANSFORMER	Х							
INSTALL CONNECTIONS AT UTILITY TRANSFORMER (PRIMARY)	X							
INSTALL CONNECTIONS AT UTILITY TRANSFORMER (SECONDARY)	Х							
PROVIDE METER	Х							
INSTALL METER	Х							
PROVIDE CTs	Х							
INSTALL CTs (INSIDE SWITCHGEAR)		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		X						
PROVIDE & INSTALL LANDSCAPE REMEDIATION		X						

NOTE: SCOPE SHOWN ABOVE WAS PROVIDED BY PUGET SOUND ENERGY. FIELD VERIFY

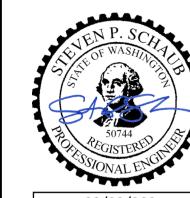
PRIOR TO CONSTRUCTION.

UTILITY COMPANY CONTACT PUGET SOUND ENERGY CONTACT: LONNIE ADAMS (360) 764-6738 LONNIE.ADAMS@PSE.COM



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EXPIRES 02/03/2026 01/19/2024

STATI GER A SUPE SUPERCHARGE SELDIAN ST. (TESLA)

TESL/

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PLAN

SITE

PROJECT MANAGER DESIGNER

> JOB NO. 2023241.47

Horizontal Scale in Feet

FEEDER SCHEDULE REFERENCE SEE SHEET E-201 FOR FEEDER/CIRCUIT SCHEDULE

	CKT#	DESCRIPTION	LOAD	AMPS/POLES	Α	В	С	AMPS/POLES	LOAD	DESCRIPTION	CKT#
	1	TESLA	129.00		258.00				129.00	TESLA	2
١	3	SUPERCHARGER	129.00	600/3		258.00		600/3	129.00	SUPERCHARGER	4
١	5	CABINET	129.00				258.00		129.00	CABINET	6
١	7	TESLA	129.00		129.00				0.00		8
1	9	SUPERCHARGER	129.00	600/3		129.00			0.00	SPACE	10
	11	CABINET	129.00				129.00		0.00		12
	13		0.00		0.00				0.00		14
1	15	SPACE	0.00			0.00			0.00	SPACE	16
1	17		0.00				0.00		0.00		18
	19		0.00		0.00				0.00		20
1	21	SPACE	0.00			0.00			0.00	SPACE	22
1	23		0.00				0.00		0.00		24
1	25		0.00		0.00				0.00		26
1	27	SPACE	0.00			0.00			0.00	SPACE	28
1	29		0.00				0.00		0.00		30
1	31		0.00		0.00				0.00		32
1	33	SPACE	0.00			0.00			0.00	SPACE	34
1	35		0.00				0.00		0.00		36
	37	LED LIGHT POLE	0.28	15/1	0.28				0.00		38
	39	TESLA SITE	0.10	15/2		0.10			0.00	SPACE	40
1	41	CONTROLLER	0.10	13/2			0.10		0.00		42
	-			TOTAL kVA	387.28	387.10	387.10	TOTA	L CONN kVA	1161.48	
				TOTAL AMPS	1398.12	1397.47	1397.47	TOTAL	CONN AMPS	1397.04	
				% UNBALANCE	0.0%	0.0%	0.0%				

PANEL BOARD NOTES

CONNECTED LOAD.

- CIRCUITS SHALL BE REARRANGED AS REQUIRED TO MAINTAIN THE MOST BALANCED LOADS ON EACH PHASE WITHIN EACH PANEL. PROVIDE TYPED PANEL DIRECTORY MOUNTED PER MANUFACTURERS RECOMMENDATIONS WITH SERVICE EQUIPMENT.
- OCPD FOR POWER CABINETS ARE CALCULATED AS FOLLOWS: 465A AC INPUT TO CABINET x 1.25 = 581.25A ⇒ 600A BRANCH REQUIRED
 CONTRACTOR SHALL COORDINATE WITH THE POWER COMPANY TO DETERMINE MAXIMUM SHORT CIRCUIT AMPS (SCA), AND PROVIDE CALCULATIONS IN ORDER TO PROVIDE PROPERLY RATED EQUIPMENT. PROVIDE LABELS ON ELECTRICAL EQUIPMENT PER NEC 110.16 AND LOCAL JURISDICTION REQUIREMENTS.
 PER NEC 230.42(A)(1) EXCEPTION 2: THE SUM OF THE TOTAL CONNECTED LOADS (NON-CONTINUOUS LOAD PLUS THE CONTINUOUS LOAD) TERMINATE IN AN

OVERCURRENT DEVICE WHERE BOTH THE OVERCURRENT DEVICE AND ITS ASSEMBLY ARE LISTED FOR OPERATION AT 100% OF THEIR RATING, SIZED PER

GENERAL SHEET NOTES

- 1. NEUTRAL MUST BE INCLUDED FOR PROPER OPERATION OF TESLA SUPERCHARGERS.
- 2. PROPOSED UTILITY CTs SHALL BE LOCATED IN UTILITY APPROVED CT COMPARTMENTS MOUNTED IN SWITCHGEAR. PROPOSED METER SHALL BE MOUNTED IN SWITCHGEAR.
- 3. ALL CONDUIT FURNISHED AND INSTALLED BY CONTRACTOR.
- 4. ALL WIRING FURNISHED BY TESLA AND INSTALLED BY CONTRACTOR UNLESS NOTED OTHERWISE. SEE SHEET E-100 FOR UTILITY/CONTRACTOR SCOPE OF WORK.
- THE TESLA PROVIDED SUPERCHARGER CABINETS AND SUPERCHARGER POSTS USED ON THIS PROJECT COMPLY WITH THE FOLLOWING STANDARDS:
- TUV CERTIFIED TO UL 2202
- ALL ELECTRICAL EQUIPMENT SHALL BE LABELED, LISTED, OR CERTIFIED BY A NATIONALLY RECOGNIZED TESTING LABORATORY ACCREDITED BY THE UNITED STATES OCCUPATIONAL SAFETY HEALTH ADMINISTRATION.
- 7. REFER TO THIS SHEET FOR FAULT CURRENT CALCULATIONS. CONTRACTOR SHALL MARK ON ALL EQUIPMENT AS REQUIRED PER N.E.C.
- 8. REFER TO SHEET E-301 FOR ARC FLASH LABEL DETAILS. CONTRACTOR SHALL LABEL ALL EQUIPMENT AS REQUIRED PER N.E.C.

	FEEDER / CIRCUIT SCHEDULE
NO	CONFIGURATION
1	(5) SETS OF 4" CONDUIT EACH WITH (3) 600 MCM AI (1) 600 MCM AI NEUT
2	(2) SETS OF 4" CONDUIT EACH WITH (3) 500 MCM AI (1) 500 MCM AI NEUT (1) #1 AWG Cu GND OR #2/0 AWG AI GND
3	FOR V4 POST*: (1) SET IN 4" CONDUIT (HDPE 90°C CONDUIT IS ACCEPTABLE) WITH (4) 600 MCM AI (TWO +, TWO -) (1) #2/0 AWG Cu GND (1) 1000V, CLASS 1, COMM CABLE (2) #8 AWG Cu (LVDC) - 6' MIN COIL AT EACH END IF REQUIRED, (1) 1.25" CONDUIT (DURALINE SMOOTHWALL IS ACCEPTABLE** CAN BE INSTALLED FOR THE COMM CABLE AND LVDC COILS. *CONTRACTOR SHALL COORDINATE WITH TESLA FOR CHARGE POST CONFIGURATION TO USE. **SEE DETAIL ON SHEET E-301 FOR DURALINE TO PVC TRANSITION AND ADDITIONAL NOTES
4	FACTORY INSTALLED WIRING
5	OUTDOOR RATED/SHIELDED CAT5e OR CAT6 COMMUNICATION CABLE IN 1" CONDUIT.
6	(2) SETS OF 3" CONDUIT EACH WITH (2) 600 MCM AI (ONE +, ONE -) (1) #3/0 AWG AI DC MID (1) #1/0 AWG Cu GND (1) #3/0 AWG AI DC MID DISC. 36" LONG IN EA. CABINET, NOT ROUTED IN CONDUIT
7	(1) SET IN 1" CONDUIT WITH (1) #10 AWG Cu (THWN-2) (1) #10 AWG Cu NEUT (THWN-2) (1) #10 AWG Cu GND (THWN-2)

NOTES:

- 1. ALL AC CONDUCTORS SHALL BE XHHW-2, 600V RATED, U.N.O.
- ALL DC CONDUCTORS SHALL BE XHHW-2, 1000V RATED, U.N.O..
 SEE "RACEWAY AND BOXES" NOTES ON SHEET E-001 FOR CONDUIT USE TYPES FOR
- ABOVE AND BELOW GRADE APPLICATIONS
- 4. DURALINE PRODUCT WILL BE USED FOR "DC-POST" CONDUIT RUN ONLY.
- 5. FOR APPROVED COPPER/ALUMINUM EQUIPMENT GROUNDING CONDUCTOR EQUIVALENTS, SEE TABLE BELOW. ALL ALUMINUM EQUIPMENT GROUND CONDUCTORS SHALL BE TERMINATED IN OUTDOOR ENCLOSURES LISTED AND IDENTIFIED FOR THE ENVIRONMENT PER NEC 2020, ARTICLE 250.64(A)(2)

				BREAKER S	SETTINGS				
USE	SIZE	LONG TIME CURVE	LONG TIME PICKUP	LONG TIME DELAY	SHORT TIME PICKUP	SHORT TIME DELAY	INST	GROUND FAULT PICKUP	GROUND FAULT DELAY
MCB - EATON SB BKR	1600A	Х	0.9 (1,440A)	7	3	0.2 (FLAT)	15	0.4	0.5 (FLAT)
MCB - GE SS BKR	1600A	l ² T	0.9 (1,440A)	C-4	2	0.7 (SLOPE: OFF)	15	0.5	13 (SLOPE: OFF)
BRANCH CIRCUIT - EATON	600A	Х	Х	Х	Х	Х	5	Х	Х
BRANCH CIRCUIT - GE	600A	Х	Х	Х	Х	Х	MIN	Х	Х

AVAILABLE FAULT CURRENT (AMPS)

NOTE: FAULT CURRENT CALCULATIONS PERFORMED

USING INFINITE BUS CALCULATION WITH AN ASSUMED 1500KVA TRANSFORMER WITH AN

IMPEDANCE OF 3%.

60,138

57,662

54,637

NOTE: CONTRACTOR SHALL VERIFY BREAKER MAKE/MODEL AND SET PER THE ABOVE TABLE. NOTIFY TESLA IMMEDIATELY OF ANY DISCREPANCIES.

	TESLA SUPERCHARGER CABINET AND POST ELECTRICAL SPECS											
CHARGE POST MODEL	AC INPUT VOLTAGE TO CABINET	kVA INPUT TO CABINET AC INPUT CURRENT TO CABINET		DC OUTPUT VOLTAGE TO CHARGE POST	DC OUTPUT CURRENT TO CHARGE POST	DC SHARED BUS CURRENT	SHORT CIRCUIT CURRENT RATING					
V4	380V - 480V	387kVA	465A	0V - 500V	615A	640A	85 kAIC					

AMPERE RATING OR SETTING OF OCPD IN CIRCUIT AHEAD OF EQUIPMENT	COPPER SIZE	ALUMINUM SIZE
15	12	12
20	12	10
60	10	8
100	8	6
200	6	4
300	4	2
400	3	1
500	2	1/0
600	1	2/0
800	1/0	3/0
1000	2/0	4/0
1200	3/0	250
1600	4/0	350
2000	250	400
2500	350	600

3000

4000

600

750

400

500

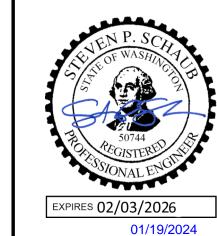
MINIMUM EQUIPMENT GROUNDING CONDUCTOR SIZE

3500 DEER CREEK RD.
PALO ALTO, CA 94304



DESCRIPTION	ISSUED FOR 50% REVIEW	ISSUED FOR 50% REVIEW	ISSUED FOR 90% REVIEW	ISSUED FOR SIGN & SEAL	ISSUED FOR SIGN & SEAL - UTILITY UPDATES			
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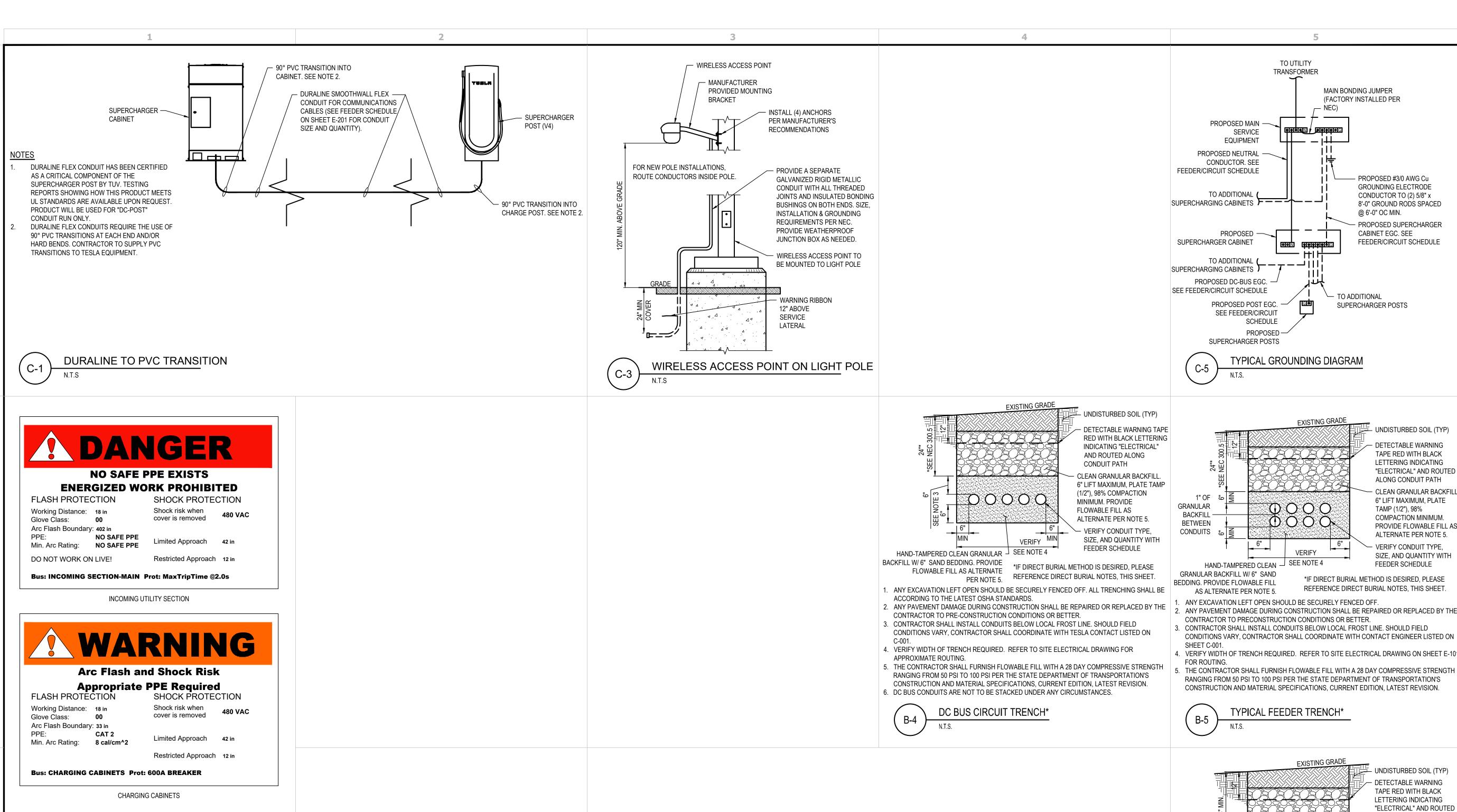
TESLA SUPERCHARGER STATION
3310 S MERIDIAN ST. (TESLA SUPERCHARGER)
PUYALLUP, WA 98373

SINGLE LINE DIAGR

PROJECT MANAGER	DESIGNER
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E-201



4. LABELS SHALL BE PRINTED WITH PERMANENT INK ON WEATHERPROOF LABELS WITH 8. CONTRACTOR SHALL CONFIRM INSTALLATION METHOD WITH OWNER. FOR 6. FOR EACH SWITCHGEAR SECTION, CONTRACTOR SHALL PROVIDE (1) APPLICABLE

CONDUIT SLEEVE THROUGH FOUNDATIONS.

8.2. CONTRACTOR SHALL PROVIDE 6" OF SAND OR FINE COURSE MATERIAL ON ALL SIDES OF CABLE.

8.3. WHEN CROSSING UNDERGROUND UTILITIES, CONTRACTOR TO VERY ALL INSTALLATION REQUIREMENTS WITH OWNER.

NOTES:

1. FOR ANY QUESTIONS OR CLARIFICATIONS REGARDING LABELS, CONTACT TESLA.

LABEL ON EXTERIOR DOOR AND (1) APPLICABLE LABEL ON INTERIOR FRONT FACING

SECTION. CONTRACTOR SHALL FIELD VERIFY SPECIFIC LOCATION FOR LABEL

7. CONTRACTOR SHALL PROVIDE LABELS WITH ANY ADDITIONAL INFORMATION AS

ARC FLASH LABELS

REQUIRED BY LOCAL JURISDICTION, STATE AND FEDERAL CODES AND LAWS.

2. ARC FLASH INCIDENT ENERGY ANALYSIS COMPLETED PER NFPA 70E 2018.

3. ARC FLASH CALCULATIONS PER IEEE 1584, 2018.

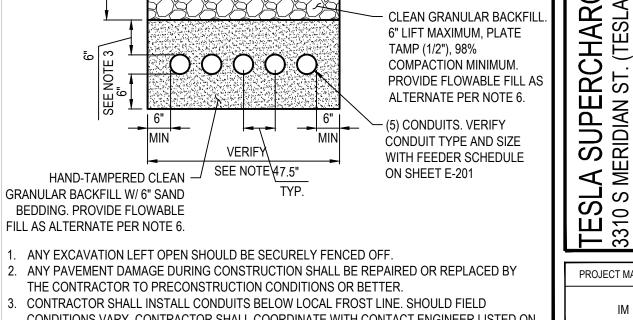
5. INSTALL LABELS PER NEC SECTION 110.16.

SELF STICKING ADHESIVE.

PLACEMENT(S).

DIRECT BURY CONDUCTOR INSTALLATION, CONTRACTOR SHALL COMPLY WITH THE FOLLOWING ADDITIONAL REQUIREMENTS: 8.1. VERTICAL TRANSITIONS SHALL CONSIST OF RIGID 90 DEGREE SWEEPS AND

DIRECT BURIAL NOTES



2. ANY PAVEMENT DAMAGE DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY

3. CONTRACTOR SHALL INSTALL CONDUITS BELOW LOCAL FROST LINE. SHOULD FIELD CONDITIONS VARY, CONTRACTOR SHALL COORDINATE WITH CONTACT ENGINEER LISTED ON SHEET C-001.

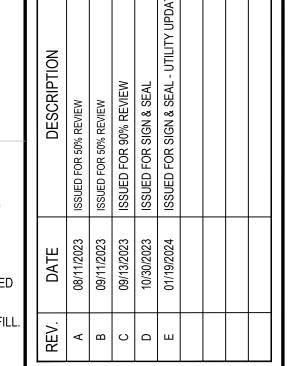
4. VERIFY WIDTH OF TRENCH REQUIRED. REFER TO SITE ELECTRICAL DRAWING ON SHEET E-101 FOR ROUTING.

5. VERIFY ALL REQUIREMENTS WITH POWER COMPANY 6. THE CONTRACTOR SHALL FURNISH FLOWABLE FILL WITH A 28 DAY COMPRESSIVE STRENGTH RANGING FROM 50 PSI TO 100 PSI PER THE STATE DEPARTMENT OF TRANSPORTATION'S CONSTRUCTION AND MATERIAL SPECIFICATIONS, CURRENT EDITION, LATEST REVISION.

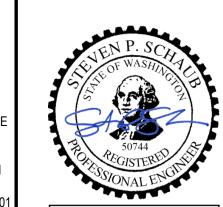
SECONDARY FEEDER TRENCH

A-5

GPD GROUP Professional Corporation 520 South Main Street, Suite 2531 Akron, OH 44311 330.572.2100 Fax 330.572.2101



PRCNC20231632



EXPIRES 02/03/2026 01/19/2024

ALONG CONDUIT PATH

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PROJECT MANAGER DESIGNER

> JOB NO. 2023241.47

PROJECT MANAGER DESIGNER

2023241.47

E-401

STANDARD

SMOOTHWALL

- Manufactured from flexible HDPE, makes gradual bends without special equipment
- Continuous lengths reduce joining costs
- Excellent low temperature properties, allows installation in cold climates
- Outstanding long term cable protection from shifting ground, rock and root impingement
- Provides a permanent pathway, simpifies future cable repairs or replacement

INSTALLATION TYPES	SIZE RAN	SIZE RANGE AVAILABLE			S
Aerial	1/2"	2"	6"	SDR 9	SCH 40
Subdivided Conduit	3/4"	2 1/2"	8"	SDR 11	SCH 80
Plow	1"	3"	10"	SDR 13.5	SIDR 9
Trench	1 1/4"	4"	12"	SDR 15.5	SIDR 11
Directional Bore	1 1/2"	5"		SDR 17	
Tray					
Direct Burial	STANDAR	D COLORS			
			• o	r custom color:	s with optional:

STANDARD

MATERIAL Manufactured from flexible HDPE (High Density Polyethylene)

SPECIFICATIONS All Smoothwall conduit dimensions meet or exceed one or more of the following: ASTM F-2160, ASTM D-3350, ASTM D-3485, NEMA TC-7, UL 651A, UL 1990, Bellcore GR-356

CONDUIT MARKINGS Permanent marking along conduit includes: material, relevant standards, production info, and sequential feet or meter markings. Custom options available.

OPTIONS

CO-EXTRUDED LINING SILICORE® ULF (Ultra-Low Friction) is co-extruded inside the HDPE wall creating a slick, permanent, interior lining. With a coefficient of friction 60% lower than standard HDPE conduit without the aid of wet lubricants, SILICORE® ULF exhibits no loss in performance over time or in extreme temperature conditions.

PRE-INSTALLED TAPE Factory pre-installed Bull-Line™ Pull Tape with EVEN-LOAD™ ensures extra slack at any access point throughout the reel. Available 500lb-6,000lb tensile strength or locatable.

PRE-INSTALLED CABLE Cable can be factory pre-installed in conduit

UV PROTECTANT Available for UV exposure applications (Aerial, Lashed, or External Tray)

		WALL TYPE	AVG OD (IN	MIN WALL	WALL	OIN)	WEIGHT (LB/FT)	BEND RADII SUP (IN)	BEND RADII UNSUP (IN)	SWPS (LB)
	1/2"	SIDR 9	0.780	0.069	0.020	0.622	0.072	8	16	445
	1/2"	SIDR 11.5	0.762	0.060	0.022	0.622	0.063	8	16	390
	2/411	SIDR 9	1.026	0.092	0.020	0.824	0.122	10	20	760
	3/4"	SIDR 11.5	0.986	0.072	0.020	0.824	0.096	10	20	597
	1"	SIDR 9	1.298	0.117	0.020	1.049	0.192	13	26	1,471
	1	SIDR 11.5	1.246	0.091	0.020	1.049	0.150	13	26	891
	4.4/411	SIDR 9	1.701	0.153	0.020	1.380	0.324	17	34	1,652
	1 1/4"	SIDR 11.5	1.635	0.120	0.020	1.380	0.253	17	34	1,549
	1 1/2"	SIDR 11.5	1.908	0.140	0.020	1.610	0.341	19	38	2,123
	211	SIDR 9	2.553	0.230	0.028	2.067	0.729	24	48	4,535
	2"	SIDR 11.5	2.447	0.180	0.022	2.067	0.558	24	48	3,468
	2 1/2"	SIDR 11.5	2.919	0.215	0.026	2.469	0.792	29	58	4,934
	3"	SIDR 11.5	3.627	0.267	0.032	3.068	1.225	39	78	7,627
	4"	SIDR 11.5	4.768	0.350	0.042	4.026	2.111	50	100	13,119
	Z11	SIDD 11 5	7 175	0.527	0.063	A 0.65	4.782	73	1/16	20.750

SMOOTHWALL SIDR NOTES:

1	Rend	Radine	

Supported Bend Radius 10 times the OD Supported Bend Radius 11 times the OD 8" through 16" Supported Bend Radius 18 times the OD

SMOOTHWALL (SIDR) TECHNICAL SPECIFICATIONS

Unsupported Bend Radius 20 times the OD Unsupported Bend Radius 22 times the OD Unsupported Bend Radius 27 times the OD

- During cable placement, large sweeping bends are recommended over tighter bends. Pre-formed sweeps are recommended for conduit sizes 8" through 16" diameters.
- SWPS (Safe Working Pull Strength) is calculated using a 25% safety factor with the minimum resin tensile strength of 3,000 psi, the average OD and average wall thickness.
- Internal or external ribs are in addition to the average wall and for determining OD and ID dimensions. The average rib height to be added is 0.020"
- Add 0.016 #/ft for ribbed products 1 1/2" and less. For 2" and larger, add 0.025 #/ft



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