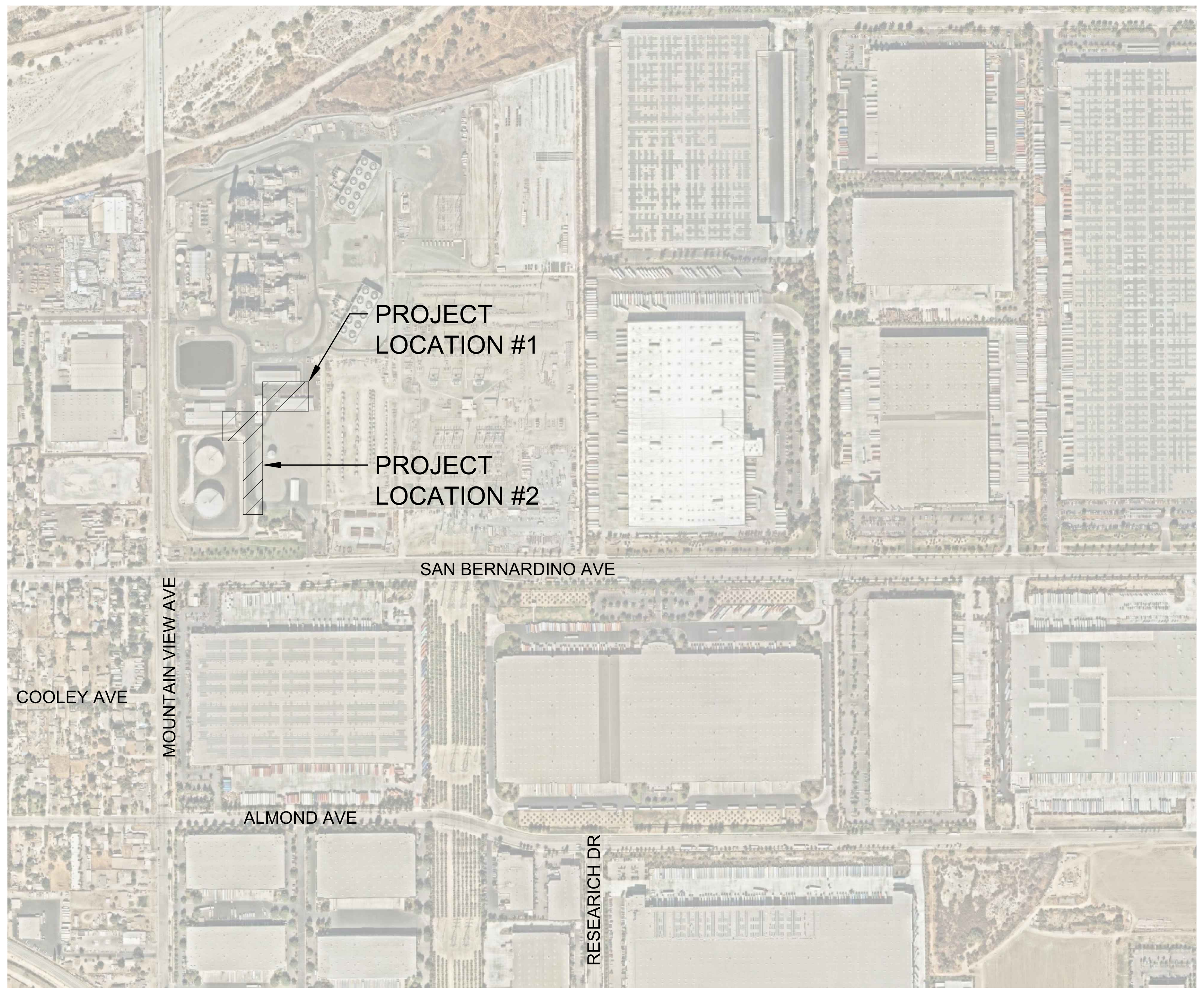
DOCKETED	
Docket Number:	00-AFC-02C
Project Title:	Mountainview Power Plant - Compliance
TN #:	240640
Document Title:	Mountainview Generation Preliminary Submittal
Description:	N/A
Filer:	Jan Whitson
Organization:	Southern California Edison
Submitter Role:	Public
Submission Date:	11/19/2021 8:29:45 AM
Docketed Date:	11/19/2021

SOUTHERN CALIFORNIA EDISON
TSD FLEET EV CHARGING PROGRAM
MOUNTAIN VIEW GENERATION STATION



LOCATION MAP
NOT TO SCALE

GENERAL CONTRACT NOTES:

1. CONTRACTOR SHALL PROVIDE ALL MATERIALS SUCH AS TOOLS, EQUIPMENT, LABOR, AND INCIDENTALS REQUIRED INCLUDING THE CONSTRUCTION OF ALL PROPOSED IMPROVEMENTS SHOWN ON THE PLANS AND AS SPECIFIED BY THE GOVERNING STANDARDS AND/OR THE CIVIL AND ELECTRICAL ENGINEERS.
2. CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
3. IF DAMAGED DURING CONSTRUCTION, THE CONTRACTOR SHALL REPLACE IN KIND ALL EXISTING STRUCTURES, WALKWAYS, CURB & GUTTER, LANDSCAPING, AND/OR OTHER IMPROVEMENTS TO AN EXISTING OR BETTER CONDITION.
4. CONTRACTOR SHALL REPLACE ALL EXISTING STRIPING, SIGNAGE AND MARKINGS DAMAGED DUE TO PROJECT CONSTRUCTION ACTIVITIES.
5. ALL WORK SHALL BE CONFINED WITHIN THE EASEMENTS AND/OR CONSTRUCTION LIMITS AS SHOWN ON THE PLANS.
6. APPROVAL OF THESE PLANS BY THE CITY ENGINEER DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL A PERMIT OR NOTICE TO PROCEED HAS BEEN ISSUED.
7. BEFORE COMMENCING WORK, THE CONTRACTOR SHALL NOTIFY ALL UTILITY AUTHORITIES OR UTILITY COMPANIES HAVING POSSIBLE INTEREST IN THE WORK OF THE CONTRACTOR'S INTENTION TO EXCAVATE PROXIMATE TO EXISTING FACILITIES AND THE CONTRACTOR SHALL VERIFY THE LOCATION OF ANY UTILITIES IN THE WORK AREA. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (U.S.A.) TWO (2) DAYS PRIOR TO BEGINNING ANY EXCAVATION.
8. THE CONTRACTOR SHALL OBTAIN WRITTEN AUTHORIZATION FROM ANY PROPERTY OWNER GIVING HIM PERMISSION TO ENTER HIS PROPERTY FOR THE PURPOSE OF CONSTRUCTING THE IMPROVEMENTS DELINEATED ON THE PLANS AND TRANSITION THERETO.
9. ALL BILL OF MATERIALS AND/OR EQUIPMENT SHALL BE PROVIDED AS SPECIFIED WITHIN THIS SET OR APPROVED EQUAL. ALL BILL OF MATERIALS AND/OR EQUIPMENT SHALL MATCH THE SAME QUALITY AND CAPACITY AS INDICATED HEREIN.
10. CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER OF RECORD, IDENTIFIED BY THE PROFESSIONAL ENGINEERING SEAL AND SIGNATURE ON THESE PLANS, OF ANY SITE CONDITION(S) AND/OR DESIGN INFORMATION THAT PREVENTS THE CONTRACTOR FROM COMPLYING WITH THE LAWS, REGULATIONS AND/OR BUILDING CODES.

GENERAL GRADING AND DRAINAGE NOTES:

THE REQUIREMENTS AND INFORMATION SET OUT BELOW ARE PROVIDED FOR THE CONTRACTOR'S CONVENIENCE AND DO NOT ENCOMPASS ALL PROJECT REQUIREMENTS DESCRIBED BY THE PROJECT PLANS AND SPECIFICATIONS AND/OR APPLICABLE LAWS, REGULATIONS AND/OR BUILDING CODES.

1. CONSTRUCTION OF ALL PROJECT SITE IMPROVEMENTS SUBJECT TO ADA ACCESS COMPLIANCE, INCLUDING ACCESSIBLE PATH OF TRAVEL, CURB RETURNS, PARKING STALL(S) AND UNLOADING AREAS, BARRIER FREE AMENITIES AND/OR OTHER APPLICABLE SITE IMPROVEMENTS SHALL CONFORM TO THE AMERICANS WITH DISABILITIES ACT, CALIFORNIA TITLE 24, AND THE CALIFORNIA BUILDING CODE, CURRENT EDITION(S).
2. CONTRACTOR SHALL FIELD VERIFY ALL GRADES AND SLOPES PRIOR TO THE PLACEMENT OF CONCRETE AND/OR PAVEMENT FOR CONFORMANCE WITH ADA ACCESS COMPLIANCE REQUIREMENTS. EXAMPLES OF MINIMUM AND MAXIMUM LIMITS RELATED TO ADA ACCESS COMPLIANCE INCLUDE, BUT ARE NOT LIMITED TO:
   A) ACCESSIBLE PATH OF TRAVEL CROSS-SLOPE SHALL NOT EXCEED 2.00%
   B) ACCESSIBLE PATH OF TRAVEL LONGITUDINAL SLOPES SHALL NOT EXCEED 5.00%
   C) RAMP LONGITUDINAL SLOPES SHALL NOT EXCEED 8.33%
   WALKS SHALL NOT HAVE LESS THAN 48 INCHES IN UNOBSTRUCTED WIDTH
3. CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER OF RECORD, IDENTIFIED BY THE PROFESSIONAL ENGINEERING SEAL AND SIGNATURE ON THESE PLANS, OF ANY SITE CONDITION(S) AND/OR DESIGN INFORMATION THAT PREVENTS THE CONTRACTOR FROM COMPLYING WITH THE LAWS, REGULATIONS AND/OR BUILDING CODES GOVERNING ADA ACCESS COMPLIANCE.
4. GROUND SLOPES AWAY FROM BUILDING PADS IN LANDSCAPED OR DIRT AREAS SHALL BE NO LESS THAN 5.0% FOR AT LEAST TEN (10) FEET, OR AS OTHERWISE NOTED ON THE PLANS.
5. DRAINAGE SHALL NOT BE ALLOWED ONTO ADJACENT PROPERTY.
6. ALL FILL MATERIAL USED TO SUPPORT THE FOUNDATIONS OF ANY BUILDING OR STRUCTURE SHALL BE PLACED UNDER THE DIRECTION OF A LICENSED GEOTECHNICAL ENGINEER, AND IN COMPLIANCE WITH THE PROJECT SPECIFICATIONS. A SOILS COMPACTION REPORT SHALL BE SUBMITTED TO THE ENGINEER OF RECORD AS REQUIRED BY THE PROJECT SPECIFICATIONS.
7. THE CONTRACTOR SHALL IMPLEMENT DUST CONTROL MEASURES AS REQUIRED BY THE PROJECT SPECIFICATIONS, AND BY GOVERNING PUBLIC AGENCIES.
8. THE CONTRACTOR SHALL IMPLEMENT A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AS REQUIRED BY THE PROJECT SPECIFICATIONS.
9. CONTRACTOR TO MATCH EXISTING PAVEMENT GRADE AT ALL NEW PAVEMENT LOCATIONS UNLESS OTHERWISE NOTED ON THE PLANS.

SURVEY NOTE:

THIS TOPOGRAPHIC SURVEY LOCATES SPECIFIC PHYSICAL FEATURES OF THE SITE AND THEIR ELEVATION AS DETERMINED NECESSARY BY THE PROJECT ENGINEER. IT IS NOT A COMPLETE TOPOGRAPHIC SURVEY OF THE SITE. THE INFORMATION SHOWN REFLECTS THE DATA OBTAINED BY FIELD SURVEY CONDUCTED ON FEBRUARY 17, 2021.

UTILITY NOTE:

UTILITY INFORMATION SHOWN HEREON IS BASED ON RECORD INFORMATION SUPPLIED TO THE ENGINEER BY THE PROPERTY OWNER, TOGETHER WITH EVIDENCE GATHERED FROM OBSERVATION OF VISIBLE EVIDENCE BY A FIELD SURVEY. THE ENGINEER CAN MAKE NO GUARANTEE AS TO THE ACCURACY OR COMPLETENESS OF THE UNDERGROUND UTILITY FACILITIES SHOWN. PRIOR TO ANY SITE EXCAVATIONS, THE CONTRACTOR SHALL CONTACT THE OWNER AND UNDERGROUND SERVICE ALERT (U.S.A.) AND REQUEST THAT THEY IDENTIFY THE LOCATION OF ALL UNDERGROUND UTILITIES AT THE SITE. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

BENCHMARK:

BENCHMARK: CNPT #10, NAIL/ TAG

ELEV: 1109.67'

ELEVATIONS ARE BASED ON NAVD88 AND DERIVED FROM AN AVERAGED GPS OBSERVATION UTILIZING THE LEICA SMARTNET NETWORK.

PROJECT LOCATION:

PROJECT IS LOCATED AT:
2492 W SAN BERNARDINO AVE
REDLANDS, CA 92374
APN: 0292-491-05-0000

DESIGN CRITERIA:

CALIFORNIA BUILDING CODE (CBC) 2019
CALIFORNIA ELECTRICAL CODE (CEC) 2019
NATIONAL ELECTRICAL CODE (NEC) 2017

SCOPE OF EV IMPROVEMENT WORK:

1. SITE AND ELECTRICAL INFRASTRUCTURE IMPROVEMENTS FOR INSTALLATION OF EV CHARGERS.
2. IMPACTED EXISTING PARKING = 10 TOTAL SPACES; 10 STANDARD SPACES
3. WORK DONE BY THE TRANSMISSION AND DISTRIBUTION CONSULTANT (T&D) IS SHOWN FOR REFERENCE ONLY.

PROPOSED EMPLOYEE CHARGER TABULATION

EV CHARGER	NO. OF EVSE(S)	NO. OF PORT(S)
SINGLE (LEVEL 2)	2	2
DUAL (LEVEL 2)	1	2
TOTAL	TOTAL EVSE(S) = 3	TOTAL PORT(S) = 4
CBC 11B-228.3.2.1 REQUIRES EV CHARGING ACCESSIBLE AND AMBULATORY STALL(S) TO BE INSTALLED. 5 TO 25 PORTS = 1 VAN ADA, 1 STANDARD ADA, 0 AMBULATORY (SEE PLANS FOR LOCATION, DESIGNED FOR FUTURE EXPANSION.)		

PROPOSED FLEET CHARGER TABULATION

EV CHARGER	NO. OF EVSE(S)	NO. OF PORT(S)
SINGLE (LEVEL 2)	5	5
TOTAL	TOTAL EVSE(S) = 5	TOTAL PORT(S) = 5
CBC 11B-228.3.2 EXCEPTION #1: EVCS NOT AVAILABLE TO THE GENERAL PUBLIC AND INTENDED FOR USE BY A DESIGNATED VEHICLE OR DRIVER SHALL NOT BE REQUIRED TO COMPLY WITH SECTION 11B-228.3.2		

LIST OF CONSULTANTS:

CIVIL:

CASSIE SCHOLZ
BLAIR CHURCH & FLYNN
451 CLOVIS AVE. STE 200
CLOVIS, CA 93612
(559) 326-1400

ELECTRICAL:

BRIAN DUFFY
BLAIR CHURCH & FLYNN
451 CLOVIS AVE. STE 200
CLOVIS, CA 93612
(559) 326-1400

CONSTRUCTION PROGRAM MANAGER:

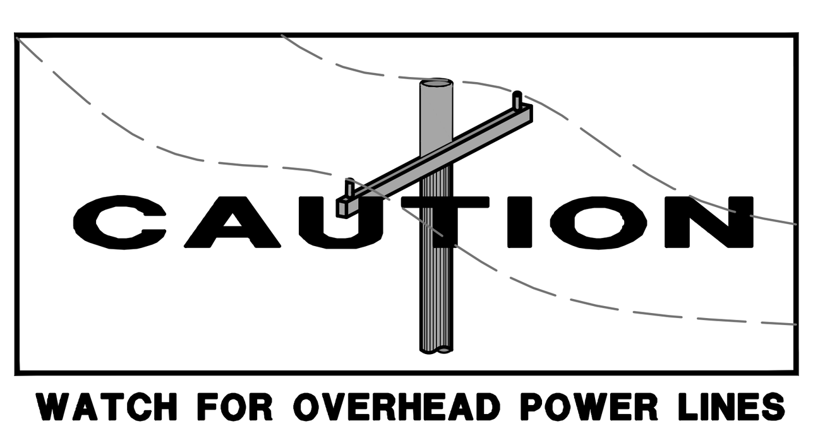
JON GALVAN
CORPORATE REAL ESTATE, PMO
8631 RUSH STREET (MC:G04-G30L)
ROSEMEAD, CA 91770
(626) 418-1002
JON.GALVAN@SCE.COM

OWNER/REPRESENTATIVE INFORMATION:

MOUNTAIN VIEW GENERATION
2492 W SAN BERNARDINO AVE
REDLANDS, CA 92374
TELEPHONE: (626) 862-8365
CONTACT: RODERICK GIRON

TELEPHONE: (909) 222-8540
CONTACT: ROBERT WERTH

SHEET INDEX



811
Know what's **below.**
Call before you dig.

PROJECT LOCATION: 2492 W. SAN BERNARDINO AVE, REDLANDS, CA 92374 | 220-0213

Blair, Church & Flynn
CONSULTING ENGINEERS

PLAN REVIEW ONLY NOT FOR CONSTRUCTION — REGISTERED PROFESSIONAL ... BRIAN M. ... ELECTRICAL ... STATE OF CALIFORNIA — Date Signed: -

PLAN REVIEW ONLY NOT FOR CONSTRUCTION — REGISTERED PROFESSIONAL ... CASSIE LEONARD ... CIVIL ... STATE OF CALIFORNIA — Date Signed: -

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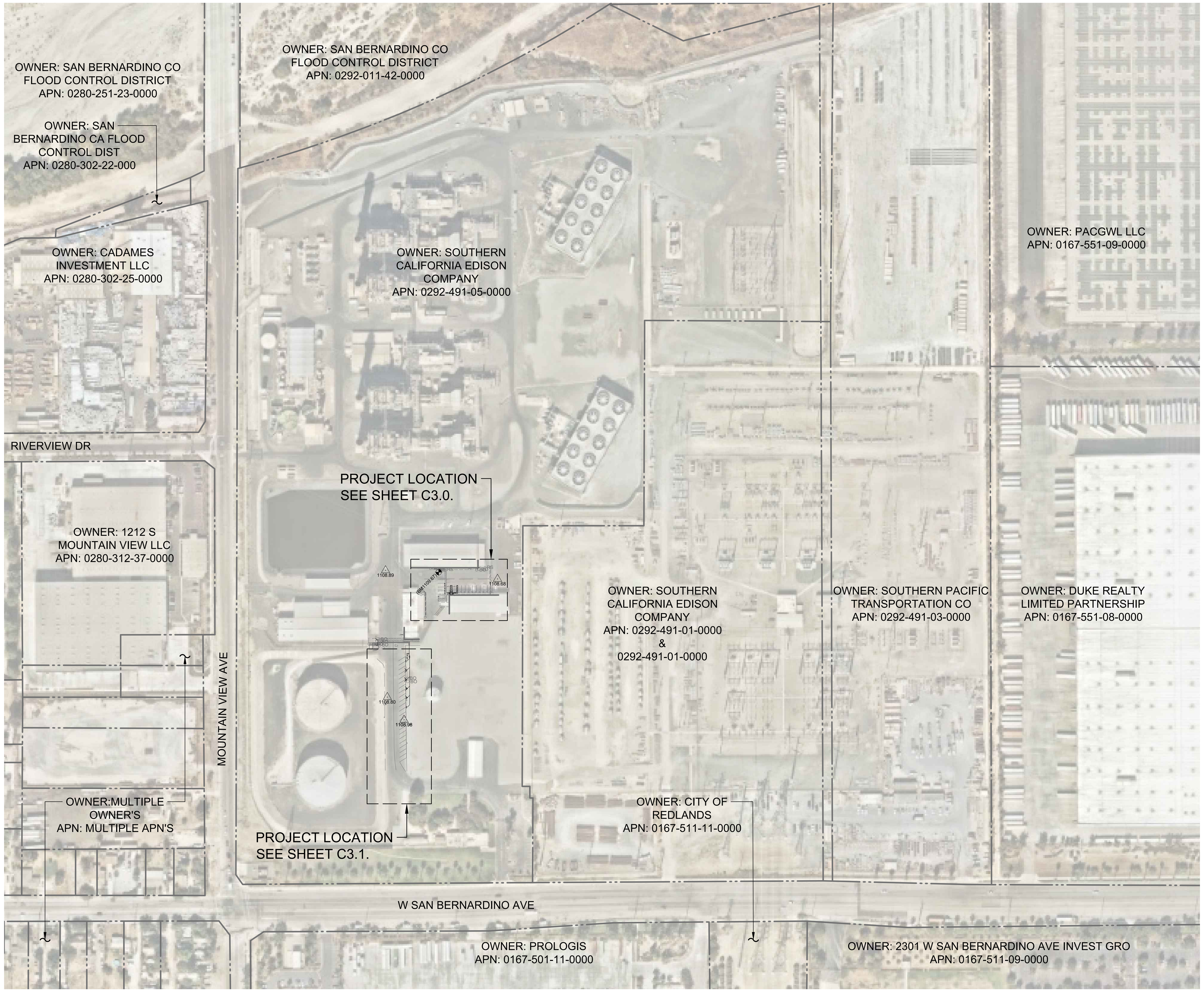
Fax (559) 326-1500

REF. & REV.

SOUTHERN CALIFORNIA EDISON
TSD FLEET EV CHARGING PROGRAM
MOUNTAIN VIEW GENRATION STATION
TITLE SHEET

T1.0
DR. BY: SL
CH. BY: CS
DATE: 03/24/2021
SCALE AS NOTED
SHEET NO. 1
OF 16 SHEETS



SCALE: 1"=150'

0 50 100 150 300
SCALE IN FEET

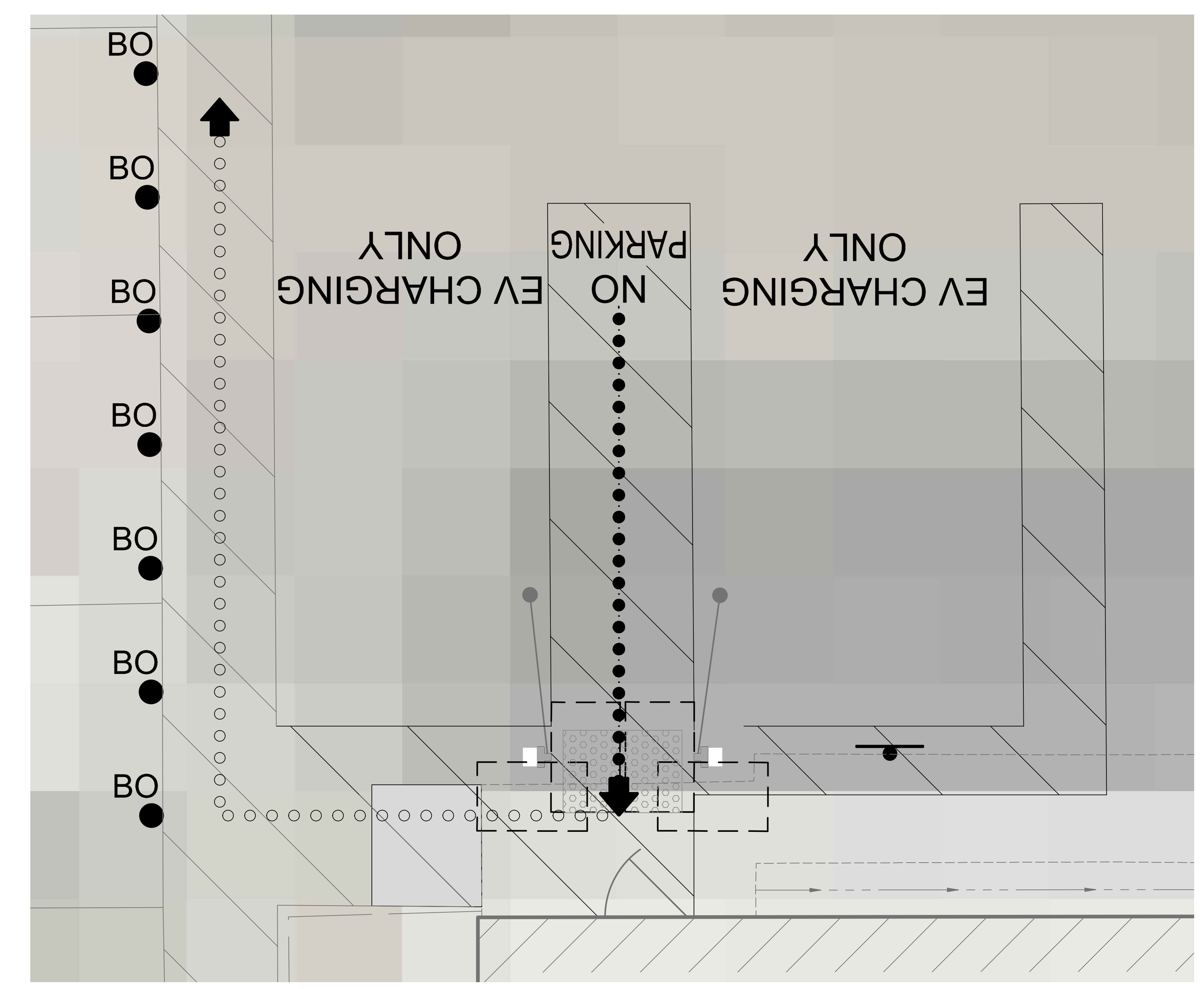
SYMBOL LEGEND:

- EXISTING PROPERTY LINE
- EXISTING PATH OF TRAVEL
- PROPOSED ACCESSIBLE ROUTE IN COMPLIANCE WITH CBC 2016
- AREA OF WORK

ACCESSIBLE NOTES:

ENGINEER HAS SURVEYED/INSPECTED THE PATH OF TRAVEL (P.O.T.) AS INDICATED ON THE PLANS AND HAS FOUND IT TO BE, OR HAS INDICATED ON THE PLANS REMEDIAL WORK WHICH WOULD CAUSE IT TO BE, A BARRIER FREE ACCESSIBLE ROUTE:

- AT LEAST 48" IN WIDTH; OR AS APPROVED BY CODE.
- WITHOUT ABRUPT LEVEL CHANGES EXCEEDING 1/2" IF BEVELED AT 1:2 MAXIMUM SLOPE, OR VERTICAL. LEVEL CHANGES EXCEEDING 1/4";
- WITH A FIRM, STABLE, AND SLIP RESISTANT WALKING SURFACE;
- WITH A RUNNING SLOPE OF 1:20 OR LESS, UNLESS OTHERWISE INDICATED, AND A CROSS SLOPE OF 1:50 OR LESS;
- IS FREE OF OVERHEAD OBSTRUCTIONS WITHIN 80" ABOVE THE WALKING SURFACE; AND
- IS FREE OF OBJECTS WHICH PROTRUDE MORE THAN 4" BETWEEN THE HEIGHTS OF 27" AND 80" ABOVE THE WALKING SURFACE.



A / C1.0 ACCESSIBLITY PLAN
1" = 5'-0"

PROJECT LOCATION: 2492 W. SAN BERNARDINO AVE, REDLANDS, CA 92374 | 220-0213

Blair, Church & Flynn
CONSULTING ENGINEERS

REGISTERED PROFESSIONAL ENGINEER — CASSIE LEONARD — CIVIL — STATE OF CALIFORNIA
PLAN REVIEW ONLY
NOT FOR CONSTRUCTION
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REF. & REV.

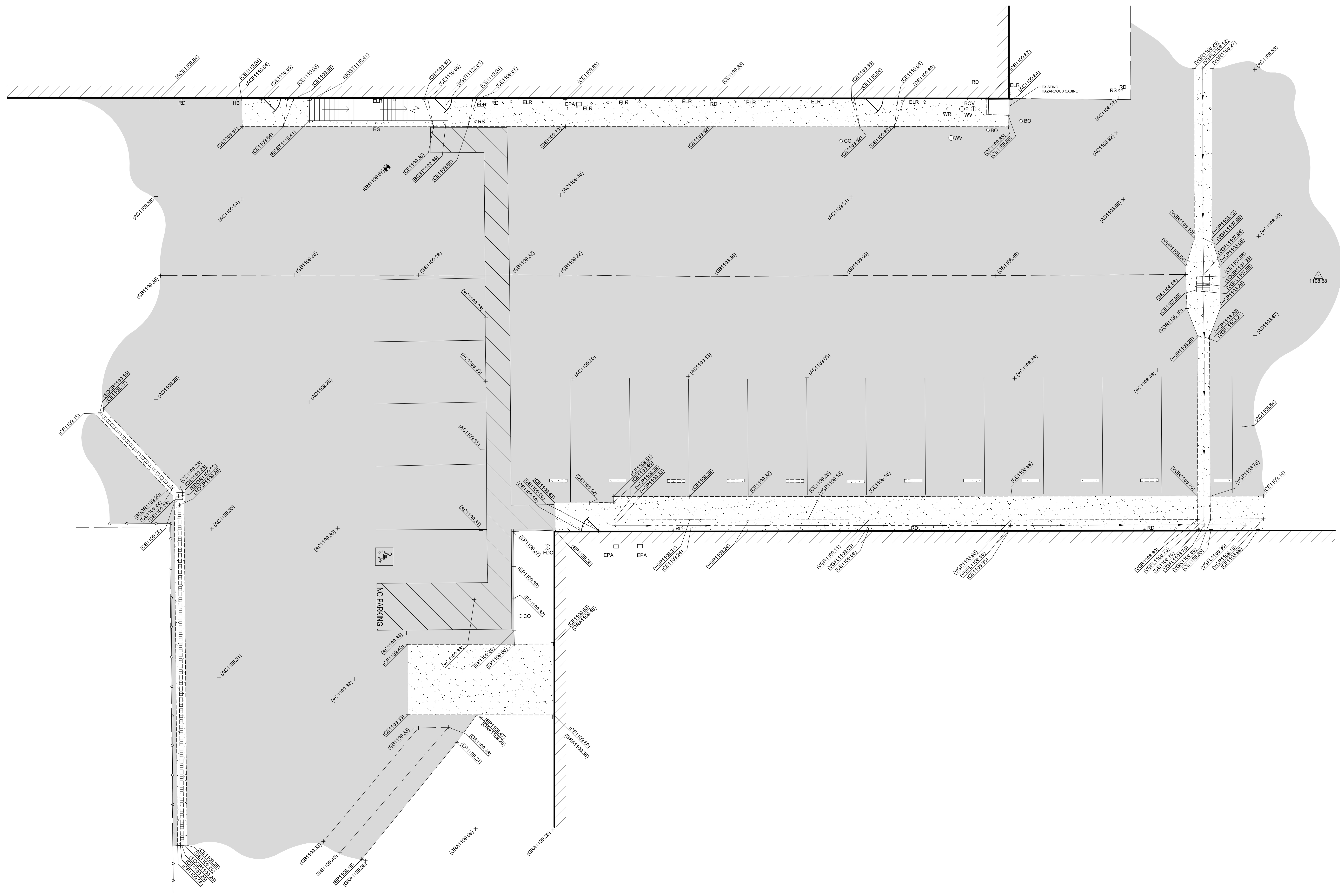
SOUTHERN CALIFORNIA EDISON

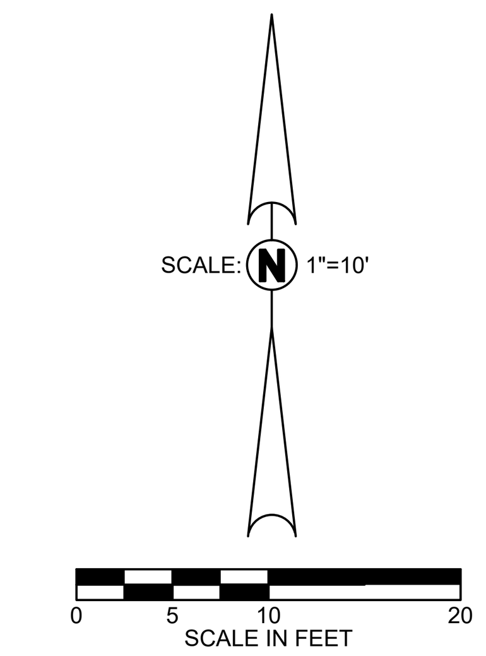
TSD FLEET EV CHARGING PROGRAM
MOUNTAIN VIEW GENRATION STATION
OVERALL SITE PLAN

C1.0

DR. BY: SL
CH. BY: CS
DATE: 03/24/2021
SCALE AS NOTED

SHEET NO. 2 OF 16 SHEETS





TOPOGRAPHIC LEGEND:

AC	ASPHALT CONCRETE
ACE	ASPHALT CONCRETE EDGE
BGST	BEGIN STEP
BW	BLOCK WALL
CE	CONCRETE EDGE
DG	DECOMPOSED GRANITE
GB	GRADE BREAK
SB	SPEED BUMP
SDGR	STORM DRAIN GRATE
TOP	TOP OF SLOPE
VGFL	VALLEY GUTTER FLOWLINE
VGR	VALLEY GUTTER
(BM1109.67)	BENCHMARK
(1109.80)	EXISTING ELEVATION
1108.96	SURVEY CONTROL POINT
BO	BOLLARD
ECA	ELECTRICAL CABINET
EPB	ELECTRICAL PULL BOX
ET	ELECTRICAL TRANSFORMER
E	ELECTRICAL MANHOLE
EPA	ELECTRICAL PANEL
ELR	ELECTRICAL RISER
HB	HOSE BIB
	INTERNATIONAL SYMBOL OF ACCESSIBILITY
ICB	IRRIGATION CONTROLLER
LP	LIGHT POST
RD	ROOF DRAIN
RS	ROOF SUPPORT
	STORM DRAIN GRATE
CO	SEWER CLEANOUT
S	SEWER MANHOLE
FDC	WATER FIRE DEPARTMENT CONNECTION
W	WATER METER
WV	WATER VALVE
WRI	WATER RISER
WP	WELL PUMP
	WHEELSTOP
	EXISTING ASPHALT CONCRETE PAVEMENT
	EXISTING BUILDING
	EXISTING CONCRETE
	EXISTING DECOMPOSED GRANITE
	CHAIN LINK FENCE
	BUILDING OVERHANG
	DIRECTION OF FLOW
	EDGE OF ASPHALT CONCRETE PAVEMENT
E	ELECTRICAL LINE
	GRADE BREAK
	STRIPING

LOCATION 1

PROJECT LOCATION: 2492 W. SAN BERNARDINO AVE, REDLANDS, CA 92374

220-0213

Blair, Church & Flynn
CONSULTING ENGINEERS

PLAN REVIEW ONLY
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REF. & REV.

SOUTHERN CALIFORNIA EDISON

TSD FLEET EV CHARGING PROGRAM
MOUNTAIN VIEW GENRATION STATION
TOPOGRAPHIC SURVEY

C2.0

DR. BY: SL
CH. BY: CS
DATE: 03/24/2021
SCALE AS NOTED

SHEET NO. 3
OF 16 SHEETS

SCALE: 1"=10'

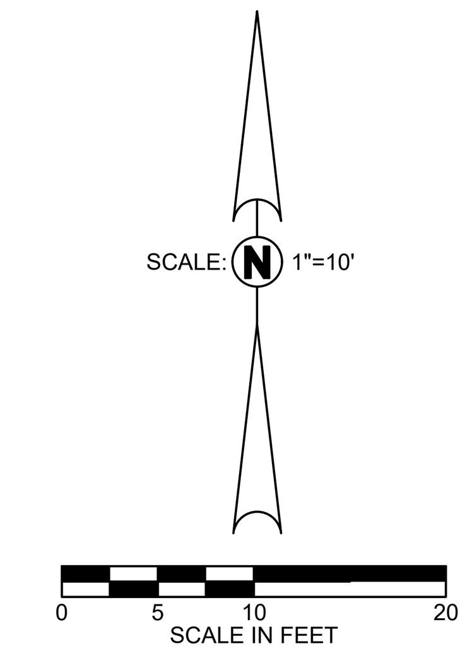
0 5 10 20
SCALE IN FEET

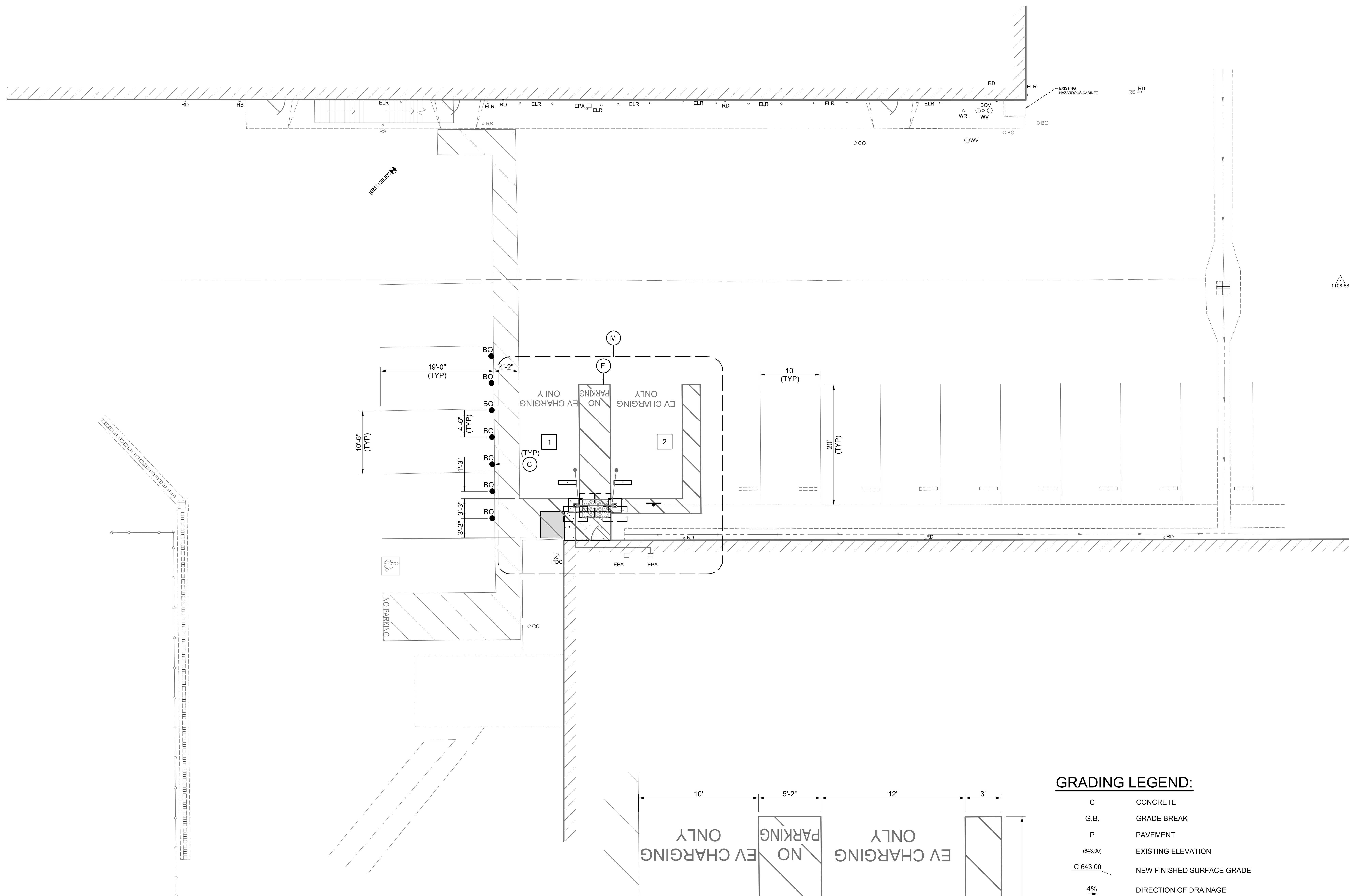
TOPOGRAPHIC LEGEND:

(SEE TOPOGRAPHIC LEGEND ON SHEET C2.0)

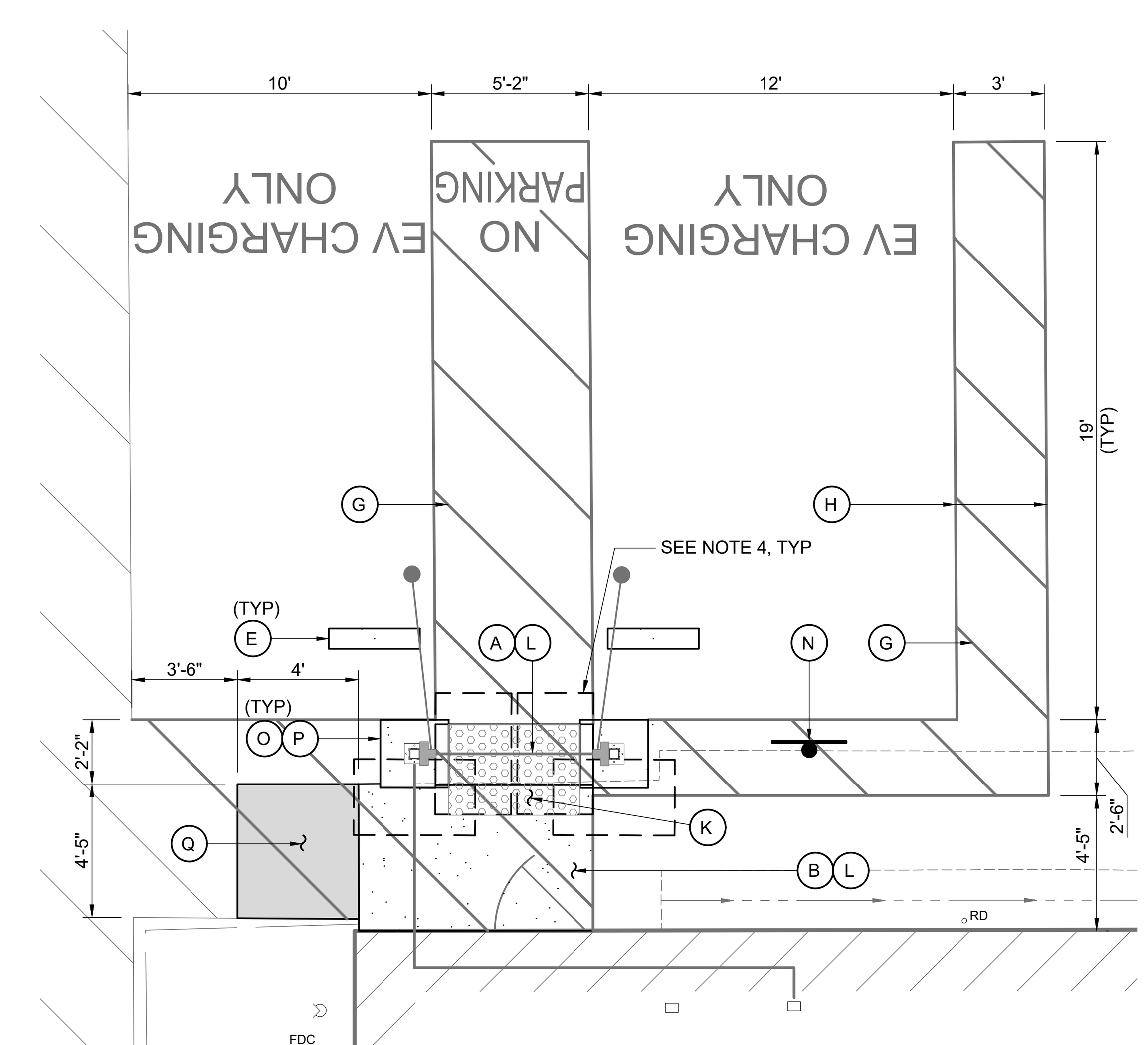
LOCATION 2

PROJECT LOCATION: 2492 W. SAN BERNARDINO AVE, REDLANDS, CA 92374				220-0213
Blair, Church & Flynn CONSULTING ENGINEERS	PLAN REVIEW ONLY NOT FOR CONSTRUCTION (REGISTERED PROFESSIONAL ... CIVIL ... STATE OF CALIFORNIA) Date Signed:	CONSULTANT Blair, Church & Flynn Consulting Engineers 451 Clovis Avenue, Suite 200 Clovis, California 93612 Tel (559) 326-1400 Fax (559) 326-1500	REF. & REV.	SOUTHERN CALIFORNIA EDISON
				TSD FLEET EV CHARGING PROGRAM MOUNTAIN VIEW GENRATION STATION TOPOGRAPHIC SURVEY
				C2.1
				DR. BY: SL CH. BY: CS DATE: 03/24/2021 SCALE AS NOTED
				SHEET NO. 4 OF 16 SHEETS





LOCATION 1



A
C3.0
ENLARGED GRADING PLAN
1" = 5'-0"

CONSTRUCTION LEGEND:

- (A) 2' WIDE ELECTRICAL UTILITY TRENCH. TRENCH, BACKFILL AND RESURFACING PER DETAIL [C/E2.0]
- (B) CONSTRUCT CONCRETE SIDEWALK PER DETAIL [F/C4.0]
- (C) FURNISH AND INSTALL FIXED BOLLARDS PER DETAIL [C/C4.0]
- (D) FURNISH AND INSTALL SERVICE EQUIPMENT BOLLARDS PER DETAIL [E/C4.0]
- (E) FURNISH AND INSTALL CONCRETE WHEELSTOPS PER DETAIL [B/C4.0]
- (F) FURNISH, INSTALL AND PAINT ACCESSIBLE EV CHARGING STALLS PER DETAIL [A/C4.0]
- (G) PAINT 4" WIDE WHITE PERIMETER LINE WITH 4" WIDE WHITE DIAGONAL LINES AT 3' ON CENTER
- (H) PAINT 4" WIDE WHITE STRIPE
- (I) CONSTRUCT EQUIPMENT PAD PER DETAIL [I/C4.0]. EQUIPMENT PAD SHALL BE POURED FLUSH WITH ADJACENT IMPROVEMENTS
- (J) CONSTRUCT CHARGER CONCRETE PAD PER DETAILS [B/E2.1]
- (K) FURNISH AND INSTALL TRUNCATED DOMES PER DETAIL [H/C4.0]
- (L) SEE ELECTRICAL CONDUIT PLAN FOR ADDITIONAL ELECTRICAL IMPROVEMENTS
- (M) SEE ENLARGED GRADING PLAN PER DETAIL [A/C3.0]
- (N) FURNISH AND INSTALL FIXED ACCESSIBLE CHARGING SIGN PER DETAIL [J/C4.0]
- (O) CONSTRUCT CHARGER CONCRETE PAD AND APPURTENANCES PER DETAILS [D/E2.0].
- (P) INSTALL EVSE LLC 3725 PAYMENT MODULE ON EVSE PEDESTAL PER MANUFACTURER INSTRUCTIONS. SEE DETAIL [B/R1.1]
- (Q) CONSTRUCT ASPHALT CONCRETE PAVEMENT PER DETAIL [G/C4.0]
- (R) FURNISH AND INSTALL ANCHORED BOLLARDS PER DETAIL [D/C4.0]
- PROPOSED EVSE LLC [EVSE MODEL 3703] 30A DUAL CHARGE PORT STYLE CHARGERS TO BE INSTALLED, SEE DETAIL [A/R1.1].
- PROPOSED CLIPPERCREEK [MODEL CS-40] SINGLE CHARGE PORT STYLE CHARGERS. SEE DETAIL [A/R1.0]
- PROPOSED WHITE STRIPING IMPROVEMENTS
- LIMITS OF ASPHALT CONCRETE PAVEMENT IMPROVEMENTS
- LIMITS OF CONCRETE IMPROVEMENTS

GRADING LEGEND:

C	CONCRETE
G.B.	GRADE BREAK
P	PAVEMENT
(643.00)	EXISTING ELEVATION
C 643.00	NEW FINISHED SURFACE GRADE
4%	DIRECTION OF DRAINAGE
	DIRECTION OF FLOW

NOTES:

1. SEE GENERAL GRADING AND DRAINAGE NOTES ON SHEET 1.
2. ACCESSIBLE EV CHARGING STALLS TO COMPLY WITH CBC 11B-812.
3. OPERABLE PARTS AND CHARGING CORD SHALL COMPLY WITH 2019 CBC 11B-309.
4. 48"X30" CLEAR GROUND SPACE FROM FRONT FACE OF CHARGER WITH MAXIMUM 2% SURFACE SLOPE IN ALL DIRECTIONS.
5. ALL OPERABLE PARTS AND CONTROLS SHALL BE 15 TO 48 INCHES ABOVE THE CLEAR GROUND SPACE FOR BOTH FORWARD AND SIDE APPROACHES PER 2019 CBC 11B-308. SEE SHEET R1.0 AND R1.1 FOR CHARGER ELEVATIONS.
6. OPERABLE PARTS ON ALL ACCESSIBLE EV CHARGERS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST.
7. MAXIMUM OF 2% SURFACE SLOPE IN ALL DIRECTIONS AT ACCESSIBLE STALLS AND ACCESS AISLES.
8. LOCATION OF CHARGER SHALL NOT EXCEED 36 INCHES MAXIMUM FROM THE HEAD END OF THE ACCESS AISLE PER 2019 CBC 11B-812.10.4 EXCEPTION 2.

PROPOSED CHARGING FOR EMPLOYEE PARKING		
PEDESTAL #	STALL/CHARGE PORT #	CHARGE PORT TYPE
1	1	STANDARD ACCESSIBLE
2	2	VAN ACCESSIBLE

PROJECT LOCATION: 2492 W. SAN BERNARDINO AVE, REDLANDS, CA 92374 — 220-0213

Blair, Church & Flynn
CONSULTING ENGINEERS

PLAN REVIEW ONLY
NOT FOR CONSTRUCTION
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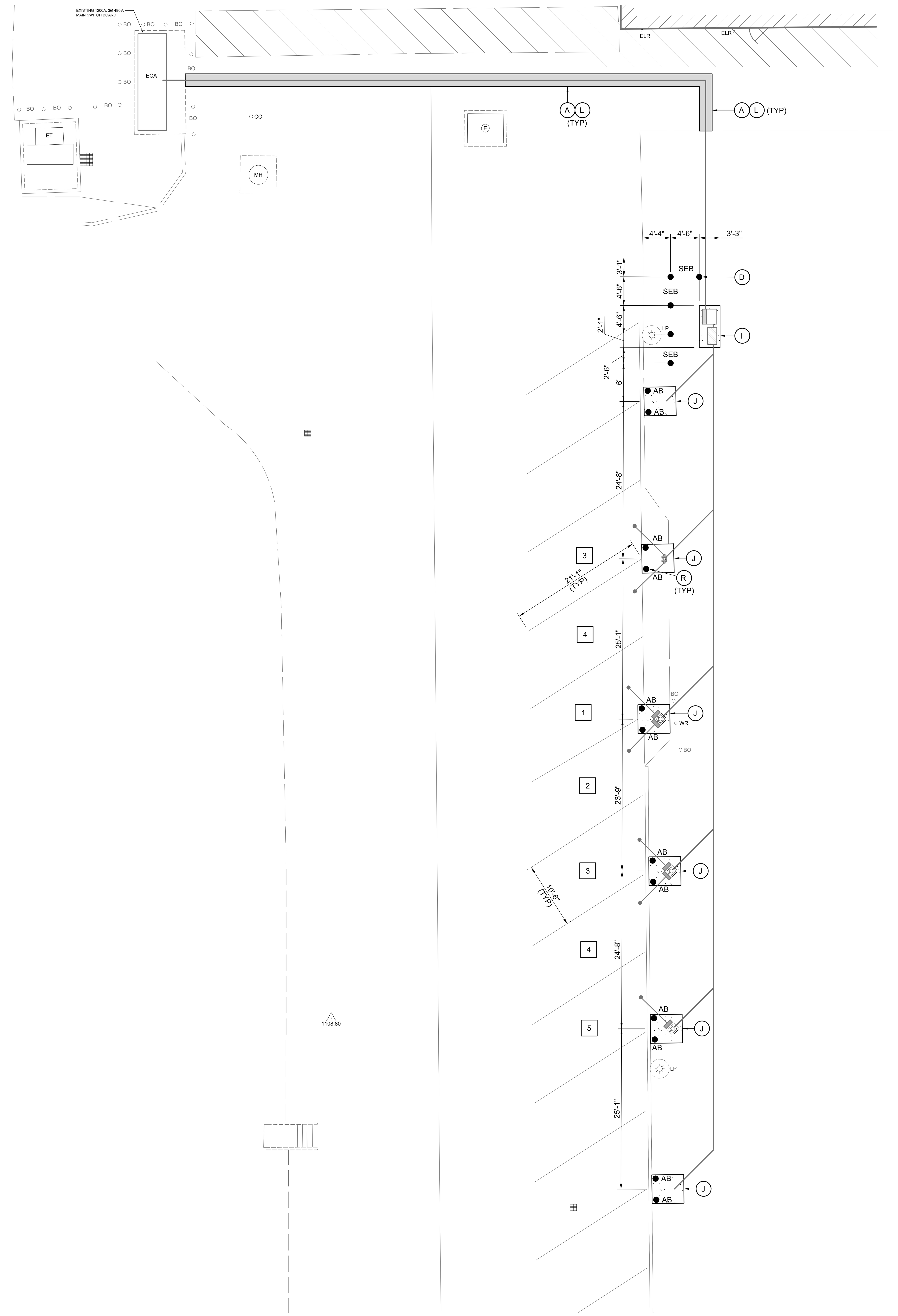
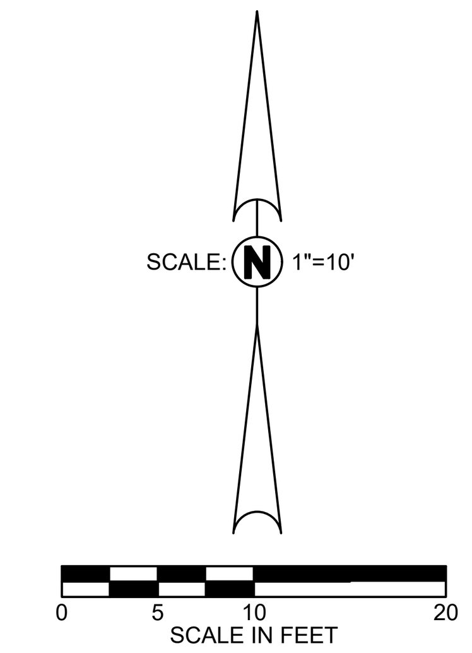
REF. & REV.

SOUTHERN CALIFORNIA EDISON
TSD FLEET EV CHARGING PROGRAM
MOUNTAIN VIEW GENRATION STATION
SITE AND GRADING PLAN

C3.0
DR. BY: SL
CH. BY: CS
DATE: 03/24/2021
SCALE AS NOTED
SHEET NO. 5
OF 16 SHEETS





CONSTRUCTION LEGEND:

(SEE CONSTRUCTION LEGEND ON SHEET C3.0)

PROPOSED CHARGING FOR FLEET PARKING			
PEDESTAL #	STALL/CHARGE PORT #		CHARGE PORT TYPE
1	1	2	FLEET
2	3	4	FLEET
3	5		FLEET

PROPOSED CHARGING FOR EMPLOYEE PARKING			
PEDESTAL #	STALL/CHARGE PORT #		CHARGE PORT TYPE
3	3	4	STANDARD

LOCATION 2

PROJECT LOCATION: 2492 W. SAN BERNARDINO AVE, REDLANDS, CA 92374 | 220-0213

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REF. & REV.

SOUTHERN CALIFORNIA EDISON

TSD FLEET EV CHARGING PROGRAM
MOUNTAIN VIEW GENRATION STATION
SITE PLAN

C3.1

DR. BY: SL
CH. BY: CS
DATE: 03/24/2021
SCALE AS NOTED

SHEET NO. 6
OF 16 SHEETS

PROJECT LOCATION: 2492 W. SAN BERNARDINO AVE, REDLANDS, CA 92374 | 220-0213

Blair, Church & Flynn
CONSULTING ENGINEERS

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Date Signed:

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REF. & REV.

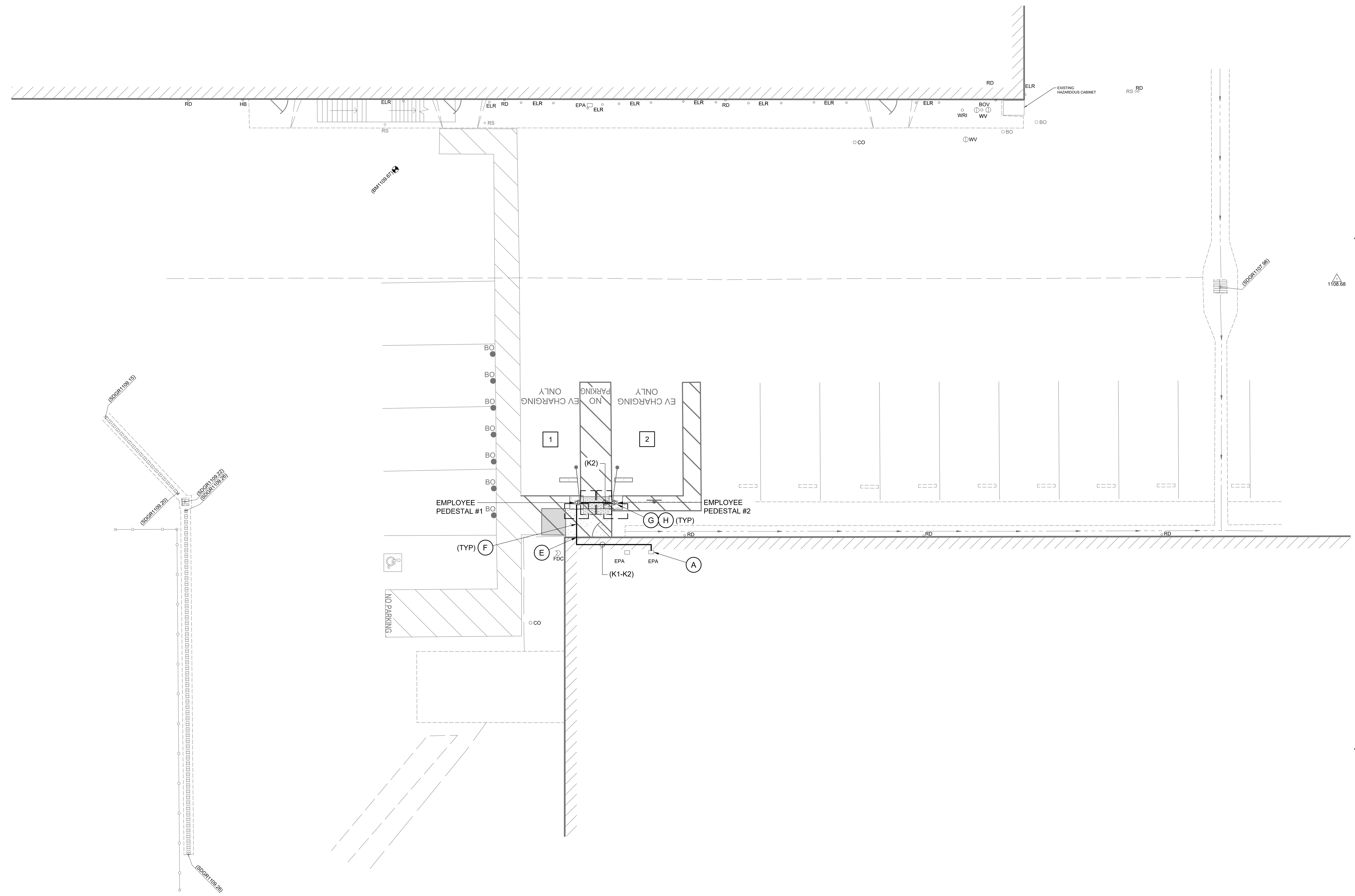
SOUTHERN CALIFORNIA EDISON

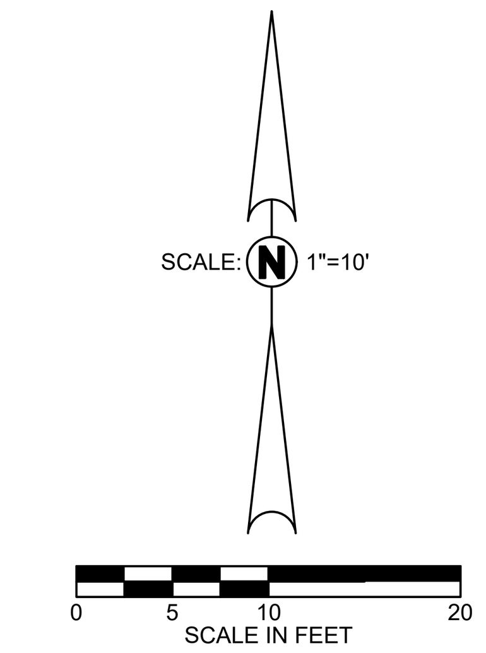
TSD FLEET EV CHARGING PROGRAM
MOUNTAIN VIEW GENRATION STATION
DETAILS

C4.0

DR. BY: SL
CH. BY: CS
DATE: 03/24/2021
SCALE AS NOTED

SHEET NO. 7 OF 16 SHEETS





ELECTRICAL LEGEND:

(A)	EXISTING 208Y/120V, 100 AMP DISTRIBUTION PANEL "LE"
(B)	EXISTING 480Y/277V, 1200 AMP MAIN SWITCHBOARD
(C)	FURNISH AND INSTALL 208Y/120, 400 AMP, 3Ø, 4W, DISTRIBUTION PANEL "EV" PER DETAILS [A/E2.0] AND [E/E3.0]
(D)	FURNISH AND INSTALL 75KVA STEP DOWN TRANSFORMER PER DETAILS [A/E2.0] AND [A/E3.1]
(E)	SEE DETAIL(S) [B/E2.0] FOR THE FURNISHING AND INSTALLATION OF ABOVE GRADE RMC CONDUIT. SEE CONDUIT SCHEDULE FOR COUNT AND CONDUIT SIZE
(F)	SEE DETAIL [C/E2.0] FOR THE FURNISHING AND INSTALLATION OF BELOW GRADE PVC CONDUIT. SEE CONDUIT SCHEDULE FOR COUNT AND CONDUIT SIZE
(G)	CONSTRUCT EVSE LLC 3703 EMPLOYEE CHARGER CONCRETE PAD AND APPURTENANCES PER DETAILS [D/E2.0] AND [E/E2.0].
(H)	INSTALL EVSE LLC 3725 PAYMENT MODULE ON EVSE PEDESTAL PER MANUFACTURER INSTRUCTIONS. SEE DETAIL [B/R1.0]
(I)	CONSTRUCT CHARGER CONCRETE PAD PER DETAILS [A/E2.1] AND [B/E2.1]
(J)	GROUND ROD 12" (MIN) BELOW SURFACE
□	PROPOSED DISTRIBUTION PANEL "EV"
⊟	PROPOSED STEP DOWN TRANSFORMER
⊗	GROUND ACCESS WELL AND 5/8" X 8' COPPER CLAD GROUND ROD
	PROPOSED EVSE LLC [EVSE MODEL 3703] 30A DUAL CHARGE PORT STYLE CHARGERS TO BE INSTALLED, SEE DETAIL [A/R1.1].
	PROPOSED CLIPPERCREEK [MODEL CS-40] SINGLE CHARGE PORT STYLE CHARGERS. SEE DETAIL [A/R1.0]
— — — —	BURIED BARE COPPER GROUND WIRE
———	ELECTRICAL CONDUIT; SIZE AND COUNT AS NOTED

ELECTRICAL NOTES:

1. ELECTRICAL UTILITY LINE TO BE PROTECTED IN PLACE WHEN POSSIBLE. IF EXISTING LINES INTRODUCE EXCESSIVE CONSTRAINTS DURING THE INSTALLATION OF THE ELECTRICAL EQUIPMENT, REMOVE AND RELOCATE EXISTING LINES AS NEEDED, USING THE PROPOSED UTILITY TRENCH. IF THE ELECTRICAL LINE CANNOT BE SALVAGED THE CONTRACTOR MUST LAWFULLY DISPOSE OF THE ELECTRICAL LINE AND REPLACE WITH LIKE-IN-KIND.
2. ALL ELECTRICAL POWER IN CLOSE PROXIMITY TO THE INSTALLATION OF THE ELECTRICAL EQUIPMENT MUST BE POWERED OFF PRIOR TO THE START OF CONSTRUCTION, TO PREVENT ANY ELECTRICAL INJURIES.
3. HAND DIG ALL UTILITIES IN CLOSE PROXIMITY TO THE INSTALLATION OF THE ELECTRICAL EQUIPMENT TO AVOID DAMAGING ANY UTILITY LINE.
4. SEE SINGLE LINE DIAGRAM ON SHEET E3.0.
5. SEE CONDUIT SCHEDULE FOR WIRE SIZE, CONDUIT FILL AND WIRE TAGS.
6. THE METHODS CONTAINED IN CEC/NEC ARTICLE 250 SHALL BE FOLLOWED TO COMPLY WITH GROUNDING AND BONDING OF ELECTRICAL SYSTEMS AND NON-CURRENT CARRYING CONDUCTIVE MATERIALS, ENCLOSURES, OR ITEMS FORMING PART OF ANY SUCH EQUIPMENT THAT ENCLOSES OR CARRIES ELECTRICAL CONDUCTOR OR EQUIPMENT THAT IS LIKELY TO BECOME ENERGIZED. SEE CEC/NEC 250.4(A)(1) THROUGH (5) FOR FURTHER DESCRIPTION.
7. WHERE TWO OR MORE GROUND RODS ARE TO BE INSTALLED, THE MINIMUM SEPARATION SHALL BE 6' PER CEC/NEC 250.53 (A)(2), AND (3) RESISTANCE OF ELECTRODES.
8. MINIMUM CONDUIT BURIAL DEPTH SHALL BE 24".
9. PER CEC/NEC 110.26 "ACCESS AND WORKING SPACE SHALL BE PROVIDED AND MAINTAINED ABOUT ALL ELECTRICAL EQUIPMENT TO PERMIT READY AND SAFE OPERATION AND MAINTENANCE OF SUCH EQUIPMENT."
10. CONDUIT BODIES AND PULLBOXES SHALL BE USED AS NEEDED TO MAINTAIN LESS THAN 360° OF CONDUIT BENDS BETWEEN PULL POINTS.
11. ALL ABOVE GRADE CONDUIT CONSTRUCTION SHALL FOLLOW CEC/NEC 342, 344 OR 350 FOR IMC, RMC, OR LFMC CONSTRUCTION.

LOCATION 1

CONDUIT SCHEDULE

CONDUIT NUMBER	FROM	TO	CONDUCTORS ALL 90°C THWN-2 OR SIMILAR UNLESS NOTED OTHERWISE	CONDUIT SIZE AND TYPE	COMMENTS
K1	(EXISTING) DISTRIBUTION PANEL "LE"	EMPLOYEE PEDESTAL #1 (EMPLOYEE PORT 1)	SOUTHWIRE, (4) #8 AWG CU, (2) #8 AWG CU GRN GROUND, TAGGED EMPLOYEE PEDESTAL #1 (L1,L2, GROUND)	2" PVC	PROPOSED WIRING FOR EMPLOYEE CHARGERS
K2	(EXISTING) DISTRIBUTION PANEL "LE"	EMPLOYEE PEDESTAL #2 (EMPLOYEE PORT 2)	SOUTHWIRE, (4) #8 AWG CU, (2) #8 AWG CU GRN GROUND, TAGGED EMPLOYEE PEDESTAL #1 (L1,L2, GROUND)	2" PVC	PROPOSED WIRING FOR EMPLOYEE CHARGERS

A / E1.0 CONDUIT SCHEDULE

PROJECT LOCATION: 2492 W. SAN BERNARDINO AVE, REDLANDS, CA 92374 — 220-0213

Blair, Church & Flynn
CONSULTING ENGINEERS

REGISTERED PROFESSIONAL ENGINEER — BRIAN M. — ELECTRICAL — STATE OF CALIFORNIA
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Date Signed:

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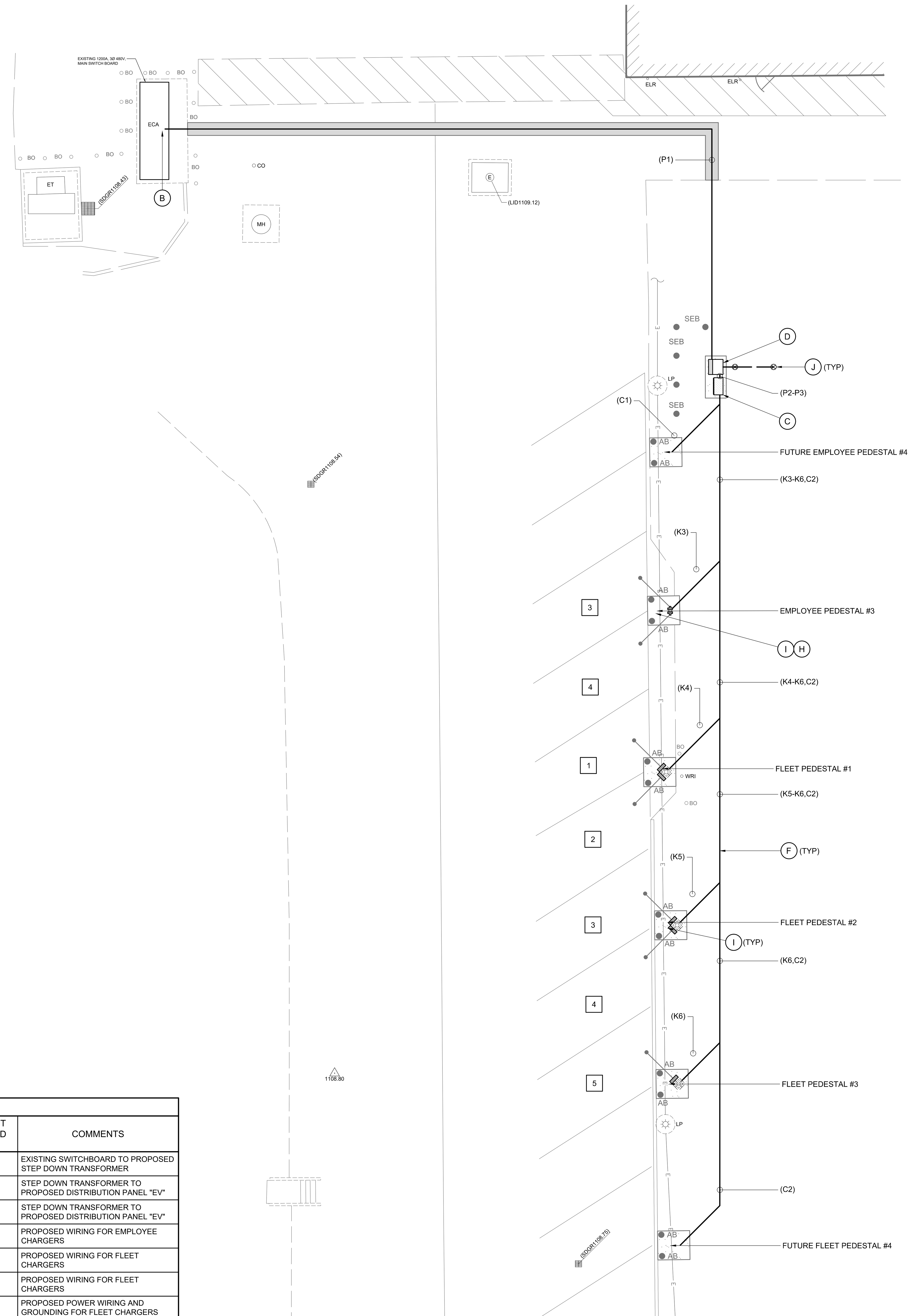
SOUTHERN CALIFORNIA EDISON

TSD FLEET EV CHARGING PROGRAM
MOUNTAIN VIEW GENRATION STATION
ELECTRICAL CONDUIT PLAN

E1.0

DR. BY: SL
CH. BY: CS
DATE: 03/24/2021
SCALE AS NOTED

SHEET NO. 8 OF 16 SHEETS



SCALE: 1"=10'

0 5 10 20
SCALE IN FEET

ELECTRICAL LEGEND:

A	EXISTING 208Y/120V, 100 AMP DISTRIBUTION PANEL "LE"
B	EXISTING 480Y/277V, 1200 AMP MAIN SWITCHBOARD
C	FURNISH AND INSTALL 208Y/120, 400 AMP, 3Ø, 4W, DISTRIBUTION PANEL "EV" PER DETAILS [A/E2.0] AND [E/E3.0]
D	FURNISH AND INSTALL 112.5KVA STEP DOWN TRANSFORMER PER DETAILS [A/E2.0] AND [A/E3.1]
E	SEE DETAIL(S) [B/E2.0] FOR THE FURNISHING AND INSTALLATION OF ABOVE GRADE RMC CONDUIT. SEE CONDUIT SCHEDULE FOR COUNT AND CONDUIT SIZE
F	SEE DETAIL [C/E2.0] FOR THE FURNISHING AND INSTALLATION OF BELOW GRADE PVC CONDUIT. SEE CONDUIT SCHEDULE FOR COUNT AND CONDUIT SIZE
G	CONSTRUCT EVSE LLC 3703 EMPLOYEE CHARGER CONCRETE PAD AND APPURTENANCES PER MANUFACTURER INSTRUCTIONS PER DETAILS [D/E2.0] AND [E/E2.0].
H	INSTALL EVSE LLC 3725 PAYMENT MODULE ON EVSE PEDESTAL PER MANUFACTURER INSTRUCTIONS. SEE DETAIL [B/R1.0]
I	CONSTRUCT CHARGER CONCRETE PAD PER DETAIL [B/E2.1]
J	GROUND ROD 12" (MIN) BELOW SURFACE
	PROPOSED DISTRIBUTION PANEL "EV"
	PROPOSED STEP DOWN TRANSFORMER
⊗	GROUND ACCESS WELL AND 5/8" X 8' COPPER CLAD GROUND ROD
	PROPOSED EVSE LLC [EVSE MODEL 3703] 30A DUAL CHARGE PORT STYLE CHARGERS TO BE INSTALLED, SEE DETAIL [A/R1.1].
	PROPOSED CLIPPERCREEK [MODEL CS-40] SINGLE CHARGE PORT STYLE CHARGERS. SEE DETAIL [A/R1.0]
— — —	BURIED BARE COPPER GROUND WIRE
——	ELECTRICAL CONDUIT; SIZE AND COUNT AS NOTED

LOCATION2

CONDUIT SCHEDULE					
CONDUIT NUMBER	FROM	TO	CONDUCTORS ALL 90°C THWN-2 OR SIMILAR UNLESS NOTED OTHERWISE	CONDUIT SIZE AND TYPE	COMMENTS
P1	(EXISTING) SWITCHBOARD	(PROPOSED) STEP DOWN TRANSFORMER	SOUTHWIRE (3) #3/0 AWG, (1) #2 AWG GRN GROUND, TAGGED (H1/H2/H3/GND)	2" PVC	EXISTING SWITCHBOARD TO PROPOSED STEP DOWN TRANSFORMER
P2	(PROPOSED) STEP DOWN TRANSFORMER	(PROPOSED) DISTRIBUTION PANEL "EV"	SOUTHWIRE (4) #3/0 AWG, (1) #2 AWG GRN GROUND, TAGGED (X0/X1/X2/X3/GND)	3" RMC	STEP DOWN TRANSFORMER TO PROPOSED DISTRIBUTION PANEL "EV"
P3	(PROPOSED) STEP DOWN TRANSFORMER	(PROPOSED) DISTRIBUTION PANEL "EV"	SOUTHWIRE (4) #3/0 AWG, (1) #2 AWG GRN GROUND, TAGGED (X0/X1/X2/X3/GND)	3" RMC	STEP DOWN TRANSFORMER TO PROPOSED DISTRIBUTION PANEL "EV"
K3	(PROPOSED) DISTRIBUTION PANEL "EV"	EMPLOYEE PEDESTAL #3 (EMPLOYEE PORTS 3 & 4)	SOUTHWIRE, (4) #8 AWG CU, (2) #8 AWG CU GRN GROUND, TAGGED EMPLOYEE PEDESTAL #1 (L1,L2, GROUND)	2" PVC	PROPOSED WIRING FOR EMPLOYEE CHARGERS
K4	(PROPOSED) DISTRIBUTION PANEL "EV"	FLEET PEDESTAL #1 (FLEET PORTS 1 & 2)	SOUTHWIRE, (4) #8 AWG CU, (2) #8 AWG CU GRN GROUND, TAGGED FLEET PEDESTAL #1 (L1,L2, GROUND)	2" PVC	PROPOSED WIRING FOR FLEET CHARGERS
K5	(PROPOSED) DISTRIBUTION PANEL "EV"	FLEET PEDESTAL #2 (FLEET PORTS 3 & 4)	SOUTHWIRE, (4) #6 AWG CU, (2) #6 AWG CU GRN GROUND, TAGGED FLEET PEDESTAL #1 (L1,L2, GROUND)	2" PVC	PROPOSED WIRING FOR FLEET CHARGERS
K6	(PROPOSED) DISTRIBUTION PANEL "EV"	FLEET PEDESTAL #3 (FLEET PORT 5)	SOUTHWIRE, (2) #6 AWG CU, (1) #6 AWG CU GRN GROUND, TAGGED FLEET PEDESTAL #1 (L1,L2, GROUND)	2" PVC	PROPOSED POWER WIRING AND GROUNDING FOR FLEET CHARGERS (PROVIDE PULL STRING)
C1	(PROPOSED) DISTRIBUTION PANEL "EV"	FUTURE EMPLOYEE PEDESTAL #4	(EMPTY CONDUIT)	2" PVC	CONDUIT FOR FUTURE EVSE (PROVIDE PULL STRING)
C2	(PROPOSED) DISTRIBUTION PANEL "EV"	FUTURE FLEET PEDESTAL #4	(EMPTY CONDUIT)	2" PVC	CONDUIT FOR FUTURE EVSE (PROVIDE PULL STRING)

A/E1.1 CONDUIT SCHEDULE

PROJECT LOCATION: 2492 W. SAN BERNARDINO AVE, REDLANDS, CA 92374 — 220-0213

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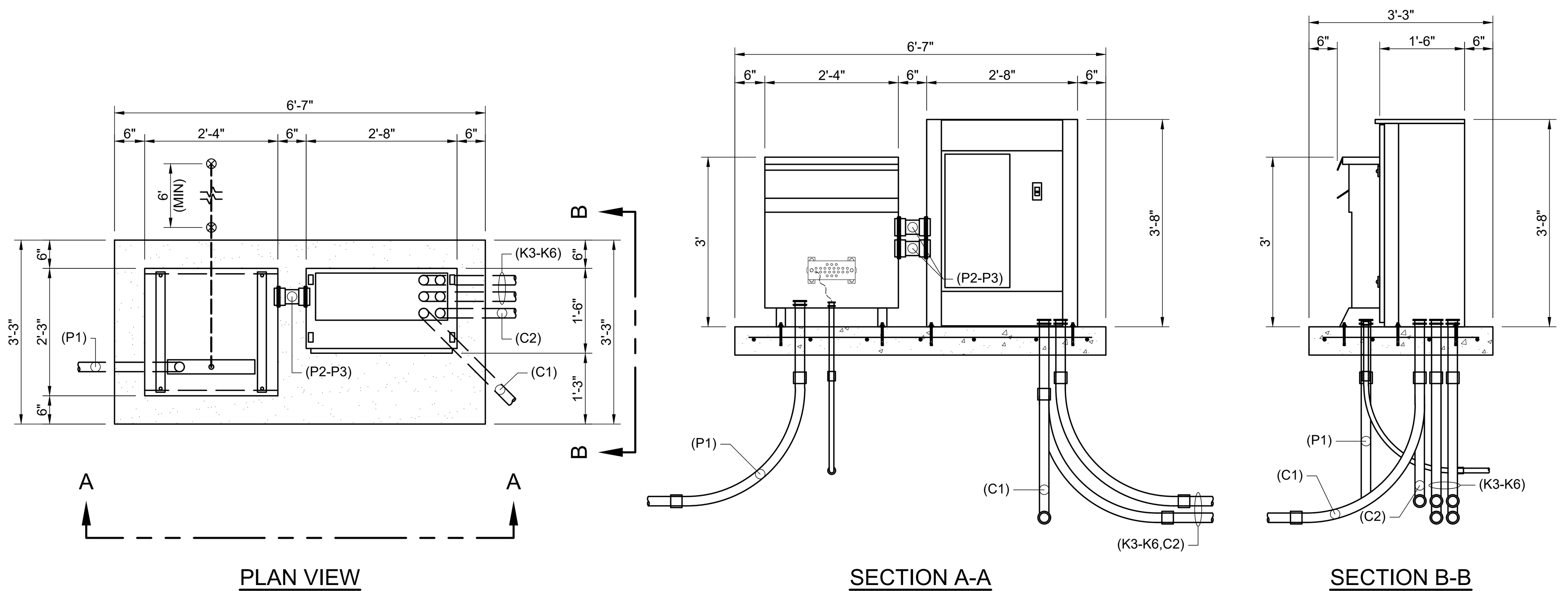
SOUTHERN CALIFORNIA EDISON

TSD FLEET EV CHARGING PROGRAM
MOUNTAIN VIEW GENRATION STATION
ELECTRICAL CONDUIT PLAN

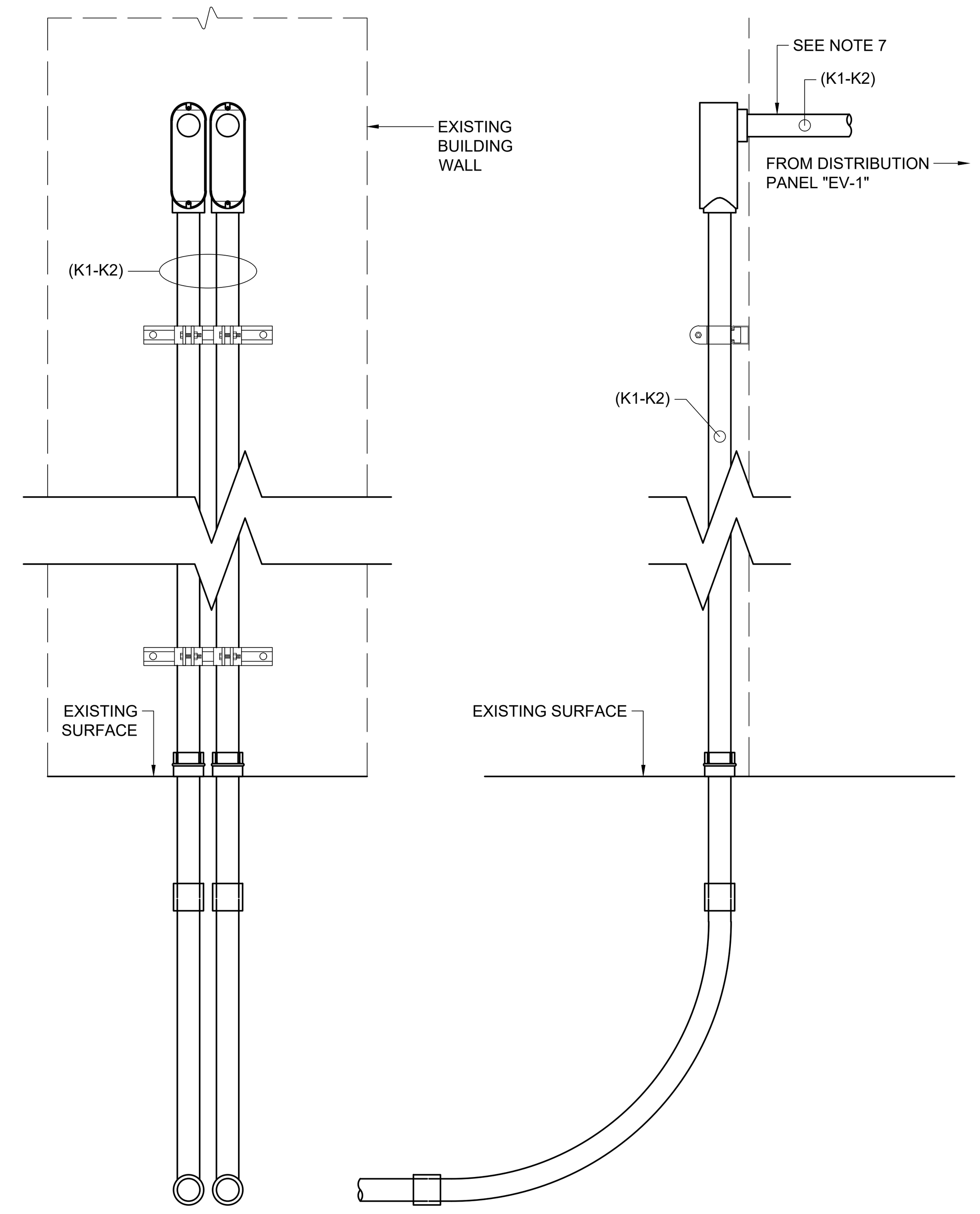
E1.1

DR. BY: SL
CH. BY: CS
DATE: 03/24/2021
SCALE AS NOTED

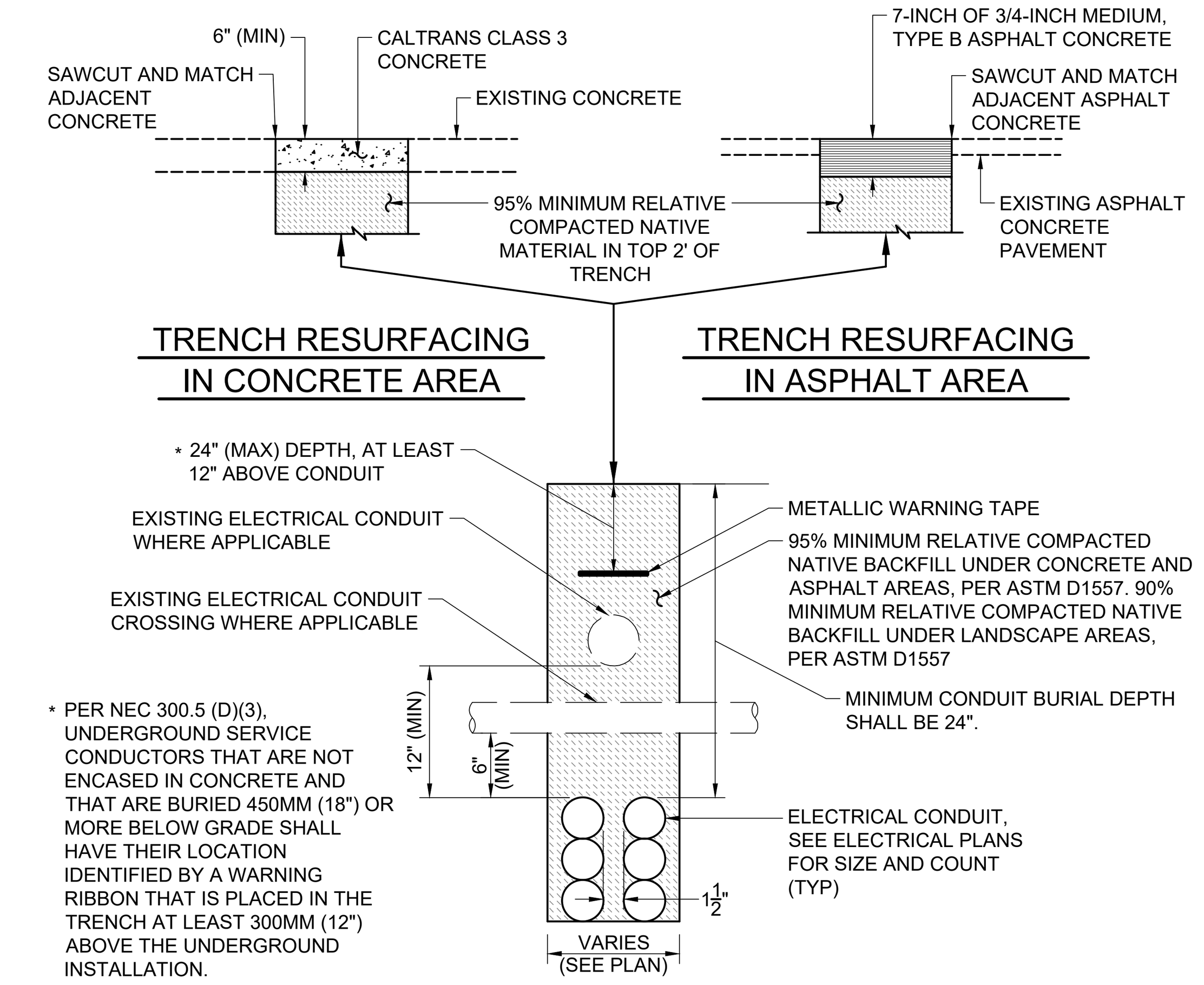
SHEET NO. 9 OF 16 SHEETS



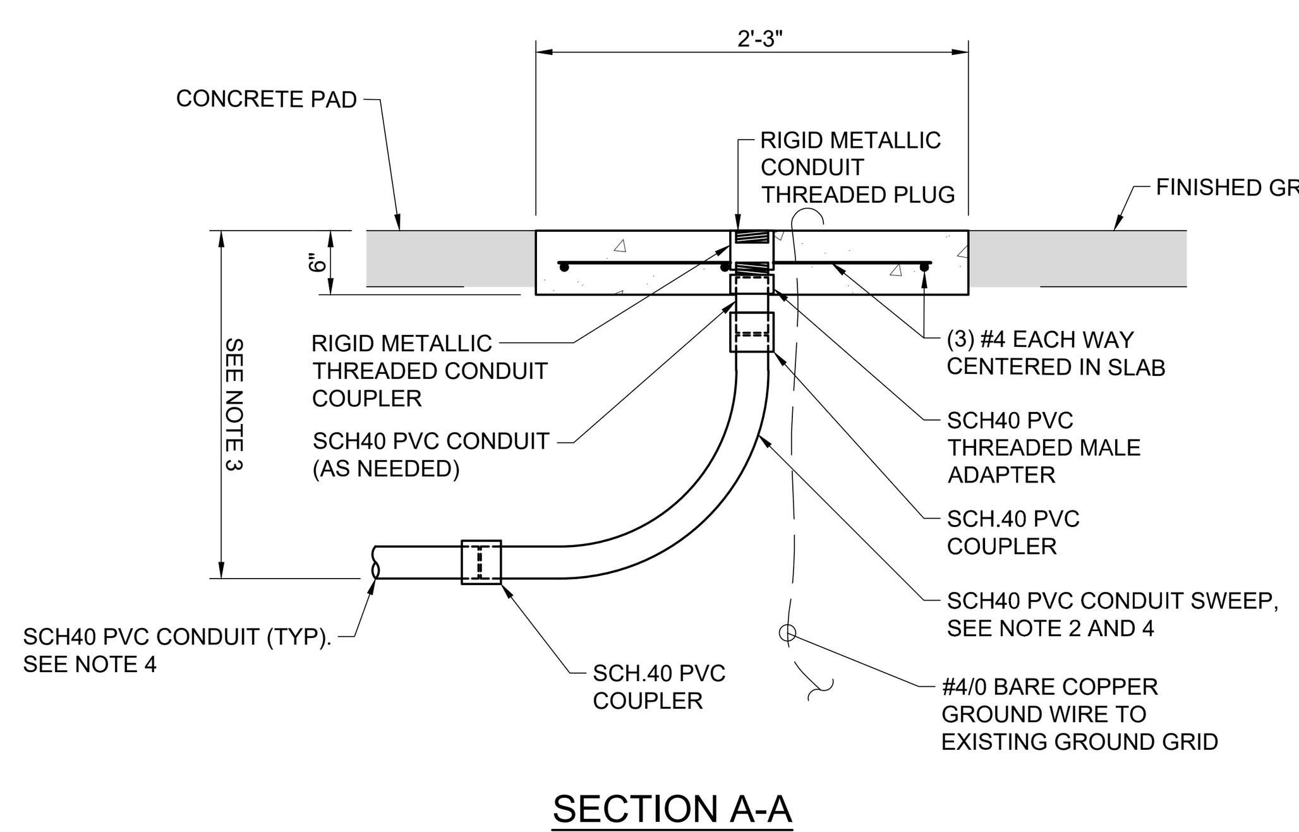
A
E2.0
112.5KVA STEP DOWN TRANSFORMER AND 400A DISTRIBUTION PANEL
NOT TO SCALE

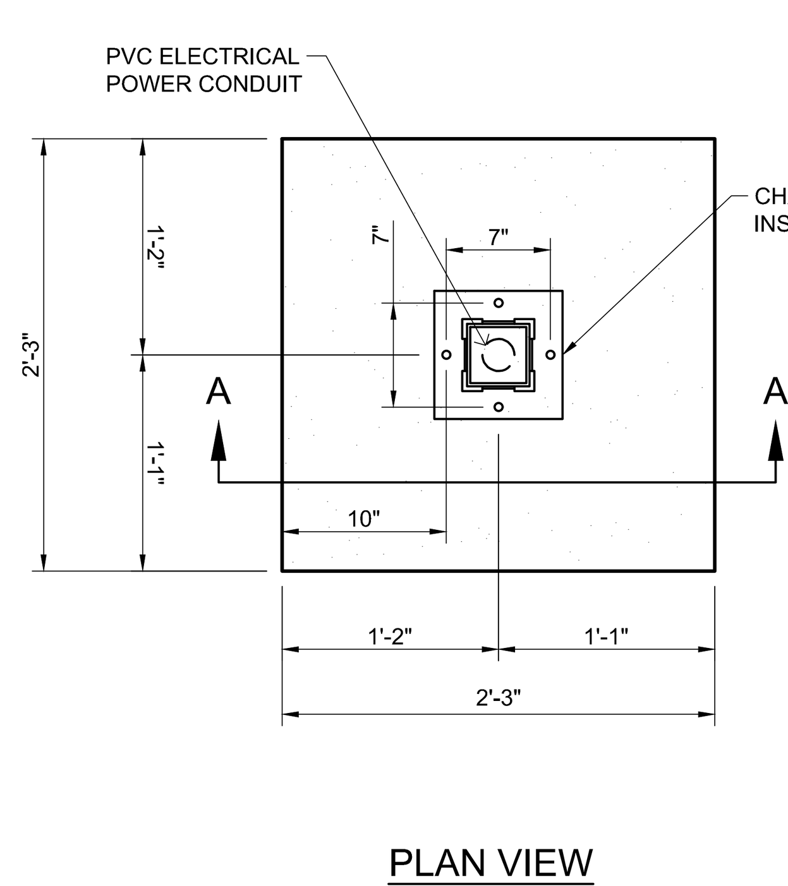


B
E2.0
EXTERIOR MOUNTING DETAIL
NOT TO SCALE



C
E2.0
TYPICAL ELECTRICAL UTILITY TRENCH
NOT TO SCALE



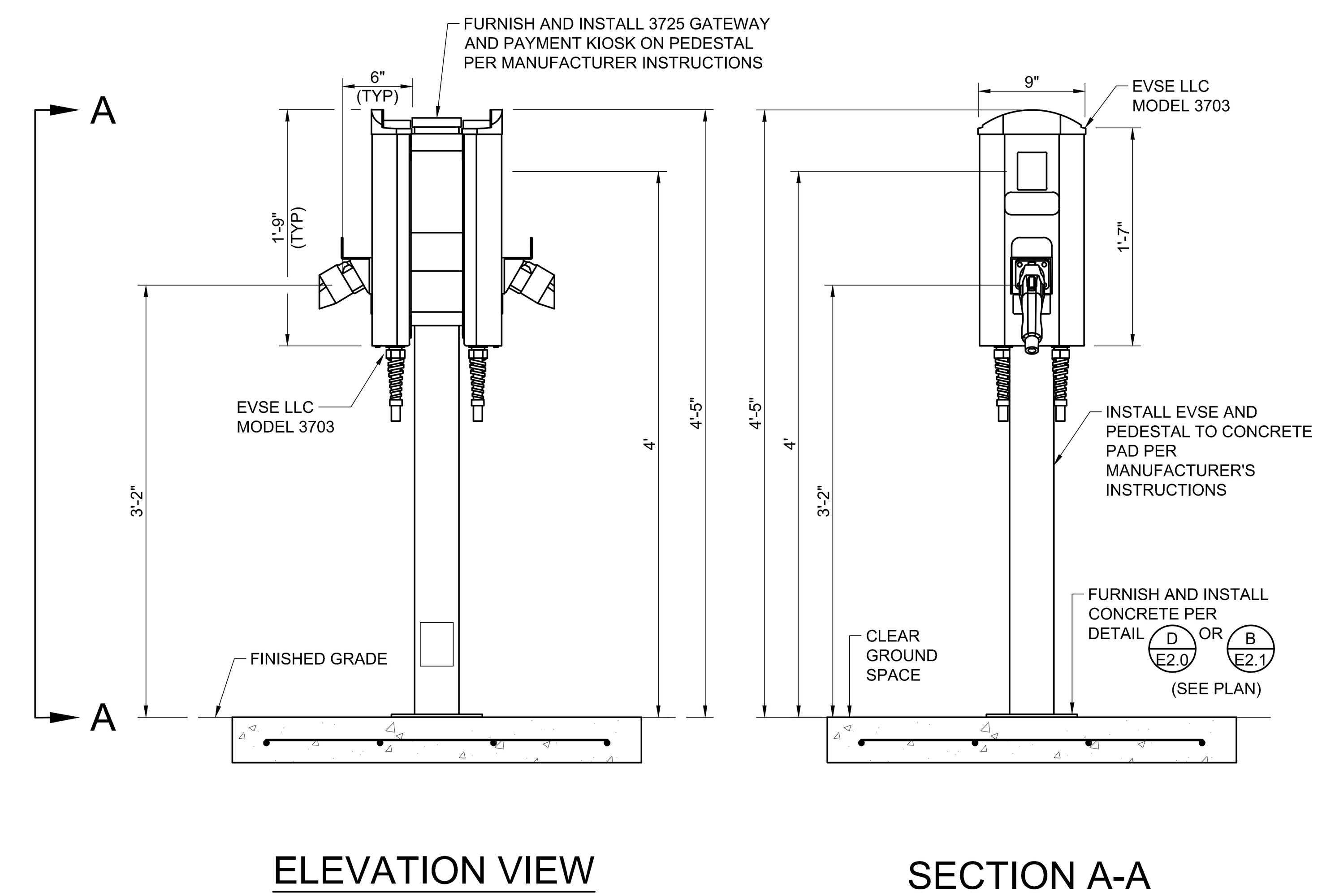


CHARGER PEDESTAL TO BE INSTALLED OVER FLUSH CONDUITS

NOTES:

1. MATERIAL FOR SERVICE CONDUIT SHALL BE LISTED AS ELECTRICAL CONDUIT. ACCEPTABLE MATERIAL SHALL BE PVC RIGID CONDUIT AND WHEN SPECIFIED, IMC OR RIGID METALLIC CONDUIT TAPED OR COATED FOR DIRECT BURIAL.
2. CONDUIT SWEEP SHALL BE PVC AND HAVE A RADIUS OF 24". RADIUS SHALL BE INCREASED WHERE REQUIRED PER NEC CHAPTER 9 .
3. MINIMUM CONDUIT COVER REQUIREMENTS SHALL FOLLOW NEC 300.5 UNLESS OTHERWISE SPECIFIED.
4. EXACT CONDUIT TYPE AND SIZE MAY VARY, REFER TO ELECTRICAL CONDUIT SCHEDULE AND PLAN

D
E2.0
TYPICAL LOCATION 1 CONDUIT STUB AND CAP
NOT TO SCALE



E
E2.0
TYPICAL EMPLOYEE PEDESTAL INSTALLATION
NOT TO SCALE

NOTES:

1. THE METHODS CONTAINED IN CEC/NEC ARTICLE 250 SHALL BE FOLLOWED TO COMPLY WITH GROUNDING AND BONDING OF ELECTRICAL SYSTEMS AND NON-CURRENT CARRYING CONDUCTIVE MATERIALS, ENCLOSURES, OR ITEMS FORMING PART OF ANY SUCH EQUIPMENT THAT ENCLOSES OR CARRIES ELECTRICAL CONDUCTOR OR EQUIPMENT THAT IS LIKELY TO BECOME ENERGIZED. SEE CEC/NEC 250.4(A)(1) THROUGH (5) FOR FURTHER DESCRIPTION.
2. WHERE TWO OR MORE GROUND RODS ARE TO BE INSTALLED, THE MINIMUM SEPARATION SHALL BE 6' PER CEC/NEC 250.53 (A)(2), AND (3) RESISTANCE OF ELECTRODES.
3. MINIMUM CONDUIT BURIAL DEPTH SHALL BE 24".
4. PER CEC/NEC 110.26 "ACCESS AND WORKING SPACE SHALL BE PROVIDED AND MAINTAINED ABOUT ALL ELECTRICAL EQUIPMENT TO PERMIT READY AND SAFE OPERATION AND MAINTENANCE OF SUCH EQUIPMENT."
5. ALL ABOVE GRADE CONDUIT CONSTRUCTION SHALL FOLLOW CEC/NEC 342, 344 OR 350 FOR IMC, RMC OR LFMC CONSTRUCTION.
6. ALL ELECTRICAL EQUIPMENT SHALL BE LISTED FOR TERMINATION OF ELECTRICAL CONDUCTORS RATED 75°C OR HIGHER.
7. CONTRACTOR TO SCAN FOR REBAR OR OTHER STRUCTURAL SUPPORT PRIOR TO CORE DRILLING OR WALL MOUNTING EQUIPMENT.

PROJECT LOCATION: 2492 W. SAN BERNARDINO AVE, REDLANDS, CA 92374 | 220-0213

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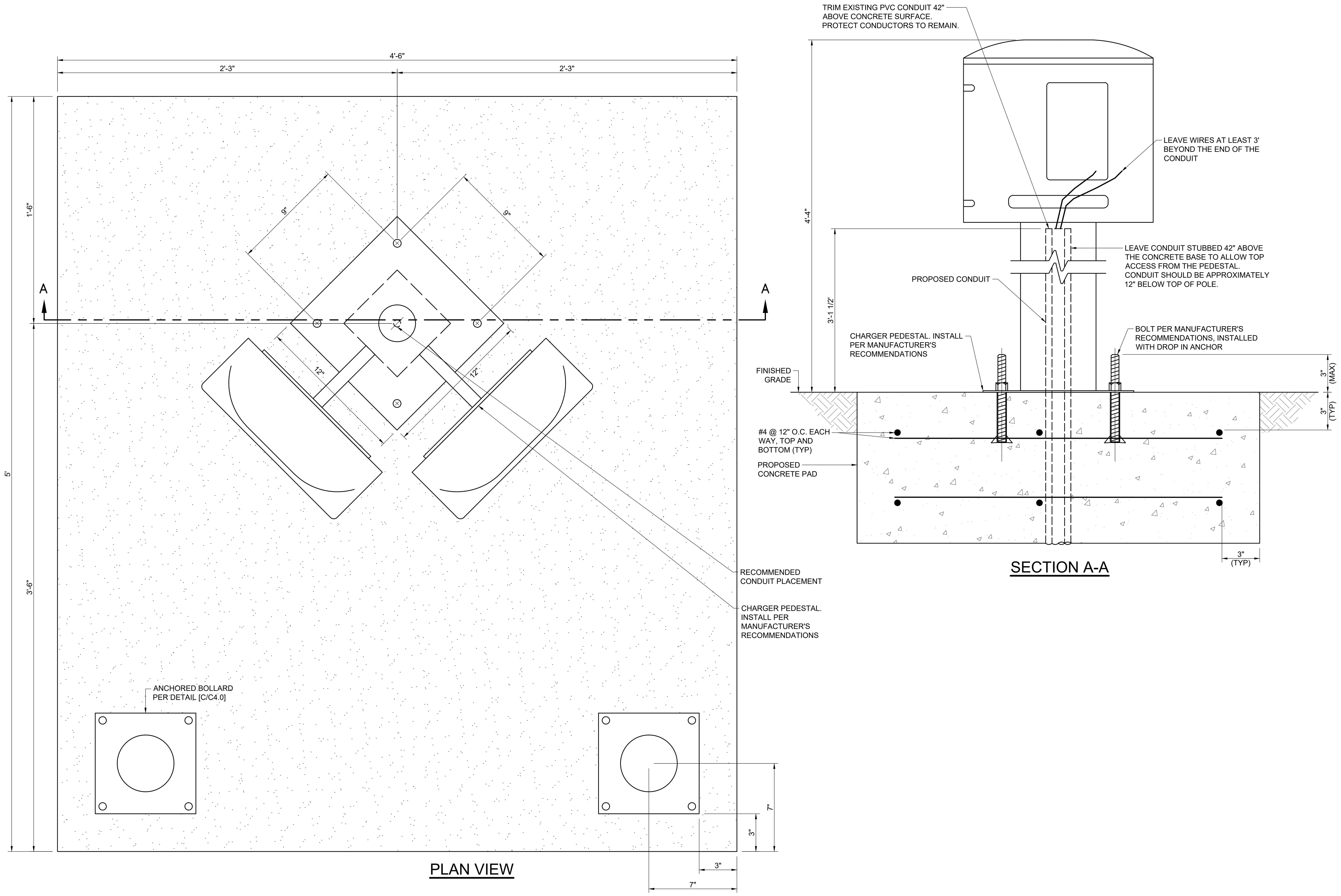
SOUTHERN CALIFORNIA EDISON

TSD FLEET EV CHARGING PROGRAM
MOUNTAIN VIEW GENRATION STATION
CONDUIT SECTIONS AND DETAILS

E2.0

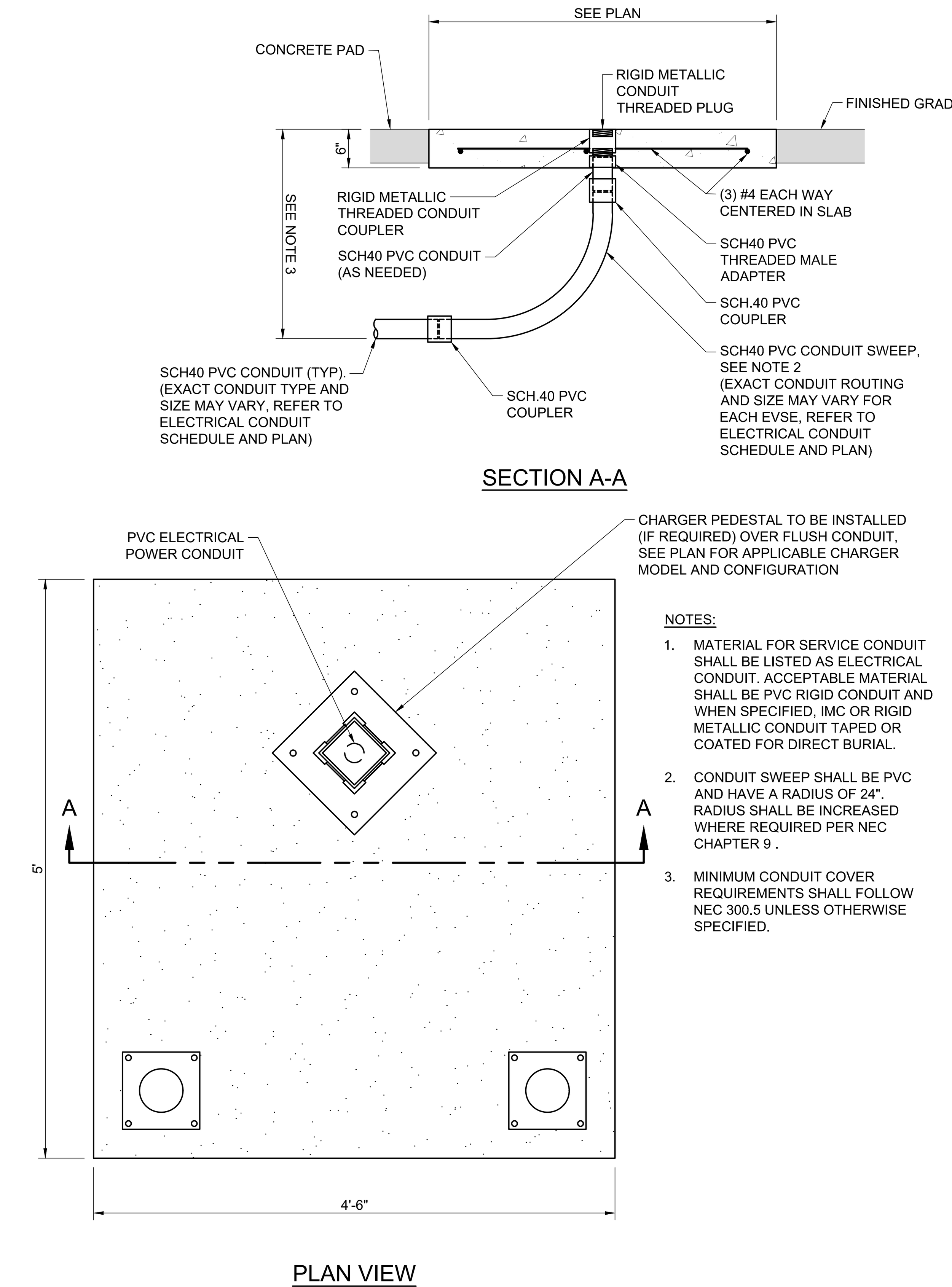
DR. BY: SL
CH. BY: CS
DATE: 03/24/2021
SCALE AS NOTED

SHEET NO. 10
OF 16 SHEETS



A E2.1 TYPICAL CHARGER PAD LAYOUT - LOCATION 1

NOT TO SCALE



B E2.1 CONDUIT STUB AND CAP

NOT TO SCALE

NOTES:

1. THE METHODS CONTAINED IN CEC/NEC ARTICLE 250 SHALL BE FOLLOWED TO COMPLY WITH GROUNDING AND BONDING OF ELECTRICAL SYSTEMS AND NON-CURRENT CARRYING CONDUCTIVE MATERIALS, ENCLOSURES, OR ITEMS FORMING PART OF ANY SUCH EQUIPMENT THAT ENCLOSES OR CARRIES ELECTRICAL CONDUCTOR OR EQUIPMENT THAT IS LIKELY TO BECOME ENERGIZED. SEE CEC/NEC 250.4(A)(1) THROUGH (5) FOR FURTHER DESCRIPTION.
2. WHERE TWO OR MORE GROUND RODS ARE TO BE INSTALLED, THE MINIMUM SEPARATION SHALL BE 6' PER CEC/NEC 250.53 (A)(2), AND (3) RESISTANCE OF ELECTRODES.
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5. ALL ABOVE GRADE CONDUIT CONSTRUCTION SHALL FOLLOW CEC/NEC 342, 344 OR 350 FOR IMC, RMC OR LFMC CONSTRUCTION.
6. ALL ELECTRICAL EQUIPMENT SHALL BE LISTED FOR TERMINATION OF ELECTRICAL CONDUCTORS RATED 75°C OR HIGHER.
7. CONTRACTOR TO SCAN FOR REBAR OR OTHER STRUCTURAL SUPPORT PRIOR TO CORE DRILLING OR WALL MOUNTING EQUIPMENT.

PROJECT LOCATION: 2492 W. SAN BERNARDINO AVE, REDLANDS, CA 92374 — 220-0213

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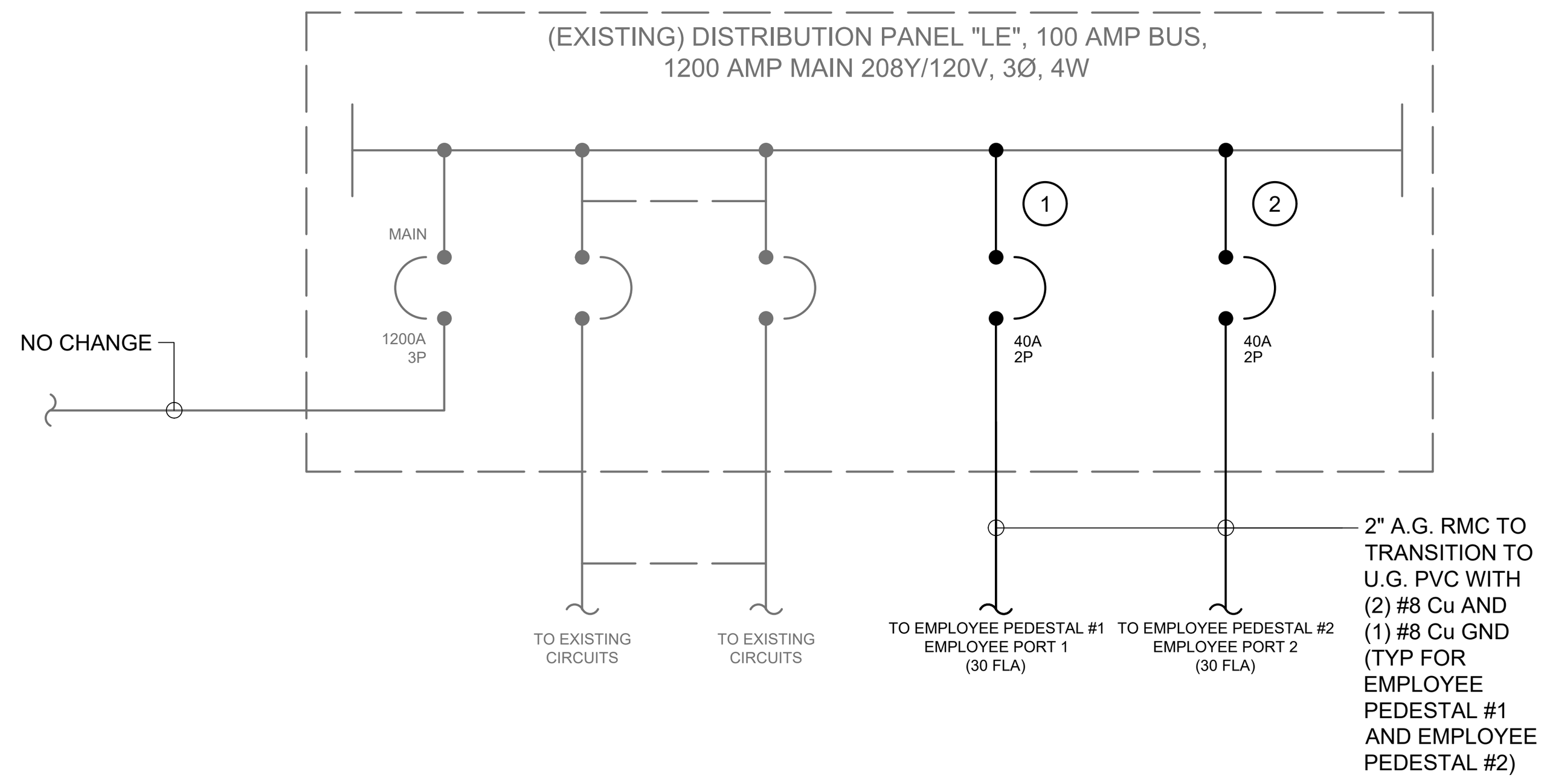
TSD FLEET EV CHARGING PROGRAM
MOUNTAIN VIEW GENRATION STATION
CONDUIT SECTIONS AND DETAILS

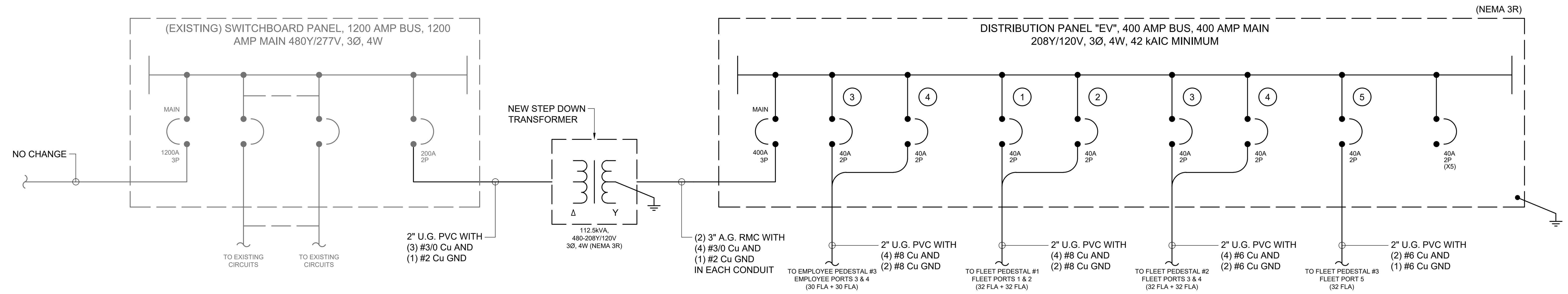
E2.1

DR. BY: SL
CH. BY: CS
DATE: 03/24/2021
SCALE AS NOTED

SHEET NO. 11 OF 16 SHEETS



A / E3.0 EXISTING PANEL "LE" SINGLE LINE DIAGRAM
NOT TO SCALE



B / E3.0 EXISTING SWITCHBOARD AND PROPOSED PANEL "EV" SINGLE LINE DIAGRAM
NOT TO SCALE

EXISTING PANEL "LE"

BUS AMPS: 100 (SEE NOTE 17) LOC: MOUNTAIN VIEW GENERATION MTG: WALL MAIN AMPS: M.L.O.
PHASE: 3 WIRES: 4 NEMA: 3R VOLTS: 208Y/120V FEEDER: EXISTING FEEDERS FEEDER ENTRY AT: BOTTOM AIC RATING: 14,000A SYM.

DESCRIPTION	VOLT-AMPS L1	L2	L3	BKR TRIP	CKT	CKT	BKR TRIP	VOLT-AMPS L1	L2	L3	DESCRIPTION
UNKNOWN	-	0.0	0.0	20A / 1P	1	2	20A / 1P	-	0.0	0.0	UNKNOWN
UNKNOWN	0.0	-	0.0	20A / 1P	3	4	20A / 1P	0.0	-	0.0	UNKNOWN
UNKNOWN	0.0	0.0	-	20A / 1P	5	6	20A / 1P	0.0	0.0	-	UNKNOWN
UNKNOWN	-	0.0	0.0	20A / 1P	7	8	20A / 1P	-	0.0	0.0	UNKNOWN
UNKNOWN	0.0	-	0.0	20A / 1P	9	10	20A / 1P	0.0	-	0.0	UNKNOWN
UNKNOWN	0.0	0.0	-	20A / 1P	11	12	20A / 1P	0.0	0.0	-	UNKNOWN
FIRE ALARM	-	0.0	0.0	20A / 1P	13	14	20A / 1P	-	0.0	0.0	UNKNOWN
UNKNOWN	0.0	-	0.0	15A / 1P	15	16	15A / 1P	0.0	-	0.0	UNKNOWN
UNKNOWN	0.0	0.0	-	15A / 1P	17	18	40A / 2P	0.0	0.0	3120.0	EMPLOYEE PEDESTAL #1 (EMPLOYEE PORT-1)
UNKNOWN	-	0.0	0.0	15A / 1P	19	20		3120.0	0.0	0.0	
UNKNOWN	0.0	-	0.0	15A / 1P	21	22	40A / 2P	0.0	3120.0	0.0	EMPLOYEE PEDESTAL #2 (EMPLOYEE PORT-2)
BLANK	0.0	0.0	0.0	-	23	24		0.0	0.0	3120.0	
UNKNOWN	-	0.0	0.0	20A / 1P	25	26	-	0.0	0.0	0.0	BLANK
BLANK	0.0	0.0	0.0	-	27	28	-	0.0	0.0	0.0	BLANK
BLANK	0.0	0.0	0.0	-	29	30	-	0.0	0.0	0.0	BLANK
UNKNOWN	-	0.0	0.0	100A / 2P	31	32	-	0.0	0.0	0.0	BLANK
	0.0	-	0.0		33	34	-	0.0	0.0	0.0	BLANK
	0.0	0.0	-		35	36	-	0.0	0.0	0.0	BLANK
BLANK	0.0	0.0	0.0	-	37	38	-	0.0	0.0	0.0	BLANK
BLANK	0.0	0.0	0.0	-	39	40	-	0.0	0.0	0.0	BLANK
BLANK	0.0	0.0	0.0	-	41	42	-	0.0	0.0	0.0	BLANK
CONNECTED LOAD >	0.0	0.0	0.0	ESTIMATED TOTAL VOLT-AMPERES				3120.0	3120.0	6240.0	< CONNECTED LOAD

LINE AMPS	L1	L2	L3	REMARKS:
LINE 1 AMP: 26.0A LINE 2 AMP: 26.0A LINE 3 AMP: 52.0A	3120.0 VA	3120.0 VA	6240.0 VA	15.6KVA TOTAL ESTIMATED CONNECTED LOAD: 43.3A @ 3PH, 208V, (AT 125% CONTINUOUS LOAD)

C / E3.0 EXISTING PANEL "LE" LOAD SCHEDULE
NOT TO SCALE

EXISTING SWITCHBOARD

BUS AMPS: 1200 (SEE NOTE 17) LOC: MOUNTAIN VIEW GENERATION MTG: PEDESTAL MAIN AMPS: 1200
PHASE: 3 WIRES: 4 NEMA: 3R VOLTS: 480Y/277V FEEDER: EXISTING FEEDERS FEEDER ENTRY AT: BOTTOM

DESCRIPTION	VOLT-AMPS L1	L2	L3	BKR TRIP	CKT	CKT	BKR TRIP	VOLT-AMPS L1	L2	L3	DESCRIPTION
MOUNTAIN VIEW ADMINISTRATION BUILDING	-	0.0	0.0	60A / 3P	1	2	800A / 3P	-	0.0	0.0	NEW MAINTENANCE SHOP
	0.0	-	0.0		3	4		0.0	-	0.0	
	0.0	0.0	-		5	6		0.0	0.0	-	
ADMINISTRATION TRAILER & CART SHED	-	0.0	0.0	60A / 3P	7	8	-	0.0	0.0	0.0	BLANK
	0.0	-	0.0		9	10	-	0.0	0.0	0.0	BLANK
	0.0	0.0	-		11	12	-	0.0	0.0	0.0	BLANK
OUTDOOR LIGHTING	-	0.0	0.0	50A / 3P	13	14	-	0.0	0.0	0.0	BLANK
	0.0	-	0.0		15	16	-	0.0	0.0	0.0	BLANK
	0.0	0.0	-		17	18	-	0.0	0.0	0.0	BLANK
OLD MAINTENANCE SHOP	-	0.0	0.0	225A / 3P	19	20	-	0.0	0.0	0.0	BLANK
	0.0	-	0.0		21	22	-	0.0	0.0	0.0	BLANK
	0.0	0.0	-		23	24	-	0.0	0.0	0.0	BLANK
(PROPOSED) STEP DOWN TRANSFORMER	25792.0	0.0	0.0	200A / 3P	25	26	-	0.0	0.0	0.0	BLANK
	0.0	26208.0	0.0		27	28	-	0.0	0.0	0.0	BLANK
	0.0	0.0	26208.0		29	30	-	0.0	0.0	0.0	BLANK
SPARE	-	0.0	0.0	-	31	32	-	0.0	0.0	0.0	BLANK
	0.0	-	0.0		33	34	-	0.0	0.0	0.0	BLANK
	0.0	0.0	-		35	36	-	0.0	0.0	0.0	BLANK
BLANK	0.0	0.0	0.0	-	37	38	-	0.0	0.0	0.0	BLANK
BLANK	0.0	0.0	0.0	-	39	40	-	0.0	0.0	0.0	BLANK
BLANK	0.0	0.0	0.0	-	41	42	-	0.0	0.0	0.0	BLANK
CONNECTED LOAD >	25792.0	26208.0	26208.0	ESTIMATED TOTAL VOLT-AMPERES				0.0	0.0	0.0	< CONNECTED LOAD

LINE AMPS	L1	L2	L3	REMARKS:
LINE 1 AMP: 93.1A LINE 2 AMP: 94.6A LINE 3 AMP: 94.6A	25792.0 VA	26208.0 VA	26208.0 VA	97.8KVA TOTAL ESTIMATED CONNECTED LOAD: 117.6A @ 3PH, 480V, (AT 125% CONTINUOUS LOAD)

D / E3.0 EXISTING SWITCHBOARD LOAD SCHEDULE
NOT TO SCALE

PROPOSED DISTRIBUTION PANEL "EV"

BUS AMPS: 400 MFR: Z-POWER LOC: MOUNTAIN VIEW GENERATION MTG: PEDESTAL MAIN AMPS: 400
PHASE: 3 WIRES: 4 NEMA: 3R VOLTS: 208Y/120V FEEDER: (2) RUNS OF (4) #3/0 CU AND (1) #2 CU GROUND FEEDER ENTRY AT: SIDE AIC RATING: 42,000A SYM.

DESCRIPTION	VOLT-AMPS L1	L2	L3	BKR TRIP	CKT	CKT	BKR TRIP	VOLT-AMPS L1	L2	L3	DESCRIPTION
EMPLOYEE PEDESTAL #3 (EMPLOYEE PORT-3)	3120.0	0.0	0.0	40A / 2P	1	2	40A / 2P	3120.0	0.0	0.0	(FUTURE) EMPLOYEE PEDESTAL #4
	0.0	3120.0	0.0		3	4		0.0	3120.0	0.0	
EMPLOYEE PEDESTAL #3 (EMPLOYEE PORT-4)	0.0	0.0	3120.0	40A / 2P	5	6	40A / 2P	0.0	0.0	3120.0	(FUTURE) EMPLOYEE PEDESTAL #4
	3120.0	0.0	0.0		7	8		3120.0	0.0	0.0	
FLEET PEDESTAL #1 (FLEET PORT-1)	0.0	3328.0	0.0	40A / 2P	9	10	40A / 2P	0.0	3328.0	0.0	FLEET PEDESTAL #2 (FLEET PORT-3)
	0.0	0.0	3328.0		11	12		0.0	0.0	3328.0	
FLEET PEDESTAL #1 (FLEET PORT-2)	3328.0	0.0	0.0	40A / 2P	13	14	40A / 2P	3328.0	0.0	0.0	FLEET PEDESTAL #2 (FLEET PORT-4)
	0.0	3328.0	0.0		15	16		0.0	3328.0	0.0	
FLEET PEDESTAL #3 (FLEET PORT-5)	0.0	0.0	3328.0	40A / 2P	17	18	40A / 2P	0.0	0.0	3328.0	(FUTURE) FLEET PEDESTAL #4
	3328.0	0.0	0.0		19	20		3328.0	0.0	0.0	
(FUTURE) FLEET PEDESTAL #3	0.0	3328.0	0.0	40A / 2P	21	22	40A / 2P	0.0	3328.0	0.0	(FUTURE) FLEET PEDESTAL #4
	0.0	0.0	3328.0		23	24		0.0	0.0	3328.0	
BLANK	0.0	0.0	0.0	-	25	26	-	0.0	0.0	0.0	BLANK
BLANK	0.0	0.0	0.0	-	27	28	-	0.0	0.0	0.0	BLANK
BLANK	0.0	0.0	0.0	-	29	30	-	0.0	0.0	0.0	BLANK
BLANK	0.0	0.0	0.0	-	31	32	-	0.0	0.0	0.0	BLANK
BLANK	0.0	0.0	0.0	-	33	34	-	0.0	0.0	0.0	BLANK
BLANK	0.0	0.0	0.0	-	35	36	-	0.0	0.0	0.0	BLANK
BLANK	0.0	0.0	0.0	-	37	38	-	0.0	0.0	0.0	BLANK
BLANK	0.0	0.0	0.0	-	39	40	-	0.0	0.0	0.0	BLANK
BLANK	0.0	0.0	0.0	-	41	42	-	0.0	0.0	0.0	BLANK
CONNECTED LOAD >	12896.0	13104.0	13104.0	ESTIMATED TOTAL VOLT-AMPERES				12896.0	13104.0	13104.0	< CONNECTED LOAD

LINE AMPS	L1	L2	L3	REMARKS:
LINE 1 AMP: 214.9A LINE 2 AMP: 218.4A LINE 3 AMP: 218.4A	25792.0 VA	26208.0 VA	26208.0 VA	97.8KVA TOTAL ESTIMATED CONNECTED LOAD: 271.4A @ 3PH, 208V, (AT 125% CONTINUOUS LOAD)

E / E3.0 PROPOSED DISTRIBUTION PANEL "EV" LOAD SCHEDULE
NOT TO SCALE

NOTES:

1. ADDITONAL CONNECTED 3-PH KVA: 97.8 KVA AT UNITY PF FOR EXISTING SWITCHBOARD

   ADDITIONAL CONNECTED 3-PH KVA: 15.6 KVA AT UNITY PF FOR PANEL "LE"
2. TYPE TEY 42 KAIC BRANCH BREAKERS
3. TAGGED (CHARGE PORT-#, L1/L2/GND) TYPICAL FOR ALL STATIONS.
4. DO NOT USE GFCI BREAKERS
5. NEUTRAL AND GROUND NOT TO BE JUMPERED IN PANEL EV.
6. STANDARD RATED SERVICE PANELS, OVER CURRENT PROTECTION DEVICES AND WIRE SIZES BASED ON CEC/NEC REQUIREMENTS AT 125% CONTINUOUS LOAD. 100% RATED SERVICE PANELS, OVER CURRENT PROTECTION DEVICES AND WIRE SIZES BASED ON CEC/NEC REQUIREMENTS AT 100% CONTINUOUS LOAD.
7. TRANSFORMER LOADING BASED ON KVA REQUIREMENTS OF CHARGERS (6.7KVA/FLEET CHARGER AND 6.24KVA/EMPLOYEE CHARGER).
9. (#), INDIVIDUAL CHARGE PORT NUMBER. THIS IS NOT BREAKER SPACE OR EVSE NUMBER. LOAD SCHEDULE INDICATES BREAKER SPACE FOR EACH CHARGE PORT.
10. (#)— —(#), INDIVIDUAL CHARGE PORT NUMBER TYPICAL FOR PORTS (#) THROUGH (#).
11. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED, LISTED, OR CERTIFIED BY A NATIONALLY RECOGNIZED TESTING LABORATORY ACCREDITED BY THE UNITED STATES OCCUPATIONAL SAFETY HEALTH ADMINISTRATION.
12. PER CEC/NEC 210.19 (A) INFORMATIONAL NOTE #4, "CONDUCTORS FOR BRANCH CIRCUITS AS DEFINED IN ARTICLE 100, SIZED TO PREVENT A VOLTAGE DROP EXCEEDING 3 PERCENT AT THE FARTHEST OUTLET OF POWER, HEATING, AND LIGHTING LOADS, OR COMBINATION OF SUCH LOADS, AND WHERE THE MAXIMUM TOTAL VOLTAGE DROP ON BOTH FEEDERS AND BRANCH CIRCUITS TO THE FARTHEST OUTLET DOES NOT EXCEED 5%."
13. THE METHODS CONTAINED IN CEC/NEC ARTICLE 250 SHALL BE FOLLOWED TO COMPLY WITH GROUNDING AND BONDING OF ELECTRICAL SYSTEMS AND NON-CURRENT CARRYING CONDUCTIVE MATERIALS, ENCLOSURES, OR ITEMS FORMING PART OF ANY SUCH EQUIPMENT THAT ENCLOSES OR CARRIES ELECTRICAL CONDUCTOR OR EQUIPMENT THAT IS LIKELY TO BECOME ENERGIZED. SEE CEC/NEC 250.4(A)(1) THROUGH (5) FOR FURTHER DESCRIPTION.
14. WHERE TWO OR MORE GROUND RODS ARE TO BE INSTALLED, THE MINIMUM SEPARATION SHALL BE 6' PER CEC/NEC 250.53 (A)(2), AND (3) RESISTANCE OF ELECTRODES.
15. MAXIMUM VOLTAGE DROP FOR CONDUCTORS: #6 WIRE = 2.1%, #8 WIRE = 1.7%
16. ALL ELECTRICAL EQUIPMENT SHALL BE LISTED FOR TERMINATION OF ELECTRICAL CONDUCTORS RATED 75°C OR HIGHER.
17. CONTRACTOR TO VERIFY THE EXISTING LOAD DRAWN BY EXISTING SWITCHBOARD & PANEL "LE" AND VERIFY THAT THE DISTRIBUTION PANELS WILL HAVE THE CAPACITY TO SUPPORT THE PROPOSED LOADS.
18. CONTRACTOR TO MATCH MANUFACTURER SPECIFICATIONS AND KAIC RATING FOR NEW BREAKERS.

PROJECT LOCATION: 2492 W. SAN BERNARDINO AVE, REDLANDS, CA 92374 | 220-0213

Blair, Church & Flynn CONSULTING ENGINEERS

REGISTERED PROFESSIONAL BRIAN M. ELECTRICAL STATE OF CALIFORNIA — PLAN REVIEW ONLY NOT FOR CONSTRUCTION

- Date Signed:

CONSULTANT
Blair, Church & Flynn
Consulting Engineers
451 Clovis Avenue,
Suite 200
Clovis, California 93612
Tel (559) 326-1400
Fax (559) 326-1500

REF. & REV.

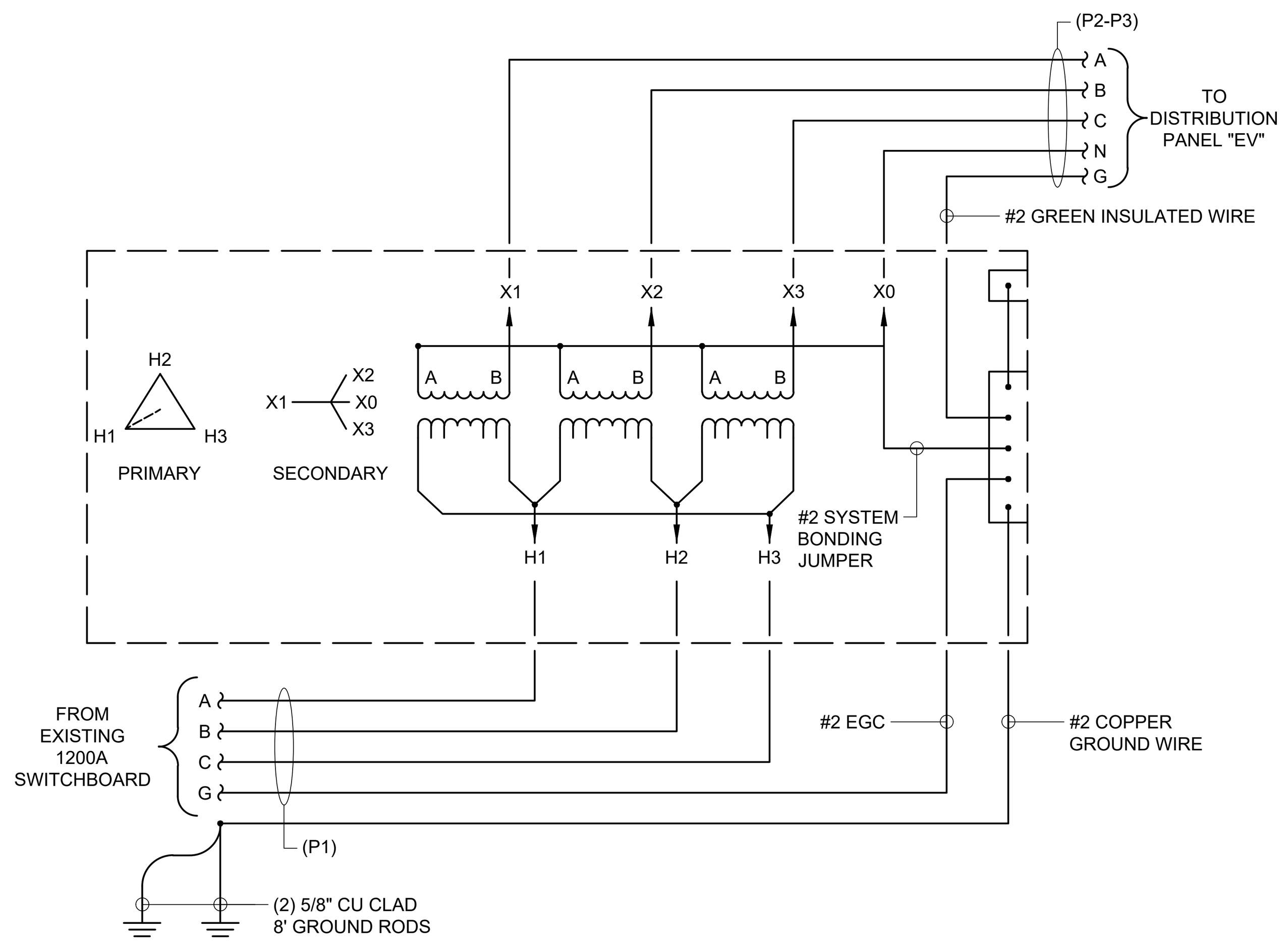
SOUTHERN CALIFORNIA EDISON

TSD FLEET EV CHARGING PROGRAM
MOUNTAIN VIEW GENRATION STATION
ELECTRICAL SCHEDULE AND CIRCUITS

E3.0

DR. BY: SL
CH. BY: CS
DATE: 03/24/2021
SCALE AS NOTED

SHEET NO. 12 OF 16 SHEETS



A / E3.1 112.5KVA STEP DOWN TRANSFORMER

NOT TO SCALE

PROJECT LOCATION: 2492 W. SAN BERNARDINO AVE, REDLANDS, CA 92374

220-0213

Blair, Church & Flynn

CONSULTING ENGINEERS

REGISTERED PROFESSIONAL ENGINEER BRIAN M. ... ELECTRICAL STATE OF CALIFORNIA

PLAN REVIEW ONLY

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Date Signed:

CONSULTANT

Blair, Church & Flynn
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451 Clovis Avenue,
Suite 200
Clovis, California 93612
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Fax (559) 326-1500

REF. & REV.

SOUTHERN CALIFORNIA EDISON

TSD FLEET EV CHARGING PROGRAM

MOUNTAIN VIEW GENRATION STATION

##############################

####

DR. BY: SL
CH. BY: CS
DATE: 03/24/2021
SCALE AS NOTED

SHEET NO. 13

OF 16 SHEETS

CS SERIES

A REAL PRODUCT, FOR THE REAL WORLD. The CS Series from ClipperCreek is designed to take the wear-and-tear of everyday use in all environments. Its tough NEMA 4 outdoor rated enclosure and rubber over-molded connector for the CS-60 and above ensures you can install this unit anywhere with confidence.

- **MANY POWER LEVELS -** 16A to 80A charging
- **QUALITY -** Technology that works for the life of your current plug-in vehicle and then some
- **CONVENIENCE -** 25 feet of charging cable for installation and operation flexibility
- **DURABILITY -** Rugged, fully sealed NEMA 4 enclosure for installation anywhere
- **RELIABILITY-** Backed by ClipperCreek's 1-year warranty, and outstanding customer service

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ClipperCreek.com

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CS SERIES
PRODUCT OVERVIEW

To learn more call 877-694-4194
or visit ClipperCreek.com

ELECTRICAL SPECIFICATIONS

- **Service -** 208V to 240V, 20A to 100A, single phase, 2 wire w/ground
- **Charge Current or Output Power -** 208V to 240V, 16A to 80A continuous (3.8kW to 19.2kW)
- **Service Ground Monitor -** Constantly checks for presence of proper safety ground
- **Automatic Circuit Reclosure after minor power faults**
- **Charge Circuit Interruption Device -** Ground Fault Protection with fully automated self-test, eliminates manual user testing
- **Cold Load Pickup -** Time-delayed and randomized to allow seamless re-energizing of unit following power outages
- **External Control Input -** Allows external control from smart meter (AMI), billing or load management device

MATERIAL SPECIFICATIONS

- Indoor/outdoor rated fully sealed (NEMA 4) enclosure
- Operating Temperatures: -22°F to 122°F (-30°C to +50°C)
- 22" H x 17" W x 8" D (559mm H x 432mm W x 203mm D)
- Weight 33 lbs. (15kg) to 45lbs. (20.4kg)
- UL, cUL, ETL, cETL Listed

MULTIPLE CONFIGURATIONS

MODEL:	CS-100	CS-90	CS-80	CS-70	CS-60	CS-50	CS-40	CS-30	CS-20
CIRCUIT BREAKER RATING:	100A	90A	80A	70A	60A	50A	40A	30A	20A
CONTINUOUS CURRENT:	80A	72A	64A	56A	48A	40A	32A	24A	16A

CODES AND STANDARDS

- **UL 2594** Electric Vehicle Supply Equipment
- **UL 2231** Personal Protection Device (i.e., CCID Hardware)
- **UL 1998** Standard for Safety-Related Software
- **UL 991** Standard for tests for Safety-Related Controls Employing Solid-State Devices
- **NEC 625** Electric Vehicle Charge System
- **SAE-J1772™** Electric Vehicle Conductive Charge Coupler

c UL us LISTED   Intertek

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CS PEDESTAL MOUNT

CONVENIENT – BUILT TO LAST. ClipperCreek's CS product line have a *time-tested* mounting solution for all your installation needs. The only mounting options on the market with more than 20 years field experience. All units come with two knockouts perfectly situated for 120V outlets.

- **Low Cost** - Minimize your installation costs and mount one or two units on a single pedestal.
- **Tough -** 4" Cold Rolled Steel 1/4" thick, powder coated for lasting installation
- **Reliable -** Backed by ClipperCreek's 3-year warranty
- **Functional -** All units come equipped with 2 knockouts positioned for 120V outlets
- **Convenient** - Integrated cable holder and connector holster

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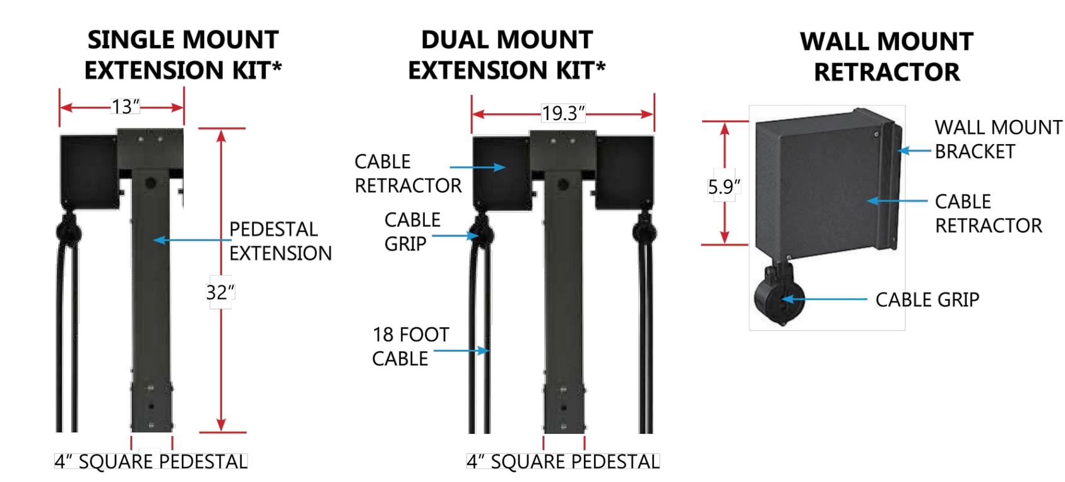
ClipperCreek.com

20190618

Add a cable management extension to the CS Pedestal to keep the cables neat and off the ground.

*18 foot cables on the HCS and CS stations are required for use with the Extension Kits. Please request at time of purchase.



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NOTE:

1. REFER TO INSTALLATION MANUAL FOR ADDITIONAL INFORMATION.

A / R1.0 — CLIPPERCREEK CS-40 EV CHARGER SPECIFICATIONS
NOT TO SCALE

PROJECT LOCATION: 2492 W. SAN BERNARDINO AVE, REDLANDS, CA 92374				220-0213
Blair, Church & Flynn CONSULTING ENGINEERS	CONSULTANT Blair, Church & Flynn Consulting Engineers 451 Clovis Avenue, Suite 200 Clovis, California 93612 Tel (559) 326-1400 Fax (559) 326-1500	REF. & REV.	SOUTHERN CALIFORNIA EDISON	
			TSD FLEET EV CHARGING PROGRAM MOUNTAIN VIEW GENRATION STATION UNDER SEPERATE CONTRACT	R1.0 DR. BY: SL CH. BY: CS DATE: 03/24/2021 SCALE AS NOTED SHEET NO. 14 OF 16 SHEETS

Specifications

Product Code

Product Code	3703

Electrical*

Voltage	208-240 VAC
Current (Rated)	40A (or 30A)
Current (Simulated Level 1)	7A@208-240 VAC (On Command)
Connections	Line 1 and 2, Ground, (Neutral Not Required)
Required Service (Breaker Panel)**	2-pole 50A (or 40A) breaker **Non GFCI** on a dedicated circuit
Stand By Power	Less than 10W typical (without communication/Payment Module/Gateway operating)
Max Rated Power	9.6 kW (or 7.2KW)

Safety Features

Over Current Disconnect	42A
Surge Protection	6KV @ 3000A
Ground Fault	Internal 20 mA CCID with auto re-closure (three attempts)

Compliance

Safety	IEC/UL/CSA C22.2 61010-1, UL2594, UL2231-1, UL2231-2, NEC Article 625, SAE J1772
EMC	FCC Part 15 Class A, Canadian ICES-003

Communications

Zigbee	FCC ID: MCQ-PROS2B, IC: 1846A-PRO S2B

Environmental

Operating Temperature	-22° to 122° F (-30° C to 50° C) ambient
Operating Humidity	Up to 95% non-condensing
NEMA Rating	NEMA 3R

Accessories

Communications Module (ZigBee) (Optional)	Contains FCC ID: MCQ-PS2CTH, MODEL XBEE PRO S2C RADIO, IC: 1846A- PS2CTH

General

Dimensions	20.71 in (h) x 9.40 in (w) x 6.06 in (d) (Excluding Pole)
Weight	14.8 lbs.
Mounting	Wall, Surface-mounted Pole

* Observe all required Lockout/Tagout procedures while making any electrical connections or servicing the unit.

** Dual pole-mounted chargers require two breakers.

308.3.2 Side Reach – Obstructed High Reach

Where a clear floor or ground space allows a parallel approach to an element and the high side reach is over an obstruction, the height of the obstruction shall be 34 inches (865 mm) maximum and the depth of the obstruction shall be 24 inches (610 mm) maximum. The high side reach shall be 48 inches (1220 mm) maximum for a reach depth of 10 inches (255 mm) maximum. Where the reach depth exceeds 10 inches (255 mm), the high side reach shall be 46 inches (1170 mm) maximum for a reach depth of 24 inches (610 mm) maximum.

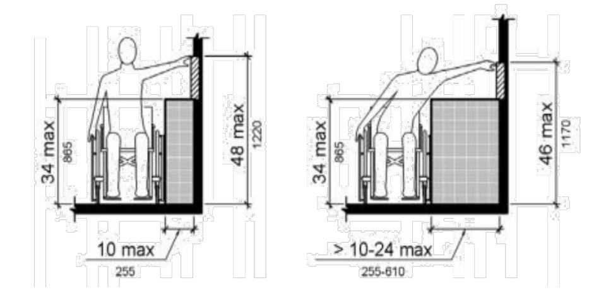


Figure 2E

309 Operable Parts

309.1 General – Operable parts shall comply with 309.

309.2 Clear Floor Space – A clear floor space or ground space complying with 305 shall be provided.

309.3 Height – Operable parts shall be placed within one or more of the reach ranges specified in 308.

309.4 Operation – Operable parts shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate operable parts shall be 5 pounds maximum.

NOTE: In order to remain ADA-compliant, from the user's perspective, the center of the 3703's Data Router *MUST* be no more than 48 inches from the ground when mounted to the pole, regardless of how the pole is mounted to the ground (**Figure 2F**).

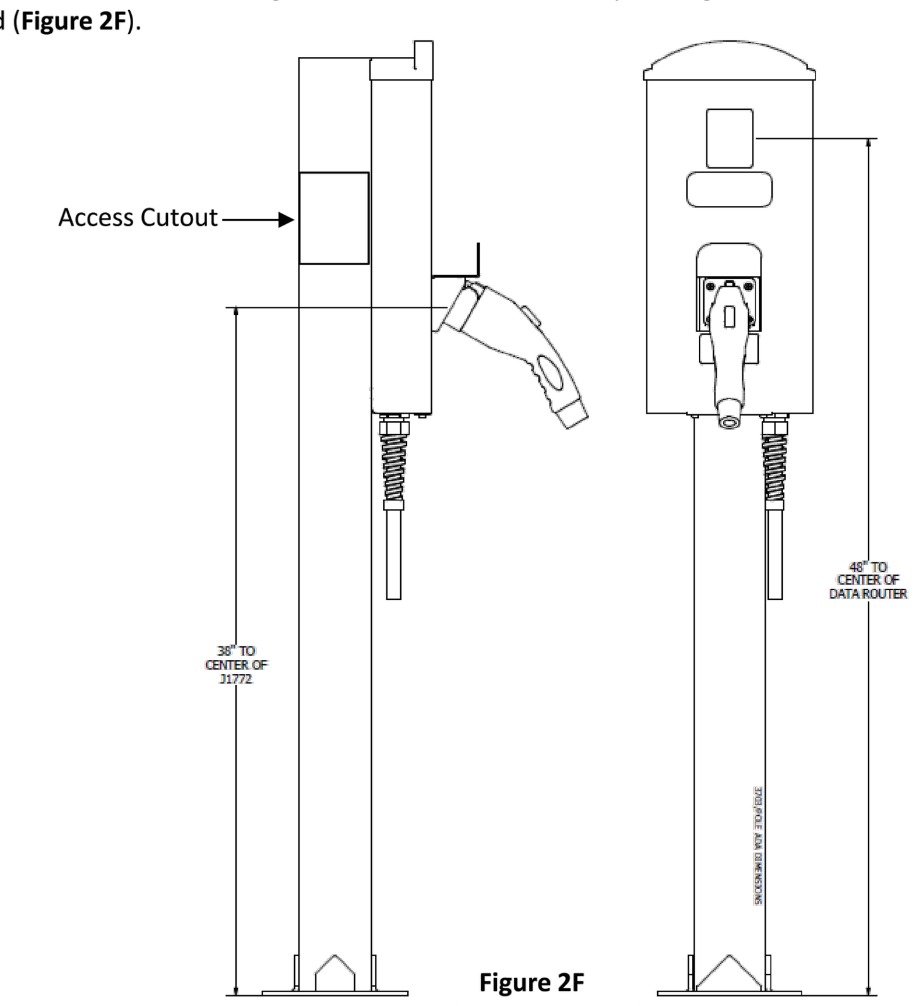


Figure 2F

Wall-Mounting

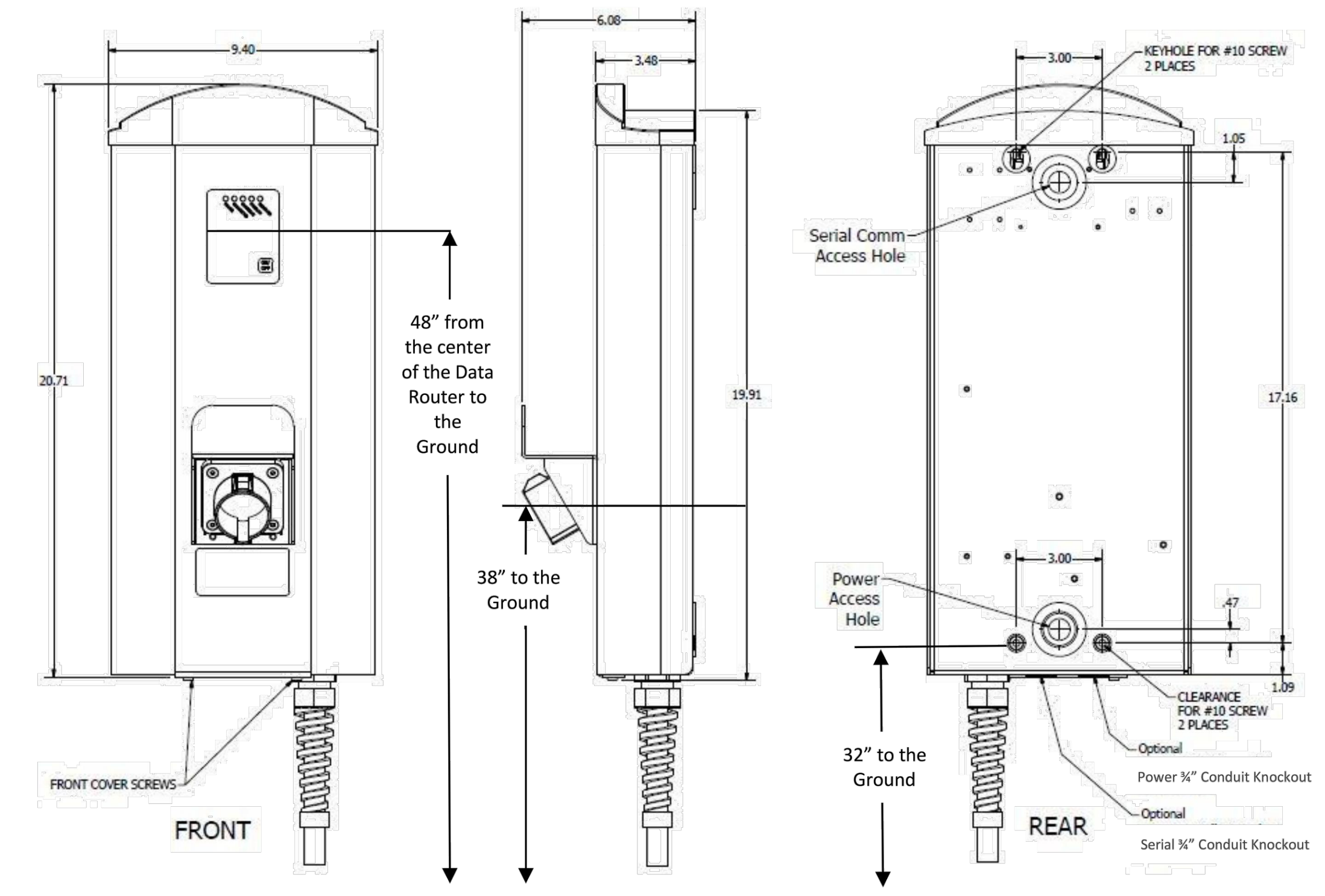


Figure 5

1. Position the 3703 so that the center of the 3703's Data Router is 48 inches from the ground (**Figure 5**).
2. Mark and drill 4 holes into the wall, duplicating the pattern shown in **Figure 5**. The mounting hardware/holes should be designed around #10-sized screws.
3. AC wiring from the breaker panel is typically brought up into the bottom hole. If any communication to the 3703 is serial, it should also be brought up into the top hole (**Figure 5**).

Note: Wall anchors and #10-sized screws are customer-supplied and dependent upon wall type. These can be purchased at any reputable building supply store. Ensure that all parts meet or exceed local building codes for quality.

Mounting Options

Pole Mounting

Whether using a CMI-supplied pole or a customer-supplied (electrically grounded per state and local codes) pole, mount the pole directly to a ground-level flat surface, which should accommodate the weight and pull force of the EVSE(s). The weight of a single 3703 with pole is 24.6 pounds, while a dual 3703 with pole weighs 38.8 pounds. A concrete sidewalk is a typical mounting surface. A one-inch conduit (to support AC wiring from the breaker panel) is typically brought up into the center bottom of the pole. (**Figure 3**) If any communication to the 3703 is serial (or Ethernet if a Payment Module is installed), an additional ¾ inch conduit needs to be brought up into the bottom of the pole. If using a CMI-supplied pole, there might be a plastic schedule 40 pipe installed inside of the pole. Feed the serial or Ethernet wiring from your conduit into this internal pipe. No transitioning coupler is needed between the conduit and this internal pipe. If a concrete base is being poured to support the 3703 EV charger, the suggested size should be 3'x3'x4" minimum. However, whatever the mounting surface and method, it should conform to town/state/federal building codes.

Note: We do not recommend mounting the 3703 pole directly to asphalt. If required, cut a section of the asphalt and pour a concrete base.

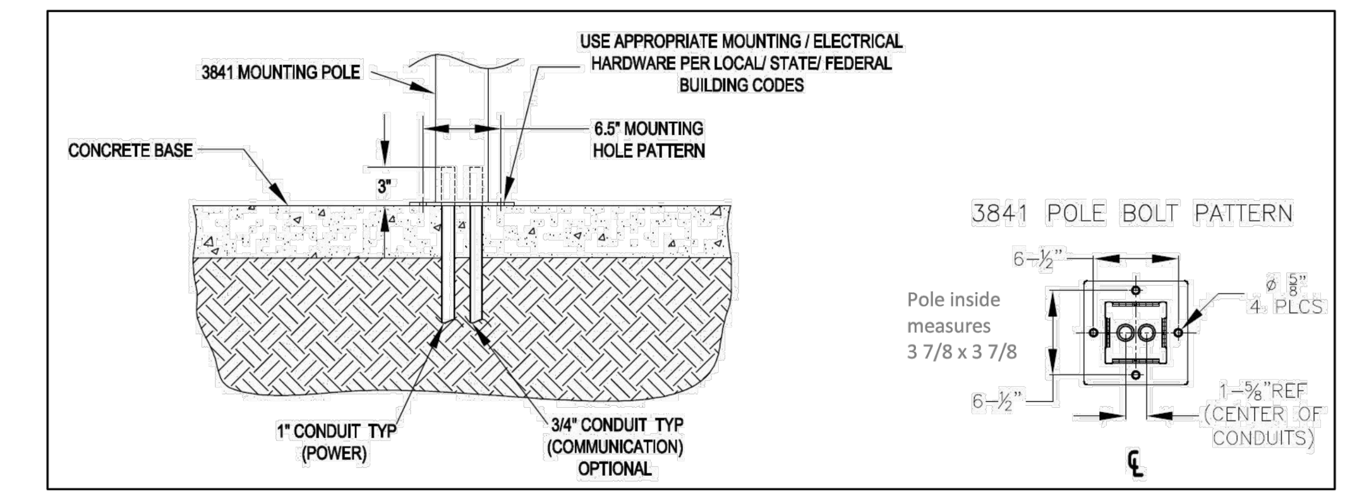


Figure 3

A / R1.1 CHARGER SPECIFICATIONS

NOT TO SCALE

PRODUCT SPECIFICATION

Product Line: **EVSE**

Payment Module, Pole/Wall Mount

Product #: **3725** Version #: **A04xx**

The Model 3725 Payment Module operates as the central payment, access and communication system manager for a network of Electric Vehicle Supply Equipment (EVSE) charging stations.

When communicating between an EVSE and a Payment Module, your options are ZigBee Mesh or Serial RS-232. When communicating between a Payment Module and your host network, your options are Cellular or Ethernet, where the unit communicates with third-party networks. The Payment Module does not need to be physically connected to EVSEs when set up for wireless Zigbee communication.

The Payment Module is packaged in a NEMA 3R-rated durable ABS enclosure designed to withstand the harshest elements, including direct rain and external icing.

The 3725 has a user-friendly 3x4 keypad, with stainless steel snap domes for tactile feel. The keypad is also sealed to be weather-resistant. A 4x20 LCD is designed to be seen clearly and outdoors in direct sunlight.

The 3725 can be equipped with an optional encrypted magnetic card reader to allow payment with credit and debit cards. An optional RFID reader is also available for pre-issued, non-contact RFID cards.

Data Processor: The 3725 Payment Module is equipped with a programmable microprocessor, Real Time Clock, and 32G SD card for data storage memory.

Card and card holder information is encrypted as it is transmitted to the credit card payment processor, and is never stored locally in the Payment Module. When a valid card authorization is received, the EVSE is activated, and the start of the transaction is stored locally and can be optionally transmitted to a central host. The charging cost is held against the card until charging is complete and the cable is removed from the vehicle, at which time, if being used, the host computer is notified, payment is finalized, and fees are charged.

Modular Design: No special tools are required to reconfigure or replace in the field. The Payment Module is mounted on a pre-wired pole, or on the wall using a durable, powder-coated metal mount with knockouts for conduit.
Keypad: Stainless steel snap domes for tactile feel.

Display: LCD, 4 rows, 20 alphanumeric characters per row

Environmental Considerations: The Payment Module operates at safe, low-voltage power supplied by the EVSE connection. It is constructed with high-impact ABS plastic, and is engineered to resist the harshest elements. A NEMA 3R enclosure stands up to direct rain, external icing and is rust-resistant.

Dimensions: 17 9/16" H x 4" W x 2 1/2" D

Operating Ranges:
Humidity: 0 – 90% non-condensing
Temperature : -22F to 122F (-30C to 50C) Ambient

Power:
+24VDC @ 1Amp

Standards:
Meets FCC Part 15 Class A, Canadian ICES-003 and NEMA 3R standards

Host Network Connections: One of the following:

Ethernet Port: Standard 10/100 IEEE 802.3
Cellular Modem: Compatible with all major US cellular operations

EVSE Connection: One of the following:

Zigbee Mesh: Communicate with up to 32 EVSE's over a 2.4GHz wireless connection
Serial: Communicate with up to 8 EVSE's over a hard-wired connection

Payment Card: Either or both:

Credit/Debit Card Reader: An encrypted magnetic card reader
RFID Card Reader: Non-contact card reader compatible with all Mifare /iCLASS cards

Label Description: **Payment Module, Pole/Wall Mount**	Product Code: **3725-A04xx**

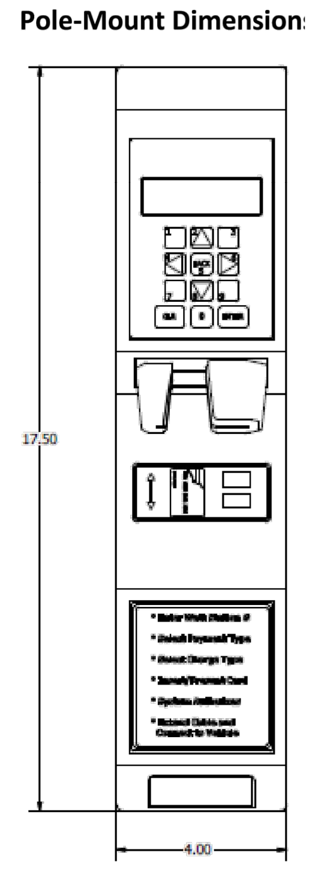
	Marketing: DS Date: 5/5/17	Engineering: GC Date: 5/5/17	Rev: A

EVSE LLC, 89 PHOENIX AVE., ENFIELD, CT 06082 PHONE (860) 745-2433 | 9/12/2019 | Page **1** of **2**

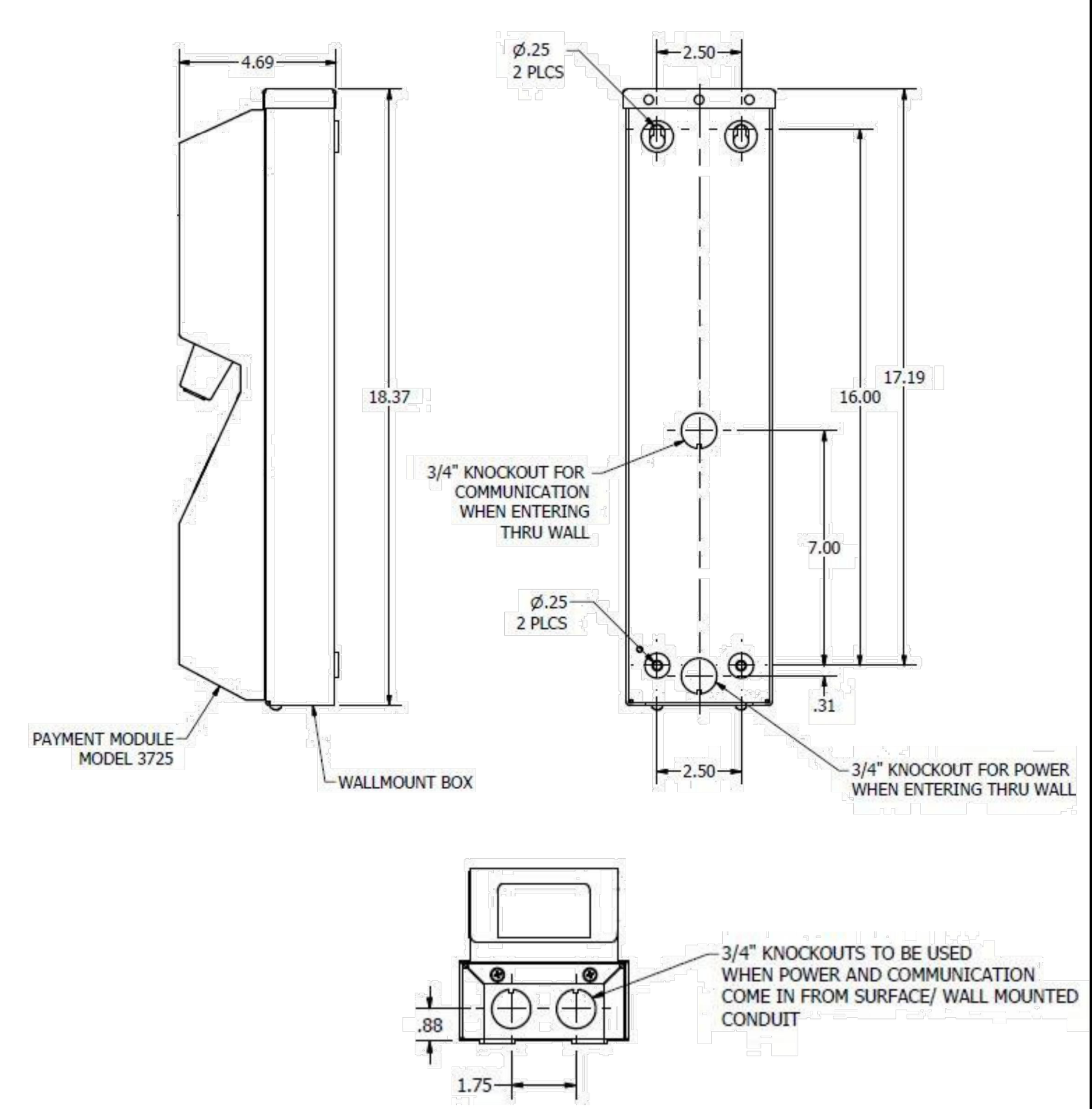
PRODUCT SPECIFICATION *(Continued)*

3725-A04xx Mechanical Drawing:

Pole-Mount Dimension



Wall-Mount Dimensions



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B / R1.1 PAYMENT MODULE SPECIFICATIONS

NOT TO SCALE

NOTE:

1. REFER TO INSTALLATION MANUAL FOR ADDITIONAL INFORMATION.

PROJECT LOCATION: 2492 W. SAN BERNARDINO AVE, REDLANDS, CA 92374	220-0213

Blair, Church & Flynn CONSULTING ENGINEERS

CONSULTANT: Blair, Church & Flynn Consulting Engineers, 451 Clovis Avenue, Suite 200, Clovis, California 93612, Tel (559) 326-1400, Fax (559) 326-1500

REF. & REV.

SOUTHERN CALIFORNIA EDISON

TSD FLEET EV CHARGING PROGRAM
MOUNTAIN VIEW GENRATION STATION
UNDER SEPERATE CONTRACT

####

DR. BY: SL
CH. BY: CS
DATE: 03/24/2021
SCALE AS NOTED

SHEET NO. 15 OF 16 SHEETS

Drawing: \\bcffs05\Project\220-0213\Site\mountain View Generation\CD Phase\productiondrawings\220-0213_MVG_dt05.dwg; 15 R2.0 Title 24 Documents - BCF.ctb
Plot by: jvazquez Mar 24, 2021 - 5:34pm

PROJECT LOCATION: 2492 W. SAN BERNARDINO AVE, REDLANDS, CA 92374	220-0213

Blair, Church & Flynn
CONSULTING ENGINEERS

REGISTERED PROFESSIONAL BRIAN M. ... ELECTRICAL ... STATE OF CALIFORNIA
PLAN REVIEW ONLY
NOT FOR CONSTRUCTION

Date Signed: -

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REF. & REV.

SOUTHERN CALIFORNIA EDISON

TSD FLEET EV CHARGING PROGRAM
MOUNTAIN VIEW GENRATION STATION
TITLE 24 DOCUMENTS

R2.0

DR. BY: SL
CH. BY: CS
DATE: 03/24/2021
SCALE AS NOTED

SHEET NO. 16
OF 16 SHEETS