



**Business Services
Contracts Office**

5735 47th Avenue • Sacramento, CA 95824
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*Janea Marking, Chief Business Officer
Robert Aldama, Purchasing Manager II*

ADDENDUM NO. 1

Date: November 8, 2024

Issued by: Sacramento City Unified School District

**Project: Project #: 403
Bus Electrification and Site Improvements**

This addenda shall supersede the original Information, attachments, and specifications regarding **Project No. 403** where it adds to, deletes from, clarifies or otherwise modifies them. All other conditions and any previous addenda shall remain unchanged.

Part A – Contract Documents

List of Attachments

AD1.01 – Bus Electrification and Site Improvements – Drawings and Specifications (10 Pages)

AD1.02 – Bus Electrification and Site Improvements – Project Labor Agreement (29 Pages)

END OF ADDENDUM NO. 1

Acknowledgement of this Addendum will be required at time of bid.

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

ELECTRIC BUS CHARGING STATIONS

7050 SAN JOAQUIN STREET
SACRAMENTO, CA 95820

GENERAL NOTES

- CONSTRUCTION DOCUMENTS DESCRIBE THE PRODUCTS, SYSTEMS, QUANTITIES, CONFIGURATION, AND PERFORMANCE SPECIFICATIONS THAT DELIVER THE OVERALL DESIGN INTENT OF THE PROJECT. THE CONSTRUCTION DOCUMENTS, DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY, AND WHAT IS REQUIRED BY ONE SHALL BE AS BINDING AS IF REQUIRED BY BOTH.
- PERFORMANCE BY THE CONSTRUCTION TEAM SHALL BE CONSISTENT WITH THE CONSTRUCTION DRAWINGS AND SPECIFICATIONS AS NECESSARY TO DELIVER THE INDICATED RESULTS OF THE DESIGN INTENT.
- VERIFY ALL DIMENSIONS, LOCATIONS OF EXISTING UTILITIES, AND CONDITIONS ON THE JOB SITE PRIOR TO THE START OF WORK OR PORTIONS OF THE WORK. NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES BETWEEN THE ACTUAL FIELD CONDITIONS AND THE CONSTRUCTION DOCUMENTS. EXISTING CONDITIONS ARE INDICATED AS A RESULT OF FIELD OBSERVATIONS, INFORMATION SHOWN ON AVAILABLE DOCUMENTS AND FIELD CONDITIONS AT THE TIME OF PREPARATION.
- ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH ALL GOVERNING CODES, ORDINANCES, REGULATIONS AND LAWS. THE DESIGN ADEQUACY AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS AND SCAFFOLDING IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. WHERE ANY CONFLICT OCCURS BETWEEN THE REQUIREMENTS OF LAWS, CODES, ORDINANCES, RULES AND REGULATIONS, THE MOST STRINGENT SHALL GOVERN. IN NO CASE SHALL WORKING DIMENSIONS BE SCALED FROM PLANS, SECTIONS OR DETAILS ON THE DRAWINGS.
- DETAILS MARKED "TYPICAL" SHALL APPLY IN ALL CASES UNLESS SPECIFICALLY NOTED OTHERWISE.
- ENACT ALL MEASURES TO PROTECT AND SAFEGUARD ALL EXISTING ELEMENTS TO REMAIN FROM BEING DAMAGED. REPLACE OR REPAIR EXISTING ELEMENTS DAMAGED BY THE EXECUTION OF THIS CONTRACT TO EQUAL OR BETTER CONDITION.
- PRIOR TO THE START OF WORK THE CONTRACTOR SHALL COORDINATE WITH ALL DISCIPLINES HEREIN AND BETWEEN THE REQUIREMENTS OF ALL DRAWINGS AND SPECIFICATIONS IN ORDER THAT ALL ITEMS SATISFACTORILY RELATE TO ONE ANOTHER. NOTIFY ARCHITECT IMMEDIATELY REGARDING ANY ITEMS THAT CANNOT BE COORDINATED.
- CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING ON THIS SITE TO AVOID EXISTING UTILITIES, PIPING, CONDUIT, ETC. AND TO PREVENT HAZARD TO PERSONNEL AND/OR TO EXISTING UNDERGROUND UTILITIES OR STRUCTURES. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT SHOULD SUCH UNEXPECTED CONDITIONS BE DISCOVERED. THESE DRAWINGS AND SPECIFICATIONS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.
- CHANGES TO THE APPROVED DRAWINGS AND/OR SPECIFICATIONS SHALL BE MADE BY ADDENDA OR A CHANGE ORDER. CUTTING, BORING, SAWCUTTING OR DRILLING THROUGH THE EXISTING OR NEW STRUCTURED ELEMENTS SHALL NOT BE STARTED UNTIL THE DETAILS HAVE BEEN REVIEWED AND APPROVED BY THE ARCHITECT, AND STRUCTURAL ENGINEER OF RECORD.
- ALL WORK SHALL CONFORM TO 2022 EDITION TITLE 24, CALIFORNIA CODE OF REGULATION (CCR).
- THE LIMIT OF WORK LINE SHOWS THESE DRAWINGS IS AN APPROXIMATE LIMIT OF WORK ONLY. REFER TO CONSULTANT DRAWINGS FOR ADDITIONAL WORK, INCLUDING BUT NOT LIMITED TO INSTALLATION OF CONDUIT, MANHOLES, PULLBOXES, ETC WHICH ARE TO BE PART OF THIS WORK, ALTHOUGH OCCURRING OUTSIDE OF SHOWN LIMIT OF WORK LINES.
- CHANGE TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA OR CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY DSA, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24 C.C.R.
- GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.
- FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION SHALL COMPLY WITH CBC CH. 33 AND CFC CH. 33.
- NO DUMPING OR PLACING OF ANY DIRT OR DEBRIS SHALL BE ALLOWED OUTSIDE OF THE CONTRACTORS LIMIT OF WORK AREA.

CODES

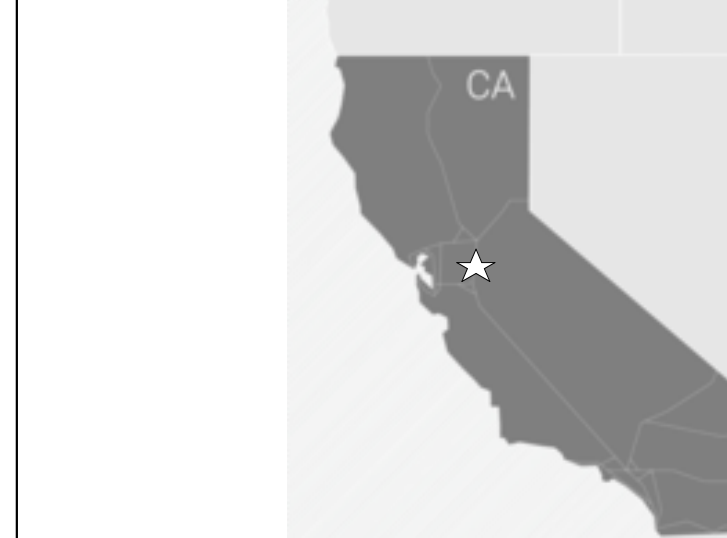
PARTIAL LIST OF APPLICABLE CODES		PARTIAL LIST OF APPLICABLE STANDARDS	
2022	CALIFORNIA ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.	NFPA 13	STANDARD FOR AUTOMATIC FIRE SPRINKLER SYSTEMS (CA AMENDED)
2022	CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R.	NFPA 14	STANDARD FOR STANDPIPE AND HOSE SYSTEMS (CA AMENDED)
2022	2021 INTERNATIONAL BUILDING CODE VOLUMES 1 & 2 AND 2022 CALIFORNIA AMENDMENTS)	NFPA 17	STANDARD FOR DRY CHEMICAL EXTINGUISHING SYSTEMS
2022	CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R.	NFPA 17A	STANDARD FOR WET CHEMICAL EXTINGUISHING SYSTEMS
2022	(2020 NATIONAL ELECTRICAL CODE AND 2022 CALIFORNIA AMENDMENTS)	NFPA 20	STANDARD FOR STATIONARY PUMPS FOR FIRE PROTECTION
2022	CALIFORNIA MECHANICAL CODE (CMC) PART 4, TITLE 24 C.C.R.	NFPA 22	STANDARD FOR WATER TANKS FOR PRIVATE FIRE PROTECTION
2022	(2021 UNIFORM MECHANICAL CODE AND 2022 CALIFORNIA AMENDMENTS)	NFPA 24	STANDARD FOR THE INSTALLATION OF PRIVATE FIRE MAINS AND THEIR APPURTENANCES (CA AMENDED)
2022	CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.	NFPA 72	NATIONAL FIRE ALARM & SIGNALING CODE (CA AMENDED)
2022	(2021 UNIFORM PLUMBING CODE AND 2022 CALIFORNIA AMENDMENTS)	NFPA 80	STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES
2022	CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 C.C.R.	NFPA 2001	STANDARD ON CLEAN AGENT FIRE EXTINGUISHING SYSTEMS (CA AMENDED)
2022	CALIFORNIA HISTORICAL BUILDING CODE (CHBC), PART 8, TITLE 24 C.C.R.	UL 300	STANDARD FOR FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS (R2014)
2022	CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R.	UL 464	ACCESSIBLE SIGNAL APPLIANCES FOR FIRE ALARM AND SIGNALING SYSTEMS, INCLUDING ACCESSORIES
2022	(2021 INTERNATIONAL FIRE CODE AND 2022 CALIFORNIA AMENDMENTS)	UL 521	STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS
2022	CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 C.C.R.	UL 1971	STANDARD FOR SIGNALING DEVICES FOR THE HEARING IMPAIRED
2022	(2021 INTERNATIONAL EXISTING CODE AND 2022 CALIFORNIA AMENDMENTS)	ICC 300	STANDARD FOR BLEACHERS, FOLDING AND TELESCOPING SEATING AND GRANDSTANDS
2022	CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 C.C.R.		
2022	CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.		
2022	TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.		
2019	ASME A17.134-19 SAFETY CODE FOR ELEVATORS AND ESCALATORS		
2020	ASME 18.1 - SAFETY STANDARD FOR PLATFORM LIFTS AND STAIRWAY CHAIR LIFTS		

FOR A COMPLETE LIST OF APPLICABLE NFPA STANDARDS REFER TO 2022 CBC (SFM) CHAPTER 35 AND CALIFORNIA FIRE CODE CHAPTER 80.
SEE CALIFORNIA BUILDING CODE, CHAPTER 35 FOR STATE OF CALIFORNIA AMENDMENTS TO NFPA STANDARDS.

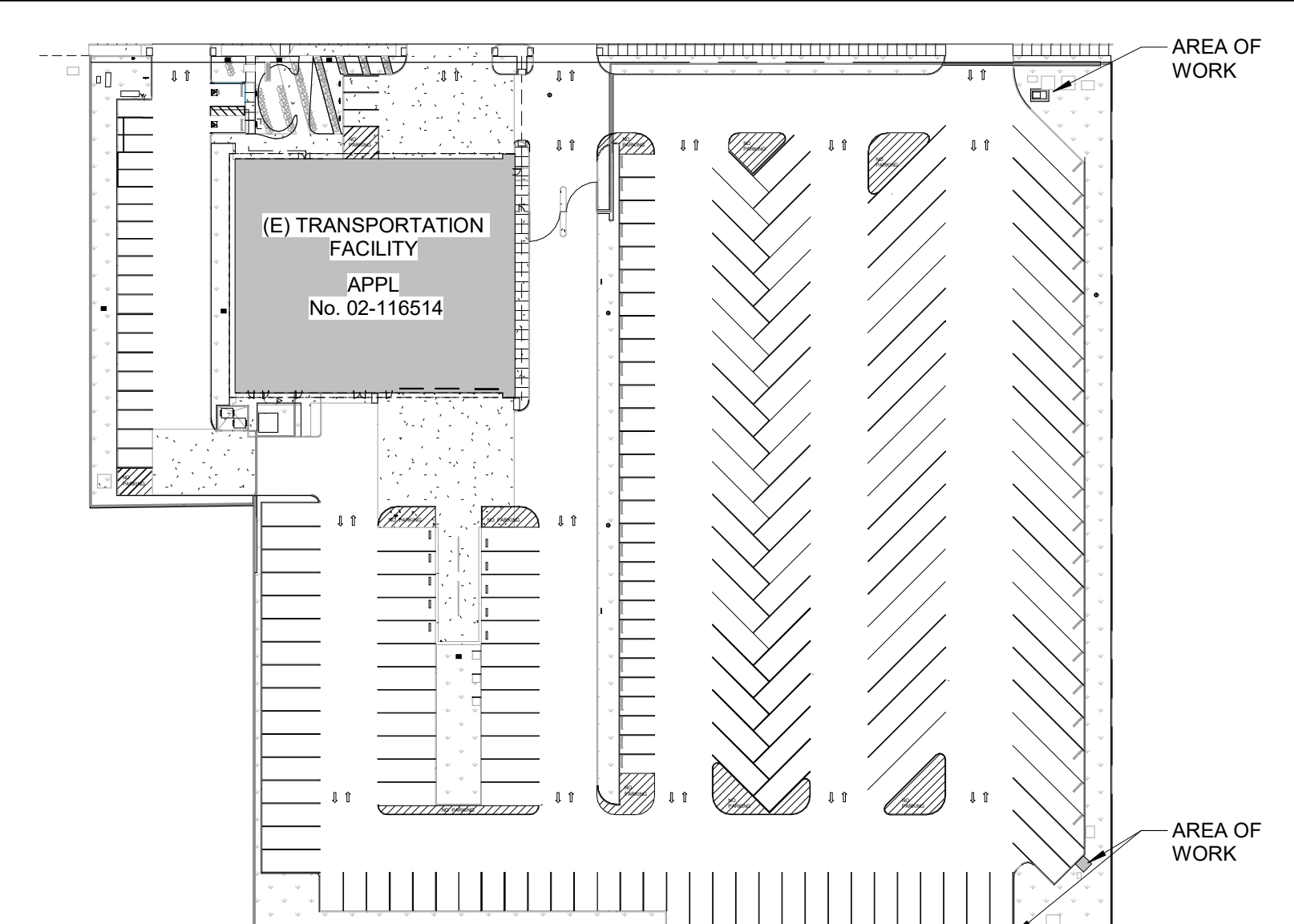
ABBREVIATIONS

(E) EXISTING	FRP FIBERGLASS REINFORCED PLASTIC	PTC POST TENSIONED CONCRETE
AB ANCHOR BOLT	FRT FIRE RETARDANT TREATED	PTD PAPER TOWEL DISPENSER
AC PAVING ASPHALTIC CONCRETE PAVING	FS FINISH SURFACE	PTN PARTITION
ACC ACCESS/ACCESSIBLE	FTG FOOTING	PTS PNEUMATIC TUBE STATION / SYSTEM
ACP ACOUSTICAL CEILING PANEL	GB GRAB BAR	PVC POLYVINYL CHLORIDE
ACT ACOUSTICAL CEILING TILE	GFRC GLASS FIBER REINFORCED CONCRETE	PVMT PAVEMENT
ADJ ADJUSTABLE	GL GLASS TYPE	QT QUARRY TILE
AFF ABOVE FINISH FLOOR	GLB GLUE LAMINATED BEAM	R RADIUS RISER
AGG AGGREGATE	GYP BD GYPSUM BOARD	RB RESILIENT BASE
AHU AIR HANDLING UNIT	GYP PLAS GYPSUM PLASTIC	RD ROOF DRAIN
ARCH ARCHITECTURAL	HB HOSE BIBB	RECEPT RECEPTACLE
ATT ATTENUATION	HD HEAVY DUTY	REF REFERENCE
AUTO AUTOMATIC	HDR HEADER	REFL REFLECTED (IVE)
BD BOARD	HDWR HARDWARE	REFL REFLECTED (IVE)
BLCG BLOCKING	HGT HEIGHT	REFR REFRIGERATOR
BUR BUILT UP ROOFING	HM HOLLOW METAL	REINF REINFORCE/REINFORCED/ REINFORCEMENT
CABT CABINET	HP HIGH POINT	REIN REMOVE
CF CUBIC FEET	HSS HOLLOW STEEL SECTION	RH ROUND HEAD
CFCI CONTRACTOR FURNISHED, CONTRACTOR INSTALLED	INT INSIDE DIAMETER	RHS ROUND HEAD SCREW
CFOI CONTRACTOR FURNISHED, OWNER INSTALLED	INT INTRIOR	INV INVERT
CJ CORNER GUARD	INT INTRIOR	INVT INVERT
CJ CONTROL JOINT	LANDS LANDSCAPE	INT INTRIOR
CLR CENTER LINE	LAV LAVATORY	INT INTRIOR
CLF CHAIN LINK FENCE	LLH LONG LEG HORIZONTAL	INT INTRIOR
CLR CLEAR	LLV LONG LEG VERTICAL	INT INTRIOR
CMU CONCRETE MASONRY UNIT	LP LOW POINT	INT INTRIOR
CO CLEANOUT	LT WT LIGHT WEIGHT	INT INTRIOR
COL COLUMN	LVR LOUVER	INT INTRIOR
COMP COMPRESSION / COMPOSITE	MACH MACHINE	INT INTRIOR
CF CUBIC FEET	MB MACHINE BOLT	INT INTRIOR
COORD COORDINATE	MDF MEDIUM DENSITY FIBERBOARD	INT INTRIOR
CORR CORRUGATED	MDO MEDIUM DENSITY OVERLAY MECH MECHANICAL	INT INTRIOR
CT CERAMIC TILE	MED MEDIUM	INT INTRIOR
CTSK COUNTER SKUNK	MEMB MEMBRANE	INT INTRIOR
CW CURTAINWALL	MFR MANUFACTURER	INT INTRIOR
DEPR DEPRESSED / DEPRESSION	MH MANHOLE	INT INTRIOR
DF DRINKING FOUNTAIN	MO MASONRY OPENING	INT INTRIOR
DM DIMENSION	MTD MOUNTED	INT INTRIOR
DISP DISPENSER	MTL METAL	INT INTRIOR
DS DOWNSPOUT	NIC NOT IN CONTRACT	INT INTRIOR
DTL DETAIL	NR NON RATED	INT INTRIOR
DWF DISHWASHER	NRC NOISE REDUCTION COEFFICIENT	INT INTRIOR
EW EACH WAY	NTS NOT TO SCALE	INT INTRIOR
EIFS EXTERIOR INSULATION FINISH SYSTEM	O OVER	INT INTRIOR
EJ EXPANSION JOINT	O/A OVERALL	INT INTRIOR
ELEC ELECTRICAL	OC ON CENTER	INT INTRIOR
ELEV ELEVATION / ELEVATOR	OD OUTSIDE DIAMETER	INT INTRIOR
ENCL ENCLOSE / ENCLOSURE	OFCI OWNER FURNISHED, CONTRACTOR	INT INTRIOR
EDGE EDGE OF SLAB	OFOI OWNER FURNISHED, OWNER	INT INTRIOR
EP ELECTRICAL PANEL	OFVI INSTALLED	INT INTRIOR
EQ EQUAL	OFV OWNER FURNISHED, VENDOR	INT INTRIOR
EXCUT EXCUTCHON	OH OPPOSITE HAND	INT INTRIOR
EWC ELECTRIC WATER COOLER	OPR OPERABLE	INT INTRIOR
EXP EXPOSED	OPNG OPENING	INT INTRIOR
FA FIRE ALARM	ORD OVERFLOW ROOF DRAIN	INT INTRIOR
FD FLOOR DRAIN	PA PROPERTY LINE	INT INTRIOR
FDC FIRE DEPARTMENT CONNECTION	PA PUBLIC ADDRESS	INT INTRIOR
FE FIRE EXTINGUISHER	PAF POWDER ACTUATED FASTENER	INT INTRIOR
FEC FIRE EXTINGUISHER W/ CABINET	PAG PAVING	INT INTRIOR
FF FINISH FLOOR	PCC PORTLAND CEMENT CONCRETE PAVING	INT INTRIOR
FG FINISH GRADE	PEO PEDESTRIAN	INT INTRIOR
FH FIRE HYDRANT	PERF PERFORATED	INT INTRIOR
FHC FIRE HOSE CABINET	PERM PERIMETER	INT INTRIOR
FSH FLAT HEAD SCREW	PERP PERPENDICULAR	INT INTRIOR
FIN FINISH	PH PANIC HARDWARE	INT INTRIOR
FLR FLOOR	PV POST INDICATOR VALVE	INT INTRIOR
FOC FACE OF CONCRETE	PL PLATE	INT INTRIOR
FOF FACE OF FINISH	PLAM PLASTIC LAMINATE	INT INTRIOR
FOM FACE OF MASONRY	PLAS PLASTER	INT INTRIOR
FOS FACE OF STUD	PLUMB PLUMBING	INT INTRIOR
FP FIREPROOFING	PNT PAINT / PAINTED	INT INTRIOR
FR FIRE RATED	POC POINT OF CONNECTION	INT INTRIOR
FRG FIRE RATED GLASS	POLY ISO POLYISOCYANURATE	INT INTRIOR
	PREFIN PREFINISHED	INT INTRIOR
	PREP / PREPARATION	INT INTRIOR

STATE MAP



OVERALL SITE PLAN



PROJECT DESCRIPTION

THE SCOPE OF WORK IS FOR THE ADDITION OF (4) TYPE 2 EV CHARGERS AND (1) DC FAST CHARGER FOR ELECTRICAL BUSES ALONG WITH ACCOMPANIED SITE WORK.

DEFERRED SUBMITTAL

FABRICATION AND INSTALLATION OF DEFERRED SUBMITTAL ITEMS SHALL NOT BE STARTED UNTIL CONTRACTOR'S DRAWINGS, SPECIFICATIONS, AND ENGINEERING CALCULATIONS FOR THE ACTUAL SYSTEMS TO BE INSTALLED HAVE BEEN ACCEPTED AND SIGNED BY THE ARCHITECT OR STRUCTURAL ENGINEER AND APPROVED BY THE DSA.

- NONE

PROJECT DATA

ADDRESS:
7050 SAN JOAQUIN STREET
SACRAMENTO, CA 95820

STATEMENT OF GENERAL CONFORMANCE

(x) THE DRAWINGS OR SHEETS LISTED ON THE INDEX SHEET () THIS DRAWING PAGE OF SPECIFICATIONS/CALCULATIONS

HAVE BEEN PREPARED BY OTHER DESIGN PROFESSIONALS OR CONSULTANTS WHO ARE LICENSED AND/OR AUTHORIZED TO PREPARE SUCH DRAWINGS IN THIS STATE. IT HAS BEEN EXAMINED BY ME FOR:

1) DESIGN INTENT AND APPEARS TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS AND THE PROJECT SPECIFICATIONS PREPARED BY ME, AND

2) COORDINATION WITH MY PLANS AND SPECIFICATIONS AND IS ACCEPTABLE FOR INCORPORATION INTO THE CONSTRUCTION OF THIS PROJECT.

THE STATEMENT OF GENERAL CONFORMANCE "SHALL NOT BE CONSTRUED AS RELIEVING ME OF MY RIGHTS, DUTIES, AND RESPONSIBILITIES UNDER SECTIONS 17302 AND 81138 OF THE EDUCATION CODE AND SECTIONS 4-338, 4-341 AND 4-344" OF TITLE 24, PART 1, (TITLE 24, PART 1, SECTION 4-317 (B))

I CERTIFY THAT:

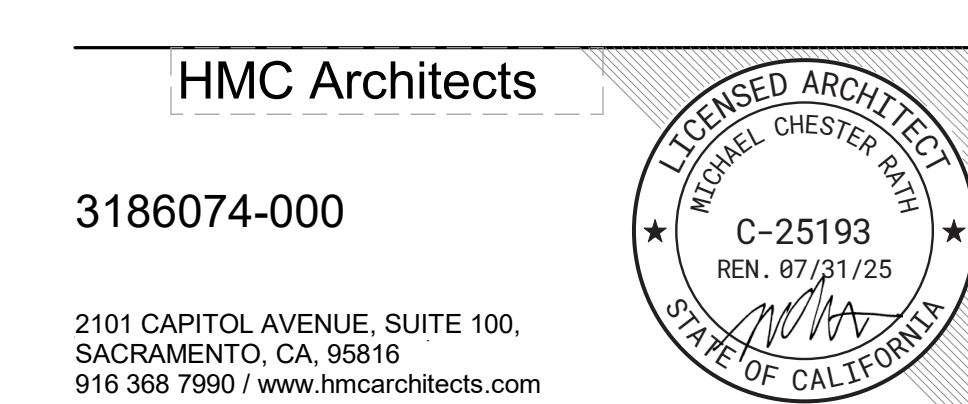
ALL DRAWINGS OR SHEETS LISTED ON THE COVER OR INDEX SHEET ARE IN GENERAL CONFORMANCE WITH THE PROJECT DESIGN INTENT, AND THEY HAVE BEEN COORDINATED WITH THE PROJECT PLANS AND SPECIFICATIONS.

SIGNATURE: _____ DATE 10-18-2024
ARCHITECT OR ENGINEER DESIGNATED TO BE IN GENERAL RESPONSIBLE CHARGE
MICHAEL RATH C-25193 07-31-21
PRINT NAME LICENSE NUMBER EXPIRATION DATE

VICINITY MAP



SACRAMENTO CITY UNIFIED SCHOOL DISTRICT
7050 SAN JOAQUIN STREET
SACRAMENTO, CA 95820



3186074-000
2101 CAPITOL AVENUE, SUITE 100,
SACRAMENTO, CA 95816
916 368 7990 / www.hmcarchitects.com

PROJECT TEAM
OWNER
SACRAMENTO CITY USD
5735 47TH AVENUE, SACRAMENTO, CA 95824 (916) 643-7400
ARCHITECT
HMC ARCHITECTS
2101 CAPITOL AVENUE, SUITE 100 SACRAMENTO, CA 95816 (916) 368-7990
ATTN: STANLEY NG (stanley.ng@hmcarchitects.com)
ELECTRICAL LP ENGINEERS
1209 PLEASANT GROVE BLVD
ROSEVILLE, CA 95678 (916) 771-0778
ATTN: ROGER PEREZ (robert.perez@lpengineers.com)

CONSTRUCTION DOCUMENTS

DATE 10-18-2024 CLIENT PROJ NO:

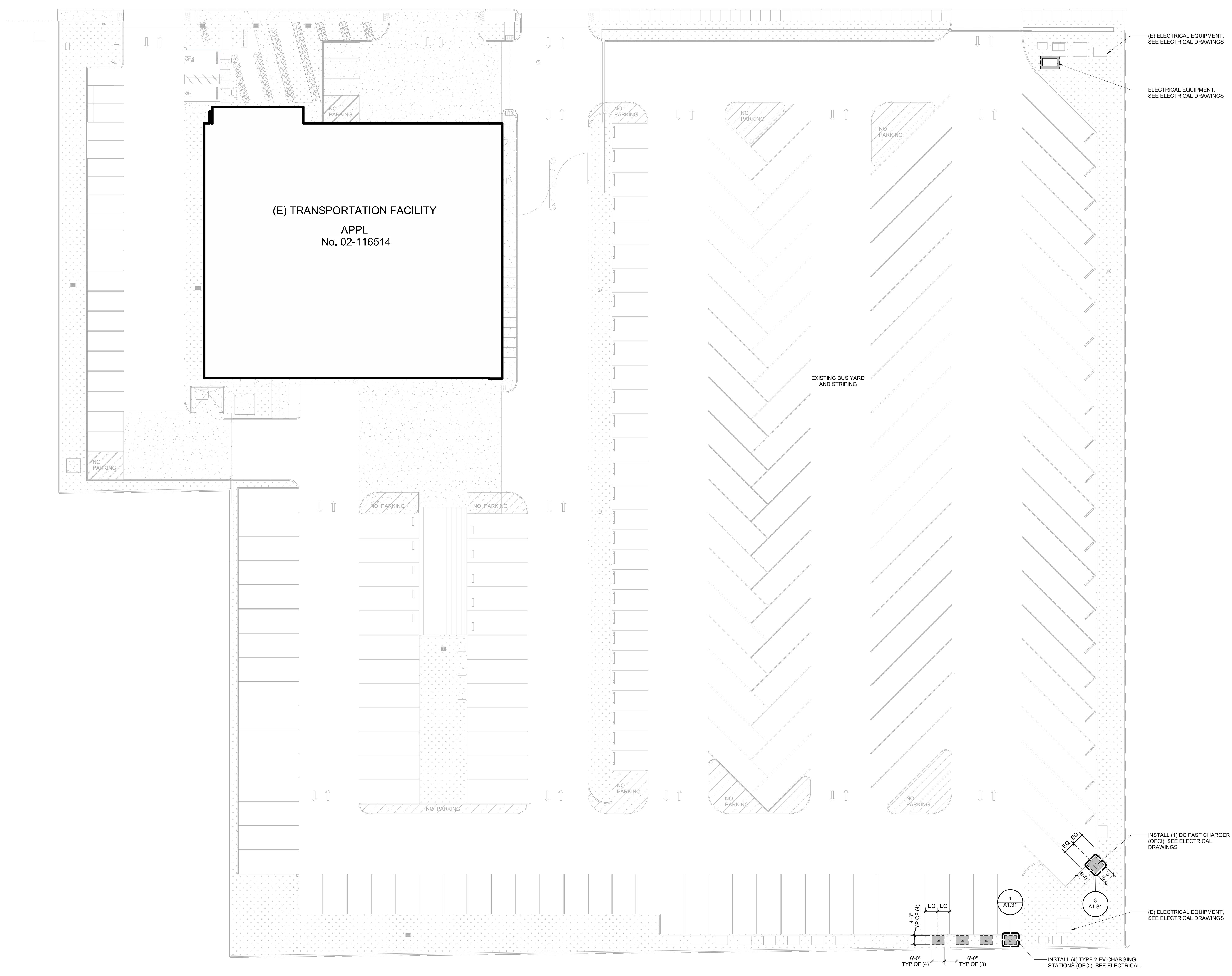
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SHEET NO: 10

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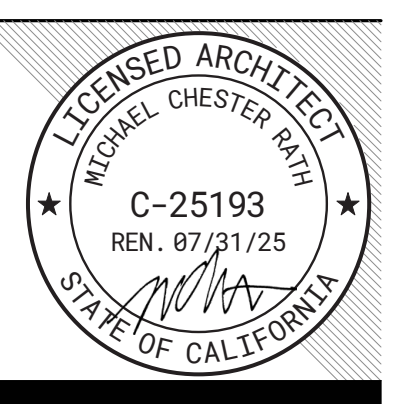
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THE LINE SHOWN INDICATES THE EXACT LOCATION OF THE SHEET ORIGINAL PAGE SIZE



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7050 SAN JOAQUIN STREET
SACRAMENTO, CA 95820

HMC Architects
3186074-000
2101 CAPITOL AVENUE, SUITE 100,
SACRAMENTO, CA, 95816
916 368 7990 / www.hmcarchitects.com



ISSUE

DESCRIPTION	DATE
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- NOTES:
- REFER TO SHEET G0.10 SERIES FOR TYPICAL SYMBOLS AND ABBREVIATIONS
 - REFER TO ELECTRICAL DRAWINGS FOR UTILITY INFORMATION
 - CONTRACTORS ARE RESPONSIBLE FOR REPAIR/REPLACEMENT OF ALL HARDSCAPE PLANTING OUTSIDE OF LIMIT OF WORK LINE FOR CONNECTION OF UNDERGROUND UTILITIES
 - PATCH AND REPAIR LANDSCAPE AND IRRIGATION TO MATCH EXISTING CONDITIONS
 - INFORM ARCHITECT OF ANY MISC. MODIFICATIONS DISTURBING EXISTING CONDITIONS FOR FURTHER REVIEW

FACILITY:
**7050 SAN JOAQUIN STREET
SACRAMENTO, CA 95820**

PROJECT:
ELECTRIC BUS CHARGING STATIONS

SHEET NAME:
SITE PLAN

CONSTRUCTION DOCUMENTS

DATE **10-18-2024** CLIENT PROJ NO:
SHEET:

PROJECT SITE PLAN 1
1" = 20'-0"

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ALL DIMENSIONS UNLESS OTHERWISE NOTED
 DIMENSIONS SHOWN ARE TO FACE UNLESS OTHERWISE NOTED
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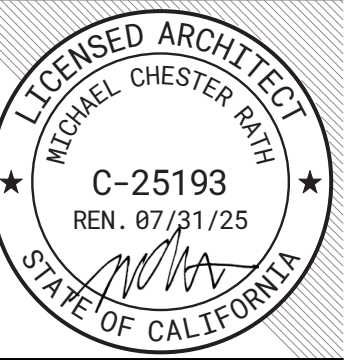


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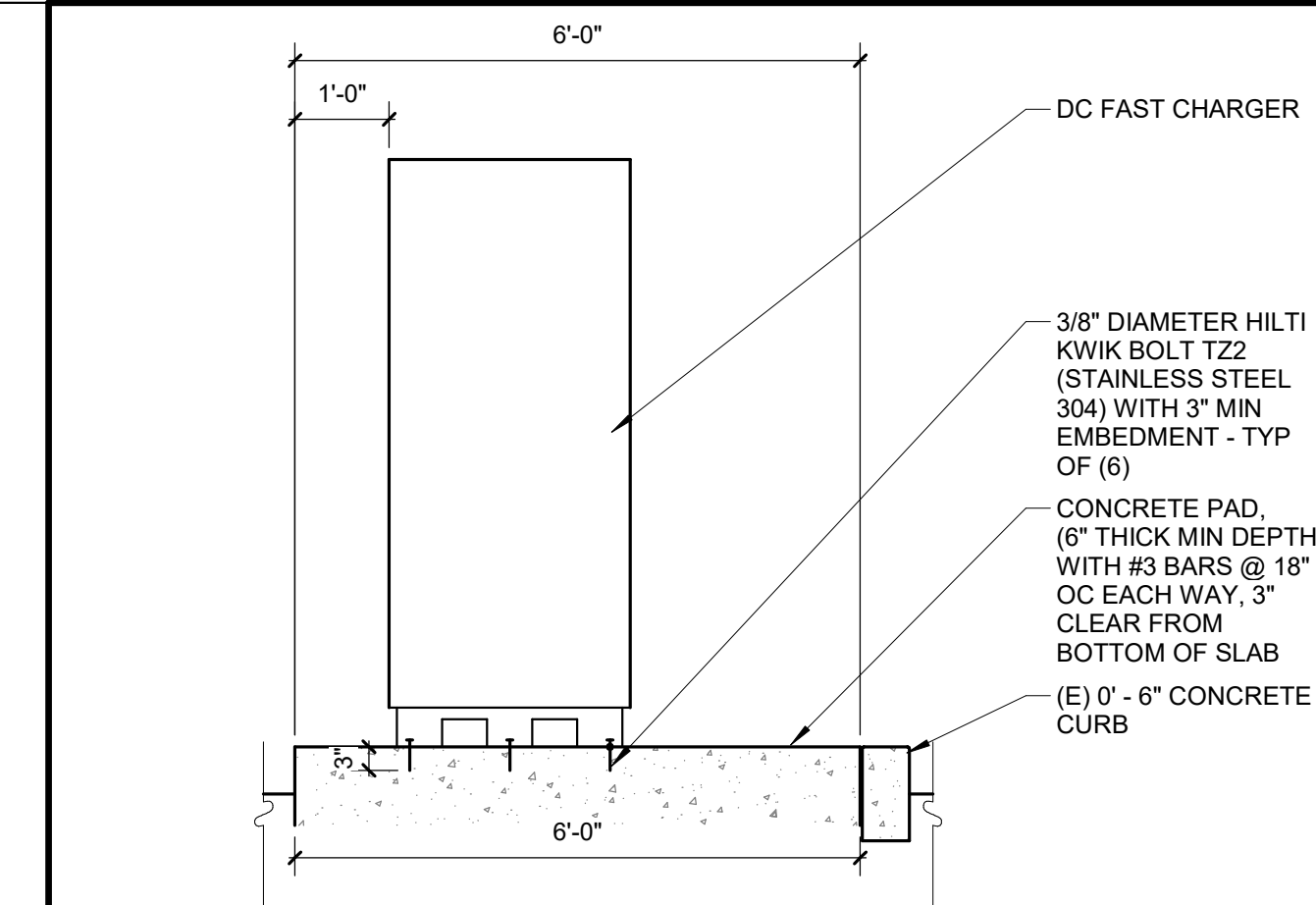


ISSUE

DESCRIPTION	DATE

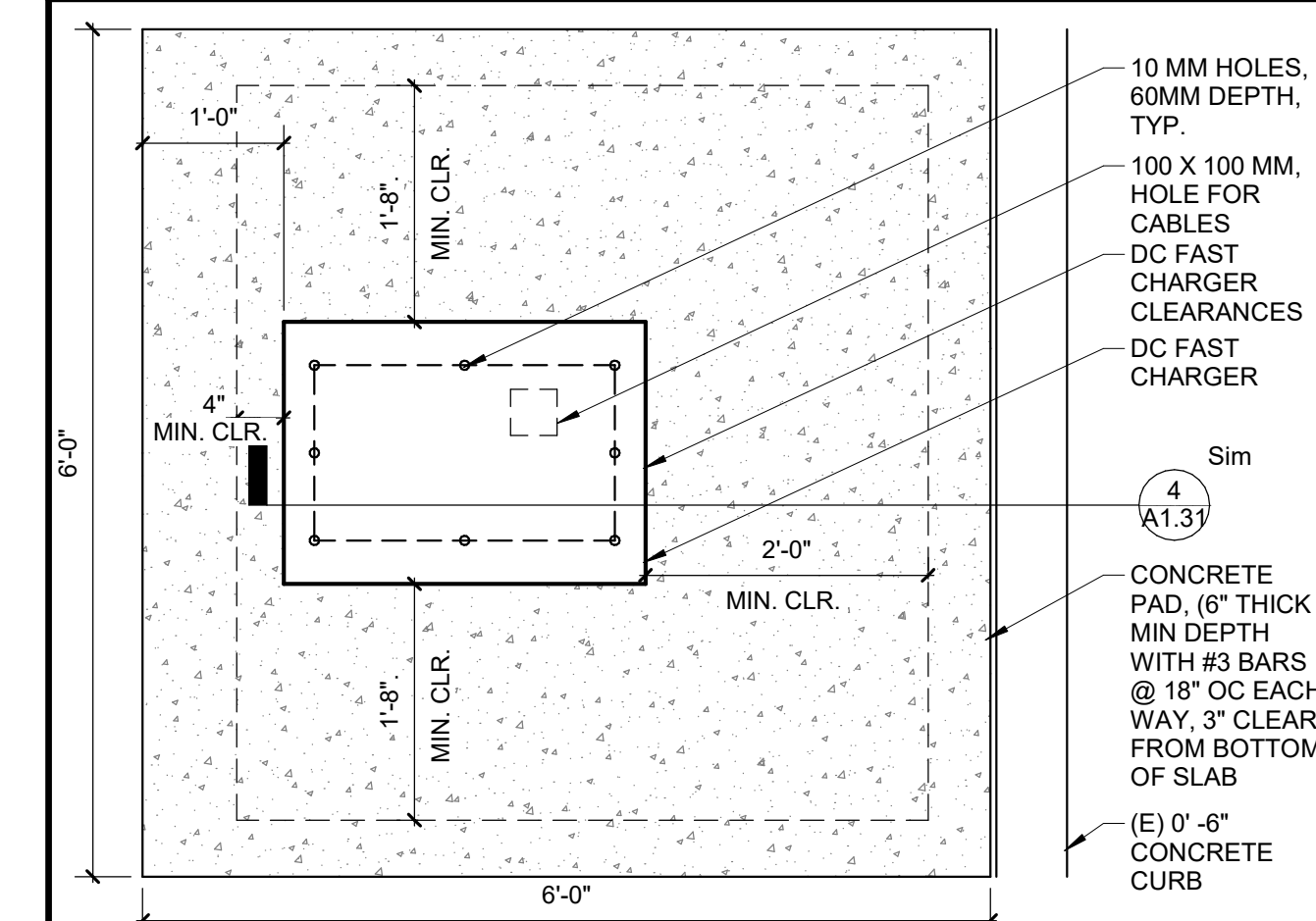
POST INSTALLED ANCHOR NOTES

- ANCHORS ARE TO BE INSTALLED PER ICC-ES-ESR-4266
- PERIODIC INSPECTION REQUIRED
- TORQUE TEST 100% OF ANCHORS TO 30 FT-LB
- CONCRETE IS TO HAVE A MINIMUM OF 28-DAY STRENGTH OF 3,000 PSI.



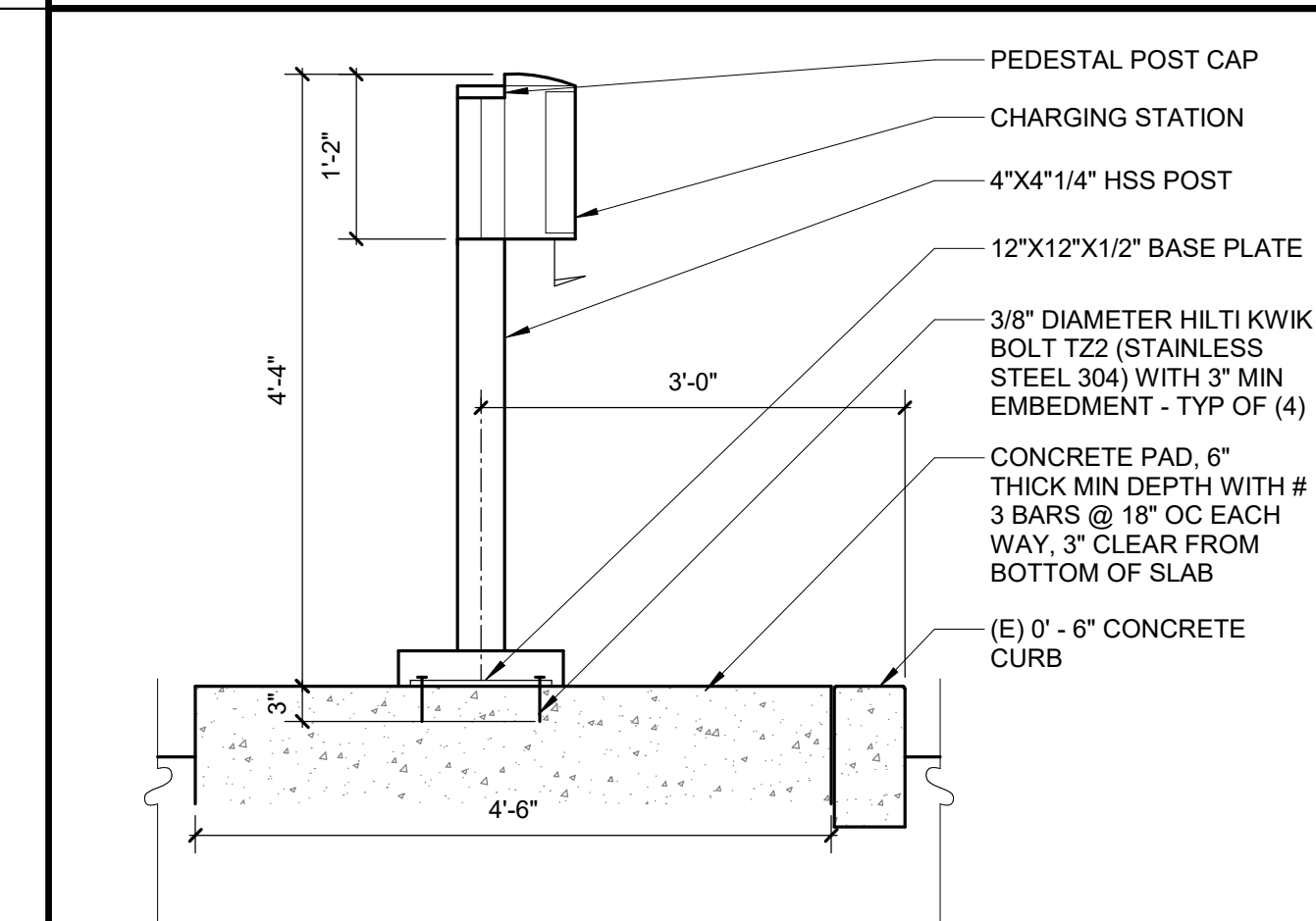
DC FAST CHARGING STATION ANCHORAGE 4

1/2" = 1'-0"



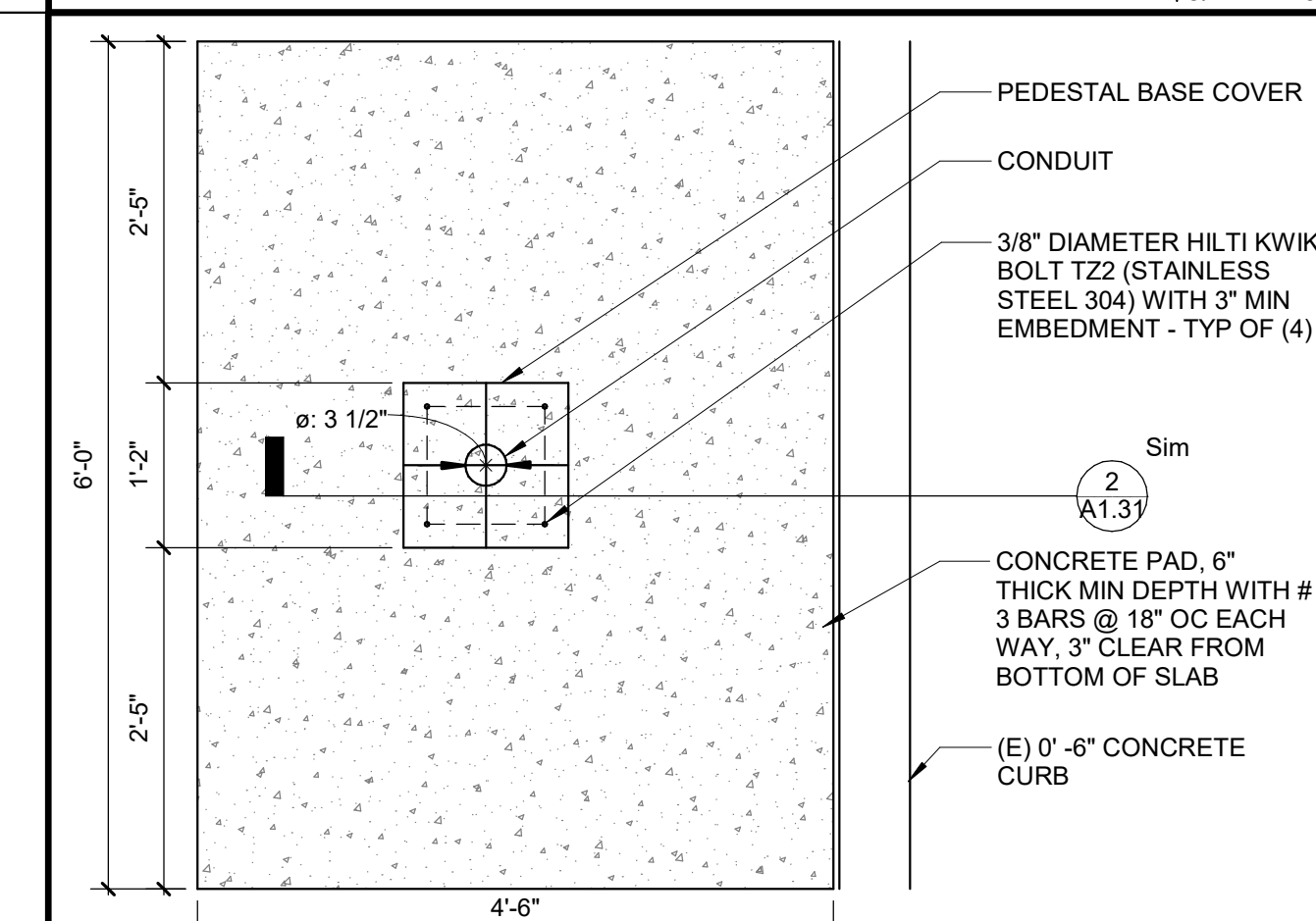
DC FAST CHARGER STATION PLAN 3

3/4" = 1'-0"



TYPE 2 EV CHARGING STATION ANCHORAGE 2

3/4" = 1'-0"



TYPE 2 EV CHARGING STATION PEDESTAL BASE PLAN 1

3/4" = 1'-0"

NOTES:

- REFER TO SHEET G0.10 SERIES FOR TYPICAL SYMBOLS AND ABBREVIATIONS
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FACILITY:

7050 SAN JOAQUIN STREET
 SACRAMENTO, CA 95820

PROJECT:

ELECTRIC BUS CHARGING STATIONS

SHEET NAME:

SITE DETAILS

CONSTRUCTION DOCUMENTS

DATE 10-18-2024

CLIENT PROJ NO:

SHEET:

A1.31

MEP COMPONENT ANCHORAGE NOTE

APPLICABLE CODE: 2022 CBC

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 1617A.1.17 THROUGH 1617A.1.20 & 1617A.1.23 AND ASCE 7-16 CHAPTERS 13, 26 AND 30:

- ALL PERMANENT EQUIPMENT AND COMPONENTS.
- TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
- TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

- COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
- COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL. RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

GENERAL NOTES

- ALL GENERAL NOTES SHOWN BELOW ARE NOT NECESSARILY USED ON PLANS IF NOT REQUIRED.
- THESE GENERAL NOTES ARE INTENDED TO ASSIST THE CONTRACTOR IN THE EXECUTION OF THE ELECTRICAL WORK AND TO BE INCLUDED IN CONJUNCTION WITH THE CONTRACT DOCUMENT DRAWINGS AND SPECIFICATION REQUIREMENTS. SOME OF THE GENERAL NOTES ARE EXCEPTS FROM THE SPECIFICATION.
 - PROCURE PERMITS AND LICENSES REQUIRED. PAY ALL NECESSARY FEES AND ARRANGE FOR INSPECTIONS REQUIRED BY LOCAL CODES, ORDINANCES, AND UTILITY COMPANIES.
 - COORDINATE ALL ELECTRICAL SERVICES WITH THE RESPECTIVE UTILITY COMPANIES AND PROVIDE ALL TRENCHING, CONDUITS, WIRING, METER FACILITIES AND OUTLETS REQUIRED BY THEM.
 - WORKMANSHIP SHALL BE OF THE HIGHEST QUALITY. DEFECTIVE EQUIPMENT OR EQUIPMENT DAMAGED IN THE COURSE OF INSTALLATION OR TEST SHALL BE REPLACED OR REPAIRED IN A MANNER MEETING WITH THE ACCEPTANCE OF THE ARCHITECT.
 - INSTALL ALL EQUIPMENT, CONDUITS, PAD, PULL BOX IN STRICT ACCORDANCE WITH THE CURRENT EDITION OF ALL APPLICABLE CODES (CEC, STATE, COUNTY, AND CITY).
 - DO NOT SCALE PLANS FOR EQUIPMENT LOCATIONS. USE FIGURED DIMENSIONS IF GIVEN OR CHECK DISTRICT PERSON IN CHARGE. ALSO REFER TO ACTUAL ON-SITE CONDITIONS.
 - ALL MATERIAL AND EQUIPMENT IS TO BE LISTED AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS AND CEC 110.3.
 - ALL ELECTRICAL DEVICES, EQUIPMENT, CONDUITS, AND WIRING SHOWN ON THESE PLANS ARE NEW, UNLESS OTHERWISE NOTED.
 - THE FINAL LOCATION OF ALL EQUIPMENT SHALL BE VERIFIED WITH THE ARCHITECT AND/OR DISTRICT AT TIME OF CONSTRUCTION.
 - ALL OUTDOOR ELECTRICAL EQUIPMENT SHALL BE WEATHER-PROTECTED.
 - ALL CONDUIT SHALL BE ROUTED CONCEALED UNLESS NOTED ON PLAN OR ACCEPTED BY THE ARCHITECT.
 - ALL WIRING SHALL BE INSTALLED IN RIGID METALLIC CONDUIT, UNLESS OTHERWISE NOTED. USE PVC INSTALLED UNDERGROUND AND/OR UNDER SLAB. ALL EXPOSED CONDUITS SHALL BE RIGID STEEL CONDUITS WITH THREADED TYPE FITTINGS. INSTALL ALL CONDUITS IN ACCORDANCE WITH CEC STANDARDS OF INSTALLATION.
 - ELECTRICAL NON-METALLIC TUBING (ENT) AND MC CABLE ARE NOT PERMITTED TO BE USED FOR THIS PROJECT, UNLESS ALLOWED PRIOR TO BID.
 - CONDUCTORS, #8 AND LARGER, SHALL BE STRANDED COPPER WITH THHN/THWN INSULATION, UNLESS OTHERWISE NOTED.
 - PROVIDE WORKING CLEARANCE PER CEC 110.26 FOR SERVICE SWITCHBOARD, DISTRIBUTION PANEL, TRANSFORMERS, DISCONNECT SWITCHES, CHARGERS, ETC.
 - PROVIDE A WARNING LABEL (SIGN) CLEARLY VISIBLE TO QUALIFIED PERSONS TO COMPLY WITH NEC AND CEC 110.16 OF POTENTIAL ELECTRIC ARC FLASH HAZARDS AT SWITCHBOARDS, PANELBOARDS, INDUSTRIAL CONTROL PANELS AND MOTOR CONTROL CENTERS THAT ARE LIKELY TO REQUIRE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE WHILE ENERGIZED. SERVICE EQUIPMENT SHALL BE LEGIBLY MARKED WITH THE MAXIMUM AVAILABLE FAULT CURRENT PER CEC SECTION 110.24(A).
 - MAIN SWITCHBOARDS, DISTRIBUTION SWITCHBOARDS AND CHARGERS TO COMPLY WITH CEC 110.9 AND 110.10 INTERRUPTING RATING AND BRACING. PROVIDE A.I.C. CALCULATIONS FOR SUBPANELS IF INTERRUPTING RATING TO BE USED IS LOWER THAN MAIN SERVICE RATING.
 - CONTRACTOR SHALL SIZE ALL EXTERIOR PULL BOXES AND UNDERGROUND PULL BOXES PER CEC 314.16 AND COMPLY WITH CEC 314.28 FOR INSTALLATION OF RACEWAYS AND WIRING AS REQUIRED BY CODE, UNLESS OTHERWISE NOTED.
 - WHERE ACCESSIBILITY IS NOT AVAILABLE TO ELECTRICAL OUTLETS, DEVICES AND/OR EQUIPMENT, COORDINATE WITH THE ARCHITECT FOR PROVISIONS TO PROVIDE ACCESSIBILITY TO THEM.
 - ALL TERMINATION PROVISIONS OF EQUIPMENT, INCLUDING CIRCUITS RATED 100 AMPERES OR LESS, SHALL BE RATED AT 60 DEGREE, CENTIGRADE PER CEC 110.14(c).
 - CONTRACTOR SHALL COORDINATE ALL ELECTRICAL BRANCH CIRCUITS LENGTH WITH BRANCH CIRCUIT WIRING TABLE LOCATED ON THIS SHEET AND ADJUST WIRE SIZES PER THE TABLE BASED ON DISTANCES TO ACCOUNT FOR A VOLTAGE DROP.
 - ENERGY SHALL NOT BE ALLOWED TO BE BACK FED THROUGH FROM THE CHARGING SYSTEM TO THE UTILITY SERVICE SYSTEM.
 - ELECTRICAL CONTRACTOR SHALL PROVIDE AIC LABELING ON ALL ELECTRICAL DISTRIBUTION SYSTEM.
 - PERSONNEL PROTECTION SYSTEM. THE EQUIPMENT SHALL HAVE A LISTED SYSTEM OF PROTECTION AGAINST ELECTRIC SHOCK OF PERSONNEL PER CEC 625.22.

ELECTRICAL SYMBOL LEGEND

ALL SYMBOLS SHOWN IN THIS LEGEND ARE NOT NECESSARILY USED ON PLANS IF NOT REQUIRED.

SYMBOL	DESCRIPTION
	MAIN SWITCHBOARD OR DISTRIBUTION PANEL AS NOTED
	RECESSED MOUNTED LIGHTING OR DISTRIBUTION PANEL
	SURFACE MOUNTED LIGHTING OR DISTRIBUTION PANEL
	RECESSED TERMINAL CABINET w/ 3/4" C. PLYWOOD BACKBOARD, DUPLEX RECEPTACLE & #6 CU GND. UON.
	SURFACE MOUNTED TERMINAL CABINET w/ 3/4" C. PLYWOOD BACKBOARD, DUPLEX RECEPTACLE & #6 CU GND. UON.
	DISTRIBUTION TRANSFORMER. MOUNTING AND SIZE AS NOTED
	NON-FUSED DISCONNECT SWITCH
	ENCLOSED CIRCUIT BREAKER DISCONNECT SWITCH
	FUSED DISCONNECT SWITCH; SIZE DISCONNECT AND FUSES PER UNIT LABEL.
	POWER CONNECTION
	DUPLEX RECEPTACLE OUTLET 20A, 120V. @ +16" TO BOTTOM OF BOX. UON.
	DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER TOP. +44" TO TOP FOR FORWARD REACH. AND +46" TO TOP FOR SIDE REACH. PER CEC 119-308.
	ISOLATED GROUND DUPLEX RECEPTACLE. 20A, 120V. @ +16" TO BOTTOM OF BOX. UON.
	DEDICATED DUPLEX RECEPTACLE OUTLET 20A, 120V. @ +16" TO BOTTOM OF BOX. UON.
	GFCI DUPLEX RECEPTACLE OUTLET 20A, 120V. @ +16" TO BOTTOM OF BOX. UON.
	PANEL IDENTIFICATION
	CIRCUIT BREAKER
	GROUND
	UNDERGROUND TERMINATION SERVICE LUG
	UTILITY METER
	UTILITY METER WITH C.T. COMPARTMENT METER SOCKET
	TRANSFORMER WITH GROUND
	UFER GROUND
	BOND TO COLD WATER PIPE, GAS PIPE, BUILDING STEEL
	NEUTRAL LINK
	JUNCTION BOX - SIZE AS REQUIRED BY CODE.
	MECHANICAL EQUIPMENT I.D. TAG - MP&S
	CIRCUIT CONCEALED IN CEILING OR WALL W/(2) #12 THWN/THHN AND #12 CU EQUIPMENT GROUND. UON.
	CIRCUIT CONCEALED IN FLOOR OR UNDERGROUND W/(2) #12 THWN/THHN AND #12 CU EQUIPMENT GROUND. UON.
	HOME RUN TO PANELBOARD OR TERMINAL CABINET W/ CONDUCTORS AS NOTED
	ISOLATED GROUND WIRE IN ADDITION TO EQUIPMENT GROUND WIRE.
	DENOTES # OF #12 WIRES. NO MARKS = 2 #12, 12°C.
	CURVED HATCH DENOTES GROUND WIRE. OTHERS AS NOTED
	FLEXIBLE CONDUIT, 6'-0" LONG MAX. W/ #12 CU GROUND UON.
	CONDUIT RISER - UP
	CONDUIT DROP - DOWN
	KEY NOTE SHOWN ON SAME SHEET
	DETAIL DESIGNATION TOP LETTER INDICATES DETAIL. BOTTOM LETTER/NUMBER INDICATES SHEET

UNDERGROUND TRENCHING NOTES

- UNDERGROUND TRENCHING:
- USE EXTREME CAUTION WHEN DIGGING TO AVOID BURIED ELECTRICAL CABLES. CALL UNDERGROUND SERVICE ALERT (U.S.A.) 900-227-2600, 48 HOURS BEFORE DIGGING
 - BEFORE START OF ANY UNDERGROUND TRENCHING FOR CONDUIT RUNS, THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH ALL PLANS OF OTHER TRADES (ARCHITECTURAL, CIVIL, LANDSCAPE), AND SITE CONDITIONS TO AVOID CONFLICT.
 - TRENCHING AND BACKFILLING SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS. COORDINATE WITH CIVIL, LANDSCAPE, AND ARCHITECTURAL SITE PLAN PRIOR TO THE TRENCHING, ETC. AND THE INSTALLATION OF THE ELECTRICAL SYSTEM.
 - ALL UNDERGROUND CONDUITS SHALL BE SCHEDULE 40 PVC, UL LISTED FOR DIRECT BURIAL, AND TERMINATED WITH FACTORY END BELL FITTINGS. ALL ELBOWS, BENDS AND TURNS TRANSITIONING TO GRADE SHALL BE INSTALLED USING PER MANUFACTURED 40-MIL PVC COATED GALVANIZED STEEL ELBOWS AND OFFSETS.
 - ALL UNDERGROUND SERVICE CONDUITS SHALL BE SEALED TO COMPLY WITH CEC 230.8.
 - PROVIDE 24" MINIMUM COVERAGE FOR UNDERGROUND CONDUITS, UNLESS OTHERWISE NOTED. THE EXCEPTION IS FOR PG&E SERVICE CONDUITS WHICH SHALL HAVE A 36" MINIMUM BURIAL DEPTH AND BE INSTALLED WITH A RED OXIDE CONCRETE CAP. MAINTAIN 12" MINIMUM SEPARATION BETWEEN THE POWER AND LOW VOLTAGE SYSTEM UNDERGROUND CONDUITS. TRENCHES SHALL ALL BE INSTALLED WITH A RED POLYETHYLENE WARNING RIBBON LABELED "ELECTRICAL", LOCATED 8" BELOW GRADE IN THE TRENCH.
 - PROVIDE UNDERGROUND TRACER WHERE NON-METAL CONDUITS ARE INSTALLED.
 - PROVIDE PARTEX IDENTIFICATION TAGS TO IDENTIFY UNDERGROUND CIRCUITS.
 - ALL UNDERGROUND SPLICES SHALL BE MADE WATERPROOF BY PROVIDING WITH "SPlice-NOTE" SPlice KITS OR OTHER ACCEPTED METHODS. ALL FUSEHOLDERS SHALL BE WATERTIGHT.
 - ALL UNDERGROUND RACEWAYS SHALL BE PROVIDED WITH A #8 AWG MINIMUM SIZE COPPER EQUIPMENT GROUNDING CONDUCTOR, WHETHER SHOWN ON PLAN OR NOT, UNLESS OTHERWISE NOTED.
 - THE CONTRACTOR SHALL BE RESPONSIBLE UNDER THIS CONTRACT TO REPAIR AND REPLACE ANY AND ALL DAMAGES TO EXISTING PCC WALKS, AC PAVING, UTILITIES, TREES, TURF, PLANTED AREAS, AND OTHER FACILITIES RESULTING FROM THIS PROJECT. WHEN CUTTING OR TRENCHING THROUGH EXISTING CONCRETE SIDEWALKS, DRIVEWAYS, AND WALKWAYS, THE CONTRACTOR SHALL BE REQUIRED TO COMPLETELY REPLACE ENTIRE SECTIONS OF CONCRETE PANELS FROM SCOREMARK TO SCOREMARK AFFECTED BY THE CONSTRUCTION WORK. ALL SIDEWALKS, DRIVEWAYS, AND WALKWAYS SHALL BE REPLACED TO MATCH ADJACENT CONDITION AND AS DIRECTED BY THE ARCHITECT.

ELECTRICAL ABBREVIATIONS

SYMBOL	DESCRIPTIONS
A/AMP	AMPERES
AC	ALTERNATING CURRENT
AFF	ABOVE FINISHED FLOOR
AFC	ABOVE FINISHED CEILING
AFG	ABOVE FINISHED GRADE
AIC	AMPERES INTERRUPTING CAPACITY (SYMMETRICAL)
C	CONDUIT
CCT	CIRCUIT
CKT	CIRCUIT
DC	DIRECT CURRENT
(E)	EXISTING TO REMAIN
EC	EMPTY CONDUIT
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
FACP	FIRE ALARM CONTROL PANEL
FLA	FULL LOAD AMPS
FLEX	FLEXIBLE METALLIC CONDUIT
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
HP	HORSEPOWER
IG	ISOLATED GROUND
J-BOX	JUNCTION BOX
KVA	KILOVOLT-AMPS
KW	KILOWATTS
LTG	LIGHTING
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUGS ONLY
MTD	MOUNTED
(N)	NEW
N	NEUTRAL CONDUCTOR (GROUNDED CIRCUIT CONDUCTOR)
N.I.E.S.	NOT IN ELECTRICAL SCOPE OR SPECIFICATIONS
NL	NIGHT LIGHT
PH/P	PHASE OR POLE
PNL	PANELBOARD
PVC	POLYVINYL CHLORIDE CONDUIT (SCHEDULE 40)
(R)	RELOCATE/RELOCATED
RECEP	RECEPTACLE
RGSC	RIGID GALVANIZED STEEL CONDUIT
U	UNSWITCHED
UNO	UNLESS NOTED OTHERWISE
V	VOLTAGE OR VOLTS
W	WATTS
WP	WEATHERPROOF
WPU	WEATHERPROOF WHILE IN USE
(X)	REMOVE
XFMR	TRANSFORMER

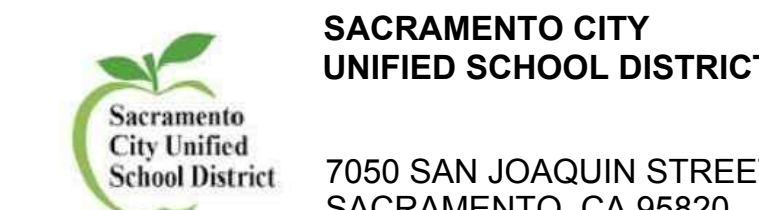
ELECTRICAL SCOPE DRAWINGS

THESE ELECTRICAL DRAWINGS INDICATE THE GENERAL SCOPE OF THE PROJECT IN TERMS OF ELECTRICAL DESIGN CONCEPT, MAJOR ELECTRICAL ELEMENTS, AND THE TYPE OF ELECTRICAL SYSTEMS. AS SCOPE DOCUMENTS, THESE DRAWINGS DO NOT NECESSARILY INDICATE OR DESCRIBE ALL WORK REQUIRED FOR FULL PERFORMANCE AND COMPLETION OF THE REQUIREMENTS. ON THE BASIS OF THE GENERAL SCOPE INDICATED OR DESCRIBED, THE CONTRACTOR SHALL FURNISH ALL ITEMS REQUIRED FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK.

THE PROJECT CONSISTS OF ADDING NEW EV-BUS CHARGERS, LOCATED IN THE EXISTING TRANSPORTATION YARD, INSTALLING FOUR (4) LEVEL 2 CHARGERS, AND ONE (1) FAST CHARGER. NEW CHARGERS TO BE CONNECTED TO THE EXISTING 600A, 277/480V, 3 PHASE ELECTRICAL SERVICE. THE ONE (1) FAST CHARGER TO BE FED FROM THE EXISTING 480V MAIN SWITCHBOARD. THE FOUR (4) LEVEL 2 CHARGERS TO BE FED FROM THE EXISTING 208V DISTRIBUTION SWITCHBOARD.

ELECTRICAL SHEET INDEX

SHEET NO.	SHEET TITLE
E0.1	SYMBOL LEGEND, ABBREVIATIONS & NOTES
E1.1	ELECTRICAL SITE PLAN
E2.1	ONE LINE DIAGRAM & LOAD CALCULATIONS
E3.1	ELECTRICAL DETAILS & SCHEDULES
E4.1	ELECTRICAL SPECIFICATIONS
E4.2	ELECTRICAL SPECIFICATIONS
E4.3	ELECTRICAL SPECIFICATIONS



3186062-000

2406 NATOMAS PARK DRIVE, STUDIO 100
SACRAMENTO, CA 95833
916 325 1100 / www.hmcarchitects.com

DESCRIPTION	DATE
100% CD SUBMITTAL	10/18/2024



FACILITY:
**7050 SAN JOAQUIN STREET
SACRAMENTO, CA 95820**

PROJECT:
ELECTRIC BUS CHARGING STATIONS

SHEET NAME:
SYMBOL LEGEND, ABBREVIATIONS & NOTES

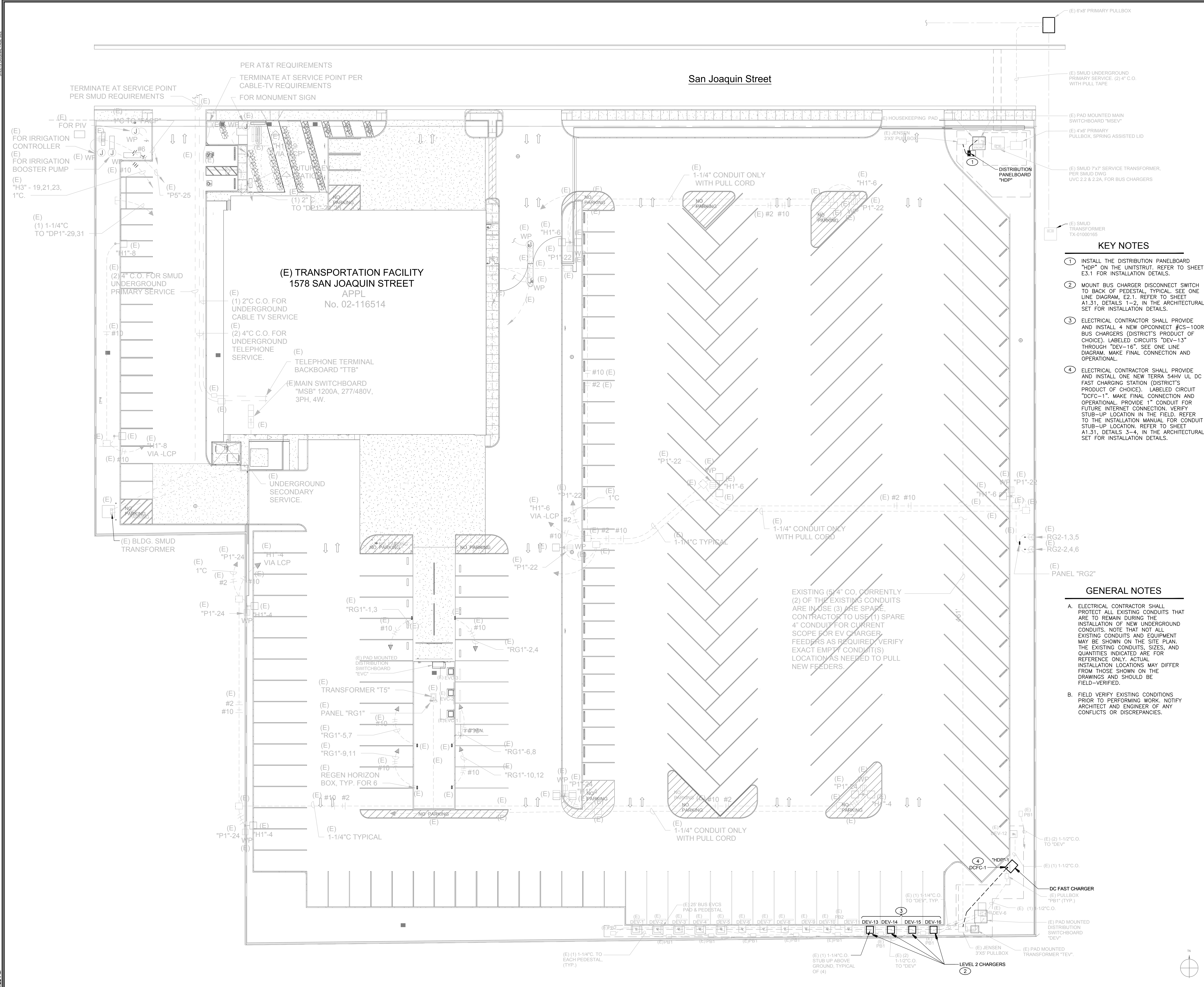
CONSTRUCTION DOCUMENTS

DATE: 10/18/2024 CLIENT PROJ NO:
SHEET:

E0.1

DATE PLOTTED: 10/18/2024 12:03:52 PM

San Joaquin Street



KEY NOTES

1. INSTALL THE DISTRIBUTION PANELBOARD "HDP" ON THE UNITRUT. REFER TO SHEET E3.1 FOR INSTALLATION DETAILS.
2. MOUNT BUS CHARGER DISCONNECT SWITCH TO BACK OF PEDESTAL, TYPICAL. SEE ONE LINE DIAGRAM, E2.1. REFER TO SHEET A1.31, DETAILS 1-2, IN THE ARCHITECTURAL SET FOR INSTALLATION DETAILS.
3. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL 4 NEW OPCONNECT #CS-100R BUS CHARGERS (DISTRICT'S PRODUCT OF CHOICE). LABELED CIRCUITS "DEV-13" THROUGH "DEV-16". SEE ONE LINE DIAGRAM. MAKE FINAL CONNECTION AND OPERATIONAL.
4. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ONE NEW TERRA 54HV UL DC FAST CHARGING STATION (DISTRICT'S PRODUCT OF CHOICE). LABELED CIRCUIT "DCFC-1". MAKE FINAL CONNECTION AND OPERATIONAL. PROVIDE 1" CONDUIT FOR FUTURE INTERNET CONNECTION. VERIFY STUB-UP LOCATION IN THE FIELD. REFER TO THE INSTALLATION MANUAL FOR CONDUIT STUB-UP LOCATION. REFER TO SHEET A1.31, DETAILS 3-4, IN THE ARCHITECTURAL SET FOR INSTALLATION DETAILS.

GENERAL NOTES

- A. ELECTRICAL CONTRACTOR SHALL PROTECT ALL EXISTING CONDUITS THAT ARE TO REMAIN DURING THE INSTALLATION OF NEW UNDERGROUND CONDUITS. NOTE THAT NOT ALL EXISTING CONDUITS AND EQUIPMENT MAY BE SHOWN ON THE SITE PLAN. THE EXISTING CONDUITS, SIZES, AND QUANTITIES INDICATED ARE FOR REFERENCE ONLY. ACTUAL INSTALLATION LOCATIONS MAY DIFFER FROM THOSE SHOWN ON THE DRAWINGS AND SHOULD BE FIELD-VERIFIED.
- B. FIELD VERIFY EXISTING CONDITIONS PRIOR TO PERFORMING WORK. NOTIFY ARCHITECT AND ENGINEER OF ANY CONFLICTS OR DISCREPANCIES.

EXISTING (6) 4" CO. CURRENTLY (2) OF THE EXISTING CONDUITS ARE IN USE (3) ARE SPARE. CONTRACTOR TO USE (1) SPARE 4" CONDUIT FOR CURRENT SCOPE FOR EV CHARGER FEEDERS AS REQUIRED. VERIFY EXACT EMPTY CONDUIT(S) LOCATION AS NEEDED TO PULL NEW FEEDERS.

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT
 Sacramento City Unified School District
 7050 SAN JOAQUIN STREET
 SACRAMENTO, CA 95820

HMC Architects

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 SACRAMENTO, CA 95833
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ISSUE	DESCRIPTION	DATE
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 p 916-771-0778
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 Job #: 24-2169

REGISTERED PROFESSIONAL ENGINEER
 RAY S. ZEIDMAN
 No. E 16762
 Exp. 9/30/26
 STATE OF CALIFORNIA
 ELECTRICAL

FACILITY:
**7050 SAN JOAQUIN STREET
 SACRAMENTO, CA 95820**

PROJECT:
ELECTRIC BUS CHARGING STATIONS

SHEET NAME:
ELECTRICAL SITE PLAN

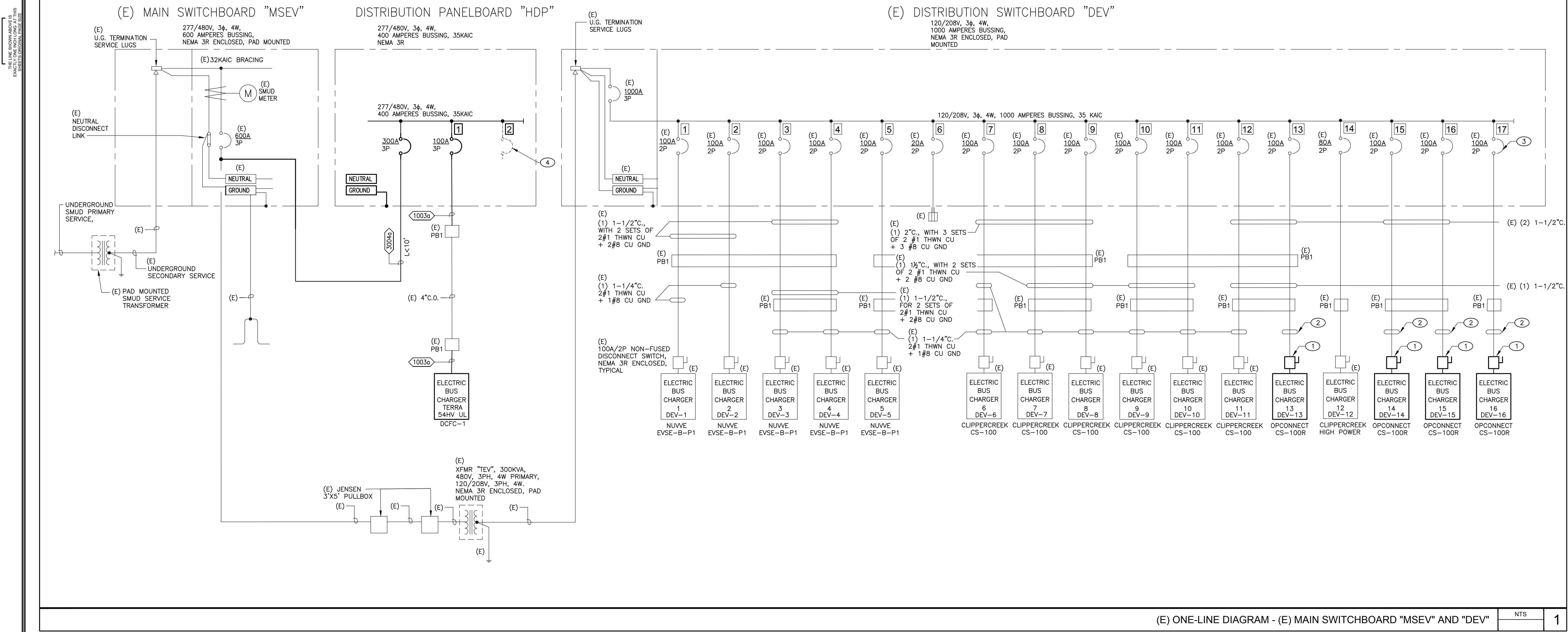
CONSTRUCTION DOCUMENTS

DATE: 10/18/2024 CLIENT PROJ NO:
 SHEET:

ELECTRICAL SITE PLAN 1
 1" = 20'-0"

E1.1

PLEASE RECYCLE



(E) ONE-LINE DIAGRAM - (E) MAIN SWITCHBOARD "MSEV" AND "DEV" NTS 1

GENERAL NOTES

A. PROVIDE A WARNING LABEL (SIGN) CLEARLY VISIBLE TO QUALIFIED PERSONS TO COMPLY WITH NEC 116.16 AND NFPA-70E-2000 OF POTENTIAL ELECTRIC ARC FLASH HAZARDS AT SWITCHBOARD, PANELBOARDS, AND INDUSTRIAL CONTROL PANELS THAT ARE LIKELY TO REQUIRE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE WHILE ENERGIZED.

KEY NOTES

- 1 PROVIDE 100A/2P NON-FUSED DISCONNECT SWITCH, NEMA 3R ENCLOSED. INSTALL LOCKABLE ON DISCONNECT SWITCH TO BACKSIDE OF PEDESTAL. GROUND ALL METAL PARTS OF PEDESTAL AND CHARGER BACK TO MAIN SWITCHBOARD "DEV".
- 2 EXISTING 1-1/4"C.O. PULL 2#1 THWN CU + 1#8 CU GND.
- 3 CONNECT NEW LEVEL 2 CHARGERS TO THE EXISTING 100A, 2P BREAKERS. (TYP)
- 4 MAKE PROVISIONS FOR (3)125A/3P FRAME SIZE SPACES.

VOLTAGE DROP CALCULATIONS

Project: Name _____ Note: Enter Nominal Conductor Sizes except as below:
1/0 = 101, 2/0 = 102, 3/0 = 103, 4/0 = 104

Designation	Voltage	Phase	Raceway		Conductor			Load		Line-to-Neutral		Line-to-Line	
			Metallic (M) or Non-Metallic (NM)	Material (AL) or (CU)	Nominal Size	Parallel Runs	Length in Feet	AMPS	Pow er Factor	Volt Drop	%	Volt Drop	%
DFCF-1	480	3	NM	CU	2	1	500	64.0	80%			9.92	2.07
DEV-13	208	1	NM	CU	1	1	80	89.0		0.66	0.31		
DEV-14	208	1	NM	CU	1	1	70	89.0		0.57	0.28		
DEV-15	208	1	NM	CU	1	1	60	89.0		0.49	0.24		
DEV-16	208	1	NM	CU	1	1	50	89.0		0.41	0.20		

These Voltage Drop Calculations are made in accordance with Table 9 of Chapter 9 of the National Electrical Code.

EXISTING ELECTRICAL "MSEV" LOAD CALCULATION

EXISTING PEAK DEMAND LOAD FOR THE PAST 12 MONTHS 87 KW/0.9pf
(SOURCE: PER DISTRICT CHAMBERLAIN'S EMAIL DATED 7/21/24.)

EXISTING PEAK DEMAND LOAD	87.0	KVA
PLUS 20% OF EXISTING DEMAND LOAD	24.3	KVA
TOTAL EXISTING DEMAND LOAD	121.3	KVA

ADD NEW LOAD

NEW CHARGERS	16.64	KW/0.9pf =	18.5	kVA ea	X	4	74.0	KVA
NEW FAST CHARGER	50	KW/0.9pf =	55.5	kVA ea	X	1	55.5	KVA
TOTAL ADDED LOAD							129.5	KVA

EXISTING AND ADDED TOTAL SERVICE LOAD = 250.8 kVA
250.8 KVA @ 277/480 VOLT , 3 PHASE = 302 AMPERES

THEREFORE: EXISTING MAIN 600 AMP SERVICE HAS THE CAPACITY FOR THE NEW ADDED LOAD.

DESCRIPTION	DATE
ISSUE	
100% CD SUBMITTAL	10/18/2024



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Job #: 24-2169

FACILITY:

7050 SAN JOAQUIN STREET
SACRAMENTO, CA 95820

PROJECT:
ELECTRIC BUS CHARGING STATIONS

SHEET NAME:
ONE LINE DIAGRAM & LOAD CALCULATIONS

CONSTRUCTION DOCUMENTS

DATE: 10/18/2024 CLIENT PROJ NO:
SHEET:

DATE: 10/18/2024 12:03:52 PM

ONE LINE DIAGRAM FEEDER SCHEDULE

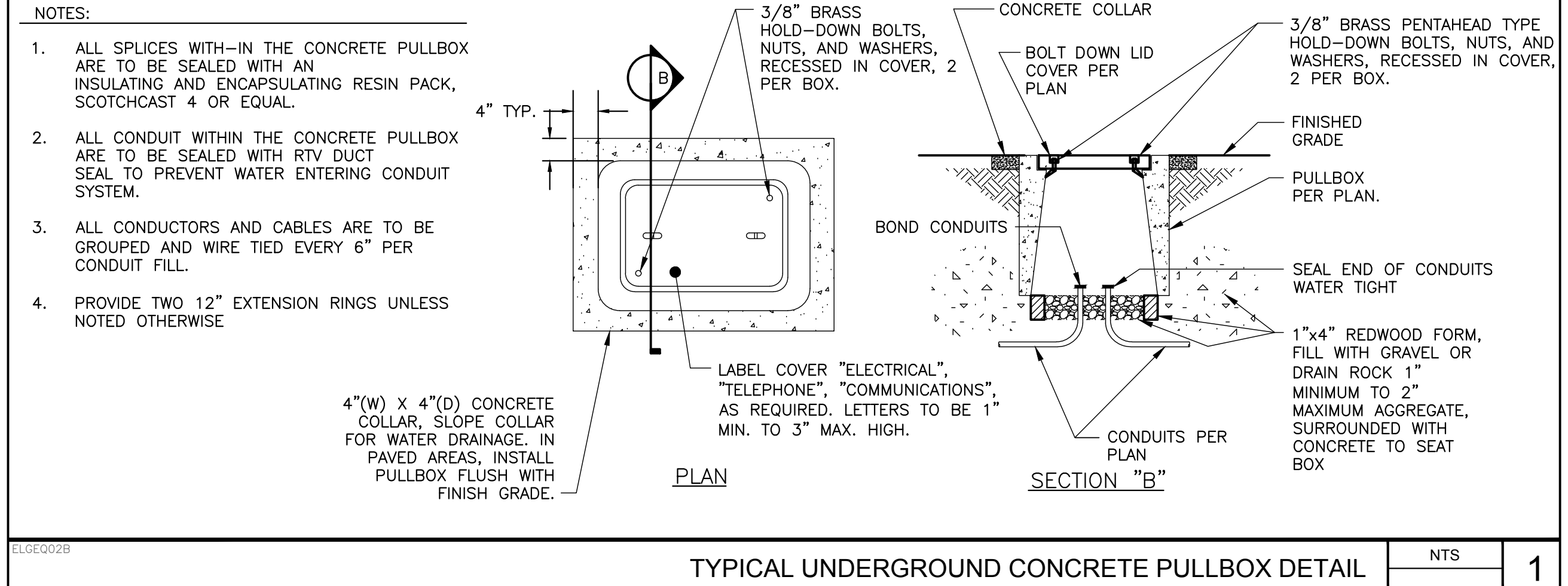
3Ø, 3W + GND CIRCUITS							3Ø, 4W + GND CIRCUITS						
FEEDER TAG	RATING (AMPS)	CONDUIT		PHASE CONDUCTORS (COPPER)	EQUIP. GND. CONDUCTOR (EGC) (NEC TABLE 250.122)		FEEDER TAG	RATING (AMPS)	CONDUIT		PHASE, NEUTRAL CONDUCTORS (COPPER)	EQUIP. GND. CONDUCTOR (EGC) (NEC TABLE 250.122)	
		EMT	PVC						EMT	PVC			
203	20	3/4"	1"	(3) #12	#12		204	20	3/4"	1"	(4) #12	#12	
253	25	3/4"	1"	(3) #10	#10		254	25	3/4"	1"	(4) #10	#10	
303	30	3/4"	1"	(3) #10	#10		304	30	3/4"	1"	(4) #10	#10	
403	40	3/4"	1"	(3) #8	#10		404	40	1"	1"	(4) #8	#10	
453	45	1"	1"	(3) #6	#10		454	45	1"	1-1/4"	(4) #6	#10	
503	50	1"	1"	(3) #6	#10		504	50	1"	1-1/4"	(4) #6	#10	
603	60	1-1/4"	1-1/4"	(3) #4	#10		604	60	1-1/4"	1-1/4"	(4) #4	#10	
703	70	1-1/4"	1-1/4"	(3) #4	#8		704	70	1-1/4"	1-1/4"	(4) #4	#8	
803	80	1-1/4"	1-1/2"	(3) #2	#8		804	80	1-1/2"	1-1/2"	(4) #2	#8	
903	90	1-1/4"	1-1/2"	(3) #2	#8		904	90	1-1/2"	1-1/2"	(4) #2	#8	
1003	100	1-1/2"	2"	(3) #1	#8		1004	100	2"	2"	(4) #1	#8	
1253	125	1-1/2"	2"	(3) #1	#6		1254	125	2"	2"	(4) #1	#6	
1503	150	2"	2"	(3) #1/0	#6		1504	150	2"	2"	(4) #1/0	#6	
1753	175	2"	2"	(3) #2/0	#6		1754	175	2"	2-1/2"	(4) #2/0	#6	
2003	200	2"	2-1/2"	(3) #3/0	#6		2004	200	2-1/2"	2-1/2"	(4) #3/0	#6	
2253	225	2-1/2"	2-1/2"	(3) #4/0	#4		2254	225	2-1/2"	3"	(4) #4/0	#4	
2503	250	2-1/2"	3"	(3) #250 KCMIL	#4		2504	250	2-1/2"	3"	(4) #250 KCMIL	#4	
3003	300	3"	3"	(3) #350 KCMIL	#4		3004	300	3"	3-1/2"	(4) #350 KCMIL	#4	
3503	350	3"	3-1/2"	(3) #500 KCMIL	#3		3504	350	3-1/2"	4"	(4) #500 KCMIL	#3	
4003	400	(2) 2"	(2) 2-1/2"	(3) #3/0 (EACH)	#3 (EACH)		4004	400	(2) 2-1/2"	(2) 2-1/2"	(4) #3/0 (EACH)	#3 (EACH)	
4503	450	(2) 2-1/2"	(2) 2-1/2"	(3) #4/0 (EACH)	#2 (EACH)		4504	450	(2) 2-1/2"	(2) 3"	(4) #4/0 (EACH)	#2 (EACH)	
5003	500	(2) 2-1/2"	(2) 3"	(3) #250 KCMIL (EACH)	#2 (EACH)		5004	500	(2) 2-1/2"	(2) 3"	(4) #250 KCMIL (EACH)	#2 (EACH)	
6003	600	(2) 3"	(2) 3"	(3) #350 KCMIL (EACH)	#1 (EACH)		6004	600	(2) 3"	(2) 3-1/2"	(4) #350 KCMIL (EACH)	#1 (EACH)	
7003	700	(2) 3"	(2) 3-1/2"	(3) #500 KCMIL	#1/0 (EACH)		7004	700	(2) 3-1/2"	(2) 4"	(4) #500 KCMIL	#1/0 (EACH)	
8003	800	(3) 2-1/2"	(3) 3"	(3) #300 KCMIL (EACH)	#1/0 (EACH)		8004	800	(3) 3"	(3) 3-1/2"	(4) #300 KCMIL (EACH)	#1/0 (EACH)	
10003	1000	(3) 3"	(3) 3-1/2"	(3) #400 KCMIL (EACH)	#2/0 (EACH)		10004	1000	(3) 3"	(3) 3-1/2"	(4) #400 KCMIL (EACH)	#2/0 (EACH)	
12003	1200	(4) 3"	(4) 3"	(3) #350 KCMIL (EACH)	#3/0 (EACH)		12004	1200	(4) 3"	(4) 3-1/2"	(4) #350 KCMIL (EACH)	#3/0 (EACH)	
16003	1600	(5) 3"	(5) 3-1/2"	(3) #400 KCMIL (EACH)	#4/0 (EACH)		16004	1600	(5) 3"	(5) 3-1/2"	(4) #400 KCMIL (EACH)	#4/0 (EACH)	
20003	2000	(6) 3"	(6) 3-1/2"	(3) #400 KCMIL (EACH)	#250 KCMIL (EACH)		20004	2000	(6) 3"	(6) 3-1/2"	(4) #400 KCMIL (EACH)	#250 KCMIL (EACH)	
25003	2500	(7) 3"	(7) 3-1/2"	(3) #500 KCMIL (EACH)	#350 KCMIL (EACH)		25004	2500	(7) 3-1/2"	(7) 4"	(4) #500 KCMIL (EACH)	#350 KCMIL (EACH)	
30003	3000	(8) 3"	(8) 3-1/2"	(3) #500 KCMIL (EACH)	#400 KCMIL (EACH)		30004	3000	(8) 3-1/2"	(8) 4"	(4) #500 KCMIL (EACH)	#400 KCMIL (EACH)	
40003	4000	(10) 3-1/2"	(10) 4"	(3) #600 KCMIL (EACH)	#500 KCMIL (EACH)		40004	4000	(10) 4"	(10) 4"	(4) #600 KCMIL (EACH)	#500 KCMIL (EACH)	

3Ø, 3W + GND CIRCUITS ADJUSTED FOR VOLTAGE DROP						
1003a	100	1-1/2"	(E) 4"	(3) #1	#1	

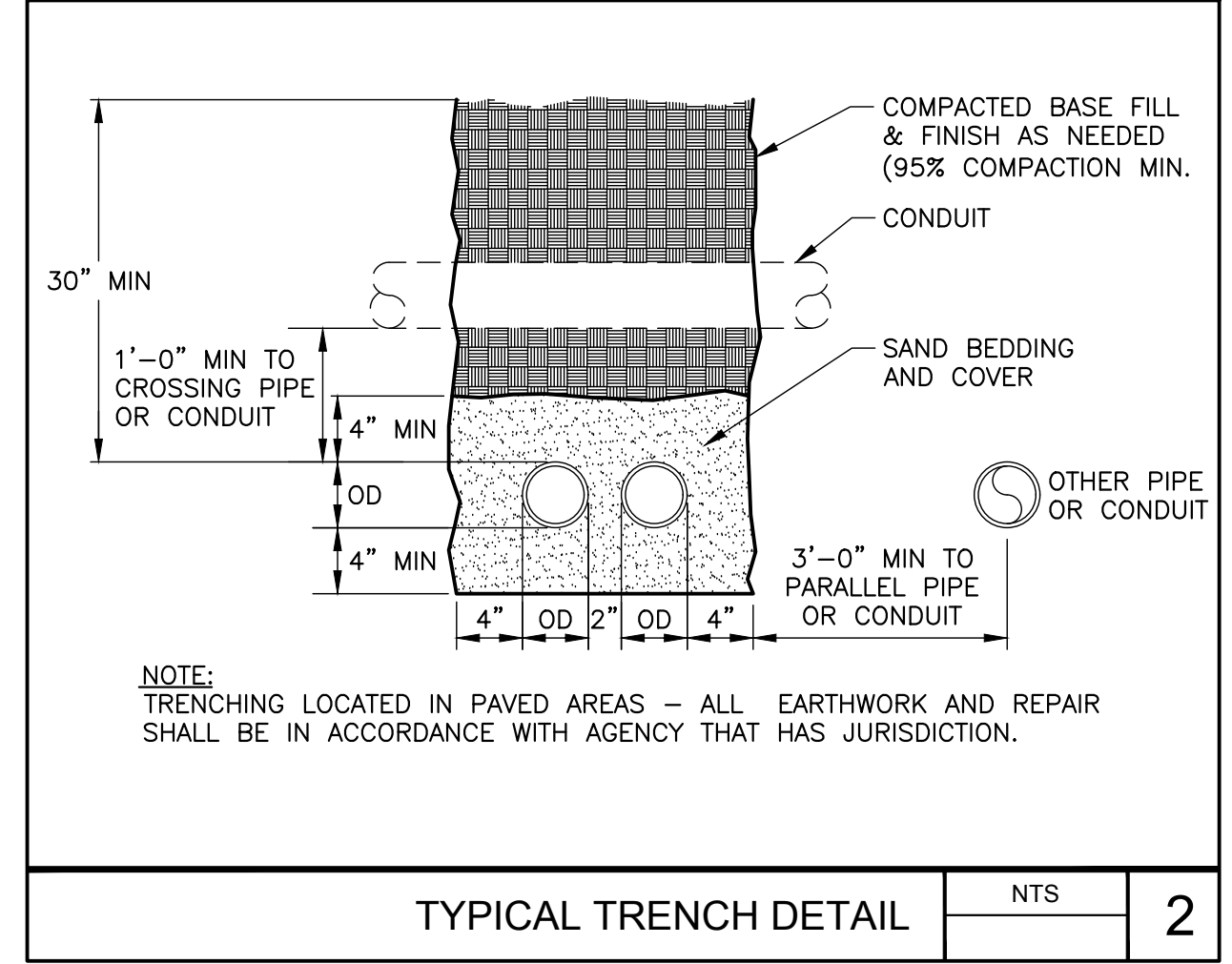
3Ø, 4W + GND CIRCUITS ADJUSTED FOR VOLTAGE DROP						
3004a	300	3"	3-1/2"	(4) #350 KCMIL	#1	

NOTES:
 A. ALL CONDUCTORS SHALL BE DUAL RATED THINWALL, 90/75°, 600V, COPPER WHERE INSTALLED UNDERGROUND OR IN WET LOCATIONS.
 B. CONDUCTOR SIZES ARE BASED ON 2020 NEC TABLE 310.16, COPPER.
 C. ALL CIRCUITS 100A AND LOWER ARE SIZED FROM THE 60" COLUMN (NEC 110.14(C)). ALL OTHER CIRCUITS ARE SIZED FROM THE 75" COLUMN.
 D. PVC CONDUIT HAS BEEN SIZED BASED ON TABLE C.1 - SCHEDULE 80.
 E. WHERE UNGROUNDED CONDUCTORS ARE INCREASED FROM THE MINIMUM SIZE DUE TO VOLTAGE DROP, THE EGC SHALL BE UPSIZED PROPORTIONATELY ACCORDING TO CIRCULAR MIL (NEC 250.122(B)).

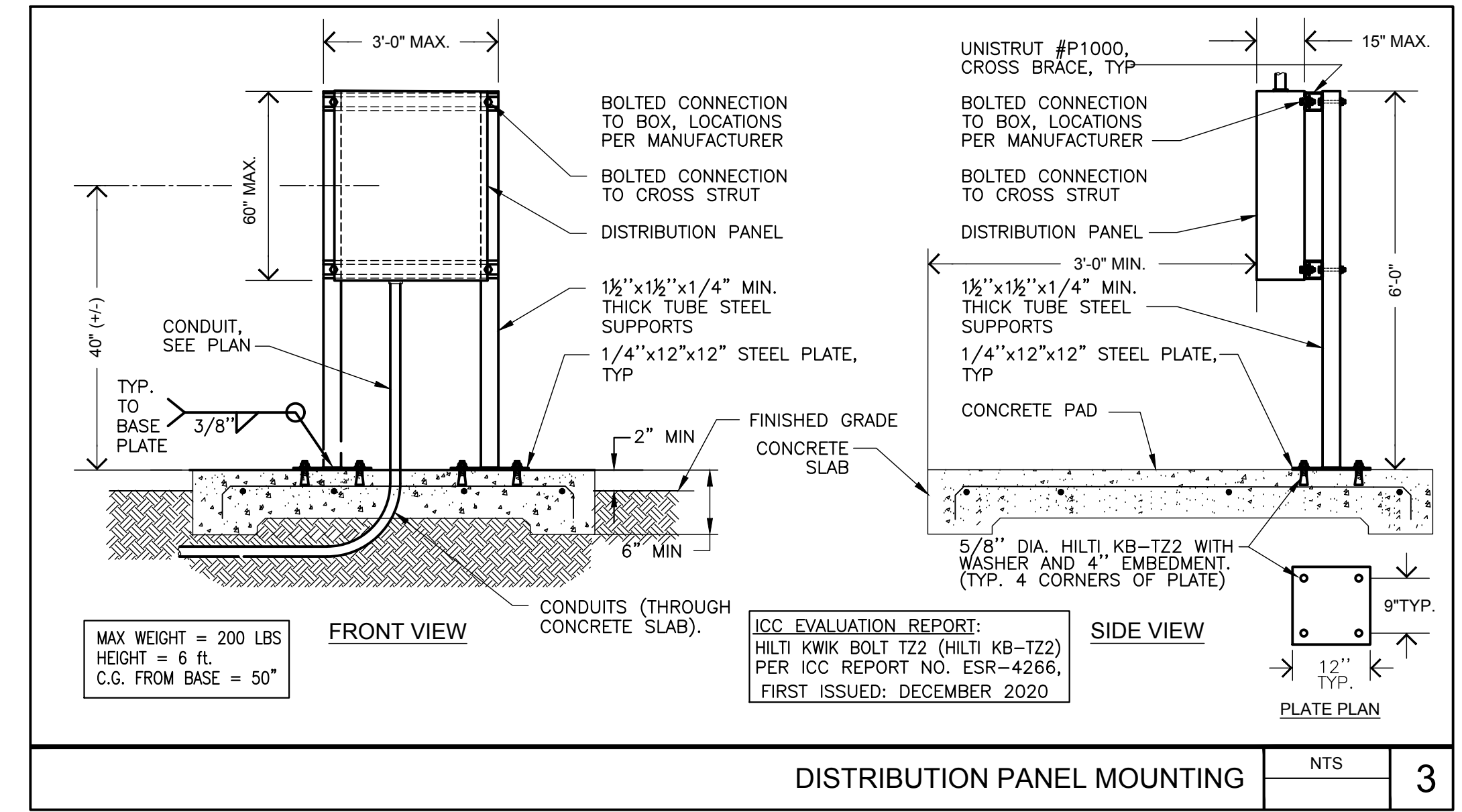
MISCELLANEOUS					
PS	PRIMARY SERVICE	N/A		PULL STRING	N/A
SEC	SECONDARY SERVICE				N/A
EXIST	EXISTING FEEDER		(E) CONDUCTORS		(E)



TYPICAL UNDERGROUND CONCRETE PULLBOX DETAIL NTS 1



TYPICAL TRENCH DETAIL NTS 2



DISTRIBUTION PANEL MOUNTING NTS 3

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT
 Sacramento City Unified School District
 7050 SAN JOAQUIN STREET
 SACRAMENTO, CA 95820

HMC Architects

3186062-000

2485 NATOMAS PARK DRIVE, STUDIO 100
 SACRAMENTO, CA 95833
 916 325 1100 / www.hmcarchitects.com

ISSUE	
DESCRIPTION	DATE
100% CD SUBMITTAL	10/18/2024

LP CONSULTING ENGINEERS

MEP & FS / Sustainability / CxA
 1209 Pleasant Grove Blvd.
 Roseville, CA 95678
 p 916-771-0778
 www.lpenginers.com
 Job #: 24-2169

REGISTERED PROFESSIONAL ENGINEER
 NAME: S. ZEIDMAN
 No. E 16762
 Exp. 9/30/26
 ELECTRICAL
 STATE OF CALIFORNIA

FACILITY: _____

**7050 SAN JOAQUIN STREET
 SACRAMENTO, CA 95820**

PROJECT: _____
ELECTRIC BUS CHARGING STATIONS

SHEET NAME: _____
ELECTRICAL DETAILS & SCHEDULES

CONSTRUCTION DOCUMENTS

DATE: 10/18/2024 CLIENT PROJ NO: _____

SHEET: _____

DATE PLOTTED: 12/16/2024 12:52:52 PM

ELECTRICAL SPECIFICATIONS

PART 1 - GENERAL

THE SPECIFICATION SECTIONS LISTED BELOW DO NOT ALL NECESSARILY APPLY TO THE SCOPE OF THIS PROJECT.

- 1.01 SCOPE OF WORK
 - A. FURNISH ALL NECESSARY LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS REQUIRED TO INSTALL A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM ACCORDING TO THE INTENT OF THIS SPECIFICATION WHETHER ITEMIZED OR NOT.
 - B. EXAMINE THE MECHANICAL PLANS AND SPECIFICATIONS FOR MECHANICAL EQUIPMENT AND PROVIDE ALL STARTERS, CIRCUIT BREAKERS, SWITCHES, PUSHBUTTONS, AND APPURTENANCES, WHICH ARE NOT SPECIFIED TO BE WITH THE MECHANICAL EQUIPMENT. ERECT ALL ELECTRICAL EQUIPMENT NOT DEFINITELY STATED TO BE ERECTED BY OTHERS, FURNISH AND INSTALL CONDUIT, WIRE, AND CABLE AND MAKE CONNECTIONS REQUIRED TO PLACE ALL EQUIPMENT IN COMPLETE OPERATION.
 - C. THE GENERAL EXTENT OF THE ELECTRICAL WORK INCLUDES, AMONG OTHERS, THE FURNISHING AND INSTALLING OF THE FOLLOWING ITEMS:
 1. PRIMARY AND SECONDARY SERVICE FACILITIES INCLUDING TRANSFORMER PADS, PRIMARY CONDUIT AND TRENCHING, SECONDARY CONDUIT, TRENCHING AND CONDUCTORS, AND MAIN SWITCHBOARD INCLUDING FACILITIES FOR METERING, DISTRIBUTION PANELS, AND PANELBOARDS.
 2. LIGHTING AND POWER INSTALLATION, INCLUDING FIXTURES, RECEPTACLE OUTLETS, SWITCHING, AND CIRCUITS AS INDICATED ON THE DRAWINGS.
 3. ALL SUPPORTS, BASES, ANCHORS, SLEEVES, HANGERS AND THE LIKE, ALL ELECTRICAL WORK SHOWN AND/OR SPECIFIED, NOT PARTICULARLY MENTIONED ABOVE.
 4. COMPLETE GROUNDING AND BONDING SYSTEMS.
 5. TELEPHONE (WIRE) SERVICE ENTRANCE CONDUIT, BACKBOARDS, AND INTERCONNECTING CONDUIT. SEE TECHNOLOGY DRAWINGS AND COORDINATE REQUIREMENTS.
 6. CABLE TELEVISION SERVICE ENTRANCE CONDUIT, BACKBOARD OR CABINET, AND INTERCONNECTING CONDUIT. SEE TECHNOLOGY DRAWINGS AND COORDINATE REQUIREMENTS.
 7. THE CONTRACTOR WILL COORDINATE WITH THE LOCAL UTILITY COMPANIES FOR VERIFICATION OF THEIR REQUIREMENTS PRIOR TO BID CLOSURE AND PRIOR TO INSTALLATION. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY VOLTAGE, PHASE, CONDUIT SIZE, TYPE AND QUANTITY, WIRE SIZE, TYPE AND QUANTITY, AND THE LOCATION OF ALL EQUIPMENT REQUIRED FOR THIS PROJECT.
 8. STANDBY EMERGENCY POWER GENERATOR, CONCRETE PAD, AND AUTO-TRANSFER SWITCH.
 9. POWER CONNECTION TO HVAC AND PLUMBING EQUIPMENT.
- 1.02 RELATED WORK INCLUDED IN OTHER DIVISIONS
 - A. FINISH PAINTING EXCEPT FACTORY APPLIED FINISHES AND REPAIR OF FACTORY FINISHES SHALL BE PROVIDED IN ACCORDANCE WITH APPROPRIATE SECTIONS OF THIS SPECIFICATION. "PAINTING" REQUIREMENTS OF THIS DIVISION WITH OTHER TRADES AS REQUIRED TO ASSURE TIMELY AND SATISFACTORY COMPLETION OF REQUIRED WORK IN FINISHED AREAS. ALL EXPOSED RACEWAY, BOXES, GALVANIZED STEEL BOX COVERS (WHERE ALLOWED), AND OTHER ELECTRICAL "STRUCTURE" SHALL BE FINISHED TO MATCH ADJACENT STRUCTURES. VERIFY THAT ALL RACEWAY OPENINGS ARE CLOSED AND BOX COVERS ARE IN PLACE PRIOR TO FINISHING WORK DONE BY OTHERS.
 - B. EXAMINE THE DRAWINGS AND SPECIFICATIONS FOR MECHANICAL EQUIPMENT AND PROVIDE ELECTRICAL INSTALLATION FOR HEATING, VENTILATION AND AIR CONDITIONING EQUIPMENT, MOTORS, PUMPS AND ASSOCIATED MOTOR STARTERS AND CONTROLS AS DESCRIBED IN 1.15 EQUIPMENT IDENTIFICATION.
 - C. EXAMINE THE DRAWINGS AND SPECIFICATIONS OF OTHER TRADES FOR ELECTRICAL EQUIPMENT WHICH MAY NOT BE SHOWN ON THE PLANS TO INCLUDE AND PROVIDE ELECTRICAL INSTALLATIONS AS DESCRIBED IN OTHER TRADES WORK, I.E. MODULAR OFFICE SYSTEM FURNITURE, INFORMATION TECHNOLOGY (IT) SYSTEM EQUIPMENT, AUDIO/VISUAL SYSTEMS EQUIPMENT, ETC.
 - D. EXAMINE THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR ELECTRICAL APPLIANCES AND EQUIPMENT WHICH MAY NOT BE SHOWN ON THE PLANS TO INCLUDE AND PROVIDE ELECTRICAL INSTALLATIONS AS DESCRIBED IN THE ARCHITECTURAL DIVISION OF WORK.
 - E. EXAMINE THE ARCHITECTURAL DRAWINGS AND PROVIDE ALL CONSTRUCTION NECESSARY TO MAINTAIN THE INTEGRITY OF THE FIRE RATED BARRIERS.
 - F. EXAMINE THE ARCHITECTURAL DRAWINGS AND COORDINATE WITH THE ARCHITECT TO PROVIDE ACCESS DOORS, WHETHER SHOWN ON DRAWINGS OR NOT, WHERE FLOORS, WALLS, OR CEILING MUST BE PENETRATED FOR ACCESS TO ELECTRICAL EQUIPMENT, OUTLET BOXES, DEVICES, ETC., AND AS SPECIFIED IN THIS SPECIFICATION.
 - G. PROVIDE AND INSTALL, AS PART OF THE WORK DESCRIBED IN THIS DIVISION, ALL POWER AND CONTROL WIRING FED FROM A SOURCE OF 30 VOLTS OR MORE (I.E. ALL WIRING EXCEPT TEMPERATURE CONTROL WIRING) FOR MECHANICAL EQUIPMENT DESCRIBED IN 1.15 EQUIPMENT IDENTIFICATION.
- 1.03 APPLICATION OF OTHER DIVISIONS
 - A. WHERE CARPENTRY, MASONRY, CONCRETE WORK, PAINTING, ETC., IS REQUIRED IN THE INSTALLATION OF EQUIPMENT SPECIFIED UNDER THIS DIVISION, THE WORK SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE DIVISION OF THESE SPECIFICATIONS. THIS WORK COULD INCLUDE FOR EXAMPLE WORK ASSOCIATED WITH PANELBOARD INSTALLATION, EQUIPMENT PADS OR BASES, SUPPORT STRUCTURES, ETC.
- 1.04 DRAWINGS AND SPECIFICATIONS
 - A. THE INFORMATION PRESENTED IN THESE SPECIFICATIONS AND ON THE DRAWINGS IS INTENDED TO DESCRIBE THE UTILITARIAN AND PHYSICAL ASPECTS OF THE SYSTEMS SHOWN AS WELL AS THE QUALITY OF THE ENTIRE INSTALLATION. ALL INFORMATION IS AS COMPLETE AND THOROUGH AS POSSIBLE, BUT EVERY CONDITION OR SITUATION CANNOT BE ANTICIPATED. EXACT LOCATIONS, DIMENSIONS, ELEVATIONS, ETC. MUST BE DETERMINED "ON THE JOB" WITH CAREFUL ATTENTION TO THE "INTENT" OF THE DRAWINGS AND SPECIFICATIONS.
 - B. THE ABOVE PARAGRAPH SHALL NOT BE CONSTRUED AS TO ALLOW SIGNIFICANT DEVIATION FROM EITHER THE DRAWINGS OR SPECIFICATIONS WITHOUT PRIOR APPROVAL OF THE ARCHITECT, BUT MINOR CHANGES IN CONDUIT ROUTING OR EQUIPMENT LOCATIONS MAY BE REQUIRED OR DESIRED DUE TO SPECIFIC CONDITIONS ENCOUNTERED. THIS WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE SPECIFICATIONS AND NO "EXTRA CHARGES" ARE TO BE CREATED FOR ANY UNANTICIPATED LABOR OR MATERIAL.
 - C. ANY ERROR OR OMISSIONS OF DETAIL IN EITHER THE DRAWINGS OR THE SPECIFICATIONS SHALL NOT RELIEVE THE CONTRACTOR FROM CORRECTLY INSTALLING ALL MATERIALS NECESSARY FOR COMPLETE AND OPERATING ELECTRICAL SYSTEMS.
 - D. CONTRACTOR SHALL INSPECT THE SITE AND VERIFY ALL MEASUREMENTS AND CONDITIONS. NO EXTRA COMPENSATION WILL BE ALLOWED BECAUSE OF DIFFERENCES BETWEEN WORK SHOWN ON THE DRAWINGS AND MEASUREMENTS AT THE SITE.
 - E. THE DRAWINGS ARE DIAGRAMMATIC IN NATURE, BUT THE LOCATIONS OF DEVICES, EQUIPMENT, OUTLETS, AND LIGHTING FIXTURES ARE SHOWN APPROXIMATELY WHERE INSTALLATIONS ARE INTENDED. ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND OTHER DRAWINGS SHALL BE EXAMINED, NOTING ALL CONDITIONS THAT MAY AFFECT THIS WORK. REPORT CONFLICTING CONDITIONS TO THE ARCHITECT/ENGINEER FOR ADJUSTMENT BEFORE PROCEEDING WITH THE WORK. SHOULD THE CONTRACTOR PROCEED WITH WORK WITHOUT REPORTING THE MATTER, HE DOES SO ON HIS OWN RESPONSIBILITY AND SHALL ALTER WORK IF DIRECTED BY THE ARCHITECT/ENGINEER AT HIS OWN EXPENSE.
 - F. EXAMINE THE ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING AND MANUFACTURER'S DRAWINGS FOR VARIOUS EQUIPMENT IN ORDER TO DETERMINE EXACT ROUTING AND FINAL TERMINATIONS FOR ALL CONDUITS AND CABLES. CONDUITS SHALL BE STUBBED UP AS NEAR AS POSSIBLE TO EQUIPMENT ENCLOSURE.
 - G. ALL EQUIPMENT SHALL BE LOCATED AND INSTALLED SO THAT IT WILL BE READILY ACCESSIBLE FOR OPERATION AND MAINTENANCE. THE OWNER RESERVES THE RIGHT TO REQUIRE MINOR CHANGES IN LOCATION OF OUTLETS OR EQUIPMENT, PRIOR TO ROUGH IN WITHOUT INCURRING ANY ADDITIONAL COST OR CHANGES.
 - H. IF SIGNIFICANT DEPARTURES FROM THE DRAWINGS OR SPECIFICATIONS ARE CONSIDERED NECESSARY BY THE CONTRACTOR, DETAILS OF THE CHANGES AND THE REASONS THEREFOR SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER WITHIN THIRTY DAYS AFTER AWARD OF CONTRACT. PRIOR WRITTEN ACCEPTANCE OF THE ARCHITECT IS REQUIRED FOR THESE DEPARTURES.
 - I. CLARIFICATION OF PLANS AND SPECIFICATIONS FOR THE PURPOSE OF FACILITATING CONSTRUCTION, BUT NOT INVOLVING ADDITIONAL LABOR AND MATERIALS, MAY BE PREPARED DURING CONSTRUCTION BY THE ARCHITECT/ENGINEER. SAID REVISED PLANS AND SPECIFICATIONS SHALL BECOME A PART OF THE CONTRACT. THE CONTRACTOR SHALL CONFORM TO THE REVISED PLANS AND SPECIFICATIONS AT NO ADDITIONAL COST TO THE OWNER.
 - J. WHERE EXISTING UNDERGROUND OR OTHERWISE CONCEALED FACILITIES ARE INDICATED ON THE DRAWINGS, THESE ARE LOCATED AS WELL AS CAN BE DETERMINED FROM AVAILABLE INFORMATION. THE CONTRACTOR IS REQUIRED TO VERIFY ACTUAL LOCATIONS AS NECESSARY FOR THIS CONSTRUCTION.
- 1.05 CODES AND STANDARDS
 - A. ALL WORK SHALL CONFORM TO THE FOLLOWING CODES:
 1. NFPA 70 - NATIONAL ELECTRICAL CODE 2020 EDITION WITH 2022 CALIFORNIA ELECTRICAL CODE (CEC) AMENDMENTS.
 2. TITLE 24 2022 - STATE OF CALIFORNIA ADMINISTRATIVE CODE
 3. 2022 CALIFORNIA BUILDING CODE
 4. CITY OR COUNTY ELECTRICAL CODE AS APPLICABLE
 5. APPLICABLE REGULATIONS OF LOCAL UTILITY COMPANIES
 6. ELECTRIC UTILITY SERVICE EQUIPMENT REQUIREMENTS COMMITTEE (EUSERC) STANDARDS
 7. ANY ADDITIONAL CODES EFFECTIVE AT THE JOB SITE
 - B. FURNISH WITHOUT EXTRA CHARGE ANY ADDITIONAL MATERIAL AND LABOR WHICH MAY BE REQUIRED FOR COMPLIANCE WITH THESE LAWS, RULES, AND REGULATIONS, EVEN THOUGH THE WORK IS NOT MENTIONED IN THESE PARTICULAR SPECIFICATIONS.
 - C. APPLY AND PAY FOR ALL PERMITS REQUIRED BY ANY OF THE LEGALLY CONSTITUTED PUBLIC AUTHORITIES FOR THE INSTALLATION OR CONSTRUCTION OF THE WORK INCLUDED UNDER THIS SPECIFICATION.
 - D. ARRANGE AND PAY FOR ANY INSPECTIONS OR EXAMINATIONS SO REQUIRED AND DELIVER CERTIFICATES OF ALL SUCH INSPECTIONS TO THE OWNER. WHEN THESE SPECIFICATIONS CALL FOR MATERIALS OR CONSTRUCTION OF A BETTER QUALITY OR LARGER SIZES THAN REQUIRED BY THE ABOVE MENTIONED RULES AND REGULATIONS, THE PROVISIONS OF THE SPECIFICATIONS SHALL TAKE PRECEDENCE.
- 1.06 EXAMINATION OF THE SITE
 - A. THE CONTRACTOR IS REQUIRED TO VISIT THE SITE OF CONSTRUCTION PRIOR TO BID TO DETERMINE EXISTING CONDITIONS AND THEIR EFFECT UPON THE WORK HE WILL BE REQUIRED TO PERFORM. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR ANY EXTRA EXPENSES INCURRED BY FAILURE TO DETECT AND EVALUATE ALL EXISTING CONDITIONS THAT WILL AFFECT HIS WORK TO BE INCLUDED IN THE BID TO ACCOMPLISH THIS CONTRACT DOCUMENT'S GOAL.

- 1.07 COORDINATION WITH OTHER TRADES
 - A. EXAMINE THE ELECTRICAL DRAWINGS AND REFER TO THE DRAWINGS AND SPECIFICATIONS DESCRIBING OTHER WORK TO BE ACCOMPLISHED. VERIFY AND COORDINATE PRIOR TO BID TO CONTINUE TO COORDINATE WORK PLANNING AND ALL WORK IN THE FIELD TO AVOID CONFLICTS, ERRORS, AND/OR DELAYS. NO COMPENSATION WILL BE ALLOWED FOR EXTRA WORK NECESSITATED BY LACK OF COORDINATION.
- 1.08 STRUCTURAL REQUIREMENTS
 - A. SECURE ALL ANCHORS FOR ELECTRICAL EQUIPMENT IN A MANNER, WHICH WILL NOT DECREASE THE STRUCTURAL VALUE OF ANY STRUCTURE TO AN UNSAFE LEVEL. INSTALL ALL EQUIPMENT, FIXTURES, ETC. TO RESIST SEISMIC MOVEMENTS. INFORM THE ARCHITECT IN ADVANCE AND PROVIDE DRAWINGS OF ANY PROPOSED MODIFICATIONS TO THE STRUCTURE THAT INVOLVES CUTTING OR PATCHING OF CONCRETE, MASONRY, STEEL, OR WOOD IN THIS PROJECT.
- 1.09 MANUFACTURER'S INSTRUCTIONS
 - A. FOLLOW THE MANUFACTURER'S INSTRUCTIONS WHEN SPECIFIC INSTALLATION OR CONNECTION DETAILS ARE NOT INDICATED OR SPECIFIED ON THE CONTRACT DOCUMENTS.
 - B. NOTIFY THE ARCHITECT/ENGINEER OF CONFLICTS BETWEEN THE MANUFACTURER'S INSTRUCTIONS AND INSTALLATION OR CONNECTION DETAILS PRIOR TO THE INSTALLATION OF MATERIALS.
- 1.10 SERVICE AND METERING
 - A. NEW UNDERGROUND FACILITIES SHALL BE PROVIDED FOR THE POWER COMPANY'S PRIMARY LINES. VERIFY AND COORDINATE WITH THE UTILITY COMPANY FOR EXACT REQUIREMENT FOR CONDUITS AND CONDUCTORS.
 - B. NEW UNDERGROUND FACILITIES SHALL BE PROVIDED FOR THE POWER COMPANY'S SECONDARY LINES. VERIFY AND COORDINATE WITH THE UTILITY COMPANY FOR EXACT REQUIREMENT FOR CONDUITS AND CONDUCTORS.
 - C. PROVIDE TRANSFORMER PADS AND SERVICE AS SHOWN ON PLANS.
 - D. PAY ALL COSTS AND POWER COMPANY CHARGES.
 - E. POWER IS PROVIDED BY THE LOCAL UTILITY COMPANY.
 - F. COORDINATE ALL REQUIREMENTS WITH THE UTILITY COMPANY PRIOR TO BID.
- 1.11 INSPECTION
 - A. COOPERATE WITH THE OWNER AND PROVIDE ASSISTANCE AT ALL TIMES FOR THE INSPECTION OF THE ELECTRICAL WORK. REMOVE COVERS, OPERATE MACHINERY, OR PERFORM ANY REASONABLE WORK, WHICH IN THE OPINION OF THE OWNER, WILL BE NECESSARY TO DETERMINE THE QUALITY OR ADEQUACY OF THE WORK.
 - B. IF ANY MATERIAL DOES NOT CONFORM TO THESE SPECIFICATIONS, REMOVE THE MATERIALS FROM THE PREMISES, WITHIN THREE DAYS AFTER BEING NOTIFIED BY THE OWNER.
 - C. WORK SHALL NOT BE CLOSED IN OR COVERED BEFORE INSPECTION AND APPROVAL BY THE OWNER.
- 1.12 QUALITY OF MATERIALS
 - A. ALL ELECTRICAL MATERIALS USED ON THIS PROJECT SHALL BE NEW AND FREE FROM DEFECTS.
 - B. ALL ELECTRICAL MATERIALS USED ON THIS PROJECT SHALL CONFORM WHERE APPLICABLE, TO THE FOLLOWING STANDARDS, UNLESS OTHERWISE NOTED:
 1. NEMA - NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
 2. ANSI - AMERICAN NATIONAL STANDARDS INSTITUTE
 3. UL - UNDERWRITERS LABORATORIES, INC.
 - C. EACH TYPE OF MATERIAL SHALL BE OF THE SAME MANUFACTURER AND QUALITY THROUGHOUT THE WORK.
- 1.13 SUBMITTAL & SHOP DRAWINGS
 - A. SHOP DRAWINGS AND SUPPLEMENTAL DATA WHERE CALLED FOR, SHALL BE PREPARED AND SUBMITTED AS PER GENERAL CONDITIONS. FINAL CORRECTED COPIES OF SCHEDULES AND SHOP DRAWINGS OR SUPPLEMENTAL DATA TO ARCHITECT FOR REVIEW SHALL BE SUCH AS TO PROVIDE ONE (1) FOR ARCHITECT'S FILES, ONE (1) FOR ELECTRICAL ENGINEER'S FILES, TWO (2) FOR THE OWNER, ONE (1) TO CONTRACTOR'S JOB FILES, AND SUCH ADDITIONAL COPIES AS CONTRACTOR MAY DESIRE FOR HIS OWN OFFICE FILES AND/OR FOR DISTRIBUTION BY HIM TO SUBCONTRACTORS OR VENDORS. EXCEPTIONS SHALL BE AS NOTED IN THE DIVISION 1 SPECIFICATION SECTIONS.
 - B. SHOP DRAWINGS AND SUPPLEMENTAL DATA ARE REQUIRED UNLESS SPECIFICALLY NOT REQUESTED BY THE ENGINEER. SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL ELECTRICAL EQUIPMENT PERTAINING TO JOB. (NOT LIMITED TO ELECTRICAL EQUIPMENT, LIGHTS, RECEPTACLES, BOXES AND ENCLOSURES, CONDUIT, WIRE, ETC.)
 - C. THE SHOP DRAWINGS AND SUPPLEMENTAL DATA SHOWN CALLED FOR SHALL BE SUBMITTED AS THE INSTRUMENTS OF THE CONTRACTOR, EVEN THOUGH THEY MAY HAVE BEEN PREPARED BY A SUBCONTRACTOR, SUPPLIER, DEALER, MANUFACTURER, OR BY ANY OTHER PERSON, FIRM OR ORGANIZATION. PRIOR TO SUBMISSION, THE CONTRACTOR SHALL UNDERTAKE HIS OWN REVIEW AND STAMP WITH HIS ACCEPTANCE, THEN SUBMIT TO THE ENGINEER FOR HIS REVIEW. BY ACCEPTING AND SUBMITTING SHOP DRAWINGS AND SUPPLEMENTAL DATA, THE CONTRACTOR REPRESENTS THAT HE HAS DETERMINED AND VERIFIED ALL FIELD MEASUREMENTS, THE PHYSICAL CONSTRUCTION, THE QUALITY OF MATERIALS, THE APPLICABILITY OF CATALOG NUMBERS, AND SIMILAR DATA, OR WILL DO SO, AND THAT HE HAS CHECKED AND COORDINATED EACH SHOP DRAWING WITH THE REQUIREMENTS OF THE TRADES SHALL BE RESOLVED BY THE CONTRACTOR IN THE SHOP DRAWINGS, IF POSSIBLE, BUT IN ANY EVENT PRIOR TO THE ACTUAL CONSTRUCTION.
 - D. ALL SHOP DRAWINGS SHALL BE DRAWN ACCURATELY ON PAPER SUITABLE FOR DUPLICATE COPYING BY BLACK, OR BLUE LINE PRINTING PROCESSES, OR XEROX.
 - E. SUPPLEMENTAL DATA SHALL INCLUDE INFORMATION AS NOTED IN THE SPECIFICATION PARAGRAPHS REQUIRING THEM, OR AS REQUESTED BY THE ARCHITECT.
 - F. THE ENGINEER WILL REVIEW SHOP DRAWINGS AND SUPPLEMENTAL DATA SUBMITTED BY THE CONTRACTOR ONLY FOR GENERAL DESIGN CONFORMANCE WITH THE CONCEPT OF THE PROJECT AND COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS.
 - G. IF MORE THAN ONE (1) SUBMISSION OF SHOP DRAWINGS OR SUPPLEMENTAL DATA IS REQUIRED FOR ANY GIVEN ITEM TO MEET THE PROJECT SPECIFICATIONS, THE COST OF REVIEWING THESE ADDITIONAL SUBMISSIONS SHALL BE CHARGED DIRECTLY AGAINST THE CONTRACTOR AND THE OWNER WILL WITHHOLD THE FUNDS NECESSARY TO COVER THESE COSTS.
 - H. SHOP DRAWINGS, IF REQUESTED, MUST BE SUBMITTED TO AND FAVORABLY REVIEWED BY THE ARCHITECT AND/OR ENGINEER BEFORE BEING USED BY THE CONTRACTOR ON THE JOB.
 - I. SHOP DRAWINGS DEADLINE: IN ADDITION TO REQUIREMENTS AS ESTABLISHED IN DIVISION 1 OF THE GENERAL CONDITIONS, THE CONTRACTOR SHALL, WITHIN 25 CALENDAR DAYS AFTER THE NOTICE TO PROCEED OF THE CONTRACT, SUBMIT TO THE ARCHITECT FOR APPROVAL THE SHOP DRAWINGS FOR EQUIPMENT AND/OR SPECIALTY ITEMS AS LISTED IN EACH DIVISION OF WORK. THE SHOP DRAWINGS SHALL BE SUBMITTED IN ADDITION TO THE LIST OF MATERIALS REQUIRED BY THE "SPECIFIED ITEMS - SUBSTITUTES" PARAGRAPH.
 - J. SHOP DRAWINGS DELINEATION: THE SHOP DRAWINGS SHALL BE DRAWN TO SCALE AND SHALL BE COMPLETELY DIMENSIONED, BRINGING THE PLAN TOGETHER WITH SUCH SECTIONS AS ARE NECESSARY TO CLEARLY SHOW CONSTRUCTION DETAIL.
 - K. RESPONSIBILITY: THESE SHOP DRAWINGS AND ALL SUPPORTING DATA, CATALOGS, ETC., SHALL BE PREPARED BY THE CONTRACTOR OR HIS SUPPLIERS, BUT SHALL BE SUBMITTED AS THE INSTRUMENTS OF THE CONTRACTOR. THEREFORE, THE CONTRACTOR SHALL CHECK THE DRAWINGS OF HIS SUPPLIERS AS WELL AS HIS OWN DRAWINGS BEFORE SUBMITTING THEM TO THE ARCHITECT. IN PARTICULAR, THE CONTRACTOR SHALL ASCERTAIN THAT THE SHOP DRAWINGS MEET ALL REQUIREMENTS OF THE FINAL DESIGN DRAWINGS AND SPECIFICATIONS AND ALSO CONFORM TO THE STRUCTURAL AND SPACE CONDITIONS. EACH SHOP DRAWING SUBMITTED FOR APPROVAL SHALL BEAR A STAMP CERTIFYING THAT IT HAS BEEN CHECKED BY THE CONTRACTOR IN ACCORDANCE WITH THE SPECIFICATIONS. IF SUCH SHOP DRAWINGS SHOW VARIATIONS FROM CONTRACT DOCUMENTS, WHETHER BECAUSE OF STANDARD SHOP PRACTICE OR OTHER REASONS, THE CONTRACTOR SHALL MAKE SPECIAL MENTION THEREOF IN HIS LETTER TRANSMITTAL. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR OBSERVING THE NEED FOR AND MAKING ANY CHANGES IN THE ARRANGEMENT OF PIPING, CONNECTIONS, WIRING, MANNER OF INSTALLATION ETC., WHICH MAY BE REQUIRED BY THE EQUIPMENT HE PROPOSES TO SUPPLY BOTH AS IT PERTAINS TO HIS OWN WORK AND ANY WORK AFFECTED UNDER OTHER PARTS, HEADINGS, OR DIVISIONS OF DRAWINGS AND SPECIFICATIONS.
 - L. IDENTIFICATION: SHOP DRAWINGS SHALL BE ENTITLED WITH THE NAME OF THE PROJECT ON EACH SHEET AND SHALL OTHERWISE BE IDENTIFIED BY LISTING THE PARTICULAR DIVISION, SECTION, ARTICLE OR REFERENCE OF THE WORK PERTAINING. SUBMIT DIFFERENT ITEMS ON SEPARATE SHEETS. ALL SUBMITTALS SHALL BE NUMBERED SEQUENTIALLY.
 - M. MANNER: FURNISH FOR ARCHITECT'S APPROVAL SEPARATE SHEETS OF SUBMITTAL OF EACH SPECIALTY ITEM IN THE FOLLOWING MANNER:
 1. CATALOG CUTS SHALL BE PHOTOCOPIED OR REPRODUCED IN SOME OTHER ACCEPTABLE MANNER AND SUBMITTED ON PDF, NOTING ONLY THE ITEMS IN QUESTION, TOGETHER WITH THE DESCRIPTIVE (SPECIFICATION) DATA COMPLETE. DRAWINGS SHALL BE SUBMITTED IN PDF FORM.
 2. EACH SHEET SHALL BE IDENTIFIED WITH THE DIVISION, SECTION, ARTICLE OR REFERENCE IN THE CONTRACT DOCUMENTS, WHICH COVERS THE ITEM SUBMITTED FOR APPROVAL.
 3. EACH SHEET SHALL BE IDENTIFIED WITH THE PROJECT NAME AND THE ARCHITECT.
 4. EACH SHEET SHALL BEAR THE CONTRACTOR'S STAMP AND SIGNATURE OF APPROVAL.
- 1.14 SPECIFIED ITEMS - SUBSTITUTES
 - A. WHEREVER CATALOG NUMBERS AND SPECIFIC BRANDS OR TRADE NAMES FOLLOWED BY THE DESIGNATION "OR APPROVED EQUAL" ARE USED IN CONJUNCTION WITH A DESIGNATED MATERIAL, PRODUCT, THICKNESS, OR SERVICE MENTIONED IN THIS SPECIFICATION, THEY ARE USED TO ESTABLISH THE STANDARDS OF QUALITY, UTILITY AND APPEARANCE REQUIRED. SUBSTITUTIONS, WHICH ARE EQUAL IN QUALITY, UTILITY, AND APPEARANCE, SUBJECT TO APPROVAL, SHALL BE ALLOWED. SUBSTITUTIONS SHALL BE IDENTIFIED IN WRITING. MUST BE APPROVED BY THE ARCHITECT AND/OR ENGINEER IN WRITING. FOR THIS PURPOSE, THE CONTRACTOR SHALL SUBMIT TO THE ARCHITECT, WITHIN 30 CALENDAR DAYS AFTER THE DATE OF COMMENCEMENT SPECIFIED IN THE NOTICE TO PROCEED, A TYPEWRITTEN LIST CONTAINING A DESCRIPTION OF EACH PROPOSED SUBSTITUTE ITEM OR MATERIAL. THE ARCHITECT MAY INCREASE THE SUBMITTAL DEADLINE BEYOND 30 CALENDAR DAYS IF THE SCHEDULE ALLOWS. SUFFICIENT DATA, DRAWINGS, SAMPLES, LITERATURE OR OTHER DETAILED INFORMATION THAT WILL DEMONSTRATE TO THE ARCHITECT THAT THE PROPOSED SUBSTITUTE IS EQUAL IN QUALITY, UTILITY, AND APPEARANCE TO THE MATERIAL SPECIFIED SHALL BE APPENDED TO THIS LIST. THE ARCHITECT WILL APPROVE, IN WRITING, SUCH PROPOSED SUBSTITUTION WHICH AFFECT OTHER PARTS OF THE CONTRACTOR'S OWN WORK OR THE WORK OF OTHERS.
 - B. FAILURE OF THE CONTRACTOR TO SUBMIT PROPOSED SUBSTITUTIONS FOR APPROVAL IN THE MANNER DESCRIBED ABOVE AND WITHIN THE TIME PRESCRIBED SHALL BE SUFFICIENT CAUSE FOR DISAPPROVAL BY THE ENGINEER OF ANY SUBSTITUTIONS OTHERWISE PROPOSED.

- C. WHEREVER CATALOG NUMBERS AND SPECIFIC BRANDS OR TRADE NAMES NOT FOLLOWED BY THE DESIGNATION "OR APPROVED EQUAL" MATERIAL, PRODUCT, THING OR SERVICE MENTIONED IN THESE SPECIFICATIONS, NO SUBSTITUTIONS WILL BE ACCEPTED FOR APPROVAL.
 - D. WHEREVER MORE THAN ONE MANUFACTURER'S PRODUCT IS SPECIFIED, THE FIRST-NAMED PRODUCT IS THE BASIS FOR PROJECT DESIGN AND THE USE OF ALTERNATIVE NAME MANUFACTURER'S PRODUCTS OR SUBSTITUTES MAY REQUIRE MODIFICATIONS IN THE PROJECT DESIGN AND CONSTRUCTION. IF SUCH ALTERNATIVES ARE PROPOSED BY THE CONTRACTOR AND ARE FAVORABLY REVIEWED BY THE ENGINEER, THE CONTRACTOR SHALL ASSUME COSTS REQUIRED TO MAKE NECESSARY REVISIONS AND MODIFICATIONS INCLUDING ADDITIONAL COSTS TO THE OWNER FOR EVALUATIONS OF MODIFICATIONS OF THE PROJECT DESIGN SUBMITTED BY THE CONTRACTOR TO THE ARCHITECT.
 - E. WHEN MATERIALS ARE SPECIFIED BY THE FIRST MANUFACTURER'S NAME, AND PRODUCT NUMBER, SECOND MANUFACTURER'S NAME, OR APPROVED EQUAL, THE SECOND MANUFACTURER'S PRODUCT SHALL BE SUBMITTED IN ACCORDANCE WITH THE ABOVE PARAGRAPH.
 - F. IF THE ENGINEER IN THIS REVIEW OF THE LIST OF MATERIALS AND EQUIPMENT REQUIRES REVISIONS OR CORRECTIONS TO BE MADE OR SHOP DRAWINGS AND/OR SUPPLEMENTAL DATA TO BE SUBMITTED, THE CONTRACTOR SHALL PROMPTLY DO SO. IF ANY PROPOSED MATERIAL IS JUDGED BY THE ENGINEER TO BE UNACCEPTABLE, THE SPECIFIED ITEM SHALL BE PROVIDED, FURTHER SUBMISSIONS WILL NOT BE ALLOWED, UNLESS DIRECTED BY THE ENGINEER.
 - G. PHYSICAL SAMPLES MAY BE REQUIRED. IF TESTS FOR THE DETERMINATION OF EQUALITY AND UTILITY ARE REQUIRED BY THE ENGINEER THEY SHALL BE MADE BY A TESTING LABORATORY, WITH ACCEPTANCE OF THE TEST PROCEDURE FIRST GIVEN BY THE ENGINEER, AND AT THE EXPENSE OF THE CONTRACTOR.
 - H. IN REVIEW OF THE DATA SUBMITTED IN SUPPORT OF SUBSTITUTIONS, THE ENGINEER WILL USE FOR PURPOSES OF COMPARISON ALL THE CHARACTERISTICS OF THE SPECIFIED ITEM AS THEY APPEAR IN THE MANUFACTURER'S PUBLISHED DATA EVEN THOUGH ALL THE CHARACTERISTICS OF THE SPECIFIED ITEM MAY NOT HAVE BEEN PARTICULARLY MENTIONED IN THE MANUFACTURER'S PUBLISHED DATA. IF MORE THAN TWO SUBMISSIONS OF DATA ARE REQUIRED, THE COST OF REVIEWING THE DATA GOES AGAINST THE CONTRACTOR, AND THE OWNER WILL WITHHOLD THE FUNDS NECESSARY TO COVER THESE COSTS. ONLY ONE (1) SUCH REQUEST MAY BE SUBMITTED. THE ENGINEER'S REJECTION OF ANY SUBSTITUTE SHALL AUTOMATICALLY REQUIRE THE CONTRACTOR TO FURNISH THE SPECIFIED ITEM WITHOUT FURTHER DISCUSSION OR DELAY.
- 1.15 EQUIPMENT IDENTIFICATION
 - A. THE MAIN SWITCHBOARD, AND ALL PANELBOARDS, DISCONNECT SWITCHES, TRANSFORMERS, BOXES, ETC., SHALL BE PROPERLY IDENTIFIED WITH A DESCRIPTIVE NAMEPLATE. NAMEPLATES SHALL BE MADE OF 1/16 INCH LAMINATED PLASTIC WITH BLACK BACKGROUND AND WHITE LETTERS. SIZE OF LETTERS SHALL BE 1/4 INCH HIGH. LETTERS SHALL BE MACHINE ENGRAVED. ALL NAMEPLATES SHALL BE SCREW MOUNTED WITH OVAL HEAD MACHINE SCREWS TAPPED INTO FRONT OF PANEL.
 - B. PROVIDE HOLDERS WITH IDENTIFICATION CARDS FILLED OUT IN A TYPEWRITTEN FORMAT OF CIRCUIT DESIGNATIONS FOR EACH PANELBOARD.
 - C. EACH BRANCH CIRCUIT, CONTROL, AND SIGNAL CONDUCTOR SHALL BE LABELED WITH THE CIRCUIT NUMBER OR TERMINAL NUMBER IT IS CONNECTED TO. USE 1/8" VINYL OR BRANDY PERMASHIELD MYLAR MARKERS. CONDUCTORS SHALL BE LABELED AT EACH PANELBOARD, SWITCHBOARD, CONTROL CENTER, TERMINAL CABINET, PULL BOX, AND EACH POINT OF UTILIZATION SUCH AS FIXTURES, MOTORS, CONTROLS, ETC. LABELING SHALL CORRESPOND TO CONTROL DIAGRAMS WHERE APPLICABLE.
- 1.16 WARRANTY
 - A. GUARANTEE ALL WORK FOR ONE YEAR FROM DATE OF ACCEPTANCE AGAINST ALL DEFECTS IN MATERIAL, EQUIPMENT AND WORKMANSHIP.
- 1.17 RECORD AS-BUILT DRAWINGS
 - A. THE CONTRACTOR SHALL KEEP A SEPARATE SET OF ELECTRICAL DRAWINGS AT THE JOB SITE TO BE USED AS RECORD DRAWINGS. THESE DRAWINGS ARE TO BE KEPT CURRENT AND IN A NEAT AND CLEAN CONDITION AT ALL TIMES. THEY ARE TO BE AVAILABLE FOR INSPECTION BY THE ARCHITECT OR ENGINEER AT ANY TIME DURING SITE VISITATIONS. THESE DRAWINGS SHALL BE "RED LINED" TO INDICATE ALL CHANGES IN EQUIPMENT, DEVICE, AND OUTLET LOCATIONS; AND TO INDICATE THE TRUE LOCATIONS OF ALL CONCEALED OR UNDERGROUND WORK WHERE DIFFERENT FROM THAT SHOWN ON THE DRAWINGS. EACH SHEET OF THIS SET SHALL BE CLEARLY AND PERMANENTLY MARKED "RECORD AS-BUILT DRAWINGS".
 - B. UPON COMPLETION OF THE PROJECT AND PRIOR TO FINAL PAYMENT, TRANSFER ALL RECORD DRAWINGS INFORMATION TO THE PROVIDED ORIGINAL DRAWINGS. ALL INFORMATION SHALL BE CLEARLY DRAWN WITH RED INK. THE DRAWINGS SHALL BE SCANNED, 100% EDITED, AND CONVERTED INTO AN AUTOCAD 2000 VERSION 2000 (OR HIGHER) ELECTRONIC FILE. DELIVER THE ORIGINAL, FINAL SETS AND ELECTRONIC FILES (CD) TO THE ARCHITECT FOR REVIEW AND DELIVERY TO THE DISTRICT'S REPRESENTATIVE/OWNER.
- ## PART 2 - PRODUCTS
- 2.01 MATERIALS
 - A. UNLESS SPECIFICALLY INDICATED OTHERWISE, ALL MATERIAL SHALL BE NEW AND FREE FROM DEFECTS; IT SHALL BE LISTED BY UNDERWRITERS LABORATORIES WHERE APPLICABLE. LIKE ITEMS SHALL BE OF THE SAME MANUFACTURER (EXCEPT LIGHTING FIXTURES - WHICH SHALL BE AS SPECIFIED).
 - B. EXCEPT AS NOTED OTHERWISE, WHERE MATERIAL OF A PARTICULAR MANUFACTURER IS SPECIFIED, THE INTENT IS TO DESCRIBE THE QUALITY AND FUNCTION OF THE ITEM. THE TERM "...OR APPROVED EQUAL" IS IMPLIED. A SUBSTITUTION OF ANY OF THESE ITEMS WILL REQUIRE THAT THE ITEM BE PRESENTED IN A SUBMITTAL WHERE SPECIFICALLY LISTED IN THE "SUBMITTALS" PARAGRAPH ABOVE.
 - 2.02 ENCLOSURES
 - A. PROVIDE ENCLOSURES SUITABLE FOR THE SPECIFIC TYPE OF LOCATION IN WHICH THEY ARE INSTALLED.
 1. PROVIDE NEMA 1 OR NEMA 12 BOXES AND ENCLOSURES FOR DRY LOCATIONS. DRY LOCATIONS ARE ALL INDOOR AREAS THAT DO NOT FALL WITHIN THE DEFINITIONS BELOW FOR WET OR DAMP LOCATIONS.
 2. PROVIDE NEMA 3R BOXES AND ENCLOSURES FOR WET LOCATIONS. WET LOCATIONS ARE ALL LOCATIONS EXPOSED TO WEATHER, WHETHER UNDER A ROOF OR NOT.
 3. PROVIDE NEMA 4 BOXES AND ENCLOSURES FOR DAMP LOCATIONS. DAMP LOCATIONS ARE ALL INDOOR SPACES WHOLLY OR PARTIALLY UNDERGROUND OR ANY AREA SUBJECT TO WATER SPRAY.
 - 2.03 SERVICE ENTRANCE EQUIPMENT
 - A. ACCEPTABLE MANUFACTURERS:
 1. ABB
 2. EATON CORPORATION
 3. SCHNEIDER ELECTRIC, SQUARE D
 4. SIEMENS INDUSTRY INC
 - B. STRUCTURE: THE SWITCHBOARD SHALL BE RIGID, SELF-SUPPORTING AND FREE STANDING. IT SHALL BE A COMPLETELY ENCLOSED SECTIONAL TYPE, REAR ALIGNED, AND REQUIRE ONLY FRONT ACCESS. AN UNDERGROUND FULL SECTION SHALL BE PROVIDED WHERE REQUIRED TO MEET THE REQUIREMENTS OF UTILITY COMPANY AND THIS SPECIFICATION. THE SWITCHBOARD SHALL BE DESIGNED, BUILT AND TESTED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE LATEST EDITIONS OF NEMA PB-2, UL-891, AND THE CEC. EACH SECTION OF THE ENTIRE SWITCHBOARD SHALL BEAR A UL LABEL AND THE MAIN SECTION SHALL BE UL LABELED "SUITABLE FOR USE AS SERVICE EQUIPMENT". FIBERGLASS OR OTHER APPROVED TYPE OF BARRIERS SHALL BE INSTALLED BETWEEN SECTIONS TO PREVENT THE SPREAD OF AN ARCING FAULT. BARRIERS SHALL ALSO BE PLACED AROUND UTILITY METERING EQUIPMENT, SWITCHBOARD INSTRUMENTATION WHERE APPROPRIATE. THE MAIN SECTION SHALL BEAR A UL LABEL AND THE MAIN SECTION SHALL BE UL LABELED "SUITABLE FOR USE AS SERVICE EQUIPMENT". 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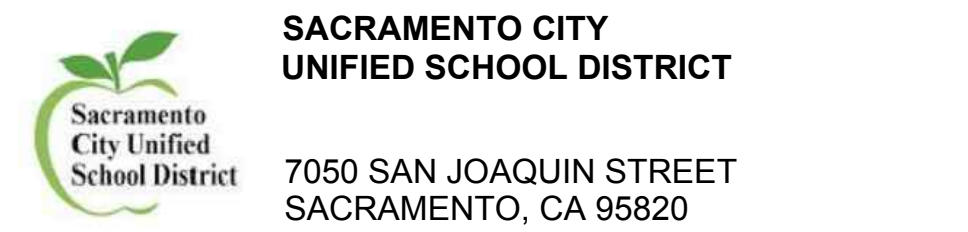
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ELECTRICAL SPECIFICATIONS (CONTINUE)

- F. MAIN BREAKER: 1. THERMAL MAGNETIC, MOLDED-CASE, WITH INVERSE TIME CURRENT OVERLOAD... 2.04 STANDBY EMERGENCY POWER GENERATOR... 2.05 AUTO-TRANSFER SWITCH... 2.06 PANELBOARDS... 2.07 DISCONNECT SWITCHES... 2.08 MOTOR STARTERS... 2.10 RACEWAY AND FITTINGS...

- E. POLYVINYLCHLORIDE (PVC): RIGID HEAVY WEIGHT TYPE, SCHEDULE 40... F. ELECTRICAL NONMETALLIC TUBING (ENT)... G. CONDUIT SUPPORTS... H. OUTLET BOXES... I. PULL BOXES AND CABINETS... 2.11 WIRE AND CABLE... 2.12 WIRING DEVICES...

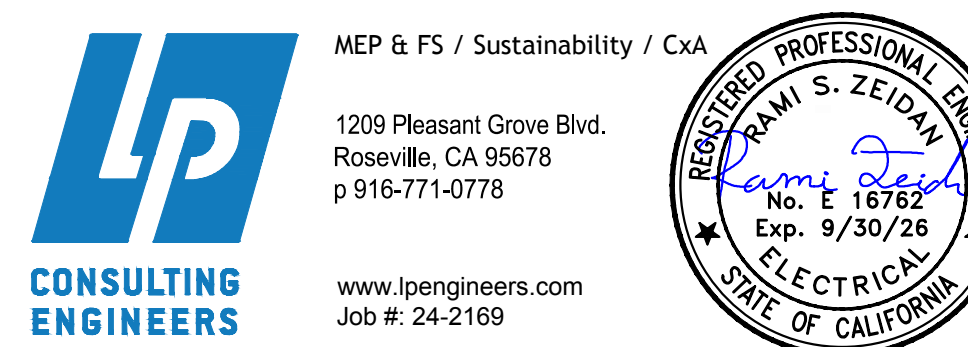
- 3. WEATHERPROOF SWITCH (SP 125V, 10A) - HUBBELL #5121-0... 4. KEY SWITCHES: EQUIVALENT TO LISTED SWITCHES... 5. SWITCH WITH PLOT LIGHT - COOPER #2221PL... B. CONVENIENCE OUTLETS... 2.13 LIGHTING FIXTURES AND ACCESSORIES... 2.14 LIGHTING CONTROL... 2.15 OCCUPANCY SENSORS... 2.16 TERMINAL CABINETS... PART 3 - EXECUTION... 3.01 EXCAVATION AND BACKFILL... 3.02 INSTALLATIONS... 3.03 SWITCHBOARD INSTALLATION...



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ISSUE table with columns: DESCRIPTION, DATE. Row 1: 100% CD SUBMITTAL, 10/18/2024



FACILITY: 7050 SAN JOAQUIN STREET SACRAMENTO, CA 95820

PROJECT: ELECTRIC BUS CHARGING STATIONS

SHEET NAME: ELECTRICAL SPECIFICATIONS

CONSTRUCTION DOCUMENTS

DATE: 10/18/2024 CLIENT PROJ NO:

SHEET:

E4.2

ALL WORK SHOWN ABOVE IS TO BE DONE IN ACCORDANCE WITH THE CITY OF SACRAMENTO STANDARD SPECIFICATIONS FOR CONSTRUCTION, LATEST EDITION.

ELECTRICAL SPECIFICATIONS (CONTINUED)

3.04 PANELBOARD INSTALLATION

- A. PANELBOARDS ARE TO BE INSTALLED PLUMB AND RIGIDLY SECURED TO STRUCTURE WITH WOOD SCREWS, MACHINE BOLTS AND CONCRETE ANCHORS, OR MACHINE BOLTS AND LOCKNUTS AS APPLICABLE. INSTALL WITH TOP OF PANELBOARD AT 6'-6" ABOVE FLOOR.
- B. NAME PLATES SHALL BE INSTALLED AS INDICATED IN THIS SECTION.
- C. RECESSED PANELBOARDS SHALL HAVE COVERS FLUSH WITH THE WALL. INSTALL 1--SPARE 3/4" EMPTY CONDUIT FOR EACH (3) SINGLE POLE SPACES OR SPARE CIRCUIT BREAKER POLES. STUB AND CAP IN ACCESSIBLE ATTIC SPACE, ABOVE THE CEILING, OR BELOW THE FLOOR AS APPLICABLE. WHERE BOTH ACCESSIBLE FLOOR AND ATTIC SPACES ARE AVAILABLE, STUB SPARE CONDUITS HALF EACH WAY (ONE EACH WAY MINIMUM). IDENTIFY SPARE CONDUITS. WHERE BUILDING CONSTRUCTION IS FIRE RATED, ENCLOSE RECESSED PANEL IN 5/8" GYPSUM BOARD AS DIRECTED BY THE ARCHITECT.
- D. COORDINATE FRAMING REQUIREMENTS WITH OTHERS TO ACCOMMODATE PANELBOARD LOCATIONS WITHOUT REQUIRING FRAMING MEMBERS TO BE CUT AWAY FOR INSTALLATION. PROVIDE ADEQUATE BLOCKING FOR SURFACE MOUNTED PANELBOARDS AS APPLICABLE.

3.05 RACEWAY INSTALLATION

- A. CONDUIT APPLICATION:
 - 1. MINIMUM SIZE OF CONDUIT SHALL BE 1/2 INCH. IN NO CASE SHALL THE CONDUIT SIZE BE SMALLER THAN THAT SHOWN ON THE DRAWINGS.
 - 2. PVC CONDUIT, MINIMUM SIZE 1", MAY ONLY BE INSTALLED BENEATH GRADE OR IN CONCRETE; A MAXIMUM OF 4 FEET. PVC MAY BE INSTALLED IN ELECTRICAL ROOMS OR CONCEALED IN STUD SPACES WHEN DESIGNATED ON PLANS. PVC SHALL NOT BE INSTALLED IN FIRE RATED AREAS OR WHERE SUBJECT TO MECHANICAL DAMAGE. THE PVC IS TO EXTEND ONLY FROM THE CONCRETE SLAB TO THE BOTTOM OF THE SWITCHBOARD, PANELBOARD, OR SIMILAR EQUIPMENT. (SEE 300.5, 300.50, AND CEC 352).
 - 3. ALL CONDUIT RUNS EXPOSED ABOVE GRADE AND UP TO 8 FEET ABOVE GRADE SHALL BE RIGID STEEL OR IMC, EXCEPT AS NOTED IN CONDUIT APPLICATIONS ITEMS 2 AND 4.
 - 4. ELECTRICAL METALLIC TUBING (EMT) MAY BE INSTALLED IN PROTECTED ATTIC SPACES AND HOLLOW STUD SPACES. IT MAY BE EXPOSED ON THE SURFACE OF ELECTRICAL AND MECHANICAL ROOMS WHERE DESIGNATED ON THE PLANS.
 - 5. FLEXIBLE METALLIC CONDUIT (MAXIMUM 6 FEET LENGTH) SHALL BE USED ONLY WHERE REQUIRED FOR CONNECTION TO MOTORS, ETC., OR WITH THE APPROVAL OF THE OWNER WHERE ABSOLUTELY NECESSARY DUE TO STRUCTURAL CONDITIONS.
 - 6. BOXES INSTALLED INDOORS OR EMBEDDED IN CONCRETE SHALL BE GALVANIZED STEEL TYPE. BOXES INSTALLED EXPOSED OR OUTDOORS SHALL BE GALVANIZED CAST STEEL WITH THREADED HUBS.
 - 7. CONDUIT FOR POWER COMPANY 12 KV PRIMARY LINES SHALL BE INSTALLED 54" BELOW GRADE.
 - 8. BRANCH CIRCUIT CONDUITS UNDER SLAB SHALL BE SEPARATED BY AT LEAST ONE INCH. IN ALL CASES TWO OR MORE CONDUITS INSTALLED IN A COMMON CONCRETE ENCASMENT SHALL BE SEPARATED BY AT LEAST THREE INCHES.
 - 9. CONDUIT SHALL BE SECURELY FASTENED IN PLACE SO THAT ABSOLUTELY NO SHIFTING WILL OCCUR DURING PLACING OF CONCRETE ENCASMENT.
 - 10. JOINTS IN ALL CONDUIT INSTALLED IN CONCRETE, OR EXPOSED TO WEATHER, SHALL BE LIQUID AND GAS TIGHT.
- B. CONDUIT LOCATION:
 - 1. ALL CONDUITS SHALL BE RUN CONCEALED IN ALL FINISHED AREAS.
 - 2. EXPOSED CONDUIT SHALL BE NEATLY INSTALLED PARALLEL TO OR AT RIGHT ANGLES TO THE STRUCTURAL MEMBERS.
 - 3. EXPOSED CONDUIT STUBBING UP THROUGH THE FLOOR INTO THE BOTTOM OF EXPOSED PANELS, CABINETS OR EQUIPMENT SHALL BE LINED UP, PROPERLY SPACED AND SHALL BE STRAIGHT AND PLUMB. CONDUITS SHALL BE INSTALLED AT SUFFICIENT DEPTH BELOW THE FLOOR TO ELIMINATE ANY PART OF THE BEND ABOVE.
 - 4. MAINTAIN 12-INCH SEPARATION BETWEEN POWER AND INTERCOMMUNICATION CABLES.
 - 5. CONDUIT SHALL BE KEPT AT LEAST 6" FROM THE COVERING ON HOT WATER PIPES, AND 18" FROM THE COVERING ON FLUES AND BREEDCHINGS.
- C. CONDUIT SUPPORT:
 - 1. CONDUIT SHALL BE SUPPORTED WITH FACTORY MADE PIPE STRAPS OR SUSPENDED WITH PIPE HANGERS OR RACKS.
 - 2. HANGER STRAPS, RODS, OR PIPE SUPPORTS UNDER WOOD SHALL BE ATTACHED TO THE WOOD STRUCTURE USING BOLTS, LAG BOLTS, OR LAG SCREWS. ATTACH TO TRUSSES USING BEAM CLAMPS.
 - 3. CONDUITS, WHICH ARE SUSPENDED ON RODS MORE THAN 2 FEET LONG SHALL BE RIGIDLY BRACED TO PREVENT HORIZONTAL MOTION OR SWAYING.
 - 4. CONDUIT SHALL BE SUPPORTED AT INTERVALS NOT EXCEEDING 10 FEET AND IN ALL CASES WITH A SUPPORT NOT MORE THAN 3 FEET FROM THE OUTLET AND AT ANY POINT WHERE IT CHANGES IN DIRECTION.
 - 5. PERFORATED STRAP AND PLUMBER'S TAPE SHALL NOT BE USED IN THE SUPPORT OF CONDUITS.
 - 6. CONDUIT PLACED AGAINST CONCRETE OR MASONRY ABOVE GROUND SHALL BE FASTENED TO THE CONCRETE WITH PIPE STRAPS OR ONE-SCREW CONDUIT CLAMPS ATTACHED TO THE CONCRETE BY MEANS OF EXPANSION ANCHORS AND SCREWS. EXPANDERS AND SHIELDS SHALL BE STEEL OR MALLEABLE IRON. SIZES OF SHIELDS AND BOLTS SHALL BE SUCH THAT THE "PROOF" TEST LOAD WILL NOT BE LESS THAN FOUR TIMES THE ACTUAL WORKING LOAD.
- D. CONDUIT BENDS:
 - 1. FIELD BENDS OR OFFSETS ARE PERMITTED IN 1 INCH AND SMALLER CONDUIT ONLY.
 - 2. ELBOWS IN 1-1/4 INCH CONDUIT AND LARGER SIZES SHALL BE FACTORY MADE.
 - 3. MINIMUM RADIUS BEND FOR TELEPHONE SERVICE ENTRANCE CONDUIT SHALL BE 36". SEE TECHNOLOGY DRAWINGS TO VERIFY AND COORDINATE.
 - 4. CONDUIT BENDS, OTHER THAN FACTORY ELBOWS, SHALL HAVE A RADIUS OF NOT LESS THAN 10 TIMES THE INTERNAL DIAMETER OF THE CONDUIT.
 - 5. 90 DEGREE BENDS IN PVC LARGER THAN 2 INCHES SHALL BE STEEL.
 - 6. USE OF A BLOW TORCH TO BEND CONDUIT IS SPECIFICALLY PROHIBITED.
- E. EMPTY CONDUITS: ALL CONDUITS, WHICH ARE INSTALLED AT THIS TIME AND LEFT EMPTY FOR FUTURE USE OR WHERE CONDUCTORS ARE TO BE INSTALLED BY A REPRESENTATIVE OF THE TELEPHONE COMPANY SHALL HAVE A 3/16 INCH POLYPROPYLENE ROPE LEFT IN PLACE FOR FUTURE USE.
- F. CONDUIT PROTECTION:
 - 1. CAP ALL CONDUIT DURING CONSTRUCTION BY MEANS OF MANUFACTURED SEALS. SWAB OUT ALL CONDUITS BEFORE PULLING IN WIRE.
 - 2. ALL CONDUIT SYSTEMS MUST BE INSTALLED COMPLETE BEFORE CONDUCTORS ARE PULLED IN.
- G. OUTLET BOXES:
 - 1. BOXES MUST BE ACCURATELY PLACED FOR FINISH, INDEPENDENTLY AND SECURELY SUPPORTED BY MANUFACTURED BOX HANGERS. FIXTURE OUTLETS SHALL BE LOCATED SYMMETRICALLY.
 - 2. LOCAL SWITCHES SHALL BE LOCATED 4-6 INCHES ABOVE THE FLOOR (TOP OF BOX) UNLESS OTHERWISE NOTED.
 - 3. CONVENIENCE OUTLETS SHALL BE LOCATED +16 INCHES ABOVE THE FINISHED FLOOR (BOTTOM OF BOX) UNLESS OTHERWISE NOTED.
 - 4. CHANGES IN OUTLET LOCATIONS OF FIXTURES, WALL SWITCHES, RECEPTACLES, AND SPECIAL EQUIPMENT FOUND NECESSARY DUE TO INTERFERENCE WITH STRUCTURE, PIPES, DUCTS, ETC. SHALL BE REPORTED TO THE OWNER FOR APPROVAL.
 - 5. ALL BOXES SHALL BE OF PROPER CODE SIZE FOR THE NUMBER OF WIRES OR CONDUITS PASSING THROUGH OR TERMINATING THEREIN, BUT IN NO CASE SHALL ANY BOX BE LESS THAN 4" SQUARE, UNLESS SPECIFICALLY NOTED AS SMALLER. COVERS SHALL BE OF THE TYPES MOST SUITABLE FOR THE FIXTURE OR DEVICE USED AT THE OUTLET, AND SHALL FINISH FLUSH WITH PLASTER OR OTHER FINISHED SURFACE. APPROVED FACTORY MADE KNOCKOUT SEALS SHALL BE USED IN ALL BOXES WHERE KNOCKOUTS ARE NOT INTACT. BOXES IN CONCRETE SHALL BE A TYPE, WHICH WILL ALLOW THE PLACING OF CONDUIT WITHOUT DISPLACING THE REINFORCING BARS.
 - 6. OUTLET BOXES SHALL BE USED AS PULL BOXES WHEREVER POSSIBLE, AND JUNCTION OR PULL BOXES SHALL BE INSTALLED ONLY AS REQUIRED BY THE SPECIFICATIONS, OR AS DIRECTED.
 - 7. FOR LIGHT OUTLET BOXES USE MINIMUM OF 4" SQUARE, 1-1/2" DEEP, EQUIPPED WITH PLASTER RING AND FIXTURE SUPPORTING DEVICE AS REQUIRED BY THE UNIT.
 - 8. FOR WALL SWITCH OUTLETS, USE 4" BOXES WITH SINGLE OR TWO GANG PLASTER RINGS FOR ONE OR TWO SWITCHES AND SQUID GANG BOXES WITH GANG PLASTER RINGS FOR MORE THAN TWO SWITCHES, UNLESS NOTED OTHERWISE ON THE DRAWINGS.
 - 9. FOR CONVENIENCE OUTLETS, USE 4" BOXES WITH SINGLE GANG PLASTER RING.
 - 10. FOR TELEPHONE OUTLETS, USE 4" BOXES WITH SINGLE GANG PLASTER RING. SEE TECHNOLOGY DRAWINGS TO VERIFY AND COORDINATE.

3.06 WIRE INSTALLATION

- A. CLEANING:
 - 1. ALL DEBRIS AND MOISTURE SHALL BE REMOVED FROM RACEWAYS, BOXES, AND CABINETS BEFORE INSTALLING WIRE OR CABLE.
- B. PULLING:
 - 1. NO OIL, GREASE OR SIMILAR SUBSTANCES SHALL BE USED TO FACILITATE THE PULLING IN OF CONDUCTORS. USE A UL APPROVED WIRE PULLING COMPOUND.
 - 2. NO WIRE OR CABLE SHALL BE PULLED IN UNTIL ALL CONSTRUCTION, WHICH MIGHT DAMAGE INSULATION OR FILL CONDUIT WITH FOREIGN MATERIAL IS COMPLETED.
 - 3. WIRE SHALL BE PULLED INTO CONDUITS WITH CARE TO PREVENT DAMAGE TO INSULATION. USE BASKET PULLING GRIPS TO AVOID SLIPPING OF INSULATION ON CONDUCTORS. NYLON ROPE OR OTHER "SOFT" SURFACE CABLE MUST BE USED FOR PULLING IN CONDUITS OTHER THAN STEEL.
- C. CONNECTIONS:
 - 1. STRANDED CONDUCTORS NO. 8 AND SMALLER SHALL BE TERMINATED WITH TERMINALS OF APPROPRIATE SIZE WHERE CONNECTED TO SCREW TYPE LUGS.
 - 2. JOINTS, SPLICES AND TAPS IN DRY LOCATIONS FOR CONDUCTORS NO. 8 AND SMALLER SHALL BE MADE WITH TWIST ON CONNECTORS SUITABLY SIZED FOR THE NUMBER AND GAUGE OF THE CONDUCTORS.
 - 3. FURNISH AND INSTALL PROPER LUGS IN ALL PANELBOARDS, SWITCHBOARDS, AND OUTLETS AS REQUIRED TO PROPERLY TERMINATE EVERY CABLE. LUGS FOR ALUMINUM CONDUCTORS SHALL BE COMPRESSION TYPE.
 - 4. CONNECTIONS OF ALUMINUM CABLE TO ALUMINUM BUS BARS SHALL BE MADE USING ALL ALUMINUM COMPONENTS (LUGS, WASHER, BOLTS, NUTS). COPPER TO ALUMINUM CONNECTIONS OF BUS BARS AND LUGS SHALL BE MADE USING BELLEVILLE WASHERS AND FLAT WASHERS TO COMPENSATE FOR DIFFERING RATES OF THERMAL EXPANSION.
 - 5. ONLY CRIMPING TOOLS APPROVED BY THE MANUFACTURER OF THE TERMINALS OR LUGS SHALL BE USED.
 - 6. UNINSULATED LUGS AND WIRE ENDS SHALL BE INSULATED WITH LAYERS OF PLASTIC TAPE EQUAL TO INSULATION OF WIRE, WITH ALL IRREGULAR SURFACES PROPERLY PADDED WITH INSULATING PUTTY PRIOR TO APPLICATION OF TAPE.
 - 7. SPLICES IN UNDERGROUND PULL BOXES OR IN OTHER AREAS SUBJECT TO MOISTURE SHALL BE PROVIDED WITH CAST RESIN KITS. PREPARE ALL SPLICES AS HEREBEFORE SPECIFIED BEFORE RESIN KITS ARE APPLIED.

3.07 LIGHTING FIXTURE INSTALLATION

- A. MOUNTING:
 - 1. UNLESS SPECIFICALLY INDICATED OTHERWISE, ALL LIGHTING FIXTURES SHALL BE PLACED SYMMETRICALLY WITH RESPECT TO THE CEILING TILE PATTERN OR OTHER ARCHITECTURAL CEILING AND WALL MODULES.
- B. SUPPORT:
 - 1. IN SUSPENDED GRID LAY-IN CEILING, IN ADDITION TO SUPPORTING FROM CEILING TEES, SUPPORT ALL LUMINAIRE HOUSINGS FROM STRUCTURAL MEMBERS WITH A MINIMUM OF FOUR NO.12 GALVANIZED WIRES FOR EACH LUMINAIRE.
 - 2. ALL FIXTURE MOUNTING SHALL MEET SEISMIC REQUIREMENTS OF THE STATE OF CALIFORNIA.
 - 3. PROVIDE SUPPORT FOR ALL FIXTURES FROM (OR ON) BUILDING STRUCTURAL WALL MEMBERS. SUPPORT FROM CEILING TILES ONLY IS SPECIFICALLY PROHIBITED.
- C. FIRE PROTECTION:
 - 1. ALL RECESSED FIXTURES SHALL BE PROTECTED FROM CONTACT WITH COMBUSTIBLE BUILDING MATERIALS, SUCH AS WOOD FRAMING MEMBERS AND INSULATION VAPOR BARRIERS, AS REQUIRED BY APPLICABLE CODES.
 - 2. FIXTURES INSTALLED IN RATED 1-HOUR CEILING SHALL BE ENCASED BY A 1-HOUR ENCLOSURE TO MAINTAIN THE FIRE INTEGRITY OF THE CEILING. ALL FIXTURE ENCLOSURES WILL COMPLY WITH UL FIRE RESISTANCE DIRECTORY DESIGN REQUIREMENTS.
- D. CLEANING UP:
 - 1. ALL FIXTURES SHALL BE LEFT IN A CLEAN CONDITION, FREE OF DIRT AND DEFECTS, BEFORE ACCEPTANCE BY THE OWNER.

3.08 RECEPTACLE INSTALLATION

- A. ALL RECEPTACLES IN FLUSH TYPE OUTLET BOXES SHALL BE INSTALLED WITH A BONDING JUMPER FOR GROUND BETWEEN THE GROUNDING OUTLET BOX AND THE RECEPTACLE GROUND TERMINAL, EXCEPT WHERE RECEPTACLE IS EQUIPPED WITH A UL APPROVED SELF-GROUNDING DEVICE. GROUNDING THROUGH THE RECEPTACLE MOUNTING STRAPS IS NOT ACCEPTABLE. BONDING JUMPER SHALL BE ATTACHED AT EACH OUTLET TO THE BACK OF THE BOX USING DRILLED AND TAPED HOLES AND WASHED HEAD SCREWS 6/32" OR LARGER. FOR RECEPTACLES IN SURFACE MOUNTED OUTLET BOXES DIRECT METAL TO METAL CONTACT BETWEEN RECEPTACLE MOUNTING STRAP (IF IT IS CONNECTED TO THE GROUNDING CONTACTS) AND OUTLET BOX MAY BE USED.

3.09 TERMINAL CABINET INSTALLATION

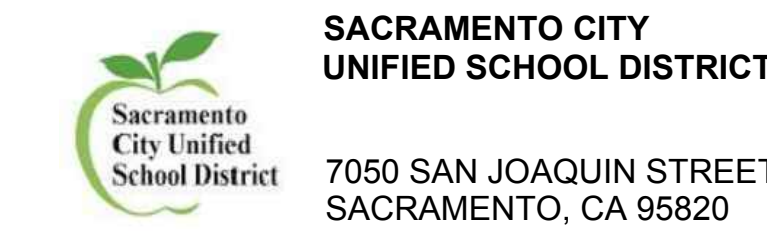
- A. CABINETS ARE TO BE INSTALLED PLUMB AND RIGIDLY SECURED TO STRUCTURE WITH WOOD SCREWS, BOLTS AND CONCRETE ANCHORS, OR MACHINE BOLTS AND LOCKNUTS AS APPLICABLE.
- B. RECESSED CABINETS SHALL HAVE COVERS FLUSH WITH THE WALL. WHERE BUILDING CONSTRUCTION IS FIRE RATED, ENCLOSE RECESSED CABINET IN 5/8" GYPSUM BOARD AS DIRECTED BY THE ARCHITECT.
- C. INSTALL (2) 1" EMPTY CONDUITS FROM ALL RECESSED CABINETS TO ACCESSIBLE SPACE ABOVE CEILING AND/OR BELOW FLOOR AS APPLICABLE (4 CONDUITS IF BOTH CAVITIES EXIST). IDENTIFY THE EMPTY CONDUITS.
- D. COORDINATE FRAMING REQUIREMENTS WITH OTHERS TO ACCOMMODATE CABINET LOCATIONS WITHOUT REQUIRING FRAMING MEMBERS TO BE CUT AWAY FOR INSTALLATION. PROVIDE ADEQUATE BLOCKING FOR SURFACE MOUNTED CABINETS AS APPLICABLE.
- E. FOR CONTROL EQUIPMENT CABINETS, A DRAWING OF THE CONTROL SCHEME SHALL BE PLACED IN THE DOOR RACK PROVIDED.
- F. ALL CONDUCTORS ENTERING OR LEAVING THE CABINET SHALL BE TERMINATED ON TERMINAL STRIPS OR PLUNCH BLOCKS. EACH TERMINAL POINT SHALL BE LABELED, AND ALL WIRES WITHIN THE ENCLOSURE SHALL BE IDENTIFIED WITH BRADY GAIN-GRIP WIRE MARKERS OR OTHER SIMILAR METHOD.
- G. WIRES SHALL BE NEATLY ARRANGED WITHIN THE CABINET AND SECURED WITH TY-RAP OR RUN IN PANOUT WIREWAYS AS REQUIRED OR AS INDICATED ON THE DRAWINGS.

3.10 GROUNDING AND BONDING

- A. THE ENTIRE ELECTRICAL RACEWAY SYSTEM SHALL FORM A CONTINUOUS METALLIC ELECTRICAL CONDUCTOR FROM SERVICE POINT TO EVERY OUTLET AND SHALL BE GROUNDED BY CONNECTION TO THE MAIN SERVICE GROUND.
- B. A GROUND WIRE SHALL BE INSTALLED IN ALL PVC AND FLEXIBLE CONDUIT.
- C. ALL RACEWAY SYSTEMS, SUPPORTS, CABINETS, SWITCHBOARDS, CONTROL EQUIPMENT, MOTOR FRAMES, LIGHTING FIXTURES, AND UTILIZATION APPARATUS SHALL BE PERMANENTLY AND EFFECTIVELY GROUNDED.
- D. WHERE CABINETS ARE FURNISHED WITH GROUNDING BUS, ALL REQUIRED BONDING CONDUCTORS SHALL CONNECT THERETO, EACH WITH A SEPARATE LUG.
- E. ALL GROUNDING CONDUCTORS ARE TO BE COPPER ONLY. ALUMINUM WILL NOT BE ALLOWED.

3.11 TESTS

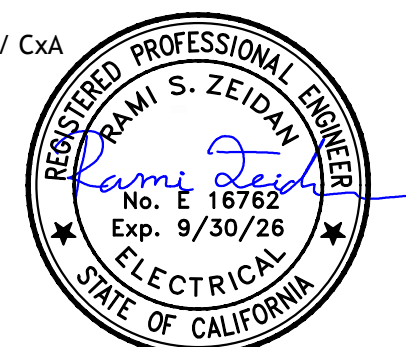
- A. UPON COMPLETION OF THE WORK AND ADJUSTMENTS OF ALL EQUIPMENT, ALL SYSTEMS SHALL BE TESTED TO DEMONSTRATE THAT ALL EQUIPMENT FURNISHED, INSTALLED, AND/OR CONNECTED UNDER THE PROVISIONS OF THESE SPECIFICATIONS SHALL FUNCTION IN THE REQUIRED MANNER.
- B. ALL SYSTEMS SHALL TEST FREE FROM SHORT CIRCUITS AND GROUNDS, AND BE FREE FROM MECHANICAL AND ELECTRICAL DEFECTS. ALL CIRCUITS SHALL BE TESTED FOR THE PROPER NEUTRAL CONNECTION, AND ROTATION OF MOTORS.
- C. WHERE TESTS INDICATE FAULTY INSTALLATION OR OTHER DEFECTS, THEY SHALL BE LOCATED, REPAIRED, AND RETESTED AT THE CONTRACTOR'S EXPENSE.



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FACILITY:

7050 SAN JOAQUIN STREET SACRAMENTO, CA 95820

PROJECT: ELECTRIC BUS CHARGING STATIONS

SHEET NAME: ELECTRICAL SPECIFICATIONS

CONSTRUCTION DOCUMENTS

DATE: 10/18/2024 CLIENT PROJ NO: SHEET:

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PROJECT LABOR AGREEMENT

for the

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

PREAMBLE

This Project Labor Agreement ("Agreement") is entered into by and between the Sacramento City Unified School District ("District"), together with contractors and/or subcontractors, who shall become signatory to this Agreement by signing the "Agreement To Be Bound" (Attachment A), and the Sacramento-Sierra Building & Construction Trades Council ("Council") and the local Unions that have executed this Agreement.

RECITALS

WHEREAS, the purpose of this Agreement is to promote efficiency of construction operations during the construction of the District's projects subject to this Agreement, through the use of skilled labor resulting in quality construction outcomes, and to provide for the peaceful settlement of labor disputes and grievances without work disruptions or delays, thereby promoting the District's interest and the public's interest in assuring the timely and cost-effective completion of the District's construction projects; and

WHEREAS, the purpose of this Agreement is to also mutually acknowledge and support the District's Core Value statement and Equity, Access, and Social Justice Guiding Principle; and

WHEREAS, the District's Core Value statement states, *we recognize that our system is inequitable by design and we vigilantly work to confront and interrupt inequities that exist to level the playing field and provide opportunities for everyone to learn, grow, and reach their greatness*; and

WHEREAS, the District's Equity, Access, and Social Justice Guiding Principle ("Guiding Principle") states that *all students are given an equal opportunity to graduate with the greatest number of postsecondary choices from the widest array of options*; and

WHEREAS, the District places high priority upon comprehensive educational programs, training, work-based learning, and workforce development programs for District students and staff in order to best achieve the District's Guiding Principle and to provide meaningful and sustainable careers in the building and construction industry; and

WHEREAS, the successful and efficient completion of the District's construction projects is of the utmost importance to the District and its educational programs and mission; and

WHEREAS, large numbers of workers of various skills will be required in the performance of the construction work, including those to be represented by the Unions affiliated with the Council; and

WHEREAS, the use of skilled labor on construction work increases the safety of construction projects as well as the quality of completed work; and

WHEREAS, the Council and Unions commit to use of skilled and trained workforce requirements described in sections 17250.25 and 17407.5 of the Education Code and sections 2600 through 2602 of the Public Contract Code on applicable Projects covered by this Agreement; and

WHEREAS, it is recognized that District construction projects require multiple contractors and bargaining units on the job site at the same time over an extended period of time, and that the potential for work disruption is substantial in the absence of a binding commitment to maintain continuity of work; and

WHEREAS, the Employers and the Unions desire to mutually establish and stabilize wages, hours and working conditions for the workers employed on the construction projects subject to this Agreement in order to promote a satisfactory, continuous and harmonious relationship among the parties to this Agreement; and

WHEREAS, the District desires to provide construction training and employment opportunities for students of and residents within the District through local hire, apprentice and pre-apprentice programs; and

WHEREAS, the parties signatory to this Agreement pledge their full good faith and trust to work towards mutually satisfactory and successful completion of all District construction projects subject to the Agreement; and

WHEREAS, the Sacramento City Unified School District has previously adopted Resolution No. 2774 regarding the use of Project Labor Agreements on District projects.

NOW, THEREFORE, the parties, in consideration of the mutual promises and covenants herein contained, do mutually agree as follows:

ARTICLE 1

DEFINITIONS

- 1.1 "Agreement" means this Project Labor Agreement.
- 1.2 "Agreement to be Bound" means the agreement (attached hereto and incorporated herein as Attachment A) required to be executed by any Employer(s) working on the Project as a precondition to performing Covered Work on the Project.
- 1.3 "Council" means the Sacramento-Sierra Building and Construction Trades Council, which is the local jurisdictional division of the State Building and Construction Trades Council of California, with affiliated trades unions within its geographical jurisdiction of Sacramento, Yolo, Placer, El Dorado, Amador, Nevada, and Sierra Counties.

- 1.4 "Completion" means the point at which there is Final Acceptance by the District of a Construction Contract. For purposes of this definition of "Completion," "Final Acceptance" shall mean that point in time at which the District has determined upon final inspection that the work on a Construction Contract has been completed in all respects and all required contract documents, including repairs, warranty work, modifications or punch list work as required under a Construction Contract or when a Contractor performs work under a change order for a Construction Contract, contract drawings, warranties, certificates, manuals and data have been submitted and training completed in accordance with the contract documents and the District has executed a written acceptance of the work.
- 1.5 "Construction Contract" means, except as to section 2.5 (exclusions from Covered Work) public works or improvement contracts approved by the District, including design-bid, design-build, lease-leaseback, or other contracts under which construction work is performed, that are necessary to complete the Project.
- 1.6 "District" means the Sacramento Unified School District and the administrative employees under its Superintendent, including any in house Project Manager designated by the District for the Project.
- 1.7 "Contractor(s)" means any person, firm, corporation, or other entity, or any combination thereof, including joint ventures, and any of its contractors or subcontractors of any tier, or any successor or assigns of such persons or entities, that has entered into a contract with the District, or with any other person or entity contracting for work on the Project on behalf of the District (whether by design-bid, design-build, lease-leaseback or other means), with respect to the construction of any part of the Project under contract terms and conditions approved by the District.
- 1.8 "Local Area" shall be defined as the area within the boundaries of the District, the City of Sacramento, Sacramento County, and the nine counties in section 1.8.4. Residents of the Local Area shall be first referred for the Project, including journey-level workers and apprentices covered by this Agreement, in the following order of priority:
 - 1.8.1 Priority 1: Residents residing within the boundaries of the District.
 - 1.8.2 Priority 2: Residents of the City of Sacramento.
 - 1.8.3 Priority 3: Residents of Sacramento County.
 - 1.8.4 Priority 4: Residents of the Counties of Yolo, Placer, El Dorado, Amador, Sutter, Yuba, Nevada, Sierra, and San Joaquin.
- 1.9 "Master Agreement" means the multi-employer collective bargaining agreement of each of the Unions that covers the geographic area of the Project, copies of which shall be provided to the District upon request.
- 1.10 "Project" means all District construction projects where either the engineer's estimate of the total cost of the project, or the actual cumulative bid amounts submitted by the contractor(s)

awarded the Construction Contracts for the Project, exceeds five hundred thousand dollars (\$500,000). All Construction Contracts required to complete an integrated District construction project shall be considered in determining the threshold value. The District and the Council may mutually agree in writing to add additional projects to the scope of Projects to be covered by this Agreement. The term "Project" applies to each and all projects as defined in this section, whether used in the singular or plural herein. Routine maintenance of District properties is not covered by the scope of this Agreement.

- 1.11 "Project Manager" means a person, including a District employee, firm or other entity designated by the District to manage, coordinate or administer the construction work on a Project subject to this Agreement.
- 1.12 "Union" or "Unions" means the Sacramento-Sierra Building and Construction Trades Council and the local Unions that are signatory to this Agreement, acting on their own behalf and on behalf of their respective affiliates and member organizations whose names are subscribed hereto and who have through their officers executed this Agreement. The Council and the local Unions are collectively referred to herein as the "Unions."

ARTICLE 2

SCOPE OF AGREEMENT

- 2.1 Parties. This Agreement shall apply and is limited to all Contractor(s), the District and the Unions that are signatory to this Agreement.
- 2.2. Applicability. For purposes of this Agreement, Construction Contracts shall be considered completed as set forth in Section 1.4, including when the District directs a Contractor to engage in repairs, warranty work, modifications or punch list work as required under a Construction Contract or when a Contractor performs work under a change order for a Construction Contract. This Agreement shall govern all Construction Contracts awarded on the District Projects that are subject to this Agreement. Except for exclusions from the Covered Work described in section 2.5, for purposes of this Agreement, a Construction Contract shall be considered completed as described in Section 1.4, except when the District's authorized representative directs a Contractor to engage in repairs, warranty work, modifications, or punch list work as required under a Construction Contract or when a Contractor performs work under a change order for a Construction Contract.
- 2.3 Covered Work. This Agreement covers, without limitation all on-site preparation, surveying, construction, alteration, demolition, installation, improvement, remediation, retrofit, painting, or repair of buildings, structures and other works and related activities for the Project that is within the craft jurisdiction of one of the Unions and which is directly or indirectly part of the Project, including, without limitation to the following examples, geotechnical and exploratory drilling, temporary HVAC, landscaping and temporary fencing, pipelines (including those in linear corridors built to serve the Project), pumps, pump stations, start-up, and modular furniture installation, On-site work includes work done for the

Project in temporary yards, dedicated sites, or areas adjacent to the Project, and at any on-site or off-site batch plant constructed solely to supply materials to the Project. This scope of work includes all soils and materials testing and inspection where such testing and inspection is a classification covered by an applicable Master Agreement or in which a prevailing wage determination has been published.

- 2.3.1 This Agreement applies to any start-up, calibration, commissioning, performance testing, repair, maintenance, and operational revisions to systems and/or subsystems for the Project performed after Completion, unless performed by District employees.
- 2.3.2 This Agreement covers all on-site fabrication work over which the District, Contractor(s)/Employer(s) or subcontractor(s) possess the right of control (including work done for the Project in any temporary yard or area established for the Project). Additionally, this Agreement covers any off-site work, including fabrication necessary for the Project defined herein, that is covered by a current Schedule A Agreement or local addenda to a National Agreement of the applicable Union(s) that is in effect as of the execution date of this Agreement.
- 2.3.3 It is expressly agreed and understood by the Parties that the District shall have the right to purchase material and equipment from any source and the craftsperson covered under this Agreement will handle and install such material and equipment. There shall be no limitation or restriction upon the choice of material or upon the full use and installation of equipment, machinery, materials, tools or other labor-saving devices other than as set forth herein. The lawful fabrication provisions of the appropriate national or local agreements shall be applicable.
- 2.3.4 The furnishing of supplies, equipment or materials which are stockpiled for later use shall not be covered by this Agreement. However, construction trucking work, such as the hauling and delivery of ready-mix, asphalt, aggregate, sand, or other fill or similar material which is incorporated into the construction process as well as the off-hauling of debris and excess fill, material and/or mud, shall be covered by the terms and conditions of this Agreement to the fullest extent allowed by prevailing wage law and determinations of the California Department of Industrial Relations. Contractor(s)/Employer(s), including brokers, of persons providing construction trucking work shall provide certified payroll records to the District within ten (10) days of written request or as required by bid specifications.
- 2.3.5 The on-site installation or application of all items shall be performed by the craft having jurisdiction over such work; provided, however, it is recognized that installation of specialty items which may be furnished by the District or a Contractor shall be performed by construction persons employed under this Agreement who may be directed by other personnel in a supervisory role; provided, however, in limited circumstances requiring special knowledge of the particular item(s), may be performed by construction persons of the manufacturer where necessary to protect a manufacturer's warranty, provided the Contractor/Employer using the manufacturer can demonstrate by an enumeration of specific tasks that the work cannot be performed by craft workers under this Agreement. All work of a specialty nature to

be performed by the employees of an equipment manufacturer necessary to protect the warranty on such equipment shall be identified and discussed at the Preconstruction Conference provided in Article V of this Agreement.

2.3.6 Work covered by this Agreement within the following craft jurisdictions shall be performed under the terms of their National Agreements as follows: the National Agreement of Elevator Constructors, the National Transient Lodge (NTL) Articles of Agreement, the National Stack/Chimney Agreement, the National Cooling Tower Agreement, and any instrument calibration work and loop checking shall be performed under the terms of the UA/IBEW Joint National Agreement for Instrument and Control Systems Technicians, with the exception that Articles IV, XV and XVI of this Agreement shall apply to such work.

2.4 The following shall be excluded from Covered Work:

2.4.1 Work of non-manual employees, including, but not limited to, superintendents, supervisors above the level of general foreman (except those covered by any applicable Master Agreement), staff engineers, building inspectors, timekeepers, clerks, office workers, including messengers, guards, safety personnel, emergency medical and first aid technicians, and other professional, engineering, administrative, executive and management employees;

2.4.2 Equipment and machinery owned or controlled and operated by the District;

2.4.3 Any work performed on or near or leading to or on to the site of work covered by this Agreement and undertaken by state, county, city or other governmental bodies, or their contractor, or by public utilities or their contractors;

2.4.4 Off-site maintenance of leased equipment and on-site supervision of such work;

2.4.5 Work performed by employees of a manufacturer or vendor on the manufacturer's or vendor's equipment if necessary to satisfy the guarantee or warranty on such equipment and where performance of the work is expressly stated in the manufacturer's or vendor's written warranty or guarantee to be a condition for the warranty or guarantee for such products. For any work performed pursuant to this provision, the Contractor shall provide copies of the written warranty requirement to the District, Project Manager, the Council and the affected local Union prior to the commencement of work by the manufacturer or vendor. This exclusion does not apply to any on site construction work subcontracted by such manufacturer or vendor.

2.4.6 District procurement or use of modular buildings;

2.4.7 Off-site maintenance of leased equipment and on-site supervision of such work;

2.4.8 Laboratory or specialty testing or inspection not covered by an applicable Master Agreement;

- 2.4.9 Non-construction support services contracted by the District or any Contractor in connection with this Project;
- 2.4.10 All Maintenance work contracted by the District;
- 2.4.11 All work by employees of the District.

ARTICLE 3

SUBCONTRACTING

- 3.1 Each Contractor agrees that it will contract for the assignment, awarding or subcontracting of Covered Work, or authorize another party to assign, award or subcontract Covered Work, only to a person, firm, corporation, or other entity that, at the time the contract is executed, has become a party to this Agreement by executing Attachment A, the Agreement to be Bound.
- 3.2 Each Contractor agrees that it will contract or subcontract the performance of Covered Work only to a person, firm, corporation, or other entity that is or becomes a party to this Agreement. Any Contractor performing Covered Work on the Project shall, as a condition to working on the Project, perform all work under the terms of this Agreement and the applicable Master Agreement. Before being authorized to perform any Covered Work, Contractors shall become a party to this Agreement by signing Attachment A, the Agreement to be Bound. Every Contractor shall notify the Council in writing within five (5) business days after it has contracted to assign, award, or subcontract Covered Work, or to authorize another party to assign, award or subcontract Covered Work in accordance with Section 3.1 or this Section 3.2 and shall at the same time provide to the Council a copy of the executed Agreement to be Bound. The District shall also provide copies to the Council of all executed Agreements to be Bound that it receives within fifteen (15) days of receipt.
- 3.3 Contractors and all subcontractors of whatever tier who have been awarded contracts for work covered by this Agreement commit to comply with the skilled and trained workforce requirements provided in California Education Code sections 17250.25 and 17407.5 and California Public Contract Code sections 2600 et seq. on applicable Projects.
- 3.4 Nothing in this Agreement shall in any manner whatsoever limit the rights of the District or any Contractor to subcontract Covered Work or to select its contractors or subcontractors; provided, however, that all Contractors, at all tiers, assigning, awarding, contracting, or performing Covered Work, or authorizing another to assign, award, contract or perform Covered Work, shall be required to comply with the provisions of this Agreement. Each Contractor shall notify each of its contractors and subcontractors of the provisions of this Agreement and require as a condition precedent to the assigning, awarding, or subcontracting of any Covered Work, or allowing any subcontracted Covered Work to be performed, that all such contractors and subcontractors at all tiers become signatory to this Agreement. Any Contractor that fails to provide the Council with the Agreement to be

Bound executed by its contractor or subcontractor shall be liable for any failure of that contractor or subcontractor, or any contractor or subcontractor at a lower tier, to comply with the provisions of this Agreement, including any contributions to any trust funds that the contractor or subcontractor, or any subcontractor to that subcontractor, fails to make. Nothing in this Agreement shall be construed to interfere with or supersede the usual and customary legal remedies available to the Unions and/or employee benefit Trust Funds to collect delinquent Trust Fund contributions from Contractors on the Project.

- 3.5 Nothing in this Agreement shall limit the District's right to combine, consolidate, or cancel contracts for Project construction, or to comply with public agency contracting laws.

ARTICLE 4

WAGES AND BENEFITS

- 4.1 All employees covered by this Agreement (including foremen and general foremen if they are covered by the Master Agreement) shall be classified and paid wages and other compensation, including but not limited to travel, subsistence, and shift premium pay, and contributions made on their behalf to multi-employer trust funds, all in accordance with the then current multi-employer Master Agreement of the applicable Union and in compliance with the applicable prevailing wage rate determination established pursuant to the California Labor Code by the Department of Industrial Relations.
- 4.2 During the period of construction on this Project, the Contractors agree to recognize and put into effect such increases in wages and recognized fringe benefits as shall be negotiated between the various Unions and the historically recognized local bargaining parties on the effective date as set forth in the applicable Master Agreement. The Unions shall notify the Contractors in writing of the specific increases in wages and recognized fringe benefits and the date on which they become effective.

ARTICLE 5

NO STRIKES - NO LOCKOUTS

- 5.1 During the term of this Agreement, there shall be no strikes, sympathy strikes, picketing, work stoppages, picket-related hand billing, slowdowns, interference with the work or other disruptive activity for any reason by the Union or by any employee, and there shall be no lockout by any Contractor. Failure of any Union or employee to cross any picket line established at the Contractor's Project site is a violation of this Article.
- 5.2 The Union shall not sanction, aid or abet, encourage, or continue any work stoppage, strike, picketing or other disruptive activity at the Project site and shall undertake all reasonable means to prevent or to terminate any such activity. No employee shall engage in activities which violate this Article. Any employee who participates in or encourages any activities which interfere with the normal operation of the Project shall be subject to

disciplinary action, including discharge, and, if justifiably discharged for the above reasons, shall not be eligible for rehire on the same project for a period of not less than ninety (90) days.

- 5.3 The Union(s) agrees that if any union or any other persons, whether parties to this Agreement or otherwise, engage in any picketing or work stoppages, the signatory Unions shall consider such work stoppage or picketing to be illegal and refuse to honor such picket line or work stoppage.
- 5.4 In the event of any work stoppage, strike, sympathy strike, picketing interference with the work or other disruptive activity in violation of this Article, the Contractor may suspend all or any portion of the Project work affected by such activity at the Contractor's discretion and without penalty, and the District may replace any Contractor whose employees have not reported to work with any other contractor or subcontractor.
- 5.5 In addition to any other action at law or equity, any party may elect to have the matter decided by a neutral arbitrator in accordance with the following procedure when a breach of this Article is alleged, after the Union(s) or Contractor(s) has been notified of the fact.
 - 5.5.1 A party invoking this procedure shall notify Robert Hirsch, as the permanent arbitrator, or Barry Winograd, as the alternate arbitrator under this procedure. In the event that the permanent arbitrator is unavailable at any time, the alternate will be contacted. If neither is available, then the American Arbitration Association shall select an alternative arbitrator within 24 hours of notice. Notice to the Arbitrator shall be by the most expeditious means available, with notice by fax or electronic means or any other effective written means to the party alleged to be in violation and the involved International Union President and/or local Union.
 - 5.5.2 Upon receipt of said notice, the District Superintendent, or their designee, shall contact the designated Arbitrator identified above who will attempt to convene a hearing within twenty-four (24) hours if it is contended that the violation still exists.
 - 5.5.3 The Arbitrator shall notify the parties by fax or electronic means or any other effective written means of the place and time he has chosen for this hearing. Said hearing shall be completed in one session. A failure of any party or parties to attend said hearing shall not delay the hearing of evidence or issuance of an Award by the Arbitrator.
 - 5.5.4 The sole issue at the hearing shall be whether or not a violation of this Article has in fact occurred. The Award which shall be final, and binding shall be issued in writing within three (3) hours after the close of the hearing and may be issued without an opinion. If any party desires an opinion, one shall be issued within fifteen (15) days, but its issuance shall not delay compliance with, or enforcement of, the Award. The Arbitrator may order cessation of the violation of this Article by the Union or Contractor, and such Award shall be served on all parties by hand or registered mail upon issuance. Should a party found in violation of this Article

fail to comply with an Arbitrator's award to cease the violation, the party in violation shall pay to the affected party as liquidated damages the sum of ten thousand dollars (\$10,000) for the first shift for which it failed to comply, or portion thereof, and ten thousand dollars (\$10,000) for each subsequent shift for which it failed to comply, until such violation is ceased. The Arbitrator shall retain jurisdiction to resolve any disputes regarding the liquidated damages claimed under this Section.

- 5.5.5 Such Award may be enforced by any court of competent jurisdiction upon the filing of this Agreement and all other relevant documents referred to hereinabove in the following manner. The fax or electronic notice of the filing of such enforcement proceedings shall be given to the other party. In the proceeding to obtain a temporary order enforcing the Arbitrator's Award as issued under Section 5.5.4 of this Article, all parties waive the right to a hearing and agree that such proceedings may be ex parte. Such agreement does not waive any party's right to participate in a hearing for a final order of enforcement. The Court's order or orders enforcing the Arbitrator's Award shall be served on all parties by hand or by delivery to their last known address or by certified mail.
- 5.5.6 Any rights created by statute or law governing arbitration proceedings inconsistent with the above procedure or which interfere with compliance therewith are hereby waived by the parties to whom they accrue.
- 5.5.7 The fees and expenses of the Arbitrator shall be borne by the party or parties found in violation, or in the event no violation is found, such fees and expenses shall be borne by the moving party.
- 5.6 The procedures contained in Section 5.5 shall be applicable to alleged violations of this Article. Disputes alleging violation of any other provision of this Agreement, including any underlying disputes alleged to be in justification, explanation, or mitigation of any violation of this Article, shall be resolved under the grievance procedures of Article 9.
- 5.7 In the case of nonpayment of wages or trust fund contributions on the Project, the Union shall give the District and the Contractor(s) three (3) business days' notice when nonpayment of trust fund contributions has occurred and one (1) business days' notice when nonpayment of wages has occurred or when paychecks being tendered to a financial institution normally recognized to honor such paychecks will not honor such paycheck as a result of insufficient funds, of the intent to withhold labor from the Contractor(s)' or their subcontractor's workforce, during which time the Contractor shall have the opportunity to correct the default. In this instance, a Union's withholding of labor (but not picketing) from a Contractor who has failed to pay its fringe benefit contributions or failed to meet its weekly payroll shall not be considered a violation of this Article. In the event the Union or any of its members withhold their services from such contractor or subcontractor, District shall have the right to replace such contractor or subcontractor with any other contractor or subcontractor who executes the Agreement to be Bound.

- 5.8 It will not be a violation of this Agreement when the Contractor considers it necessary to shut down to avoid the possible loss of human life because of an emergency situation that could endanger the life and safety of an employee. In such cases, employees will be compensated only for the actual time worked. In the case of a situation described above whereby the Contractor requests employees to wait in a designated area available for work, the employees will be compensated for the waiting time.
- 5.9 If a Master Agreement expires before the Contractor completes the performance of work under the Construction Contract and the Union or Contractor gives notice of demands for a new or modified Master Agreement, the Union agrees that it will not strike on work covered under this Agreement and the Union and the Contractor agree that the expired Master Agreement shall continue in full force and effect for work covered under this Agreement until a new or modified Master Agreement is reached. If the new or modified Master Agreement provides that any terms of the Master Agreement shall be retroactive, the Contractor agrees to comply with any retroactive terms of the new or modified Master Agreement which are applicable to employees who were employed on the projects during the interim, with retroactive payment due within seven (7) days of the effective date of the modified Master Agreement subject to section 4.3.

ARTICLE 6

WORK ASSIGNMENTS AND JURISDICTIONAL DISPUTES

- 6.1 The assignment of Covered Work will be solely the responsibility of the Contractor performing the work involved; and such work assignments will be in accordance with the Plan for the Settlement of the Jurisdictional Disputes in the Construction Industry (the "Plan") or any successor Plan.
- 6.2 All jurisdictional disputes on this Project between or among the building and construction trades Unions and the Contractors parties to this Agreement, shall be settled and adjusted according to the present Plan established by the Building and Construction Trades Department or any other plan or method of procedure that may be adopted in the future by the Building and Construction Trades Department. Decisions rendered shall be final, binding, and conclusive on the Contractors and Unions parties to this Agreement.
- 6.3 If a dispute arising under this Article involves the Northern California Carpenters Regional Council or any of its subordinate bodies, an Arbitrator shall be chosen by the procedures specified in Article V, Section 5, of the Plan from a list composed of John Kagel, Thomas Angelo, Robert Hirsch, and Thomas Pagan, and the Arbitrator's hearing on the dispute shall be held at the offices of the California State Building and Construction Trades Council in Sacramento, California within fourteen (14) days of the selection of the Arbitrator. All other procedures shall be as specified in the Plan.
- 6.4 All jurisdictional disputes shall be resolved without the occurrence of any strike, work stoppage, or slow-down of any nature and the Contractor's assignment shall be adhered to until the dispute is resolved. Individual employees violating this section shall be subject to immediate discharge.

ARTICLE 7

JOINT LABOR/MANAGEMENT MEETINGS

- 7.1 Joint Labor/Management Meetings. During the period of any work performed under this Agreement, the Project Manager, or District designee, may schedule monthly Joint Labor/Management Meetings that include the Project Manager, or the District's designee, the Contractors and the Unions. The purpose of these meetings is to promote harmonious labor/management relations, ensure adequate communications and advance the proficiency and efficiency of the employees and the Contractors on the Project. These meetings may include a discussion of safety, craft resource requirements, scheduling and productivity of work performed at the Project. The Union representative shall keep minutes of any such meetings and the minutes shall be subject to approval at any subsequent meeting. Any such meetings may be in person, virtually or by conference call. It shall be mandatory for a representative of the Unions to participate in such meetings.
- 7.2 A Pre-Job Conference shall be scheduled by the District prior to the commencement of work to establish the scope of work in each Contractor's contract. When a contract has been let to a Contractor covered by this Agreement, a job conference and/or markup meeting shall be scheduled by the District upon request of any Union, Contractor or the District.

ARTICLE 8

MANAGEMENT RIGHTS

- 8.1 The Contractor(s) retains full and exclusive authority for the management of their work forces for all work performed under this Agreement. This authority includes, but is not limited to the right to:
- A. Plan, direct and control the operation of all the work.
 - B. Decide the number and types of employees required to perform the work safely and efficiently. The lawful staffing provisions of the applicable Master Agreement shall be recognized.
 - C. Hire, promote and layoff employees as deemed appropriate to meet work requirements and/or skills required.
 - D. Require all employees to observe the District and Contractor Project Rules, Security and Safety Regulations, consistent with the provisions of this Agreement. These Project Rules and Regulations shall be reviewed and mutually agreed upon at the Pre-Job meeting and supplied to all employees and/or posted on the jobsite.
 - E. Discharge, suspension or discipline will be handled under the applicable craft agreement.

- F. Assign and schedule work at its sole discretion and determine when overtime will be worked. There shall be no refusal by a craft to perform work assigned, including overtime work. However, individual craftspeople shall not be required to work overtime unless specifically dispatched for overtime work. Any cases of a craft's refusal to work overtime shall be subject to the grievance procedure.
 - G. Utilize any work methods, procedures or techniques and select and use any type or kind of materials, apparatus or equipment regardless of source, manufacturer or designator (in accordance with Article 2).
 - H. The foregoing listing of management rights shall not be deemed to exclude other functions not specifically set forth herein. The Contractors, therefore, retain all legal rights not specifically enumerated in this Agreement.
- 8.2 All workers employed or otherwise used on a Project shall comply with the District's Drug and Alcohol-Free Workplace Policy (BP 4020) and Employee Drug Testing Policy (BP 41 12.41, 4212.41, 4312.41) and applicable regulations as amended from time to time. If not otherwise specified, the drug testing protocol shall be in compliance with 49 Code of Federal Regulations (CFR) section 382.105 (Testing procedures) which incorporates 49 CFR Part 40.

ARTICLE 9

GRIEVANCE PROCEDURE

- 9.1 It is mutually agreed that any question arising out of and during the term of this Agreement involving its interpretation and application (other than matters subject to Section 5.5 and Union jurisdictional disputes subject to Article 6) shall be considered a grievance. Questions between or among parties signatory to a Master Agreement arising out of or involving the interpretation of a Master Agreement shall be resolved under the grievance procedure provided in that Master Agreement.
- 9.2 The District and other Contractors, as well as the Unions, may bring forth grievances under this Article.
- 9.3 A grievance shall be considered null and void if not brought to the attention of the effect party by the grievant within five (5) working days after the incident that initiated the alleged grievance occurred or was discovered, whichever is later. The term "working days" as used in this Article shall exclude Saturdays, Sundays, or holidays regardless of whether any work is actually performed on such days.
- 9.4 Grievances shall be settled according to the following procedure, except those grievances that do not involve an individual grievant, which shall be discussed by the District, and the Council and then, if not resolved within five (5) working days of written notice unless extended by mutual consent, commence at Step 4:

Step 1

The Steward and the grievant shall attempt to resolve the grievance with the craft supervisor within five (5) working days after the Grievance has been brought to the attention of the Contractor.

Step 2

In the event the matter remains unresolved in Step 1 above after five (5) working days, within five (5) working days thereafter, the alleged grievance may be referred in writing to the Business Manager(s) of the Union(s) affected and the site construction manager or Labor Relations representative of the Contractor(s) for discussion and resolution. A copy of the written grievance shall also be mailed, faxed or emailed to the District.

Step 3

In the event the matter remains unresolved in Step 2 above within five (5) working days, within five (5) working days thereafter, the grievance may be referred in writing to the Business Manager(s) of the affected Union(s) involved and the Manager of Labor Relations of the Contractor(s) or the Manager's designated representative and the District for discussion and resolution.

Step 4

If the grievance is not settled in Step 3 within five (5) working days, within five (5) days thereafter, either party may request the dispute be submitted to neutral arbitration or the time may be extended by mutual consent of both parties. The request for arbitration and/or the request for an extension of time must be in writing with a copy to the District. Should the parties be unable to mutually agree on the selection of a neutral Arbitrator, selection for that given arbitration shall be made by seeking a list of seven (7) labor arbitrators with construction experience from the Federal Mediation and Conciliation Service and alternately striking names from the list of names on the list until the parties agree on an Arbitrator or until one name remains. The first party to strike a name from the list shall alternate between the party bringing forth the grievance and the party defending the grievance. District shall keep a record of the sequence and shall notify the parties to the grievance as to which party has the right to strike a name first.

- 9.5 The Arbitrator shall conduct a hearing at which the parties to the grievance shall be entitled to present testimonial and documentary evidence. Hearings will be transcribed by a certified court reporter. The parties shall be entitled to file written briefs after the close of the hearing and receipt of the transcript.
- 9.6 Upon expiration of the time for the parties to file briefs, the Arbitrator shall issue a written decision that will be served on all parties and on the District. The Arbitrator shall have the authority to utilize any equitable or legal remedy to prevent and/or cure any breach or threatened breach of this Agreement. The Arbitrator's decision shall be final and binding as to all parties signatory to this Agreement.
- 9.7 The cost of the Arbitrator and the court reporter, and any cost to pay for facilities for the hearing, shall be borne equally by the parties to the grievance. All other costs and expenses in connection with the grievance hearing shall be borne by the party who incurs them.

- 9.8 The Arbitrator's decision shall be confined to the issue(s) posed by the grievance, and the Arbitrator shall not have the authority to modify, amend, alter, add to or subtract from any provision of this Agreement.
- 9.9 Any party to a grievance may invite the District to participate in resolution of a grievance. The District may, at its own initiative, participate in Steps 1 through 3 of the grievance procedure.
- 9.10 In determining whether the time limits of Steps 2 through 4 of the grievance procedure have been met, a written referral or request shall be considered timely if it is personally delivered, sent by overnight mail or faxed within the five (5) working day period. Any of the time periods set forth in this Article may be extended in writing by mutual consent of the parties to the grievance, and any written referral or request shall be considered timely if it is personally delivered, sent by overnight mail or faxed during the extended time period.

ARTICLE 10

EMPLOYEE REPRESENTATION AND REFERRAL

- 10.1 The Employers recognize the Unions as the sole bargaining representatives of all craft employees performing Covered Work under this Agreement. Authorized representatives of the Unions shall have reasonable access to the Project whenever work covered by this Agreement is being, has been, or will be performed on the Project. All authorized representatives of the Unions must comply with the required check-in procedure prior to visiting the work area.
- 10.2 Employees are not required to become or remain union members as a condition of performing Covered Work under this Agreement. Employers shall make and transmit all deductions for union dues, fees, and assessments that have been authorized by employees in writing in accordance with the applicable Master Agreement. Nothing in this Section 10.2 is intended to supersede the requirements of applicable Master Agreements as to those Employers otherwise signatory to such Master Agreements and as to the employees of those Employers who are performing Covered Work.
- 10.3 In filling craft job requirements, Employers performing Covered Work shall utilize and be bound by the registration facilities and referral systems established or authorized by the Unions ("Job Referral System"). Such Job Referral System shall be operated in a non-discriminatory manner and in full compliance with all federal, state, and local laws and regulations, including those which require equal employment opportunities and non-discrimination. The Employers shall have the right to reject any applicant referred by the Unions in accordance with this Article 10.
- 10.4 The Employers shall have the unqualified right to select and hire directly all supervisors above general foreman it considers necessary and desirable, without such persons being referred by the Unions.
- 10.5 In the event that referral facilities maintained by the Union are unable to fill the requisition of an Employer for employees within a forty-eight (48) hour period (Saturdays, Sundays and Holidays excluded) after such requisition is made by the Employer, the Employer shall

be free to obtain such workers from any source. An Employer who hires any personnel to perform Covered Work on the Project pursuant to this Section shall immediately provide the appropriate Union with the name and address of such employee(s) and shall immediately refer such employee(s) to the appropriate Union to satisfy the requirements of this Article 10.10.6 Unions will exert their utmost efforts to recruit sufficient numbers of skilled and trained craft persons to fulfill the requirements of the Contractor/Employer(s). On Projects governed by Education Code sections 17250.25 and 17407.5, the Unions shall consider a Contractor's request to transfer skilled and trained employees to work on Projects in a manner consistent with the Union's referral procedures.

- 10.7 Subject to the limitation of applicable law and the hiring hall procedures of the Unions, the Parties to this Agreement mutually support the development of increased numbers of skilled construction workers from District graduates and the residents of the City of Sacramento specifically and from the residents of Sacramento County generally, to meet the needs of the Projects and the requirements of the industry generally. To facilitate this goal, the Unions agree to encourage the referral and utilization of qualified District graduates and the City of Sacramento and Sacramento County residents as journeypersons and apprentices on the Projects.

ARTICLE 11

REFERRAL-LOCAL COMMUNITY WORKFORCE PROVISIONS

- 11.1 Contractors performing Covered Work on the Project shall, in filling craft job vacancies, utilize and be bound by the registration facilities and referral systems established or authorized by the Unions signatory to this Agreement. The Union will exert and document their best efforts to recruit and identify residents of the Local Area, in a manner that is consistent with the District's Core Value and Guiding Principle, and those individuals shall be referred for Project work first, to the extent allowed by law, and consistent with the Union's hiring hall provisions, and as long as they possess the requisite skills and qualifications, including journeymen and apprentices covered by this Agreement.
- 11.2 The Job Referral System shall be operated in a non-discriminatory manner and in full compliance with all federal, state, and local laws and regulations, including those which require equal employment opportunities and non-discrimination. The Contractor(s) shall have the right to reject any applicant referred by the Union(s), in accordance with the applicable Master Agreement. The Unions shall be the primary source of all craft labor employed on the Project, however, a Contractor with a core workforce may request by name, and the local Union shall honor, referral of such Contractor's regular and experienced personnel ("Core Employees") who have applied to the applicable Union to perform Covered Work on the Project. For purposes of this Agreement, a Core Employee is a person who meets all the following:

- (1) Possesses any license required by state or federal law for the Project work to be performed;

- (2) Worked a total of at least one thousand (1,000) hours in the construction craft during the prior two (2) years;
- (3) Has been on the Contractor's active payroll for at least ninety (90) out of the one hundred and twenty (120) calendar days prior to the contract award; and
- (4) Has the ability to perform safely the basic functions of the applicable trade.

11.3 The Union will refer to such Contractor one journeyman employee from the hiring hall out-of-work list for the affected trade or craft and will then refer one of the Contractor's Core Employees as a journeyman, until such Contractor has hired six (6) Core Employees, whichever occurs first. Thereafter, all additional employees in the affected trade or craft shall be hired exclusively from the hiring hall out-of-work list(s). For the duration of the Contractor's work on the Project, the ratio shall be maintained. When such Contractor's workforce is reduced, employees shall be reduced in the same one for one ratio of Core Employees to hiring hall referrals as was applied in the initial hiring. Contractors that are signatory to a Master Agreement with Union(s) signatory hereto must comply with the hiring hall provisions contained in the applicable Master Agreement, and nothing in the referral provisions of this Agreement shall be construed to supersede the local hiring hall provisions of the Master Agreement(s) as they apply to such Contractors.

11.4 In the event the referral facilities maintained by the Unions do not refer the employees as requested by the Contractor within a forty-eight (48) hour period after such requisition is made by the Contractor (Saturdays, Sundays and holidays excepted), the Contractor may employ applicants from any source. Contractors shall immediately notify and provide the appropriate Union(s) with the name and address of such gate-hires, who shall be bound by the provisions of this Article.

It is in the interest of the parties to this Agreement to facilitate employment of District and Local Area residents, including parents, guardians or other care givers of students attending the District's schools, and to use resources in the Local Area in construction of a Project. The "Local Area" shall be defined as the area within the boundaries of the District, the City of Sacramento, Sacramento County, and the nine counties outlined in section 1.8.4, in priority order outlined in section 1.8. To the extent allowed by law, and consistent with the Union's hiring hall provisions, and as long as they possess the requisite skills and qualifications, residents of the Local Area shall be first referred for Project work, including journeymen and apprentices covered by this Agreement. It is the goal of the parties that not less than fifty (50) percent of all hours worked on the Project, on a craft-by-craft basis, be worked by residents of the Local Area (including fifty (50) percent of the total hours worked by any Core Employees). The Union shall provide a list of individuals referred for Project work and their applicable zip code of residence to the District, upon request. Contractors will be required to submit certified weekly payroll records to the District along with monthly workforce utilization reports documenting the Contractor's compliance with the requirements described in this Article. At a minimum, the monthly reports must include data on Local Area resident work hour utilization on the Project. An annual report shall be submitted to the Board on the number of workers employed, or contracted for,

within the Local Area. Provisions of this article shall be an item for discussion at each Pre-Job Conference outlined in Article.

ARTICLE 12

MUTUAL COMMITMENT TO SUPPORTING EDUCATIONAL AND CAREER DEVELOPMENT OPPORTUNITIES FOR DISTRICT STUDENTS

- 12.1 The Parties agree that this Agreement is also intended to formalize partnerships between the Unions and the District to support the educational and career development of the District's students, and to help develop the next generation of skilled construction workers. The Parties agree to support District Construction and Design Academies or Pathways within the District ("Academy" or "Pathway") in order to carry out the training and employment objectives of this Agreement, including providing District students with the opportunities and skills necessary to enter post-secondary study and to pursue lifelong training within the broader context of the building trades industry, and to develop and reinforce academic course standards in order to maximize career opportunities and technical competency. The Parties agree to the following actions in order to implement this mutual commitment.
- 12.2 Contractors shall employ apprentices in the respective drafts to perform such work as is within their capabilities and which is customarily performed by the craft in which they are indentured. The Parties agree that apprentices may comprise up to twenty (20) percent of each craft's workforce at any time, unless the state approved apprenticeship standards or regulations or the applicable Master Agreement establish a lower maximum percentage.
- 12.3 The Union shall provide speakers at District Academies, at no cost to the District, through the Multi-Craft Core Curriculum (MC3) program and at other mutually agreed upon school functions and events.
- 12.4 In order to facilitate the goals of the Academy, the District and Council agree to create an Advisory Board for the Luther Burbank High School Construction and Design Academy, American Legion High School's Residential and Commercial Construction Academy (collectively "High Schools"), Rosemont High School Engineering , Construction and Design, and participate in the District-level Pathway Advisory Board, which will conduct meetings as determined by the District during the school year to develop the goals of the Academy; plan for the presentation and content of training lectures to facilitate employable skills in the construction trades; develop a summer schedule for training; organize and develop summer internship positions; assist in planning curriculum scope and sequencing; design cocurricular activities; identify sources for educational and financial support; and otherwise initiate steps to carry out the goals of the Academy.
- 12.4.1 The High School Advisory Boards shall consist of the appropriate membership as outlined by current regulations and requirements placed upon the District. The Advisory Board, in coordination with the District's Career Services representative, shall develop and implement a plan for annual assessment of the goals and

objectives to maximize the employability of students and District graduates, including summer internship opportunities. A quorum for the Advisory Board meeting shall be at least one member representing the building trades JATCs; one member representing the Council; and one member representing the District.

- 12.4.2 The Academy Advisory Board will collaborate with post-graduate training programs, such as the Northern California Construction Training and American River College's Stripe Program, in order to assist graduates in obtaining an internship into a JATC.
- 12.4.3 The training and employment program of the interns shall be developed by the Academy Advisory Board such that graduating interns shall possess the skills, training, and educational background to help the graduate achieve priority on the lists of the building trades to the degree allowed under each JATC's application process including those programs that allow direct entry. It is recognized that the Apprenticeship Programs operate according to existing Standards approved by the California Department of Industrial Relations, Division of Apprenticeship Standards, and the standards set forth in the collective bargaining agreements for each building trades union and that any such priority shall be in accordance with such Standards and agreements.
- 12.5 The Parties agree to meet and identify additional mutually agreed upon specific actions to meet these goals, including, but not limited to, consideration of: (1) measures to facilitate teacher training in Multi-Craft Core Curriculum (MC3); (2) measures to provide student employment opportunities through externships, internships and/or post-graduation apprenticeship placement; (3) measures to provide hands-on training opportunities for students; (4) measures to facilitate identification of funding sources to provide recent women, minoritized and low-income District graduates scholarships or assistance in the purchase of tools and other equipment needed for apprenticeship programs; (5) support to identify and find funding for a Pre-Apprentice / Internship / Apprenticeship Coordinator to assist District Academies. These additional commitments shall be set forth in a Memorandum of Understanding (MOU) to this Agreement (“Union Educational and Career Development Support MOU”). Parties agree to meeting twice before August 1, 2022, and throughout the month of August to identify the mutually agreeable terms of the MOU and shall finalize the MOU no later than September 1, 2022.
- 12.6 The Union shall provide the District with an annual report by June 30 of each year on the implementation of the provisions set forth in this Article and in the Union Educational and Career Development Support MOU. The report shall provide any information requested by the District to assist the District in reporting work-based learning indicator on the State of California’s College and Career Dashboard.

ARTICLE 13

NON-DISCRIMINATION

- 13.1 The Unions and Contractors shall not discriminate against any employee or applicant for employment because of race, creed, color, sex, sexual orientation, political affiliation, national origin, age, religion, Vietnam veteran or Vietnam Era status, disability as identified in the Americans with Disabilities Act, membership in a labor organization in hiring and dispatching workers for the Project, or any other basis recognized by law. The parties to this Agreement understand and agree that nothing in this Agreement shall supersede or take precedence over any District Board of Education policy or requirement including, but not limited to, the construction contract and general conditions for the Project.
- 13.2 All qualified (as determined by the District and applicable law) contractors and subcontractors may bid and be awarded work on a Project without regard to whether they are otherwise parties to collective bargaining agreements provided they comply with the provisions of this Agreement.

ARTICLE 14

HOURS OF WORK SHIFTS AND HOLIDAYS

- 14.1 The standard workday shall be in accordance with the applicable Master Agreements. Common start times may be established by the Contractor during the standard workday established by the applicable Master Agreements. The standard work week shall be five (5) consecutive days of work commencing on Monday. Nothing herein shall be construed as guaranteeing any employee eight (8) hours of work per day or forty (40) hours of work per week.
- 14.2 Common shifts may be established when considered necessary by the Contractor. The Contractor shall provide at least one week notice to the Council prior to any change in shift time. Any shifts established shall continue for the established work week.
- 14.3 Recognized holidays shall be in accordance with the applicable Master Agreements. Under no circumstances shall any work be performed on Labor Day except in cases of emergency involving life or property. In the event a holiday falls on Saturday, the previous day, Friday, shall be observed as such holiday. In the event a holiday falls on Sunday, the following day, Monday, shall be observed as such holiday. There shall be no paid holidays. If employees are required to work on a holiday, they shall receive the appropriate rate, but in no case shall such overtime rate be more than double the straight time rate.

ARTICLE 15

GENERAL PROVISIONS

- 15.1 If any article or provision of this Agreement shall become invalid, inoperative and/or unenforceable by operation of law or by declaration of any competent authority of the executive, legislative, judicial or administrative branches of the federal or state government, the District, the Contractors and the Council shall suspend the operation of such article or provision during the period of its invalidity, and the District and the Council shall negotiate in its place and stead an article or provision that will satisfy the objections to its validity and that, to the greatest extent possible, will be in accord with the intent and purpose of the article or provision in question. The new article or provision negotiated by the District and the Council shall be binding on all parties signatory to this Agreement.
- 15.2 If any article or provision of this Agreement shall be held invalid, inoperative or unenforceable by operation of law, or by any of the above-mentioned tribunals of competent jurisdiction, the remainder of the Agreement or application of such article or provision to persons or circumstances other than to which it has been held invalid, inoperative or unenforceable shall not be affected thereby.
- 15.3 Except as enumerated in this Agreement, all other terms and conditions of employment described in the Master Agreement of the Union having traditional and customary jurisdiction over the Covered Work shall apply.
- 15.4 The provisions of this Agreement shall take precedence over conflicting provisions of any Master Agreement or any other national, area or local collective bargaining agreement, except for all work performed under the NTL Articles of Agreement, the National Stack/Chimney Agreement and the National Cooling Tower Agreement. In addition, all instrument calibration work and loop checking Covered Work shall be performed under the terms of the UA/IBEW Joint National Agreement for Instrument and Control Systems Technicians, and work within the craft jurisdiction of the Elevator Constructors will be performed under the terms of the National Agreements of the International Union of Elevator Constructors. Notwithstanding the provisions of this section, Articles 5, 6 and 9 of this Agreement shall apply to all Covered Work.
- 15.5 Each person executing this Agreement represents and warrants that he or she is authorized to execute this Agreement on behalf of the party or parties indicated.
- 15.6 This Agreement may be executed in any number of counterparts, and each counterpart shall be deemed to be an original document. All executed counterparts together shall constitute one and the same document, and any signature pages may be assembled to form a single original document.
- 15.7 To the fullest extent consistent with the applicable Master Agreement and trust agreement, it is agreed that any liability under this Agreement by District, the Council, a Union, or any other Contractor shall be several and not joint. Any alleged breach of this Agreement by a party shall not affect the rights, liabilities, obligations, and duties among the other parties or between that party and any other party.

ARTICLE 16

HELMETS TO HARDHATS

- 16.1 The Contractors and Unions recognize a desire to facilitate the entry into the building and construction trades of veterans and members of the National Guard and Reserves who are interested in careers in the building and construction industry. The Contractors and Unions agree to utilize the services of the Center for Military Recruitment, Assessment and Veterans Employment (hereinafter "Center"), a joint Labor-Management Cooperation Trust Fund, established under the authority of Section 6(b) of the Labor-Management Cooperation Act of 1978, 29 U.S.C. Section 175(a), and Section 302(c)(9) of the Labor-Management Relations Act, 29 U.S.C. Section and a charitable tax exempt organization under Section 501 (c)(3) of the Internal Revenue Code, and the Center's "Helmets to Hardhats" program to serve as a resource for preliminary orientation, assessment of construction aptitude, referral to apprenticeship programs or hiring halls, counseling and mentoring, support network, employment opportunities and other needs as identified by the parties.
- 16.2 The Unions and Contractors agree to coordinate with the Center to create and maintain an integrated database of veterans and members of the National Guard and Reserves interested in working on this Project and of apprenticeship and employment opportunities for this Project. To the extent permitted by law, the Contractors and Unions will give credit to such veterans and members of the National Guard and Reserves for bona fide, provable past experience.

ARTICLE 17

DURATION OF AGREEMENT; MID-TERM ASSESSMENT

- 17.1 This Agreement shall remain in full force and effect for a period of five (5) years from the date approved by the Board of Education on June 9, 2022. Notwithstanding the term of the Agreement as set forth above, the Agreement will continue to apply until the completion of all Covered Work pursuant to Section 2.1 where the initial bid for any Construction Contract for a Project is awarded or approved by the Board on or before the date the Agreement terminates.
- 17.2 At the two-year mark, a mid-term assessment, including mutually agreed upon metrics, shall be reported to the Board.

SIGNATURES

Sacramento City Unified School District



Date: 8/5/22


Name: Christine Pritchet

Title: SCUSD Board President

Sacramento-Sierra Building and

Construction Trades Council

DocuSigned by:



B4C87250B34241A

Date: _____

Name: Kevin Ferreira

Title: Executive Director

Sacramento-Sierra Building and

Construction Trades Council



Date: 7-29-22

Name: Karl Pineo

Title: President

Sacramento-Sierra Building and
Construction Trades Council

A handwritten signature in blue ink, appearing to read "Todd Schiavo", is written over a horizontal line.

Date: 8/2/2022

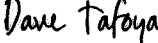
Name: Todd Schiavo

Title: Vice-President

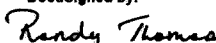
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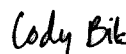
Asbestos Workers Local #16

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
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Boilermakers Local #549

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Cement Masons Local #400

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Asbestos, Lead and Mold Laborers Local #67

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District Council #16 International Union of Painters & Allied Trades

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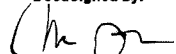
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Elevator Constructors Local #8

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International Brotherhood of Electricians Local #340


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Sprinkler Fitters Local #669

UNIONS

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Iron Workers Local #118

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Laborers Local #185


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Operating Engineers Local #3

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Plasterers & Cement Masons Local #300


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UA of Journeymen & Apprentices of the Plumbing & Pipe Fitting Ind. Local #355

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Plumbers & Pipefitters Local #447

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Roofers Local #81

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Sheet Metal Workers Local #104

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Teamsters Local #150

Northern California Carpenters Regional Council on behalf of itself and its affiliated Local Unions

UNIONS

Asbestos Workers Local #6

Laborers Local #185

Bricklayers Local #3

Millwrights Local #102

Boilermakers Local #549

Northern California District Council of Laborers



Carpenters 46 Northern California Counties Conference Board

Operating Engineers Local #3

Cement Masons Local #400

Plasterers & Cement Masons Local #300

District Council #16 International Union of Painters & Allied Trades

Pile Drivers Local #34

District Council of Plasterers & Cement Masons of Northern California

Plumbers & Pipefitters Local #447

Drywall/Latherers Local #9109

Roofers Local #81

International Brotherhood of Electricians Local #340

Sheet Metal Workers Local #104

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ATTACHMENT A

PROJECT LABOR AGREEMENT

Project:

Bid Number:

AGREEMENT TO BE BOUND

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

The undersigned hereby certifies and agrees that:

- 1.) It is a Contractor as that term is defined in Section I .7 of the Sacramento City Unified School District Agreement ("Agreement") because it has been, or will be, awarded a contract or subcontract to assign, award or subcontract Covered Work (as defined in Section 2.3) on the Project (as defined in Section 1.9), or to authorize another party to assign, award or subcontract Covered Work, or to perform Covered Work.
- 2.) In consideration of the award of such contract or subcontract, and in further consideration of the promises made in the Agreement and all attachments thereto (a copy of which was received and is hereby acknowledged), it accepts and agrees to be bound by the terms and conditions of the Agreement, together with any and all amendments and supplements now existing, or which are later made thereto.
- 3.) If it performs Covered Work, it will be bound by the legally established trust agreements designated in local master collective bargaining agreements, and hereby authorizes the parties to such local trust agreements to appoint trustees and successor trustee to administer the trust funds, and hereby ratifies and accepts the trustees so appointed as if made by the undersigned.
- 4.) It has no commitments or agreements that would preclude its full and complete compliance with the terms and conditions of the Agreement.
- 5.) It will secure a duly executed Agreement to be Bound, in form identical to this document, from any Contractor(s) at any tier or tiers with which it contracts to assign, award, or subcontract Covered Work, or to authorize another party to assign, award or subcontract Covered Work, or to perform Covered Work, and it will provide a copy of such executed Agreement to be Bound to the Sacramento-Sierra Building & Construction Trades Council within fifteen (15) days of such contracting or subcontracting in accordance with Section 3.2 of the Agreement.

DATED: _____

Name of Contractor _____

(Authorized Officer & Title)

(Address)