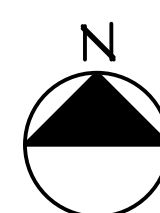
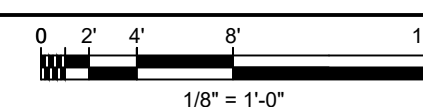


1
- EXISTING SITE PLAN
SCALE: 1/8" = 1'-0"



BLYMYER
ENGINEERS
1101 MARINA VILLAGE PARKWAY # 100
ALAMEDA, CA 94501 510.521.3773



SIESTA HILLS
5305 S GIBSON BOULEVARD - EV
ALBUQUERQUE, NM 87108

NO.	REVISION	DATE	INIT.
0	ISSUE FOR PERMIT	10/17/22	
1	CITY COMMENTS	01/13/23	

ORIGINAL SIZE 24"X36"
SHEET SIZE ARCH "D"

PROJECT #
222001.130

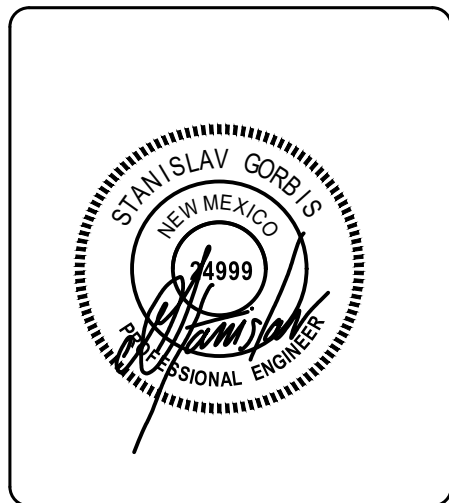
SHEET TITLE

EXISTING
SITE PLAN

SHEET NUMBER
G-000



PARKING ANALYSIS	
TOTAL BUILDING AREA (S.F.)	97,895
TOTAL NUMBER OF REQUIRED PARKING SPACES <small>(ONE SPACE PER 200 SQUARE FEET FOR THE FIRST 15,000 SQUARE FEET OF NET LEASABLE AREA; THEN, ONE SPACE PER 250 SQUARE FEET FOR THE NEXT 45,000 SQUARE FEET OF NET LEASABLE AREA; THEN, ONE SPACE PER 300 SQUARE FEET FOR THE NET LEASABLE AREA THAT EXCEEDS 60,000 SQUARE FEET)</small>	382
TOTAL NUMBER OF PROPOSED STANDARD PARKING SPACES	435
TOTAL NUMBER OF REQUIRED BICYCLE PARKING SPACES <small>(ONE BICYCLE SPACE PER EACH 20 PARKING SPACES REQUIRED FOR AUTOMOBILES AND LIGHT TRUCKS)</small>	20
TOTAL NUMBER OF REQUIRED MOTORCYCLE PARKING SPACES	6



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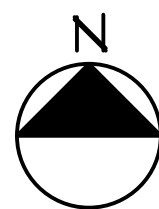
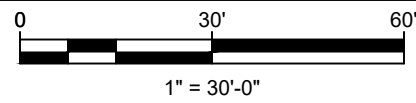
ORIGINAL SIZE 24"x36"
SHEET SIZE ARCH "D"

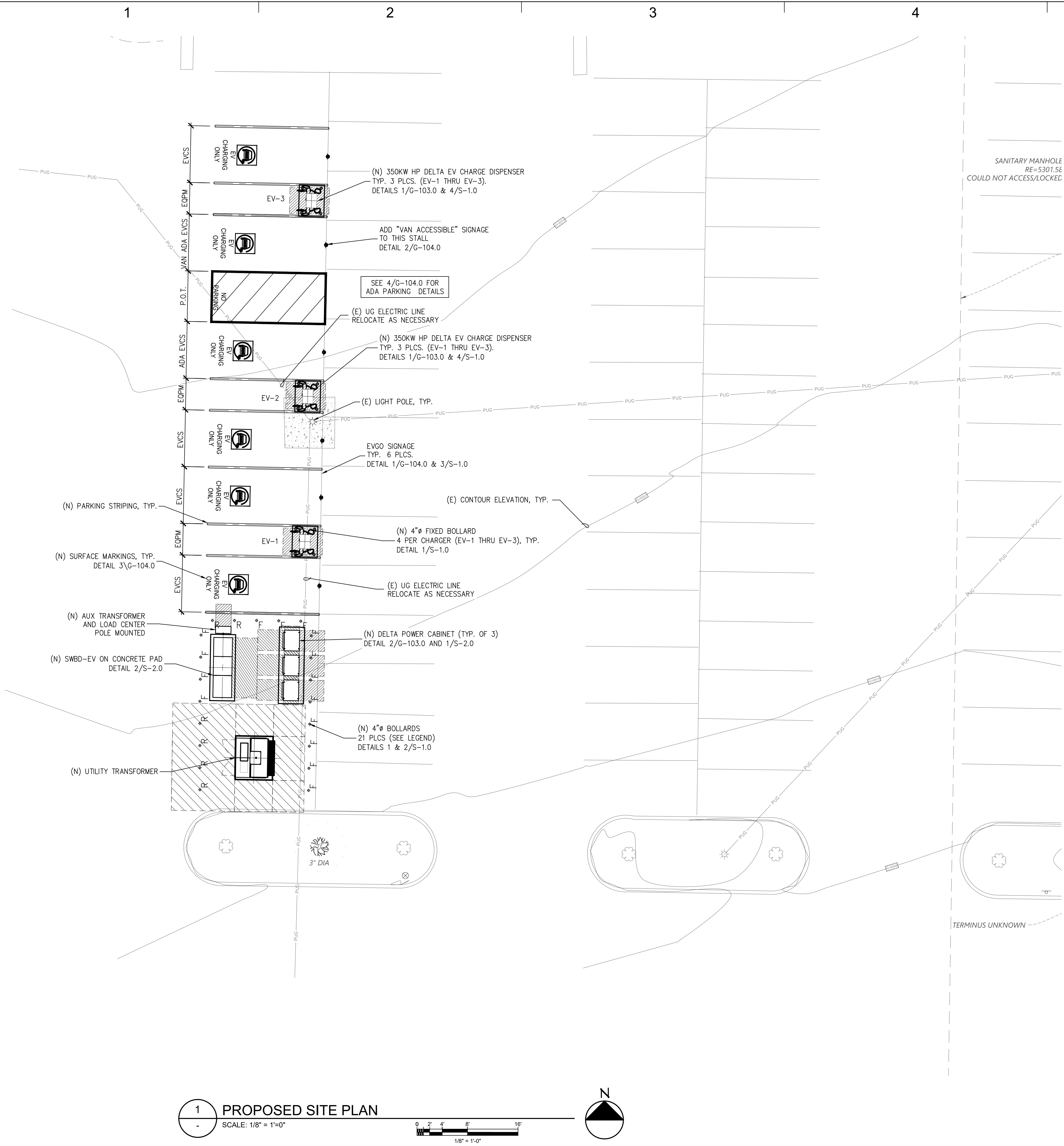
PROJECT #
222001.130

SHEET TITLE
OVERLAY SITE
PLAN

SHEET NUMBER
G-001

1 OVERLAY SITE PLAN
SCALE: 1" = 30'-0"





1

PROPOSED SITE PLAN

SCALE: 1/8" = 1'-0"

0 2 4 8 16

1/8" = 1'-0"

N

EQUIPMENT SCHEDULE			
QTY	EQUIPMENT	PART #	DESCRIPTION
3	350kW EV POWER CABINET		DELTA 350kW POWER CABINET
3	350kW EV CHARGER	DP350K	DELTA DC HIGH POWER CHARGE DISPENSER

PARKING STALL SCHEDULE	
EXISTING STALLS	12
PROPOSED EVgo STANDARD STALLS	4
PROPOSED EVgo ADA STALLS	2
NET STALL COUNT	-6

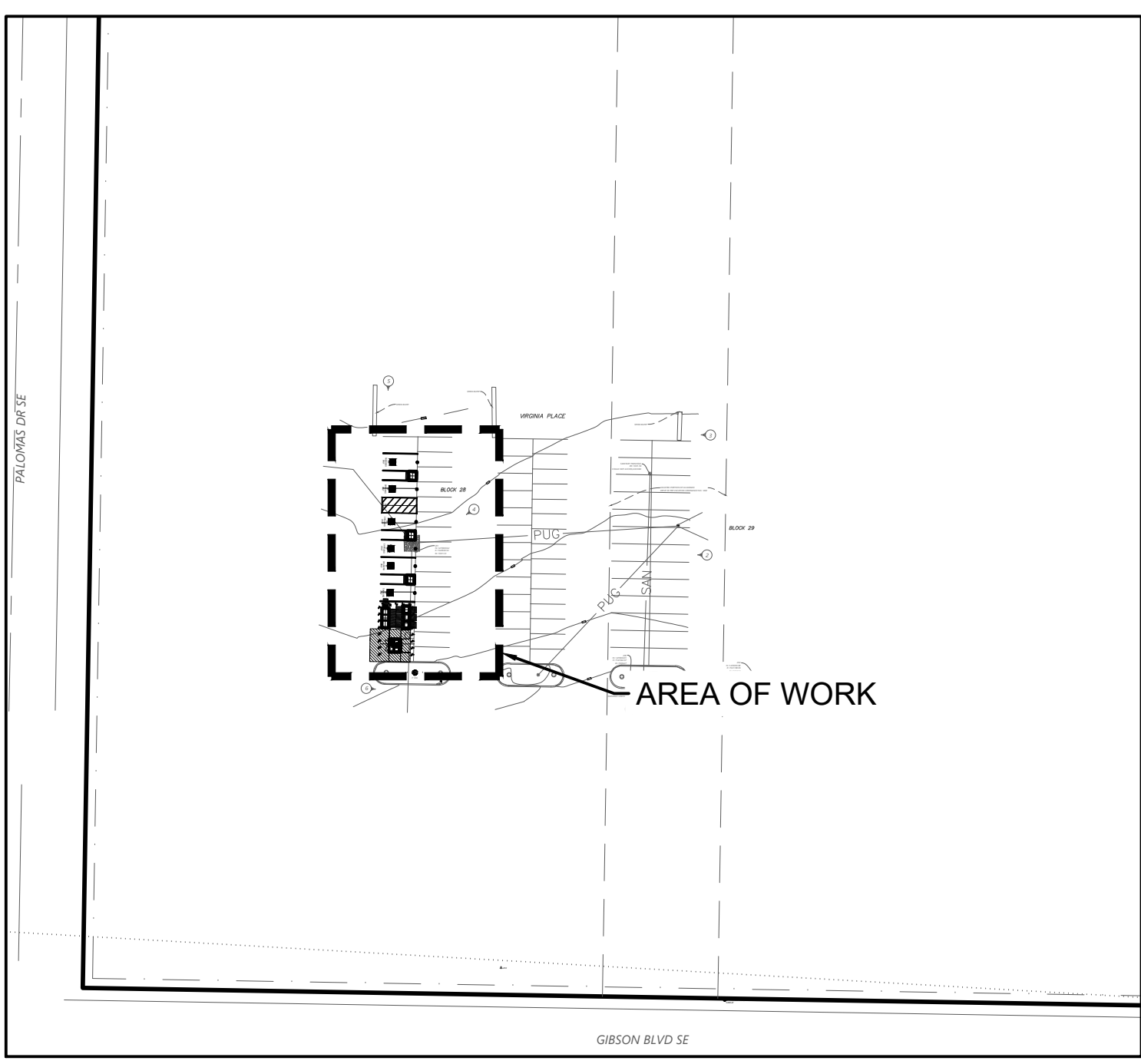
CHARGER COORDINATES	
CHARGER	COORDINATES (LAT,LON)
EV-1	35.059069°, -106.582463°
EV-2	35.059127°, -106.582467°
EV-3	35.059217°, -106.582457°

CLEARANCES

DELTA POWER CABINET - 4'-0" FRONT AND REAR, 8" SIDES
DELTA 350KW DISPENSER - 2'-8" FRONT, 1'-0" SIDES AND 2'-0" REAR
AUX TRANSFORMER - 3'-6" FRONT
SWBD-EV - 4'-0" FRONT
UTILITY TRANSFORMER - 8'-0" FRONT, 5'-0" REAR AND SIDES

LEGEND

R - REMOVABLE BOLLARD
F - FIXED BOLLARD

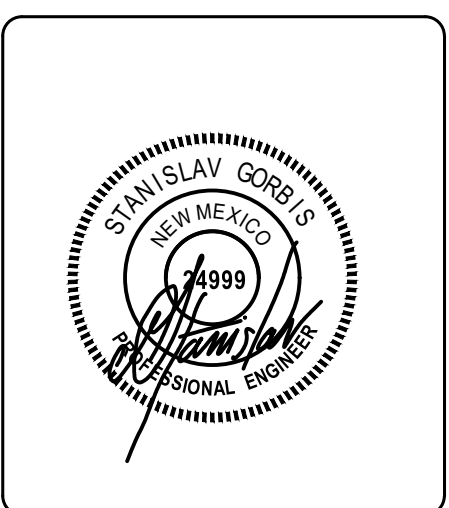


2

VICINITY MAP

SCALE: 1" = 80'-0"

N



SIESTA HILLS
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ALBUQUERQUE, NM 87108

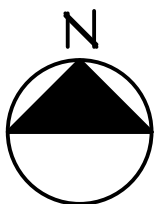
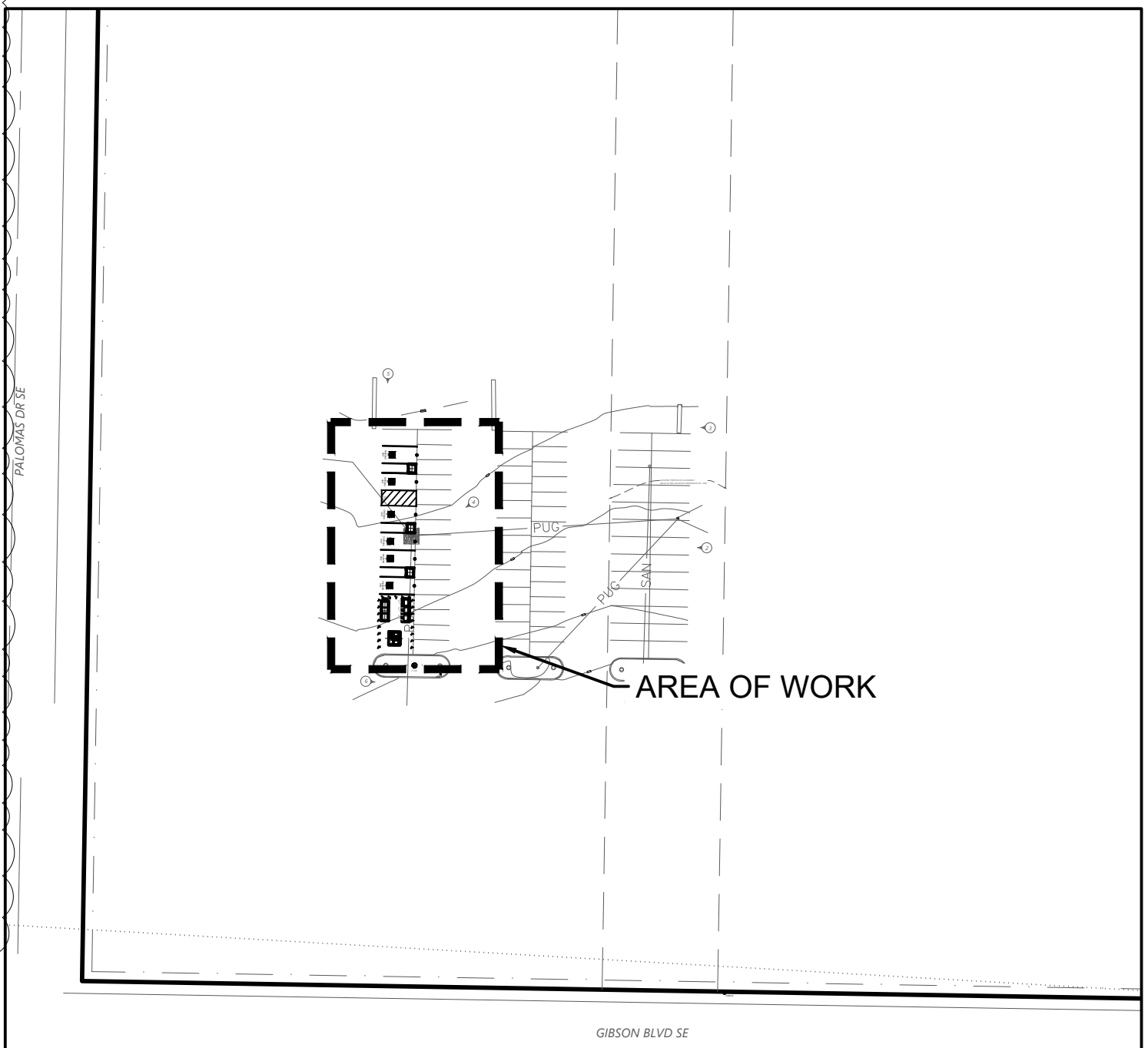
NO.	REVISION	DATE	INIT.
0	ISSUE FOR PERMIT	10/17/22	
1	CITY COMMENTS	01/13/23	

ORIGINAL SIZE 24"x36"
SHEET SIZE ARCH "D"

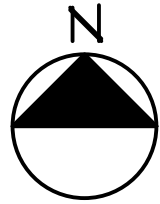
PROJECT #
222001.130

SHEET TITLE
PROPOSED
SITE PLAN

SHEET NUMBER
G-100.0



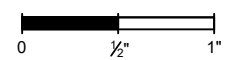
2 VICINITY MAP
- SCALE: 1" = 80'-0"



SIESTA HILLS
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ALBUQUERQUE, NM 87108

[illegible]

ORIGINAL SIZE 24"X36"
SHEET SIZE ARCH "D"

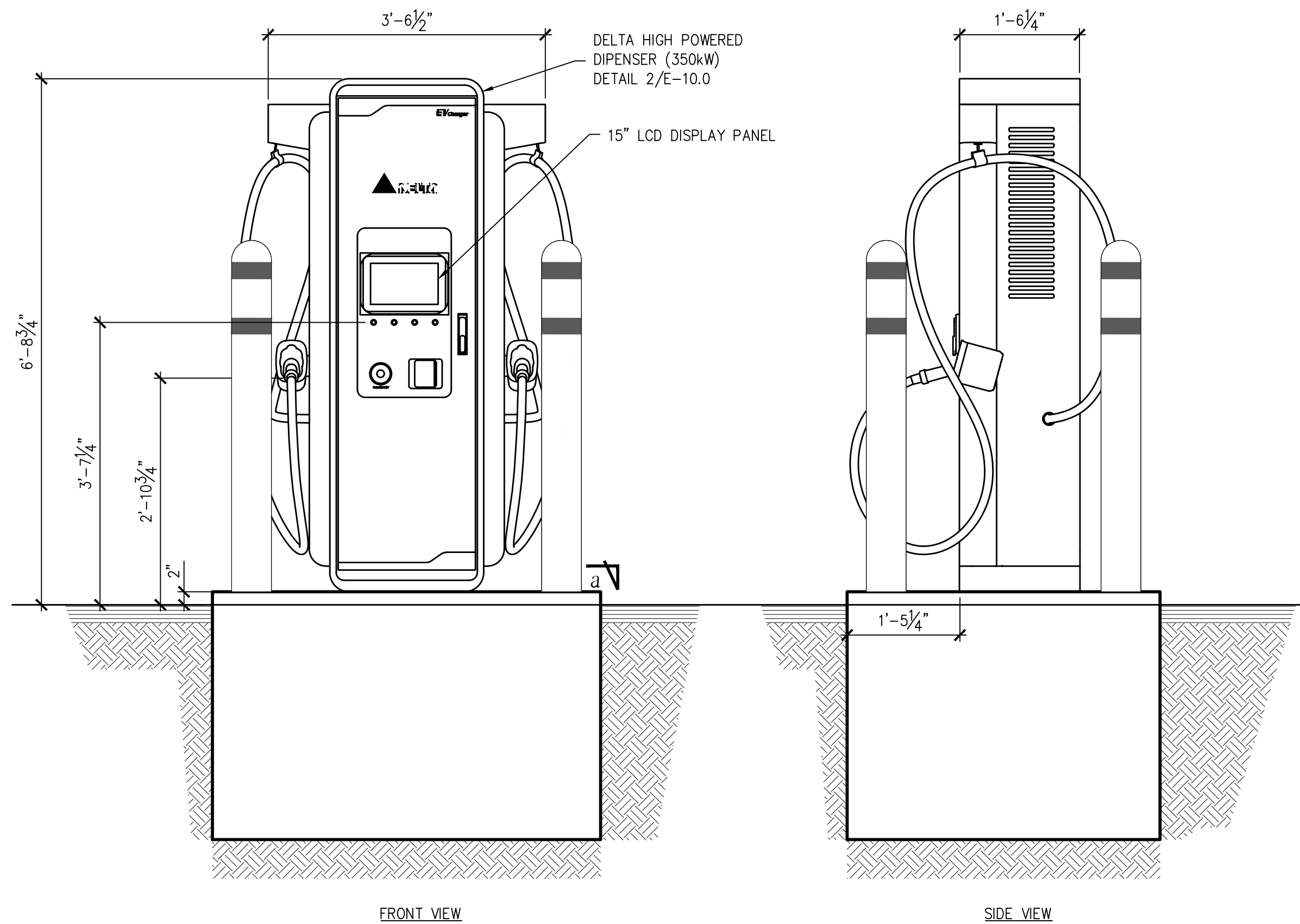


PROJECT #
222001.130

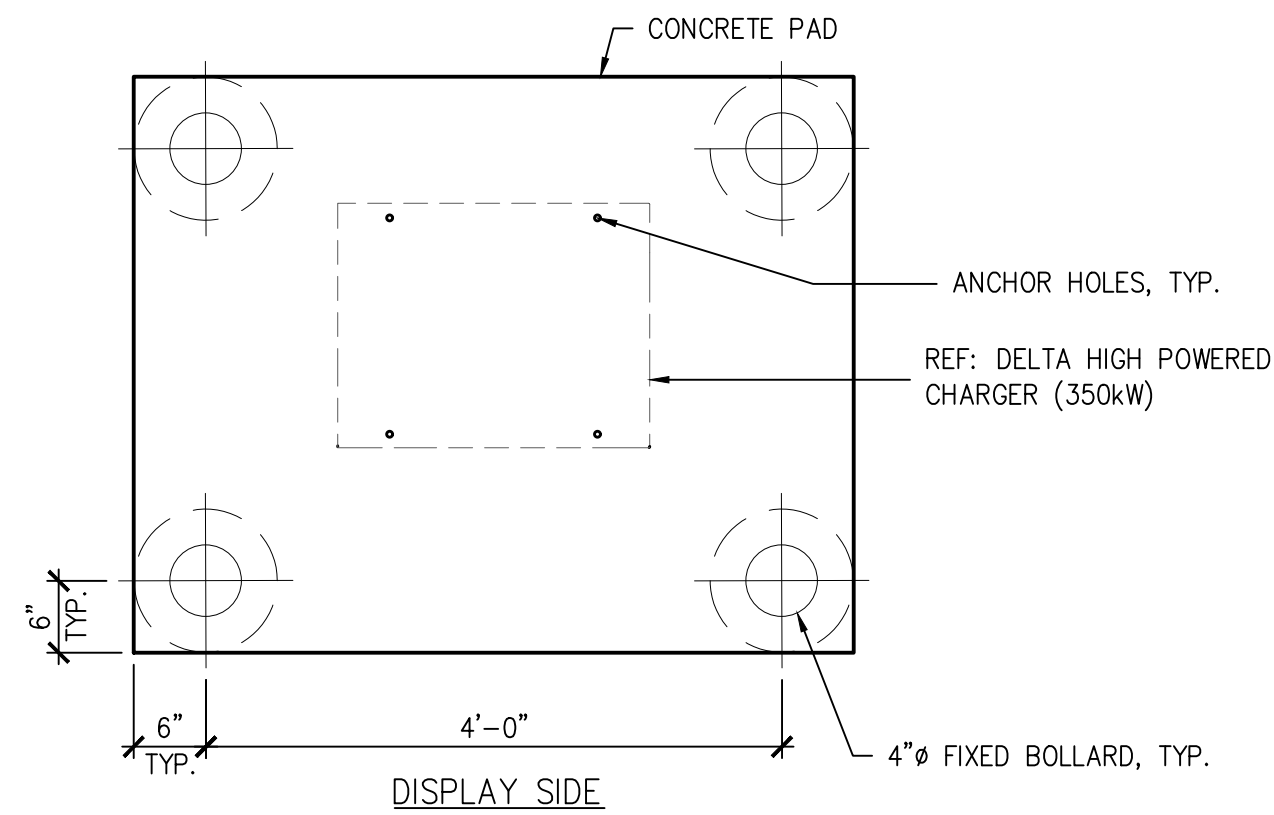
SHEET TITLE

GENERAL
ARRANGEMENT

SHEET NUMBER
G-101.0



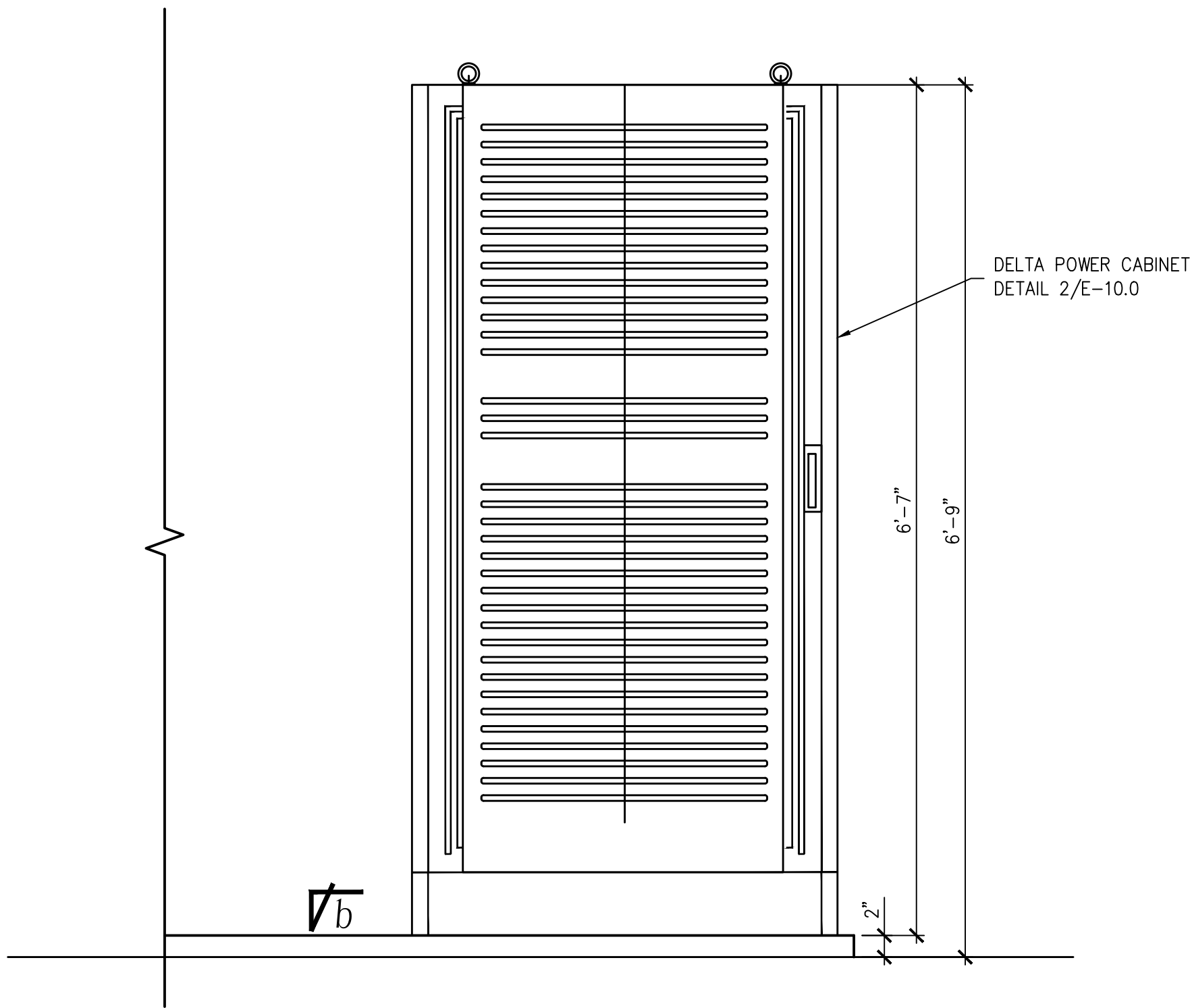
1 DELTA 350KW HP DISPENSER
G-100 SCALE: 3/4" = 1'-0"



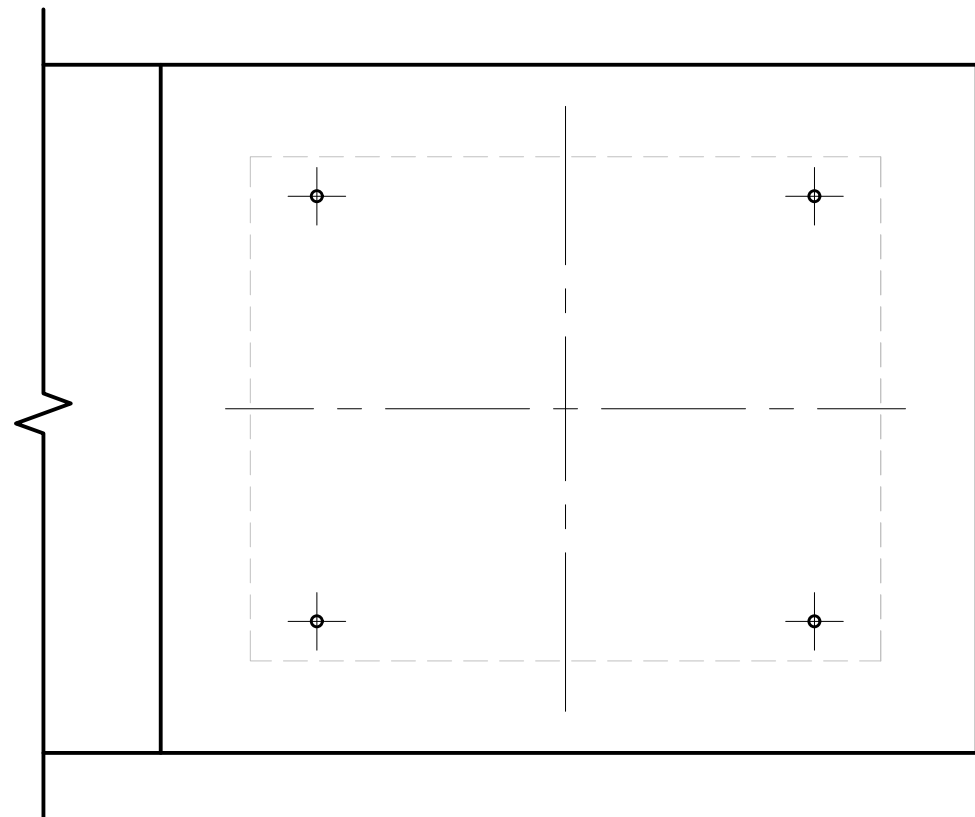
SECTION a
SCALE: 1" = 1'-0"

NOTE:

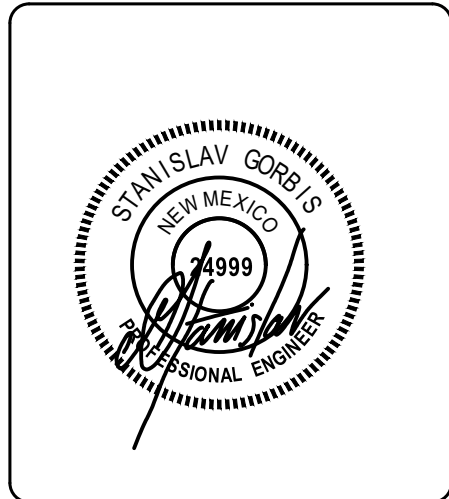
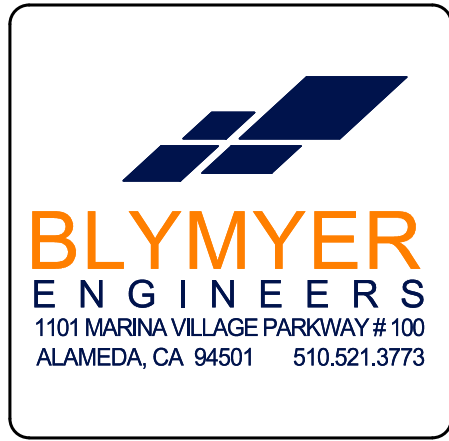
- REFER TO FINAL MANUFACTURER INSTALLATION INSTRUCTIONS BEFORE CONSTRUCTING. DIMENSIONS GIVEN FOR REFERENCE ONLY, TYP.



2 DELTA POWER CABINET DETAIL
G-100 SCALE: 1" = 1'-0"

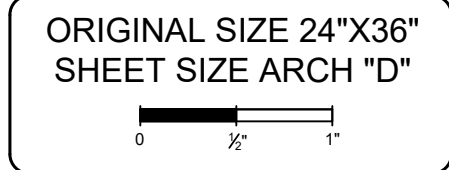


SECTION b
SCALE: 1" = 1'-0"



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ALBUQUERQUE, NM 87108

NO.	REVISION	DATE	INIT.
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PROJECT #
222001.130

SHEET TITLE
EQUIPMENT
DETAILS

SHEET NUMBER
G-103.0

1

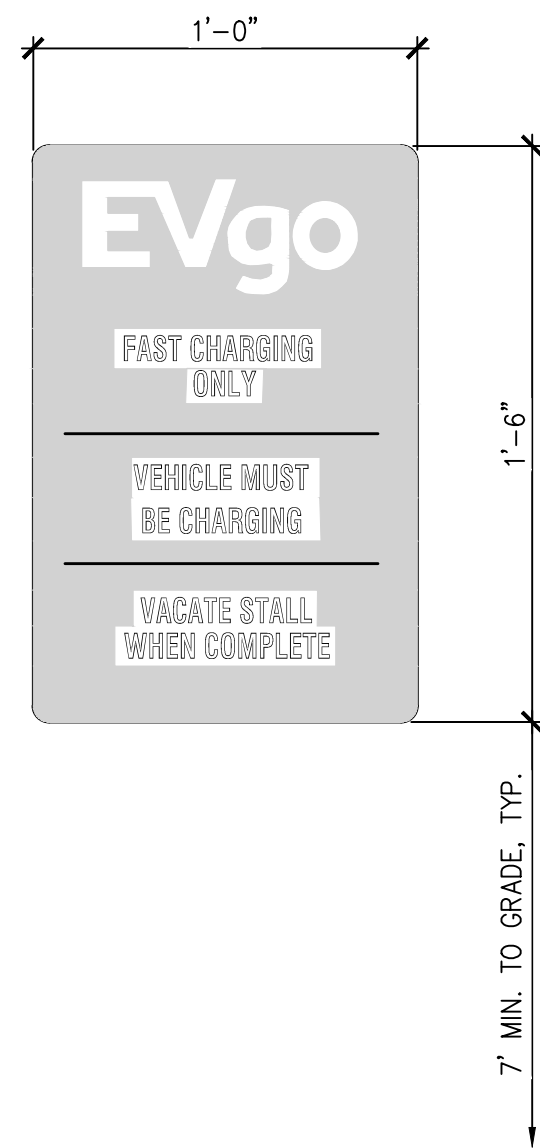
2

3

4

5

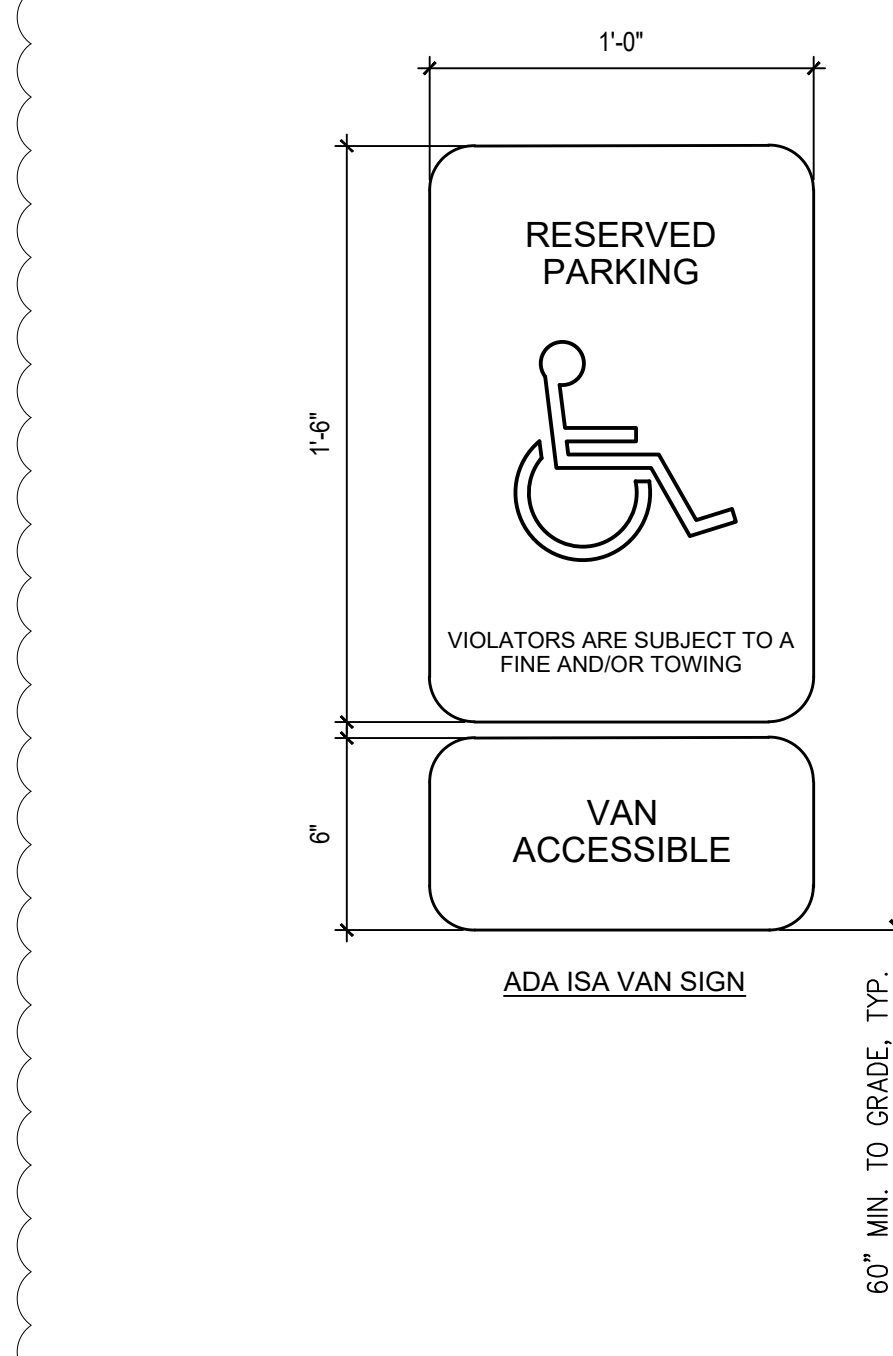
6



1

STANDARD STALL SIGNAGE DETAIL

G-100.0 SCALE: 2" = 1'-0"



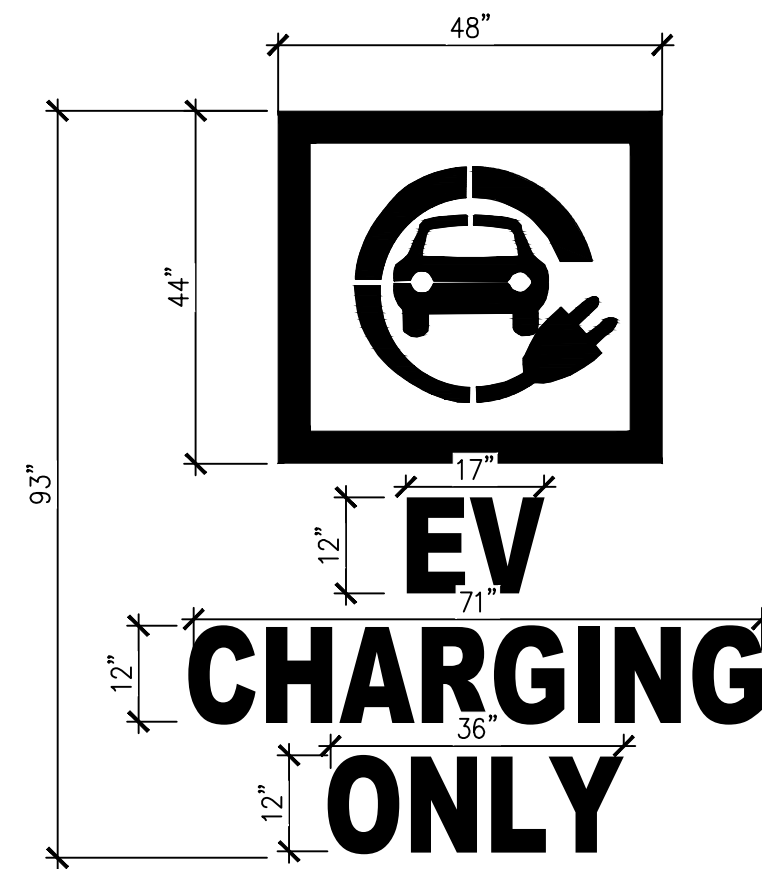
2

ACCESSIBLE SIGNAGE DETAIL

G-100.0 SCALE: 2" = 1'-0"

SIGN NOTES:

1. STALL SIGNAGE SHALL BE REFLECTORIZED WITH A MINIMUM AREA OF 70 SQ. INCHES.
2. SIGN SHALL BE VISIBLE FROM THE EVCS IT SERVES.
3. SIGN SHALL BE PERMANENTLY POSTED EITHER IMMEDIATELY ADJACENT OR WITH IN THE PROJECTED VEHICLE SPACE.
4. SIGN SHALL BE LOCATED AT THE HEAD OF THE VEHICLE SPACE.
5. SIGN SHALL BE 7 FEET MINIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE MEASURED TO THE BOTTOM OF THE SIGN.
6. SIGNS LOCATED WITHIN AN ACCESSIBLE ROUTE SHALL BE 80 INCHES MINIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE MEASURED TO THE BOTTOM OF THE SIGN.
7. SIGN MAY ALSO BE PERMANENTLY POSTED ON A WALL AT THE INTERIOR END OF THE VEHICLE SPACE.
8. EVgo SHALL SUPPLY THE VEHICLE STALL SIGNAGE.



3

STANDARD STALL MARKINGS

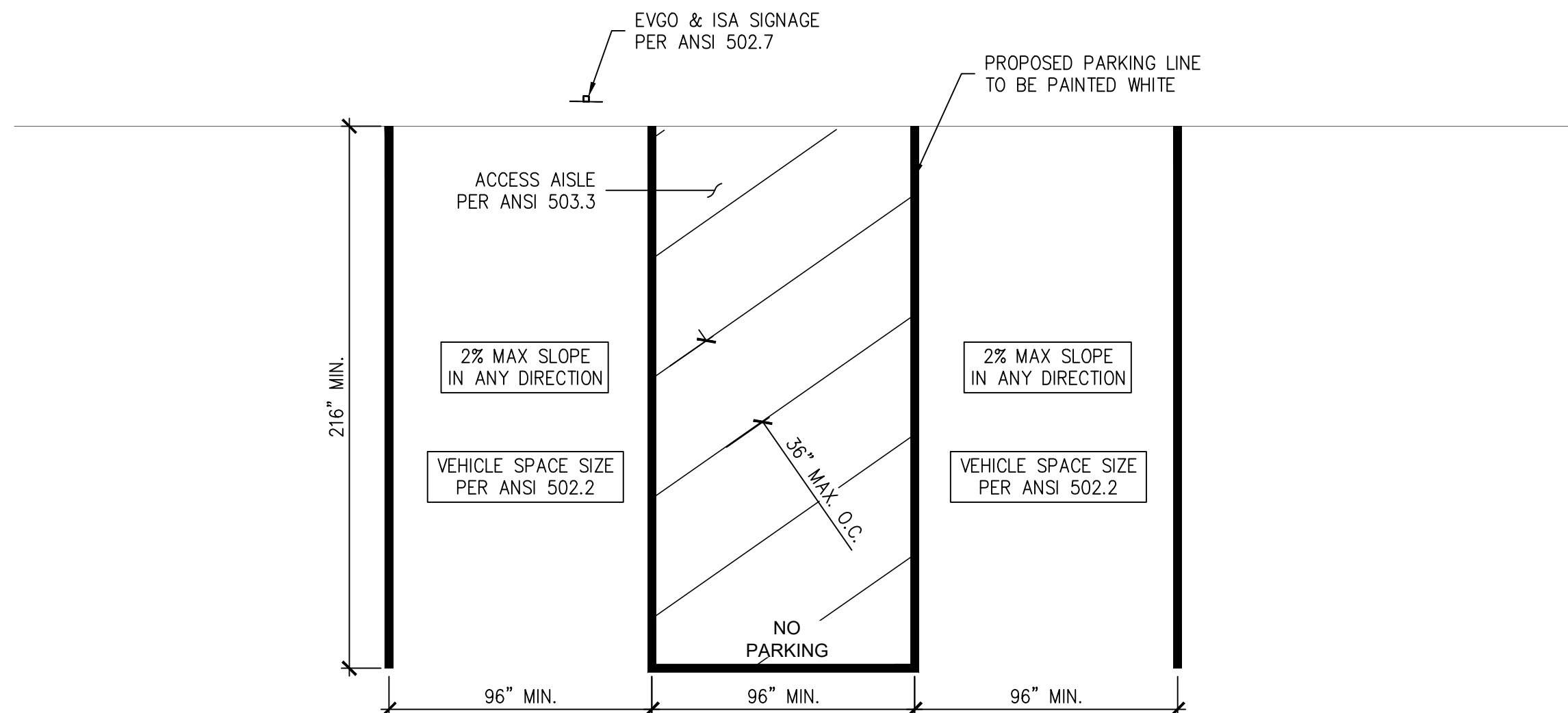
G-100.0 SCALE: 1/2" = 1'-0"

STALL MARKING NOTES:

1. USE ON ALL STANDARD AND VAN ACCESSIBLE STALLS WHERE APPLICABLE.
2. EVCS VEHICLE SPACES SHALL PROVIDE SURFACE MARKING STATION "EV CHARGING ONLY" IN LETTER 12" HIGH MINIMUM. THE CENTERLINE OF THE TEXT SHALL BE A MAXIMUM OF 6 INCHES FROM THE CENTER LINE OF THE VEHICLE SPACE AND ITS LOWER CORNER AT, OR LOWER SIDE ALIGNED WITH, THE END OF THE PARKING SPACE LENGTH.
3. PROVIDE 4 1/2" SPACING BETWEEN STENCILS
4. FONT SHALL BE STANDARD GOTHIC
5. COLOR: WHITE ON EXISTING SURFACE (NO FILL INSIDE STENCIL)

NOTES:

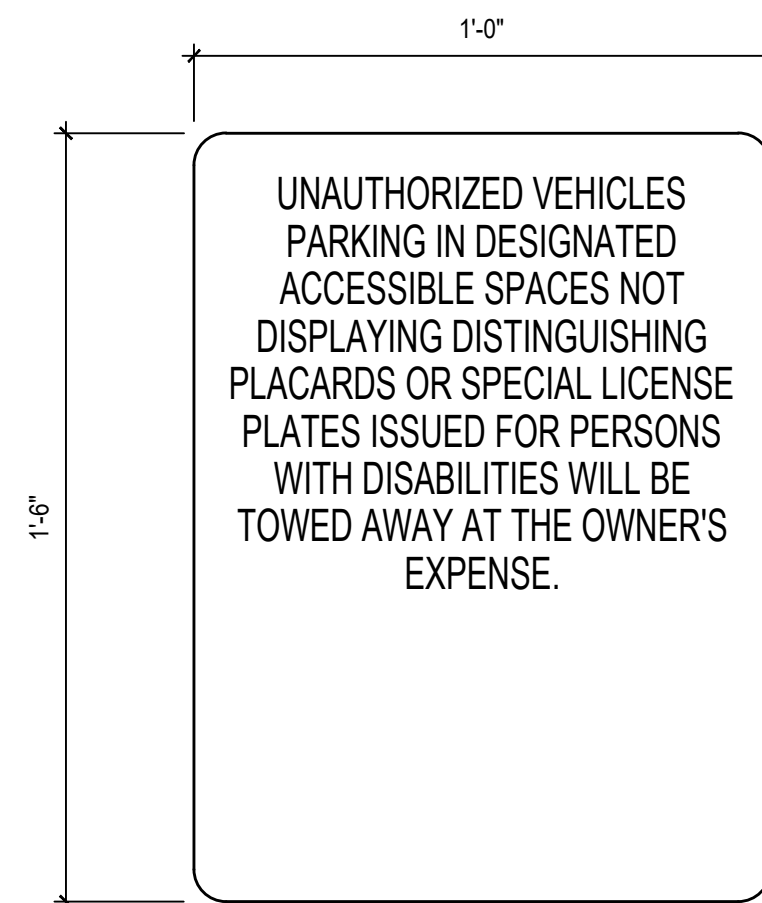
1. PROPOSED ADA STALLS AND WALKWAY SHALL BE MAX 2% SLOPE IN ALL DIRECTIONS.
2. REFER TO G-100 FOR PROPOSED SITE PLAN.
3. LOWER SIDE OF MARKING SHALL BE ALIGNED WITH THE END OF THE PARKING SPACE.



4

ACCESSIBLE PARKING DETAIL

G-100.0 SCALE: 1/4" = 1'-0"



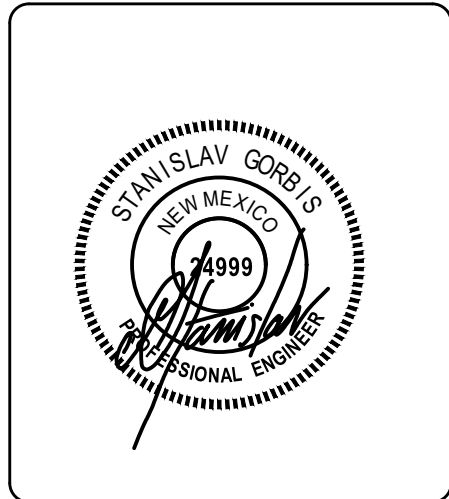
LETTERING PER 66-7-352.4C NMSA 1978

5

GENERAL TOWING SIGN DETAIL

G-100 SCALE: 2" = 1'-0"

E



D

C

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5305 S GIBSON BOULEVARD - EV
ALBUQUERQUE, NM 87108

B

NO.	REVISION	DATE	INIT.
0	ISSUE FOR PERMIT	10/17/22	
1	CITY COMMENTS	01/13/23	

A

ORIGINAL SIZE 24"X36"
SHEET SIZE ARCH "D"

PROJECT #
222001.130

SHEET TITLE
PARKING STALL DETAILS

SHEET NUMBER
G-104.0

1	2	3	4	5	6																								
GENERAL NOTES			ACCEPTANCE TESTING	QUALITY ASSURANCE NOTES																									
<div>1. AT ALL TIMES THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITION OF JOB SITE, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY AND FOR ALL NECESSARY INDEPENDENT ENGINEERING REVIEWS OF THESE CONDITIONS. THE ENGINEERS JOB SITE REVIEW IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTORS SAFETY MEASURES.</div> <div>2. THE CONTRACTOR SHALL MAKE AN EXAMINATION OF THE SITE AND COMPARE THE SITE WITH THE DRAWINGS AND SPECIFICATIONS AND SATISFY HIMSELF AS TO CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED. THE CONTRACTOR SHALL ASCERTAIN AND CHECK THE LOCATIONS OF ANY EXISTING STRUCTURES OR EQUIPMENT WHICH MAY AFFECT WORK THAT HAS TO BE PERFORMED. NO ALLOWANCE SHALL SUBSEQUENTLY BE MADE IN CONTRACTOR'S BEHALF FOR ANY EXPENSE TO WHICH THE CONTRACTOR MAY BE PUT DUE TO FAILURE OR NEGLECT BY CONTRACTOR TO MAKE SUCH EXAMINATION.</div> <div>3. ALL WORK SHALL BE COORDINATED WITH THE OWNER TO MAINTAIN CONTINUITY OF SERVICE AND MAXIMUM UTILIZATION OF THE OWNERS FACILITY.</div> <div>4. ELECTRICAL WORK SHALL CONFORM TO THE 2017 NEC AND CURRENT ISSUES OF ALL NFPA, IBC, IFC, ANSI, OSHA, ASTM, NEMA, AND OTHER NATIONALLY PUBLISHED CODES OR STANDARDS SHALL APPLY TO THIS WORK UNLESS LOCAL JURISDICTION SUPERSEDES. THE MOST STRINGENT CODES SHALL APPLY.</div> <div>5. NOTHING IN THE DRAWINGS OR SPECIFICATIONS IS INTENDED TO ALLOW A VIOLATION OF ELECTRICAL WORKING SPACE AROUND ELECTRICAL EQUIPMENT REQUIREMENT. ANY DEVIATION FROM THIS REQUIREMENT SHALL BE APPROVED IN WRITING, BY THE ENGINEER. THE CONTRACTOR SHALL RELOCATE ANY EQUIPMENT IN VIOLATION OF THE ELECTRICAL CODE AT HIS OWN COST.</div> <div>6. PROVIDE PHENOLIC NAMEPLATE WITH WHITE LETTERING ON BLACK BACKGROUND FOR EACH ELECTRICAL EQUIPMENT. PROVIDE PERMANENT MEANS OF ATTACHMENT THAT WILL NOT VIOLATE NEMA RATING OR EQUIPMENT WARRANTY.</div> <div>7. REFER TO THE DRAWINGS FOR LOCATIONS AND SPACE REQUIREMENTS OF ELECTRICAL EQUIPMENT. COORDINATE THE INSTALLATION OF ELECTRICAL EQUIPMENT WITH OTHER TRADES.</div> <div>8. POWER FEEDERS ARE SHOWN ON ELECTRICAL PLAN. REFER TO THE SINGLE LINE DIAGRAM FOR FEEDER INFORMATION.</div> <div>9. CONTRACTOR SHALL SECURE AND PAY FOR ELECTRICAL TRADE SPECIFIC CONSTRUCTION PERMITS, LICENSES, GOVERNMENTAL AND INSPECTION FEES NECESSARY FOR THE EXECUTION OF THE WORK, UNLESS OTHERWISE DIRECTED.</div> <div>10. ELECTRICAL CONTRACTOR SHALL PROVIDE COMPLETE ELECTRICAL INSTALLATION IN ACCORDANCE WITH ESTABLISHED TECHNIQUES AND ACCEPTED PRACTICES AND ALL LOCAL, STATE, AND NATIONAL CODES HAVING JURISDICTION.</div> <div>11. ELECTRICAL REQUIREMENTS SUCH AS CONDUIT ROUTING AND LOCATIONS OF ELECTRICAL DEVICES (RECEPTACLES, SWITCHES, FLOOR OUTLETS, CONDUIT STUBS, ETC.) SHOWN ON THESE PLANS ARE DIAGRAMMATIC AND SUBJECT TO VERIFICATION BY ELECTRICAL CONTRACTOR FOR THE INTERFACING OF THE ELECTRICAL WORK WITH THE INSTALLATION. CONTRACTOR SHALL MAKE FIELD ADJUSTMENTS TO CLEAR THE OTHER FACILITIES EXCEPT AS SHOWN DIMENSIONED ON THE ARCHITECTURAL DRAWINGS OR AS APPROVED BY THE ARCHITECT.</div> <div>12. ELECTRICAL EQUIPMENT SHOWN OR SPECIFIED FOR THIS PROJECT HAS BEEN GENERALLY SELECTED BASED ON DIMENSIONS TO FIT THE SPACE. THE CONTRACTOR SHALL VERIFY EQUIPMENT DIMENSIONS AND/OR ANY INTERFERENCES PRIOR TO ORDERING THE CONTRACTOR OR OWNER PROVIDED EQUIPMENT.</div> <div>13. MANUFACTURER'S RECOMMENDATIONS FOR CONDUCTOR SIZING, CIRCUIT BREAKER OR FUSE RATING OF ELECTRICALLY OPERATED EQUIPMENT MAY DIFFER FROM THOSE INDICATED ON DRAWINGS. CONTRACTOR SHALL CONFIRM RATINGS PRIOR TO ORDERING CONTRACTOR OR OWNER PROVIDED EQUIPMENT.</div> <div>14. CONTRACTOR SHALL REVIEW THE MECHANICAL AND PLUMBING DRAWINGS IF APPLY, AND CONNECT ELECTRICALLY OPERATED EQUIPMENT UNLESS OTHERWISE NOTED. COORDINATE THE LOCATION AND ELECTRICAL CONNECTION REQUIREMENTS PRIOR TO ORDERING OF CONTRACTOR OR OWNER PROVIDED ELECTRICAL AND MECHANICAL EQUIPMENT.</div> <div>15. CONTRACTOR SHALL REVIEW THE SECTIONS OF EACH DIVISION OF THE SPECIFICATION (WHERE APPROPRIATE) AND PROVIDE CONNECTIONS TO ELECTRICALLY OPERATED EQUIPMENT AS MAY BE SPECIFIED THEREIN.</div> <div>16. ALL CONDUIT ONLY (CO) NOTED SHALL HAVE PULL ROPES OR WIRES INSTALLED, TENSILE STRENGTH MINIMUM OF 200 FT/LBS.</div> <div>17. CONTRACTOR SHALL PROVIDE PULL BOX(S) AS REQUIRED TO COMPLY WITH NEC 352.26 & NEC 356.26.</div> <div>18. ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE LISTED BY UNDERWRITER'S LABORATORIES OR OTHER APPROVED NRTL, AND SHALL BEAR THEIR LABEL. ALL CONTROL PANELS SHALL BE SO LISTED AS AN ASSEMBLY.</div> <div>19. ELECTRICAL EQUIPMENT AND FEEDERS SHALL BE SUPPORTED AND/OR ANCHORED IN ACCORDANCE WITH IBC SEISMIC REQUIREMENTS. DO NOT SUPPORT CONDUITS FROM MECHANICAL DUCTS, PLUMBING, PIPING, OR EQUIPMENT OF ANY KIND.</div> <div>20. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, FEES AND EQUIPMENT SPECIFIED, INDICATED OR IMPLIED IN THESE DOCUMENTS TO ACCOMPLISH THE CONSTRUCTION IN A PROFESSIONAL, WORKMANLIKE MANNER. ANY DISCREPANCIES BETWEEN THE CONSTRUCTION TASKS INDICATED AND LOCAL CODES AND/OR ORDINANCES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE GENERAL CONTRACTOR AND/OR OWNER FOR RESOLUTION BEFORE PROCEEDING WITH THE WORK AT ISSUE.</div> <div>21. THE CONTRACTOR SHALL CONSULT THE MECHANICAL, STRUCTURAL, AND OTHER DRAWINGS AND DOCUMENTATION RELATED TO THE PROJECT FOR ADDITIONAL WORK TO BE PROVIDED.</div>			<div>22. THE OWNER RETAINS FIRST SALVAGE RIGHTS TO ALL EXISTING EQUIPMENT REMOVED UNDER THIS CONTRACT. THE ELECTRICAL CONTRACTOR SHALL CONSULT WITH THE OWNER FOR DISPOSITION OF THE EXISTING EQUIPMENT TO BE REMOVED.</div> <div>23. ANY WORK INSTALLED INCORRECTLY, OR BEFORE APPROVAL HAS BEEN OFFICIALLY GRANTED FOR THOSE ITEMS AT ISSUE, SHALL BE CORRECTED BY THE ELECTRICAL CONTRACTOR AT NO CHARGE TO OWNER/ARCHITECT/CLIENT.</div> <div>24. ALL MATERIALS AND EQUIPMENT FURNISHED BY THE CONTRACTOR SHALL BE NEW AND COMPLETELY SERVICEABLE UNLESS OTHERWISE SPECIFIED.</div> <div>25. CONTRACTOR SHALL COORDINATE ROUGH-IN AND FINAL CONNECTION REQUIREMENTS WITH THE OWNER, EQUIPMENT SUPPLIERS, GENERAL CONTRACTOR AND OTHER BUILDING TRADES BEFORE PROCEEDING WITH ANY FURTHER RELATED WORK. INSTALLATIONS SHALL BE IN FULL ACCORDANCE WITH EQUIPMENT MANUFACTURER'S RECOMMENDATIONS AND REQUIRED CODES. CONFLICTS AND INTERFERENCES SHALL BE RESOLVED IMMEDIATELY, BEFORE ANY INSTALLATION BEGINS.</div> <div>26. FINAL ACCEPTANCE OF WORK IN PLACE SHALL BE SUBJECT TO APPROVAL BY OWNER'S REPRESENTATIVE AND ARCHITECT/ENGINEER. INSTALLATION APPROVAL SHALL BE BASED ON APPROVED SUBMITTALS, SHOP DRAWINGS AND LOCAL INSPECTION.</div> <div>27. CONTRACTOR SHALL SUBMIT "FOR RECORD" MARKUP DRAWINGS WITHIN TWO (2) WEEKS AFTER DATE OF NOTIFICATION OF FINAL APPROVAL OF WORK-IN-PLACE. CONTRACTOR'S FINAL INVOICE WILL NOT BE PAID WITHOUT COMPLETE DOCUMENTATION.</div> <div>28. CONTRACTOR SHALL WARRANT ALL WORKS FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE OF WORK-IN-PLACE. CONTRACTOR SHALL REPAIR OR REPLACE ANY DEFECTIVE WORK INCLUDING MATERIALS AND EQUIPMENT AT NO ADDITIONAL COST TO THE OWNER WITHIN WARRANTY PERIOD.</div> <div>29. THE CONTRACTOR SHALL PROVIDE ALL FUSES AND OVERLOAD HEATER ELEMENTS REQUIRED FOR THIS CONTRACT INSTALLATION INCLUDING ANY FUSES BLOWN DURING INITIAL TESTING.</div> <div>30. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES TO ALL WALLS, FLOORS AND PAVING. IF DAMAGE OCCURS DURING CONSTRUCTION, ELECTRICAL CONTRACTOR SHALL COORDINATE WITH OWNER TO PATCH, PAINT AND REPAIR TO MATCH EXISTING CONDITIONS.</div> <div>31. CONDUIT AND WIRE SCHEDULE FOR NEW EQUIPMENT ARE GENERALLY INDICATIVE. CONTRACTOR SHALL REFER TO MANUFACTURER AND SUPPLIER OF EQUIPMENT FOR DETAILED WIRING DIAGRAM AND VERIFY THE EXACT ROUTING AND CONDUCTOR SIZE.</div> <div>32. THE CONTRACTOR SHALL REFER TO MANUFACTURER AND SUPPLIER OF ELECTRICAL CONTROL EQUIPMENT FOR EXACT WIRING INTERCONNECTION.</div> <div>33. ALL CONDUCTORS SHALL BE ALUMINUM OR COPPER STRANDED, AND HAVE INSULATION TEMPERATURE RATING 90°C, UNLESS OTHERWISE NOTED.</div> <div>34. IDENTIFICATION OF GROUNDED CONDUCTORS SHALL BE IN ACCORDANCE WITH NEC 200.6. IDENTIFICATION OF EQUIPMENT GROUNDING CONDUCTORS SHALL BE IN ACCORDANCE WITH NEC 250.19. IDENTIFICATION OF UNGROUNDED CONDUCTORS IS REQUIRED FOR MULTIWIRE CIRCUITS AND SHALL BE AS FOLLOWS:</div> <table><tr><th>SYSTEM</th><th>480Y/277V</th><th>208Y/120V</th><th>120/240V 1-PHASE</th></tr><tr><td>PHASE A</td><td>BROWN</td><td>BLACK</td><td>BLACK (LINE 1)</td></tr><tr><td>PHASE B</td><td>ORANGE</td><td>RED</td><td>RED (LINE 2)</td></tr><tr><td>PHASE C</td><td>YELLOW</td><td>BLUE</td><td></td></tr></table> <div>35. USE WIRE IDENTIFICATION COLOR CODE PER SPECIFICATIONS BELOW.</div> <table><tr><th>COLOR</th><th>DESCRIPTION</th></tr><tr><td>LT. BLUE</td><td>INTRINSICALLY SAFE CIRCUITS</td></tr><tr><td>GREEN</td><td>EQUIPMENT GROUNDING CONDUCTOR</td></tr><tr><td>YELLOW</td><td>CONTROL CIRCUITS SUPPLIED FROM EXTERNAL POWER SOURCE, INTERLOCKS</td></tr></table> <div>36. MEDIUM VOLTAGE CABLE MARKINGS SHALL UTILIZE COLORED CONDUCTOR TAPE FOR ALL PHASES: FOLLOW THE EXISTING COLOR SCHEME IF ONE EXISTS, OTHERWISE PROVIDE YELLOW COLORED, SELF-ADHESIVE VINYL TAPE NOT LESS THAN 3 MILS THICK BY 1 INCH WIDE. 1 STRIPE FOR THE A PHASE CONDUCTOR, 2 STRIPES FOR THE B PHASE CONDUCTOR, 3 STRIPES FOR THE C PHASE CONDUCTOR. TAPE SHALL BE LOCATED AT ALL TERMINATIONS, SPLICES AND PULL BOXES.</div> <div>37. THE ELECTRICAL DESIGN AND EQUIPMENT RATINGS ARE BASED ON ELECTRICAL SYSTEM STUDIES WHICH MAY INCLUDE:<div><div>A. LOAD FLOW</div><div>B. SHORT CIRCUIT</div><div>C. ARC FLASH</div><div>D. RELAY COORDINATION</div><div>E. GROUNDING</div><div>F. CABLE SIZING</div></div></div> <div>39. OUTDOOR SITE LIGHTING SHALL COMPLY WITH DARK SKY GUIDELINES.</div>	SYSTEM	480Y/277V	208Y/120V	120/240V 1-PHASE	PHASE A	BROWN	BLACK	BLACK (LINE 1)	PHASE B	ORANGE	RED	RED (LINE 2)	PHASE C	YELLOW	BLUE		COLOR	DESCRIPTION	LT. BLUE	INTRINSICALLY SAFE CIRCUITS	GREEN	EQUIPMENT GROUNDING CONDUCTOR	YELLOW	CONTROL CIRCUITS SUPPLIED FROM EXTERNAL POWER SOURCE, INTERLOCKS	<p>THE FOLLOWING TESTS SHALL BE PERFORMED PRIOR TO ENERGIZATION OF THE SYSTEM WHEN APPLICABLE: TEST RESULTS SHALL BE MADE AVAILABLE TO THE ENGINEER OF RECORD OR BUILDING OFFICIAL UPON REQUEST.</p> <div>1. GROUND-FAULT PROTECTION EQUIPMENT</div> <div>1.1. VERIFY PICKUP AND TIME DELAY SETTINGS ARE IN ACCORDANCE WITH SETTINGS PROVIDED BY THE ENGINEER OR EQUIPMENT MANUFACTURER.</div> <div>2. ELECTRICAL TESTS SWITCHBOARDS, PANELBOARDS, MOTOR CONTROL CENTERS AND OTHER EQUIPMENT RATED 1000 AMPERES OR MORE, OR OVER 1000 VOLTS.</div> <div>2.1. RELAY PICKUP CURRENT BY CURRENT INJECTION AT THE SENSOR AND OPERATION OF THE CIRCUIT INTERRUPTING DEVICE</div> <div>2.2. TEST RELAY TIMING.</div> <div>2.3. TEST PRIMARY CONTROL VOLTAGE AT NOT MORE THAN 57 PERCENT OF ITS RATED VOLTAGE</div> <div>2.4. VOLTAGE-TO-GROUND CONDUCTOR INSULATION RESISTANCE</div> <div>2.5. VERIFICATION OF CONTINUITY OF EQUIPMENT GROUNDING SYSTEM.</div> <div>2.6. INSULATION RESISTANCE TEST ON EACH BUS AND PROTECTIVE DEVICE, PHASE-TO-PHASE AND PHASE-TO-GROUND.</div> <div>2.7. DIELECTRIC VOLTAGE-WITHSTAND TEST ON EACH BUS AND PROTECTIVE DEVICE, PHASE-TO-PHASE AND PHASE-TO-GROUND.</div> <div>2.8. CONTROL POWER TRANSFORMER, CONTROL POWER CIRCUITS AND POTENTIAL CIRCUITS.</div> <div>2.9. CONTROL AND PROTECTIVE DEVICES FOR PROPER OPERATION.</div> <div>3. ELECTRICAL TESTS ON TRANSFORMERS RATED 100 KVA OR MORE SINGLE PHASE AND 300 KVA OR MORE THREE PHASE.</div> <div>3.1. INSULATION RESISTANCE TEST ON EACH WINDING. TEST WINDING-TO-WINDING AND WINDINGS-TO-GROUND.</div> <div>3.2. TURNS-RATIO TEST FOR EACH WINDING AT ALL TAP SETTINGS.</div> <div>3.3. CONTROL POWER TRANSFORMER, CONTROL POWER CIRCUITS AND POTENTIAL CIRCUITS.</div> <div>3.4. CONTROL AND PROTECTIVE DEVICES FOR PROPER OPERATION.</div> <div>4. CONDUCTORS THAT SUPPLY EQUIPMENT RATED AT 1000 AMPERES OR MORE, OR OVER 1000 VOLTS</div> <div>4.1. INSULATION RESISTANCE TEST ON EACH CONDUCTOR, PHASE-TO-PHASE AND PHASE-TO-GROUND.</div> <div>4.2. DC HIGH-POTENTIAL TEST ON EACH CONDUCTOR, PHASE-TO-PHASE AND PHASE-TO-GROUND.</div> <div>5. ELECTRICAL TESTS ON EMERGENCY AND STANDBY POWER SYSTEMS: SWITCHBOARDS, PANELBOARDS, DISTRIBUTION BOARDS, TRANSFER EQUIPMENT, POWER SOURCE, CONDUCTORS, FIRE PUMPS, EXHAUST AND VENTILATION FANS.</div> <div>5.1. CONTROL AND PROTECTIVE DEVICES FOR PROPER OPERATION.</div> <div>5.2. PHASE ROTATION TEST</div> <div>5.3. INSULATION RESISTANCE TEST ON FEEDER CONDUCTORS AND EQUIPMENT, PHASE-TO-PHASE AND PHASE-TO-GROUND.</div> <div>5.4. AUTOMATIC LOAD TRANSFER TEST. TEST NORMAL AND EMERGENCY POWER, OR NORMAL AND STANDBY POWER, OR BOTH. SIMULATE LOSS OF EMERGENCY AND NORMAL POWER OR STANDBY AND POWER, OR BOTH. SIMULATE ALL FORMS OF SINGLE PHASE CONDITIONS.</div> <div>5.5. CONDUCT OPERATIONAL TEST ON SYSTEM UNDER LOAD CONDITIONS.</div>	<div>1. FOLLOW AND ADHERE TO ALL MANUFACTURERS INSTALLATION INSTRUCTIONS.</div> <div>2. ALL ELECTRICAL TERMINATIONS SHALL BE TORQUED TO MANUFACTURERS' SPECIFICATIONS. WHERE THEY ARE NOT SPECIFIED, REFER TO UL STANDARDS 486A AND 486B. FINAL TORQUE TEST DOCUMENTATION SHALL BE PROVIDED TO OWNER OR HIS REPRESENTATIVE, WITH ONE OR THE OTHER IN WITNESS AT RANDOM TIMES.</div> <div>3. LINE AND LOAD CONDUCTORS SHALL BE BRACED AND SUPPORTED (LASHED, HELD FIRMLY IN PLACE) IN ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S SPECIFICATIONS AND NECA/IBEW APPROVED INSTALLATION PRACTICES.</div>
SYSTEM	480Y/277V	208Y/120V	120/240V 1-PHASE																										
PHASE A	BROWN	BLACK	BLACK (LINE 1)																										
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			EQUIPMENT SPECIFICATIONS																										
			THE FOLLOWING EQUIPMENT SPECIFICATION AND SUBMITTALS SHALL BE PROVIDED TO AND APPROVED BY THE ENGINEER OF RECORD PRIOR TO INSTALLATION:																										
			<div><div><div></div><div>ELECTRICAL EQUIPMENT INCLUDING: SWITCHGEAR, PANELBOARDS, MOTOR CONTROL CENTERS, AND SAFETY SWITCHES.</div></div><div><div></div><div>CONDUCTORS AND CABLES INCLUDING: MEDIUM VOLTAGE CABLES, LOW VOLTAGE CABLES, RV DC WIRING, AND CONTROL CABLES</div></div><div><div></div><div>PROTECTIVE DEVICES INCLUDING: CIRCUIT BREAKERS, FUSES, RELAYS, AND PROTECTION SETTINGS.</div></div><div><div></div><div>ELECTRIC VEHICLE CHARGING STATIONS</div></div><div><div></div><div>LIGHTING (IF APPLICABLE)</div></div></div>																										
			MOUNTING HEIGHTS																										
			MOUNTING HEIGHTS SHALL BE TO BOTTOM OF BOX, UNLESS OTHERWISE NOTED.																										
			RECEPTACLES	18"	VOLUME CONTROLS 48"																								
			RECEPTACLE WIREWAYS	43"	THERMOSTATS 48"																								
			SWITCHES	48"	TELE/COMMUNICATION OUTLET 18"																								
			MOTOR STARTERS, TO TOP	72"	PANELBOARDS, TO TOP 72"																								
			DISCONNECTS, TO TOP	72"	CABINETS, TO TOP 72"																								
			JUNCTION BOXES	15" MIN.	FIRE ALARM PULL STATIONS 48"																								
			ABBREVIATIONS																										
			<div><div><div>A, AMPS</div><div>AB</div><div>A/C</div><div>AC</div><div>AF</div><div>AFF</div><div>AFG</div><div>AIC</div><div>AL</div><div>AS</div><div>AT</div><div>ATS</div><div>AWG</div><div>BC</div><div>BLDG</div><div>BMS</div><div>C</div><div>CB</div><div>CC</div><div>CCS1/CCS2</div><div>CHAdemo</div><div>CKT</div><div>CL</div><div>CLG</div><div>CLR</div><div>CO</div><div>CONC</div><div>CU</div><div>DB</div><div>DC</div><div>DIA</div><div>DN</div><div>DP</div><div>DWG</div><div>EM</div><div>EGC</div><div>EMT</div><div>EPO</div><div>EQ</div><div>EQUIP</div><div>EV</div><div>(E)</div><div>FA</div><div>FACP</div><div>FLA</div></div><div><div>AMPERES</div><div>ANCHOR BOLT</div><div>AIR CONDITIONER</div><div>ALTERNATING CURRENT</div><div>AMPERE FRAME</div><div>ABOVE FINISHED FLOOR</div><div>ABOVE FINISHED GRADE</div><div>AMPERE INTERRUPTING CURRENT</div><div>ALUMINUM</div><div>AMPERE SWITCH</div><div>AMPERES TRIP</div><div>AUTOMATIC TRANSFER SWITCH</div><div>AMERICAN WIRE GAUGE</div><div>BARE COPPER</div><div>BUILDING</div><div>BUILDING MANAGEMENT SYSTEM</div><div>CONDUIT</div><div>CIRCUIT BREAKER</div><div>CENTER TO CENTER</div><div>COMBINED CHARGING SYSTEM TYPE 1/2</div><div>CHARGE de MOve (EV CHARGING STANDARD)</div><div>CIRCUIT</div><div>CENTER LINE</div><div>CEILING</div><div>CLEAR</div><div>CONDUIT ONLY WITH PULL ROPE</div><div>CONCRETE</div><div>COPPER</div><div>DIRECT BURIAL</div><div>DIRECT CURRENT</div><div>DIAMETER</div><div>DOWN</div><div>DISTRIBUTION PANEL</div><div>DRAWING</div><div>EMERGENCY</div><div>EQUIPMENT GROUNDING CONDUCTOR</div><div>ELECTRICAL METALLIC TUBING</div><div>EMERGENCY POWER OFF</div><div>EQUAL</div><div>EQUIPMENT</div><div>ELECTRIC VEHICLE</div><div>EXISTING</div><div>FIRE ALARM</div><div>FIRE ALARM CONTROL PANEL</div><div>FULL LOAD AMPERES</div></div><div><div>(F)</div><div>GEC</div><div>GALV</div><div>GRS</div><div>GFCI</div><div>HH</div><div>HOA</div><div>HP</div><div>HV</div><div>HVAC</div><div>HZ</div><div>IMC</div><div>ISC</div><div>IG</div><div>INST</div><div>JB</div><div>KAIC</div><div>KCMIL</div><div>KV</div><div>KVA</div><div>KWH</div><div>LCP</div><div>LGT</div><div>MAX</div><div>MCC</div><div>MCB</div><div>MCP</div><div>MFR</div><div>MH</div><div>MIN</div><div>MISC</div><div>MLO</div><div>MTD</div><div>MSB</div><div>MSG</div><div>MV</div><div>MVA</div><div>(N)</div><div>N</div><div>NC</div><div>NEC</div><div>NIC</div><div>NL</div></div><div><div>FUTURE</div><div>GROUNDING ELECTRODE CONDUCTOR</div><div>GROUND</div><div>GALVANIZED</div><div>GALVANIZED RIGID STEEL</div><div>GROUND FAULT CIRCUIT INTERRUPTER</div><div>HANDHOLE</div><div>HAND-OFF-AUTO</div><div>HORSEPOWER</div><div>HIGH VOLTAGE</div><div>HEATING, VENTILATION, AIR CONDITIONING</div><div>HERTZ</div><div>INTERMEDIATE METAL CONDUIT</div><div>INTERRUPTING SHORT CIRCUIT</div><div>ISOLATED GROUND</div><div>INSTANTANEOUS</div><div>JUNCTION BOX</div><div>KILO AMPERES INTERRUPTION CAPACITY</div><div>KILO CIRCULAR MILS</div><div>KILOVOLTS</div><div>KILOVOLT-AMPERES KW KILO WATTS</div><div>KILO WATT-HOURS</div><div>LIGHTING CONTROL PANEL</div><div>LIGHTING</div><div>MAXIMUM</div><div>MOTOR CONTROL CENTER</div><div>MAIN CIRCUIT BREAKER</div><div>MOTOR CIRCUIT PROTECTOR</div><div>MANUFACTURER</div><div>MANHOLE</div><div>MINIMUM</div><div>MISCELLANEOUS</div><div>MAIN LUGS ONLY</div><div>MOUNTED</div><div>MAIN SWITCHBOARD</div><div>MAIN SWITCHGEAR</div><div>MEDIUM VOLTAGE</div><div>MEGA VOLT AMPERES</div><div>NEW</div><div>NEUTRAL</div><div>NORMALLY CLOSED</div><div>NATIONAL ELECTRICAL CODE</div><div>NOT IN CONTRACT</div><div>NIGHT LIGHT</div></div><div><div>NO</div><div>NRTL</div><div>NTS</div><div>OFCI</div><div>OH</div><div>PH, Ø</div><div>PB</div><div>PDU</div><div>PNL</div><div>POCC</div><div>PV</div><div>PVC</div><div>(R)</div><div>(RE)</div><div>(RL)</div><div>SCA</div><div>SEC</div><div>SPECS</div><div>STD</div><div>SHIELDED TWISTED PAIR</div><div>SWBD</div><div>SYM</div><div>TBD</div><div>TD</div><div>TEL</div><div>TVSS</div><div>TYP</div><div>UG</div><div>UL</div><div>UON</div><div>UPB</div><div>UTP</div><div>V</div><div>VA</div><div>VFD</div><div>VFI</div><div>VP</div><div>W</div><div>WH</div><div>WP</div></div><div><div>NORMALLY OPEN</div><div>NATIONAL RECOGNIZED TESTING LABORATORY</div><div>NOT TO SCALE</div><div>OWNER FURNISHED CONTRACTOR INSTALLED OVERHEAD</div><div>PHASE</div><div>PUSHBUTTON</div><div>POWER DISTRIBUTION UNIT</div><div>PANEL</div><div>POINT OF COMMON CONNECTION</div><div>PHOTOVOLTAIC</div><div>POLYVINYL CHLORIDE</div><div>EXISTING TO BE REMOVED</div><div>NEW LOCATION OF RELOCATED DEVEICE</div><div>EXISTING TO BE RELOCATED</div><div>SHORT CIRCUIT AVAILABLE</div><div>SECONDARY</div><div>SPECIFICATIONS</div><div>STANDARD</div><div>SHIELDED TWISTED PAIR</div><div>SWITCHBOARD</div><div>SYMMETRICAL</div><div>TO BE DETERMINED</div><div>TIME DELAY</div><div>TELEPHONE</div><div>TRANSIENT VOLTAGE SURGE SUPPRESSION</div><div>TYPICAL</div><div>UNDERGROUND</div><div>UNDERWRITERS LABORATORIES</div><div>UNLESS OTHERWISE NOTED</div><div>UNDERGROUND PULLBOX</div><div>UNSHIELDED TWISTED PAIR</div><div>VOLTS</div><div>VOLT-AMPERES</div><div>VARIABLE FREQUENCY DRIVE</div><div>VACUUM FUSED INTERRUPTER</div><div>VAPORPROOF</div><div>WATTS, WIRE</div><div>WATER HEATER</div><div>WEATHERPROOF</div></div><div><div>WT</div><div>XFMR</div><div>XP</div><div>WATERTIGHT</div><div>TRANSFORMER</div><div>CROSS-LINKED POLYETHYLENE</div><div>EXPLOSION PROOF</div></div></div>																										
			C																										
			B																										
			A																										

NO.	REVISION	DATE	INIT.	NO.	REVISION	DATE	INIT.
0	ISSUE FOR PERMIT	10/17/22		1	CITY COMMENTS	01/19/23	
					</		

1101 MARINA VILLAGE PARKWAY # 100
ALAMEDA, CA 94501 510.521.3773

SIESTA HILLS
5305 S GIBSON BOULEVARD - EV
ALBUQUERQUE, NM 87108

NO	REVISION	DATE	INIT						
0	ISSUE FOR PERMIT	10/17/22							
1	CITY COMMENTS	01/13/23							

ORIGINAL SIZE 24"x36"
SHEET SIZE ARCH "D"

PROJECT #
222001.130

SHEET TITLE
ELECTRICAL NOTES
SYMBOLS AND ABBREVIATIONS

SHEET NUMBER
E-1.0

EV CHARGING STATION
INTERCONNECTION

ELECTRIC VEHICLE SERVICE DESIGN LOAD:
1122 KVA AT POI (3Ø)
3 DELTA 350KW POWER CABINET (369 KVA EACH)
DISPENSER AUX LOADS (15 KVA)

AC WIRE AND CONDUIT SCHEDULE

* CONDUITS ARE MINIMUM REQUIRED SIZES; INSTALLED SIZES MAY BE LARGER, IF USED														
TO	FROM	CIRCUIT ID	VOLTAGE	CURRENT	OCB	WIRE MATERIAL	WIRE INSULATION	PARALLEL SETS OF WIRES	PHASE CONDUCTORS PER SET	NEUTRAL CONDUCTOR PER SET	EGC PER SET	*MIN PVC PER SET (IN)	DISTANCE (FT)	% VOLTAGE DROP
PC-1	SWBD-EV	PC-1	480	443	600	Cu	THWN-2	2	(3) 300 kcmil	N/A	#1 AWG (Cu)	3	18	0.06%
PC-2	SWBD-EV	PC-2	480	443	600	Cu	THWN-2	2	(3) 300 kcmil	N/A	#1 AWG (Cu)	3	16	0.06%
PC-3	SWBD-EV	PC-3	480	443	600	Cu	THWN-2	2	(3) 300 kcmil	N/A	#1 AWG (Cu)	3	16	0.06%
AUX-1	SWBD-EV	AUX-1	480	18	30	Cu	THWN-2	1	(3) #8 AWG	#8 AWG	#8 AWG (Cu)	1	12	0.06%
EV-1, EV-2, EV-3	SWBD-EV	AUX-D	120	16	20	Cu	THWN-2	1	(1) #6 AWG	#6 AWG	#6 AWG (Cu)	1	75	0.98%

DC WIRE AND CONDUIT SCHEDULE

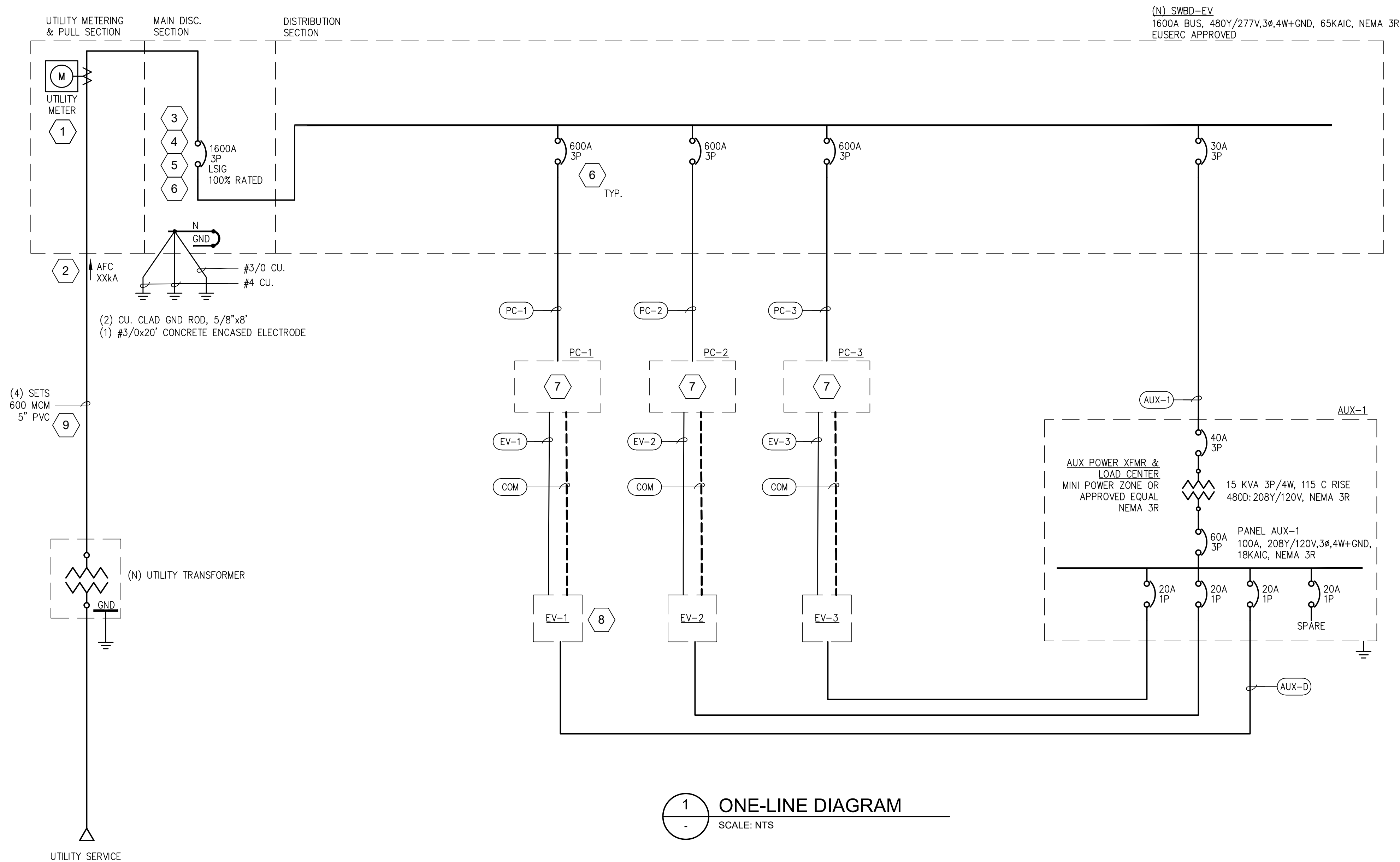
* CONDUITS ARE MINIMUM REQUIRED SIZES; INSTALLED SIZES MAY BE LARGER, IF USED														
TO	FROM	CIRCUIT ID	VOLTAGE	CURRENT	OCB	WIRE MATERIAL	WIRE INSULATION	PARALLEL SETS OF WIRES	PHASE CONDUCTORS PER SET	ADDITIONAL CONDUCTOR PER SET	EGC PER SET	*MIN PVC PER SET (IN)	DISTANCE (FT)	% VOLTAGE DROP
EV-1	PC-1	EV-1	1000	540	By MFR	Cu	XHHW-2	4	(2) 350 kcmil	N/A	#1 AWG (Cu)	3	25	0.03%
EV-2	PC-2	EV-2	1000	540	By MFR	Cu	XHHW-2	4	(2) 350 kcmil	N/A	#1 AWG (Cu)	3	45	0.05%
EV-3	PC-3	EV-3	1000	540	By MFR	Cu	XHHW-2	4	(2) 350 kcmil	N/A	#1 AWG (Cu)	3	80	0.08%

COMMUNICATIONS CABLE AND CONDUIT SCHEDULE

CIRCUIT ID	CABLE	MIN PVC (IN)	DISTANCE (FT)
COM	(1) FIBER OPTIC CABLE PER DELTA SPECIFICATIONS	1	80

FEEDER NOTES:

- ALL DC CONDUCTORS SHALL BE COPPER WITH 1000V XHHW-2 INSULATION, UNLESS OTHERWISE NOTED.
- CONDUIT SIZES SHOWN ARE MINIMUM REQUIRED, INSTALLED SIZES MAY BE LARGER.



GENERAL NOTES

- ALL EQUIPMENT SHALL BE INSTALLED BY CONTRACTOR UNLESS OTHERWISE NOTED. ALL MATERIAL SHALL BE IN NEW CONDITION AND APPROVED BY THE ENGINEER.
- ALL EQUIPMENT SHALL BE NRTL LISTED.
- ALL EQUIPMENT WIRING AND GROUNDING METHODS SHALL CONFORM TO THE MANUFACTURER'S RECOMMENDED PRACTICES AND INSTALLATION INSTRUCTIONS.
- ALL SWITCHBOARDS AND PANELBOARDS SHALL HAVE ARC FLASH WARNING LABELS WITH APPLICABLE INCIDENT ENERGY LEVELS, WORKING DISTANCES, AND REQUIRED PPE IN ACCORDANCE WITH NFPA 70E.
- EXPOSED NON-CURRENT CARRYING METAL PARTS OF EQUIPMENT AND ENCLOSURES SHALL BE GROUNDED IN ACCORDANCE WITH NEC 250.134 AND 250.136(A).
- COORDINATE DATE, TIME, AND LENGTH OF ANY REQUIRED FACILITY SHUTDOWNS WITH OWNER PRIOR TO CONSTRUCTION.
- ALL CONDUCTORS SHALL BE COPPER, UNLESS OTHERWISE NOTED.
- CONDUITS UNDERGROUND SHALL BE PVC, CONDUITS ABOVE GROUND SHALL BE EMT, AND CONDUITS SUBJECT TO DAMAGE SHALL BE RGS.
- ALL EQUIPMENT SHALL BE FURNISHED WITH TERMINALS RATED FOR 75°C OR GREATER, LUGS SHALL BE DUAL-RATED FOR COPPER/ALUMINUM CONDUCTORS. ALL ALUMINUM CONDUCTOR TERMINATIONS MUST BE COATED WITH ANTI-OXIDATION COMPOUND IMMEDIATELY AFTER STRIPPING INSULATION.
- CONDUIT ROUTING AND EQUIPMENT LOCATIONS ARE DIAGRAMMATIC ONLY, AND SHALL BE COORDINATED TO AVOID INTERFERENCES WITH OTHER UTILITIES/UNDERGROUND INSTALLATIONS. CONTRACTOR IS RESPONSIBLE FOR FIELD CHECKING AND MAKING ALL NECESSARY OFFSETS AS REQUIRED.
- NO PART OF THIS DRAWING OR SPECIFICATIONS IS INTENDED TO ALLOW A VIOLATION OF PHYSICAL WORKING SPACE REQUIREMENTS AROUND ELECTRICAL EQUIPMENT AS REQUIRED PER NEC 110.26.
- INSTALL PULL-BOXES AS REQUIRED PER NEC 314.28. ALL BOXES SHALL BE TRAFFIC RATED WHERE SUBJECT TO VEHICULAR TRAFFIC. MIN ONE (1) FEET OF CONCRETE IS REQUIRED AROUND ALL BOXES. PROVIDE ADDITIONAL PULLBOXES AS REQUIRED TO COMPLY WITH NEC 352.26 & 356.26
- CONTRACTOR SHALL REFER TO G-SERIES SHEETS FOR EXISTING AND PROPOSED LANDSCAPING.
- CONTRACTOR SHALL HAND DIG AROUND ALL EXISTING UTILITIES UNLESS OTHERWISE NOTED.

KEYED NOTES

- UTILITY COMPLIANT METERING COMPARTMENT, METER AND CTs BY UTILITY.
- AFC (AVAILABLE FAULT CURRENT) IS PENDING FROM UTILITY.
- LONG, SHORT, INSTANTANEOUS, GROUND FAULT EQUIPPED BREAKER PER NEC 230.95.
- REFER TO COORDINATION STUDY FOR OCPD TRIP SETTINGS.
- MAIN BREAKER IS REQUIRED TO INCLUDE MAINTENANCE MODE FOR ARC ENERGY REDUCTION IN ACCORDANCE WITH NEC 240.87
- ALL OVERCURRENT PROTECTION DEVICES WILL HAVE THE SAME FAULT CURRENT RATING AS THE RATING OF PANEL, DISCONNECT OR SWITCHGEAR LOCATED WITHIN.
- DELTA 350KW POWER CABINET
369 KVA
INPUT: 443A 480VAC, 3P/3W
OUTPUT: 150-950VDC, 540A MAX
NEMA 3R
- DELTA 350KW DISPENSER
1000VDC MAX
540A MAX CCS1, 200A MAX CHAdEMO
NEMA 3R
- UTILITY DESIGN TO SUPERSEDE WIRE AND CONDUIT REQUIREMENT IF DIFFERENT.

EQUIPMENT PROCUREMENT

EQUIPMENT PROVIDED BY EVGO:
DELTA POWER CABINETS
DELTA DISPENSERS
SWITCHBOARD

EQUIPMENT PROVIDED BY CONTRACTOR:
CABLES
CABLE TERMINATIONS
CONDUITS AND FITTINGS
UTILITY UNDERGROUND STRUCTURES AND PADS
ADDITIONAL EQUIPMENT AS SPECIFIED ON THESE PLANS



SIESTA HILLS
5305 S GIBSON BOULEVARD - EV
ALBUQUERQUE, NM 87108

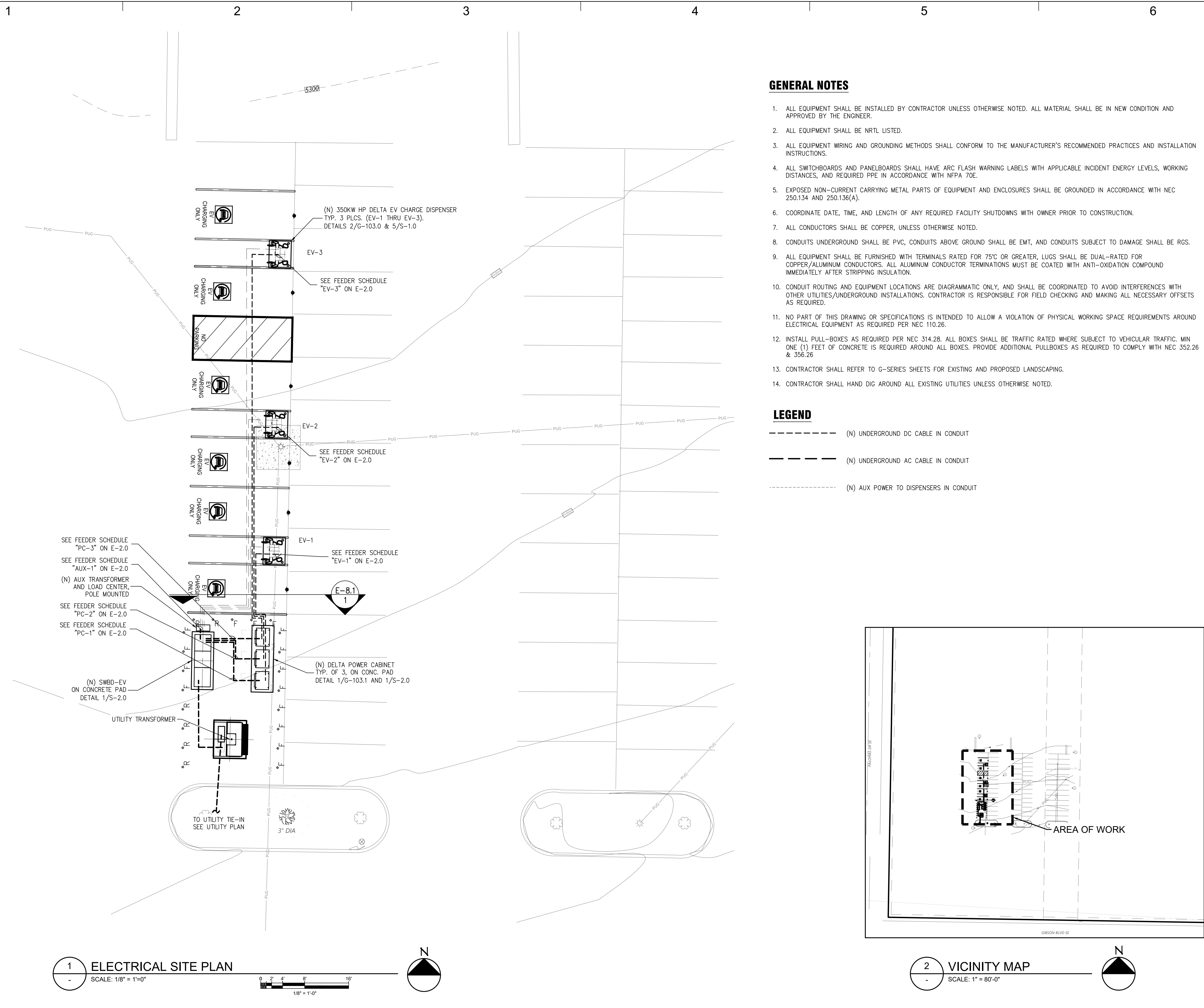
NO.	REVISION	DATE	INIT.
0	ISSUE FOR PERMIT	10/17/22	
1	CITY COMMENTS	01/13/23	

ORIGINAL SIZE 24"x36"
SHEET SIZE ARCH "D"

PROJECT #
222001.130

SHEET TITLE
ONE-LINE DIAGRAM

SHEET NUMBER
E-2.0



GENERAL NOTES

1. ALL EQUIPMENT SHALL BE INSTALLED BY CONTRACTOR UNLESS OTHERWISE NOTED. ALL MATERIAL SHALL BE IN NEW CONDITION AND APPROVED BY THE ENGINEER.
2. ALL EQUIPMENT SHALL BE NRTL LISTED.
3. ALL EQUIPMENT WIRING AND GROUNDING METHODS SHALL CONFORM TO THE MANUFACTURER'S RECOMMENDED PRACTICES AND INSTALLATION INSTRUCTIONS.
4. ALL SWITCHBOARDS AND PANELBOARDS SHALL HAVE ARC FLASH WARNING LABELS WITH APPLICABLE INCIDENT ENERGY LEVELS, WORKING DISTANCES, AND REQUIRED PPE IN ACCORDANCE WITH NFPA 70E.
5. EXPOSED NON-CURRENT CARRYING METAL PARTS OF EQUIPMENT AND ENCLOSURES SHALL BE GROUNDED IN ACCORDANCE WITH NEC 250.134 AND 250.136(A).
6. COORDINATE DATE, TIME, AND LENGTH OF ANY REQUIRED FACILITY SHUTDOWNS WITH OWNER PRIOR TO CONSTRUCTION.
7. ALL CONDUCTORS SHALL BE COPPER, UNLESS OTHERWISE NOTED.
8. CONDUITS UNDERGROUND SHALL BE PVC, CONDUITS ABOVE GROUND SHALL BE EMT, AND CONDUITS SUBJECT TO DAMAGE SHALL BE RGS.
9. ALL EQUIPMENT SHALL BE FURNISHED WITH TERMINALS RATED FOR 75°C OR GREATER, LUGS SHALL BE DUAL-RATED FOR COPPER/ALUMINUM CONDUCTORS. ALL ALUMINUM CONDUCTOR TERMINATIONS MUST BE COATED WITH ANTI-OXIDATION COMPOUND IMMEDIATELY AFTER STRIPPING INSULATION.
10. CONDUIT ROUTING AND EQUIPMENT LOCATIONS ARE DIAGRAMMATIC ONLY, AND SHALL BE COORDINATED TO AVOID INTERFERENCES WITH OTHER UTILITIES/UNDERGROUND INSTALLATIONS. CONTRACTOR IS RESPONSIBLE FOR FIELD CHECKING AND MAKING ALL NECESSARY OFFSETS AS REQUIRED.
11. NO PART OF THIS DRAWING OR SPECIFICATIONS IS INTENDED TO ALLOW A VIOLATION OF PHYSICAL WORKING SPACE REQUIREMENTS AROUND ELECTRICAL EQUIPMENT AS REQUIRED PER NEC 110.26.
12. INSTALL PULL-BOXES AS REQUIRED PER NEC 314.28. ALL BOXES SHALL BE TRAFFIC RATED WHERE SUBJECT TO VEHICULAR TRAFFIC. MIN ONE (1) FEET OF CONCRETE IS REQUIRED AROUND ALL BOXES. PROVIDE ADDITIONAL PULLBOXES AS REQUIRED TO COMPLY WITH NEC 352.26 & 356.26
13. CONTRACTOR SHALL REFER TO G-SERIES SHEETS FOR EXISTING AND PROPOSED LANDSCAPING.
14. CONTRACTOR SHALL HAND DIG AROUND ALL EXISTING UTILITIES UNLESS OTHERWISE NOTED.

LEGEND

- (N) UNDERGROUND DC CABLE IN CONDUIT
- (N) UNDERGROUND AC CABLE IN CONDUIT
- (N) AUX POWER TO DISPENSERS IN CONDUIT



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ALBUQUERQUE, NM 87108

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ORIGINAL SIZE 24"x36"
SHEET SIZE ARCH "D"

PROJECT #
222001.130

SHEET TITLE
ELECTRICAL
SITE PLAN

SHEET NUMBER
E-3.0

1

2

3

4

5

6

NOTES:

1. PLACE LABEL IN A VISIBLE LOCATION: SWITCHGEAR (METER COMPARTMENT)

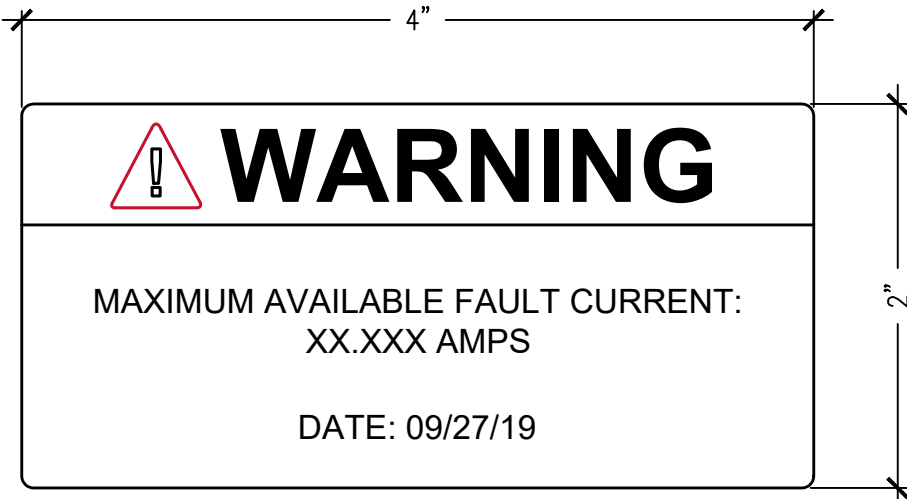


LASER ENGRAVED PLAQUE
WHITE LETTERING ON RED BACKGROUND

1 METER LABEL-1
SCALE: NTS

NOTES:

1. PLACE LABEL IN A VISIBLE LOCATION: SWITCHGEAR.
2. RED BACKGROUND, WHITE LETTERING
3. TEXT: MIN. 3/8" AND 1/8" HEIGHT, ALL CAPITAL LETTERS ARIAL OR SIMILAR FONT, NON-BOLD
4. MATERIAL NOTE: ENGRAVED ON OUTDOOR-RATED PLASTIC LAMINATE WITH ADHESIVE BACKING SUITABLE FOR THE ENVIRONMENT.
5. APPLICABLE NEC SECTIONS: NEC 110.9



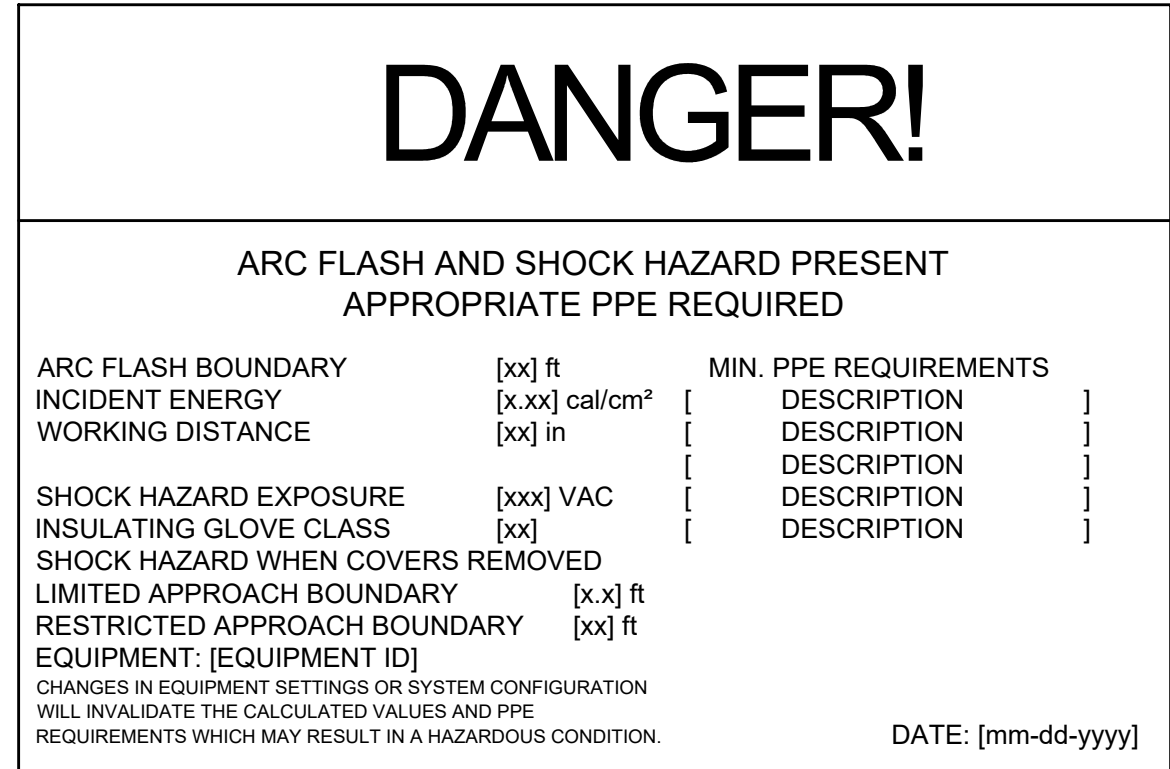
4 MAXIMUM FAULT CURRENT LABEL
SCALE: NTS

NOTES:

1. PLACE LABEL IN A VISIBLE LOCATION: SWITCHGEAR
2. RED BACKGROUND, WHITE LETTERING
3. TEXT: MIN. 3/8" AND 1/8" HEIGHT, ALL CAPITAL LETTERS ARIAL OR SIMILAR FONT, NON-BOLD
4. MATERIAL NOTE: ENGRAVED ON OUTDOOR-RATED PLASTIC LAMINATE WITH ADHESIVE BACKING SUITABLE FOR THE ENVIRONMENT.
5. APPLICABLE NEC SECTIONS: NEC 110.22



2 MAIN CIRCUIT BREAKER LABEL
SCALE: NTS



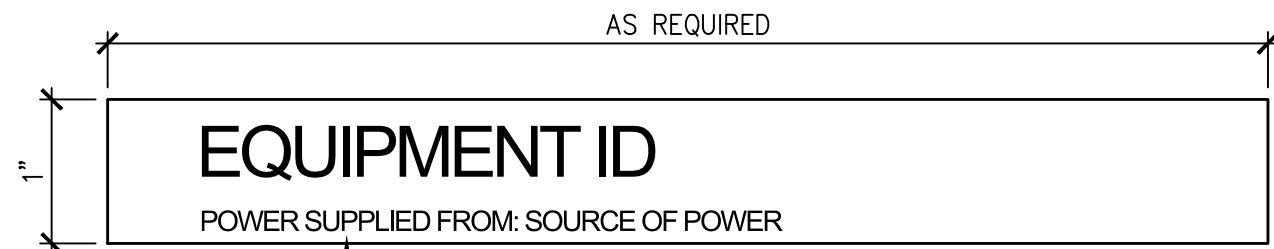
NOTES:

1. *TYPICAL LABEL SHOWN, ARC FLASH LABELS TO BE PROVIDED FOR ALL ELECTRICAL EQUIPMENT INCLUDING, SWITCHGEAR, PANELBOARDS, AND CHARGING CABINETS.
2. 4"x4" LABEL MAY BE USED AS AN ALTERNATE
3. *WARNING* HEADING FOR INCIDENT ENERGY < 40 CAL/CM²
4. *DANGER* HEADING FOR INCIDENT ENERGY > 40 CAL/CM²
5. VALUES IN BRACKETS WILL BE UPDATED ACCORDING TOT HE RESULTS OF THE ARC FLASH HAZARD ANALYSIS.
6. PLACE LABEL ON EQUIPMENT DESIGNATED IN THE ARC FLASH HAZARD ANALYSIS.
7. LABELS SHALL BE PROVIDED IN PDF FORMAT TO CONTRACTOR
8. MATERIAL: WEATHER AND UV RESISTANT VINYL WITH DURABLE ADHESIVE SUITABLE FOR THE ENVIRONMENT.
9. APPLICABLE NEC SECTIONS: NEC 110.16

5 ARC FLASH HAZARD LABEL
SCALE: NTS

NOTES:

1. PLACE LABEL ON FRONT OF EQUIPMENT IN VISIBLE LOCATION: EV CHARGER CABINETS, SWITCHBOARDS, PANELS, AND METERING ENCLOSURES.
2. BLACK BACKGROUND, WHITE LETTERING
3. TEXT: MIN. 1/2" HEIGHT, ALL CAPITAL LETTERS ARIAL OR SIMILAR FONT, NON-BOLD
4. MATERIAL NOTE: ENGRAVED ON OUTDOOR-RATED PLASTIC LAMINATE WITH ADHESIVE BACKING SUITABLE FOR THE ENVIRONMENT.
5. APPLICABLE NEC SECTIONS: NEC 408.4(B)



ALL SWITCHBOARDS AND PANELBOARDS SUPPLIED BY A FEEDER SHALL BE MARKED TO INDICATE THE NAME OF THE EQUIPMENT AND SOURCE OF SUPPLY.

REFER TO SINGLE LINE DIAGRAM FOR IDENTIFICATION OF ALL EQUIPMENT AND ASSOCIATED SOURCE OF SUPPLY.

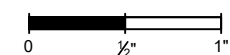
3 EQUIPMENT IDENTIFICATION LABEL
SCALE: NTS



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ORIGINAL SIZE 24"x36"
SHEET SIZE ARCH "D"



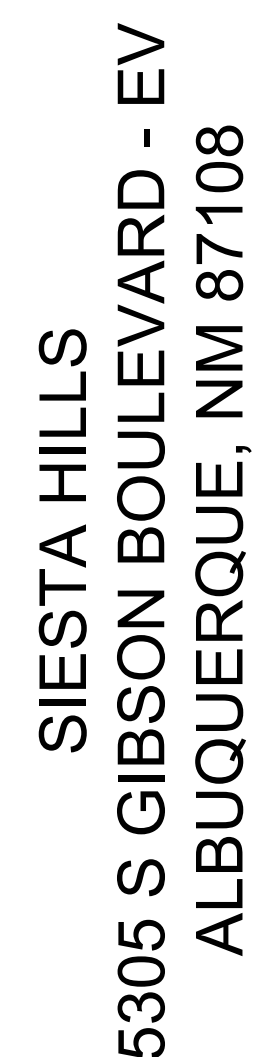
PROJECT #
222001.130

SHEET TITLE
WARNING SIGNS

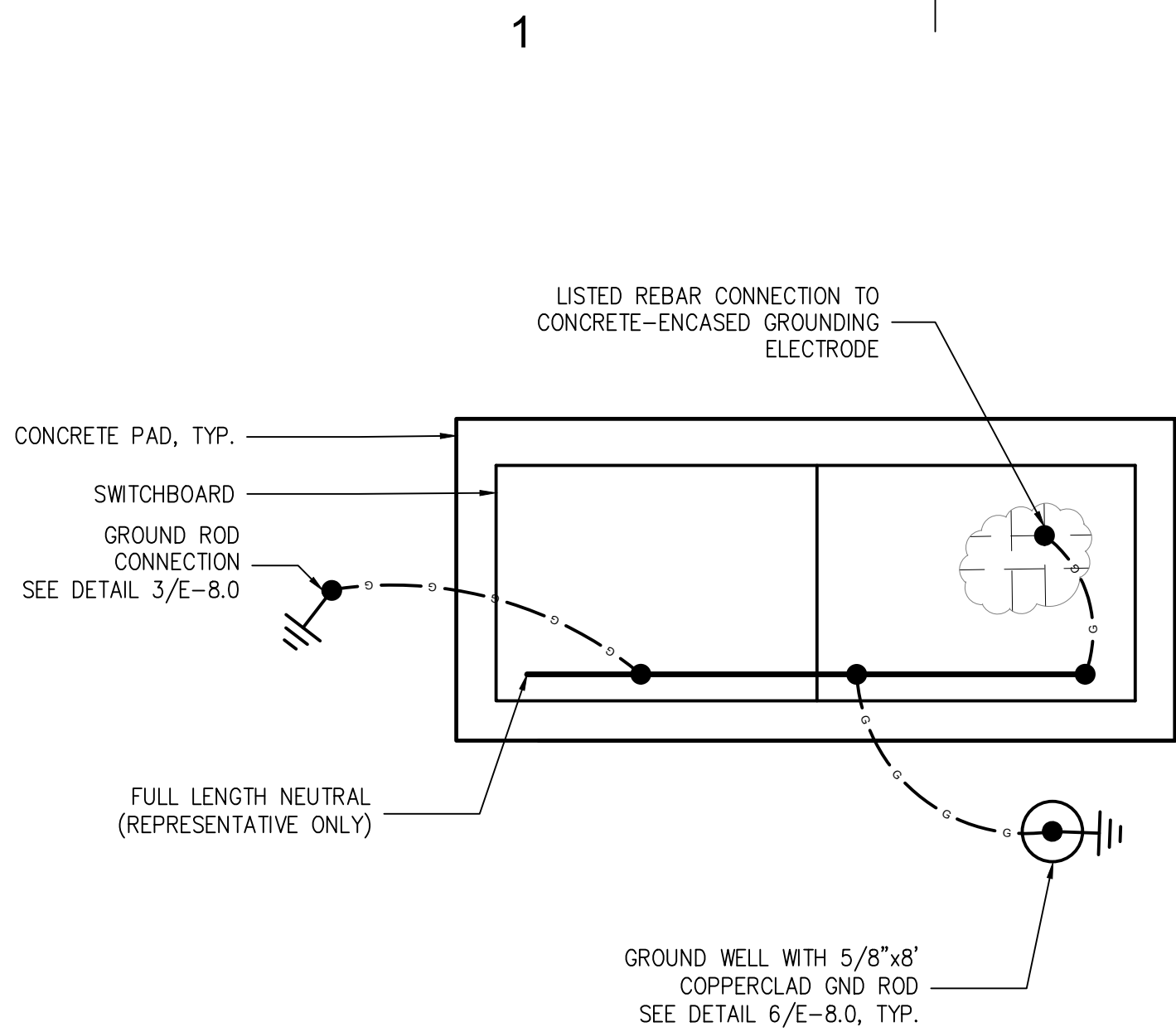
SHEET NUMBER
E-6.0



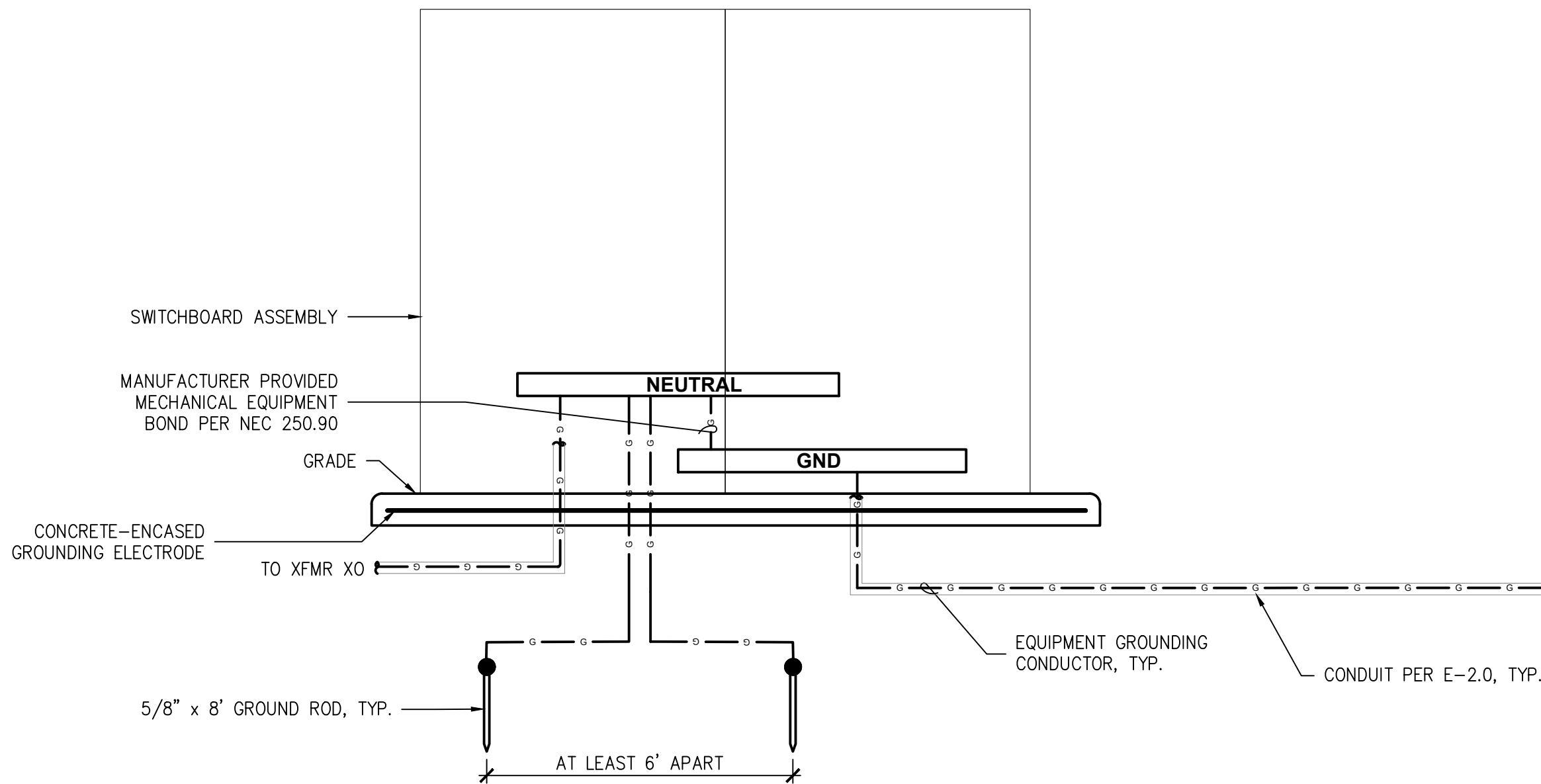
2 PANEL SCHEDULE
E-2.0 SCALE: NTS



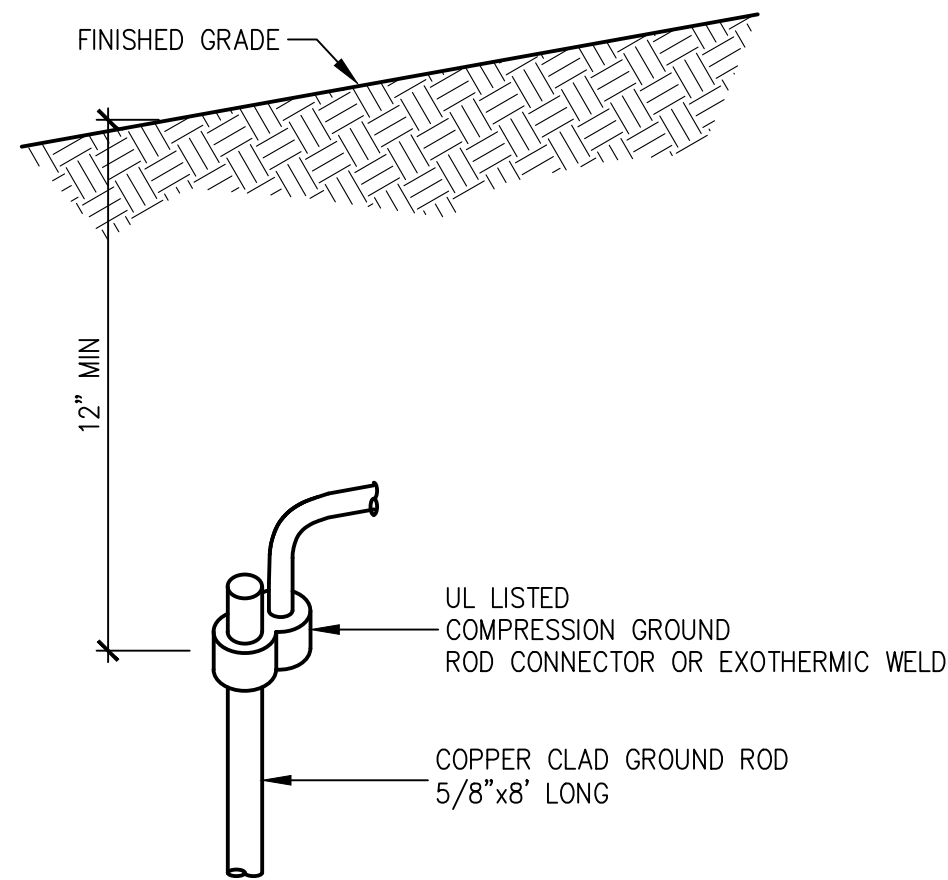
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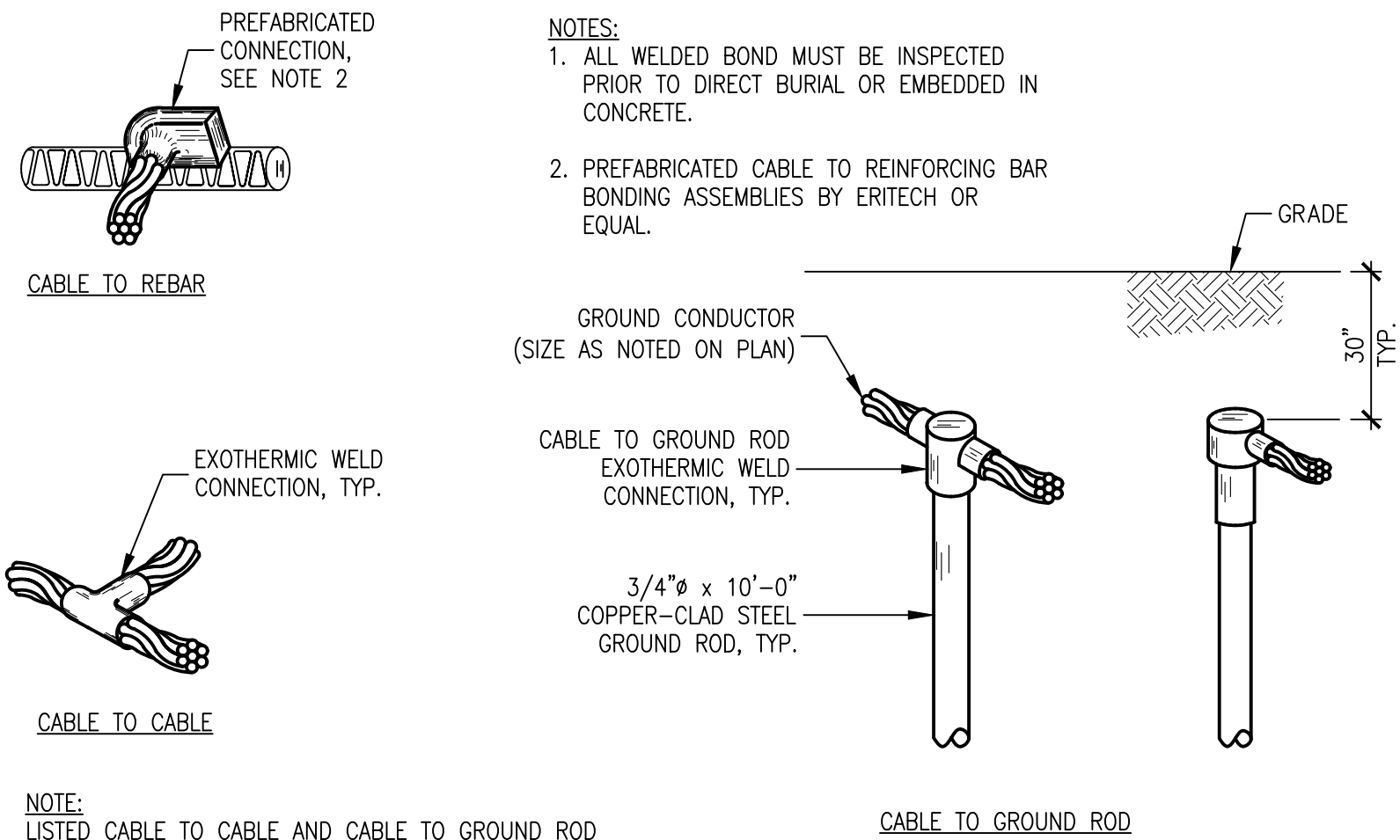
1 SWITCHBOARD GROUNDING PLAN
SCALE: NTS



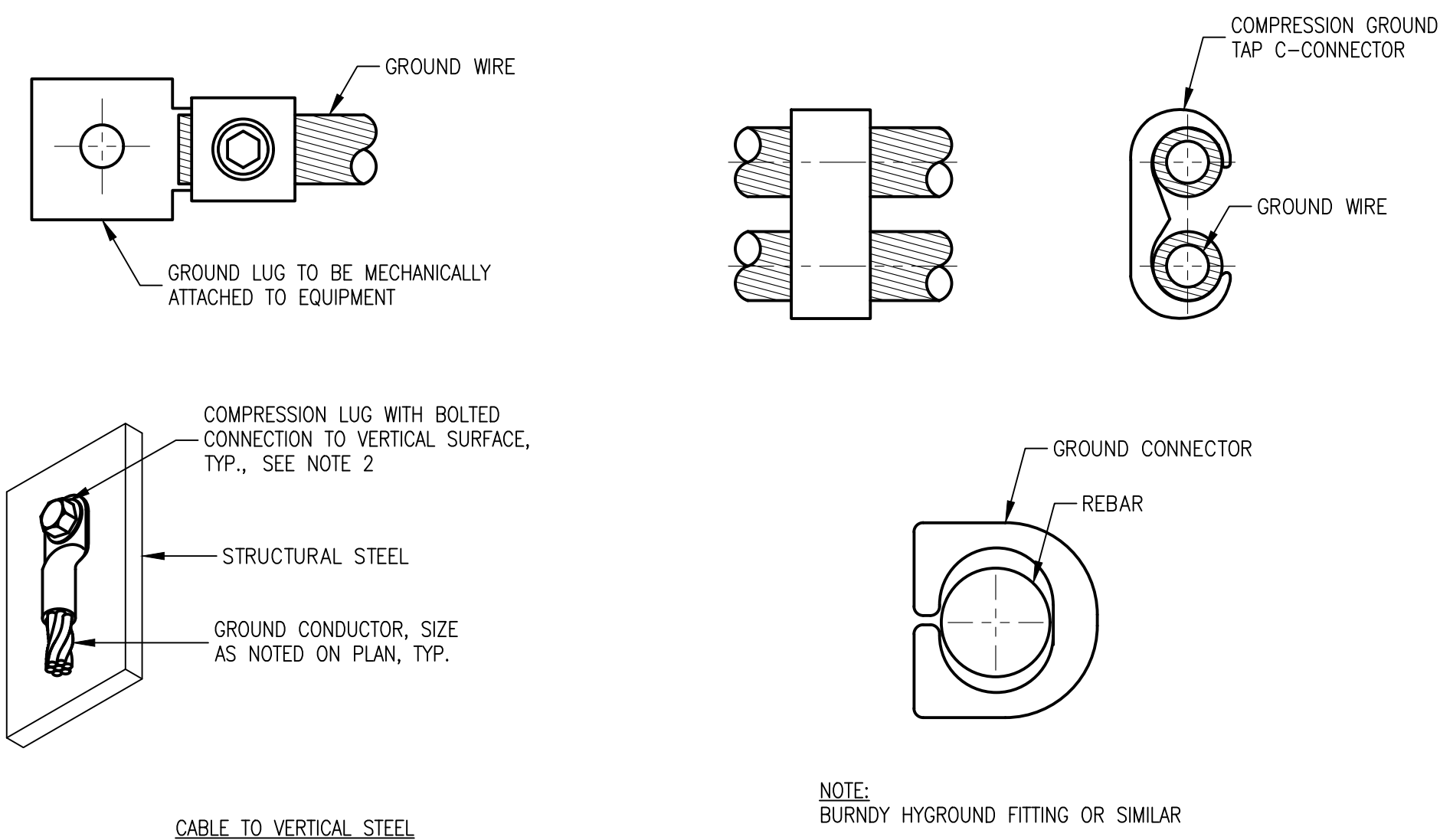
2 SWITCHBOARD GROUNDING SCHEMATIC
SCALE: NTS



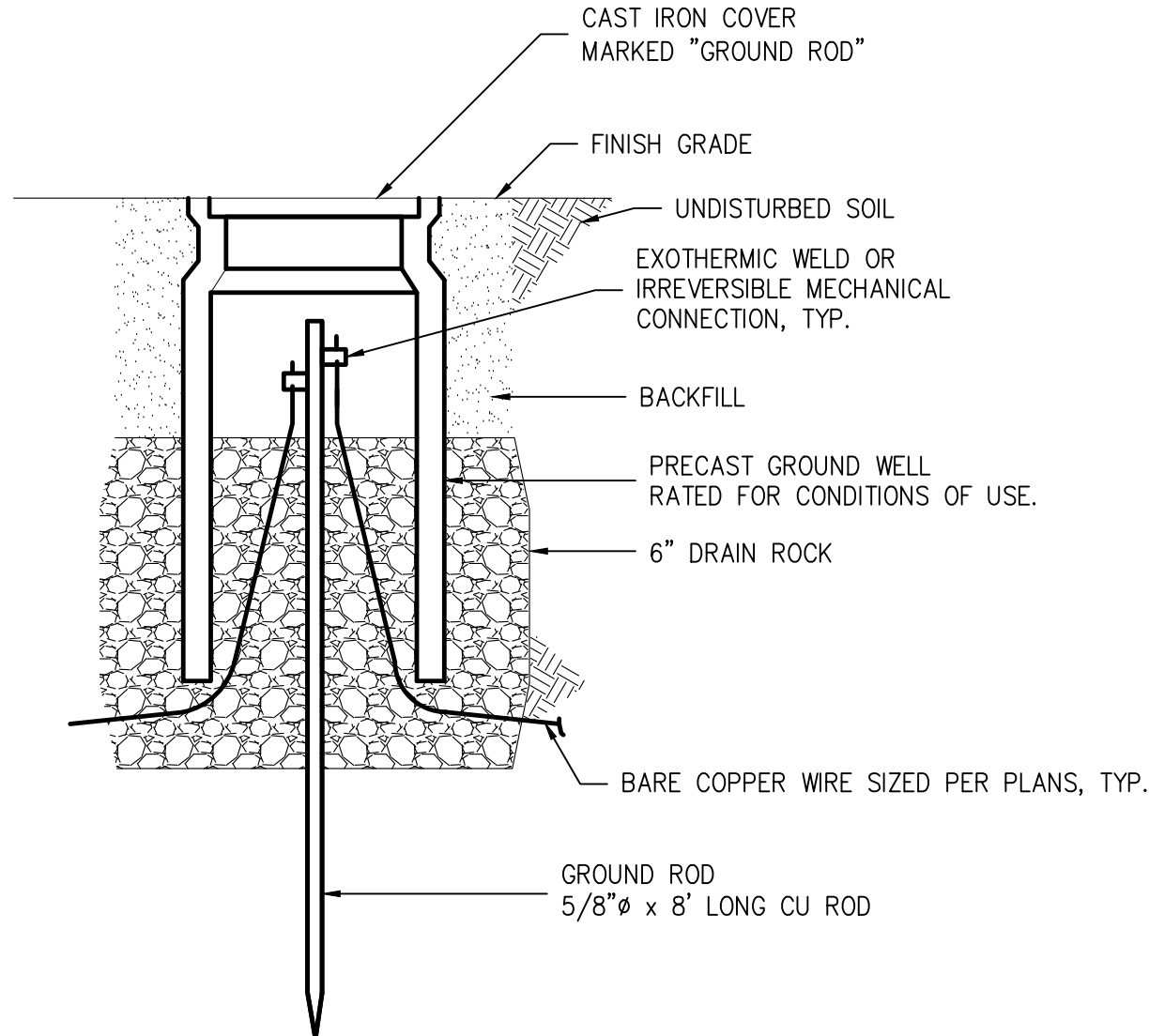
3 BURIED GROUND ROD
SCALE: NTS



4 WELDED GROUNDING CONNECTION DETAILS
SCALE: NTS



5 GROUNDING CONNECTION DETAILS
SCALE: NTS



6 GROUND ROD WELL
SCALE: NTS

GENERAL NOTES

- REFER TO SINGLE LINE DIAGRAM FOR EQUIPMENT SPECIFICATIONS AND CONDUCTOR SIZES.
- ALL GROUND RODS SHALL MAINTAIN A MINIMUM 6FT SEPARATION.
- THE GROUND WIRE MUST BE A CONTINUOUS WIRE THAT RUNS FROM THE OUTSIDE GROUND ROD, UNDER THE PAD, TO THE PRIMARY WINDOW, THEN ABOVE THE PAD FROM THE PRIMARY WINDOW, THROUGH THE SECONDARY WINDOW TO THE SECOND GROUND ROD AS SHOWN.
- CONDUIT ROUTING AND EQUIPMENT LOCATIONS ARE DIAGRAMMATIC ONLY, AND SHALL BE COORDINATED TO AVOID INTERFERENCES WITH OTHER UTILITIES/UNDERGROUND INSTALLATIONS. CONTRACTOR IS RESPONSIBLE FOR FIELD CHECKING AND MAKING ALL NECESSARY OFFSETS AS REQUIRED.
- INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED NEC AND NESC CODES AND STANDARDS AND SHALL CONFORM WITH INDUSTRY BEST PRACTICES AND IEEE RECOMMENDATIONS. THE AHJ HAS FINAL JURISDICTIONAL AUTHORITY ON CODE APPLICATION AND COMPLIANCE.
- ALL WIRING AND GROUNDING METHODS SHALL CONFORM TO THE MANUFACTURER'S RECOMMENDED PRACTICES.
- EXPOSED NON-CURRENT CARRYING METAL PARTS OF ALL EQUIPMENT AND ENCLOSURES SHALL BE GROUNDED IN ACCORDANCE WITH NEC 250.134 AND 250.136(A). GROUND IN ACCORDANCE WITH LISTING.
- ALL GROUNDING ELECTRODE CONNECTIONS SHALL BE MADE USING EXOTHERMIC WELD PROCESS, OR UL LISTED IRREVERSIBLE MECHANICAL CONNECTORS, SUITABLE FOR ITS USE.
- EQUIPMENT SIZES SHOWN ARE TYPICAL REFER TO SUBMITTAL DRAWINGS FOR ACTUAL SIZES.
- ALL GND CONNECTIONS SHALL BE MADE USING UL LISTED IRREVERSIBLE COMPRESSION CONNECTOR OR EXOTHERMIC WELD PROCESS AS APPLICABLE. MECHANICAL GND CONNECTORS CAN BE APPROVED FOR AN ABOVEGROUND CONNECTIONS. CONTRACTOR TO VERIFY ELECTRODE RESISTANCE TO THE GROUND BY 3-POINT TESTING METHOD. THIS RESISTANCE SHALL NOT EXCEED 50.



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ORIGINAL SIZE 24"x36"
SHEET SIZE ARCH "D"

PROJECT #
222001.130

SHEET TITLE
GROUNDING DETAILS

SHEET NUMBER
E-8.0

1

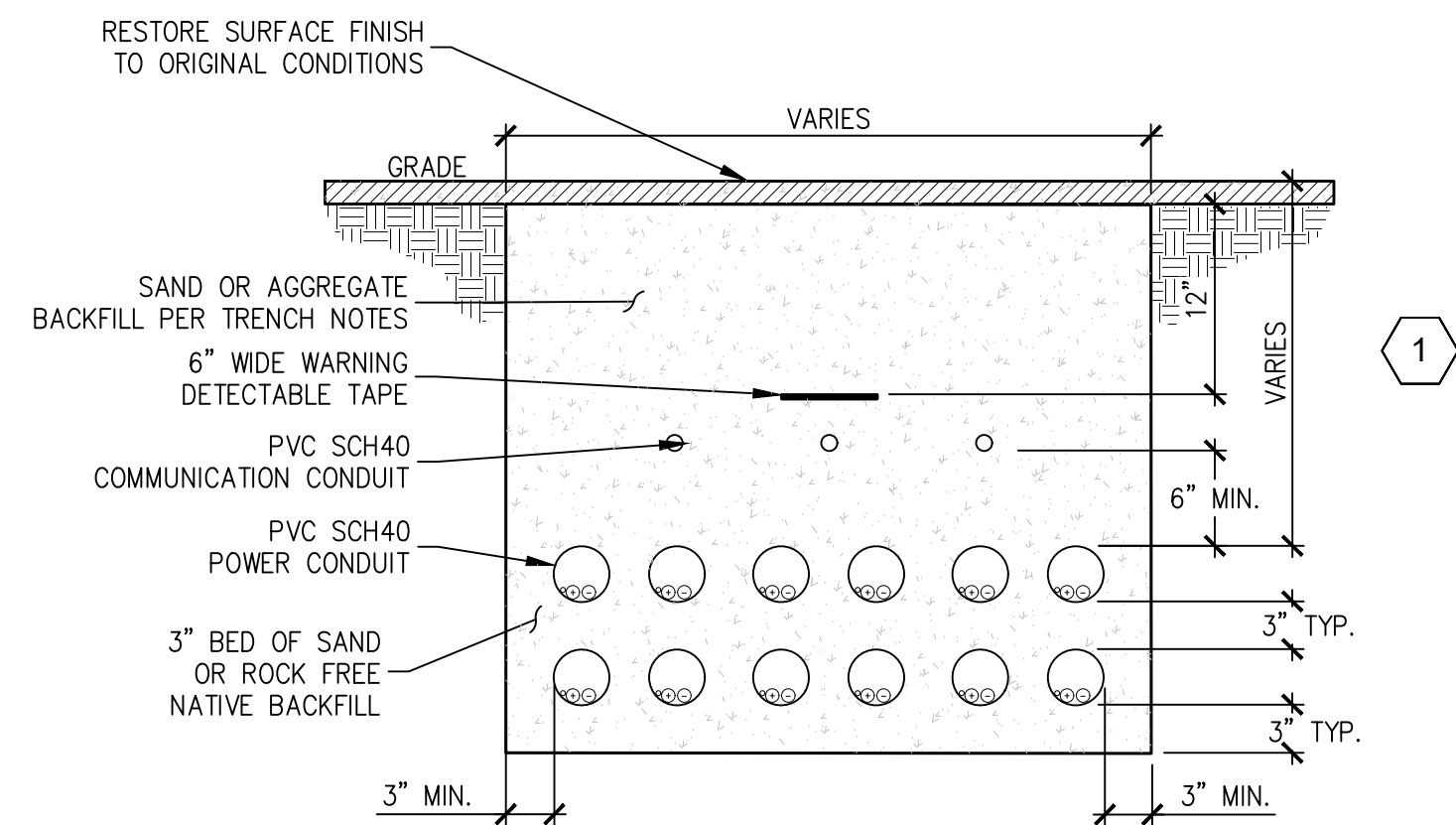
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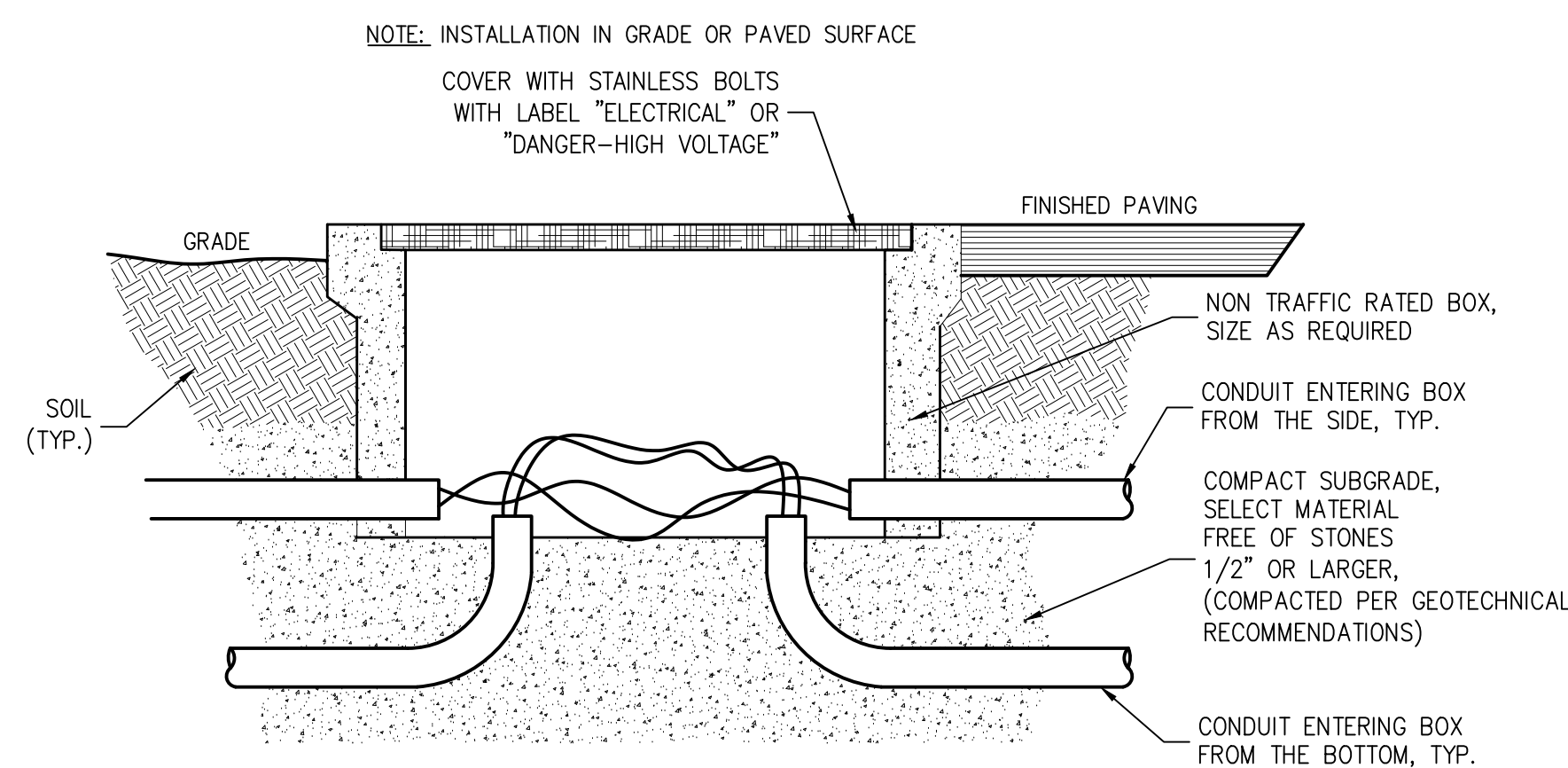
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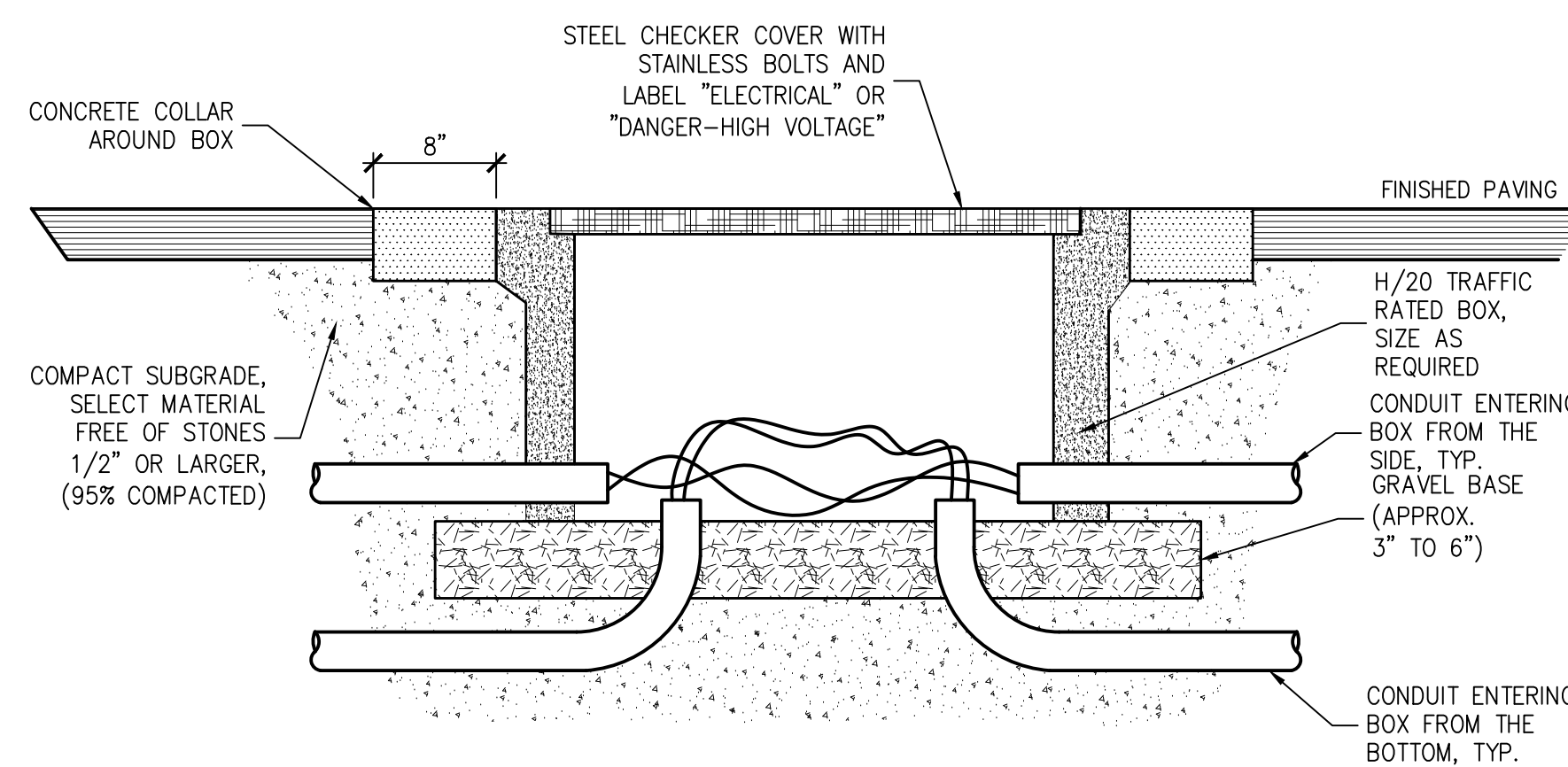
6



1 ELECTRICAL TRENCH
- SCALE: 1" = 1'-0"



2 NON-TRAFFIC RATED PULLBOX < 600V
- SCALE: NTS



3 TRAFFIC RATED PULLBOX < 600V
- SCALE: NTS

TRENCH NOTES

1. TRENCH BACKFILL SHOULD BE PLACED IN HORIZONTAL LIFTS AND COMPACTED TO 85% RELATIVE COMPACTION, AS EVALUATED BY ASTM D698.
2. COMPACTION MEANS AND METHODS SHALL BE DETERMINED BY TRENCHING CONTRACTOR.
3. TRENCH CONSTRUCTION SHALL COMPLY WITH OSHA REQUIREMENTS.
4. AGGREGATE BASE AND THE UPPER 12" OF SUBGRADE BENEATH PAVEMENT AREAS SHOULD BE COMPACTED TO 95% RELATIVE COMPACTION, AS EVALUATED BY ASTM D698.
5. PROVIDE MIN 12" SEPARATION FROM ANY EXISTING UTILITIES, IF APPLICABLE.
6. SOILS CONSISTING OF ROCKS NO LONGER THAN 0.5" IN DIAMETER SHALL BE CONSIDERED ROCK FREE.
7. CONTRACTOR SHALL HAND DIG AROUND ALL UTILITIES.

KEYED NOTES

- 1 MINIMUM BURIAL DEPTH IS 24" UNDER STREETS, DRIVEWAYS AND PARKING LOTS AND 18" MINIMUM DEPTH UNDER LANDSCAPING AREA PER NEC TABLE 300.5.



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ORIGINAL SIZE 24"X36"
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222001.130

SHEET TITLE

TRENCH DETAILS

SHEET NUMBER

E-8.1

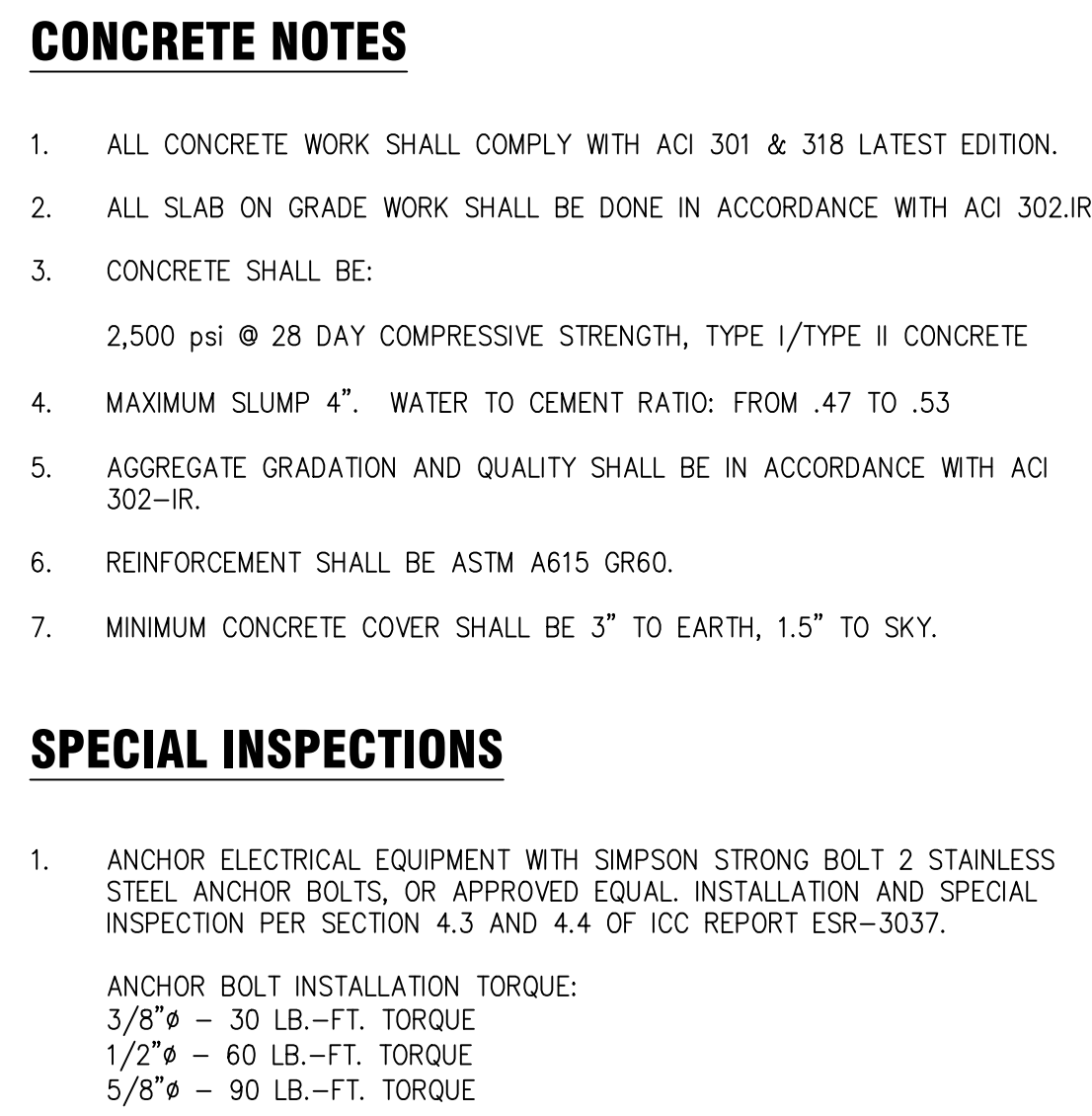
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4

C

E

A



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ORIGINAL SIZE 24"X36"
SHEET SIZE ARCH "D"

0 3/4" 1"

PROJECT #

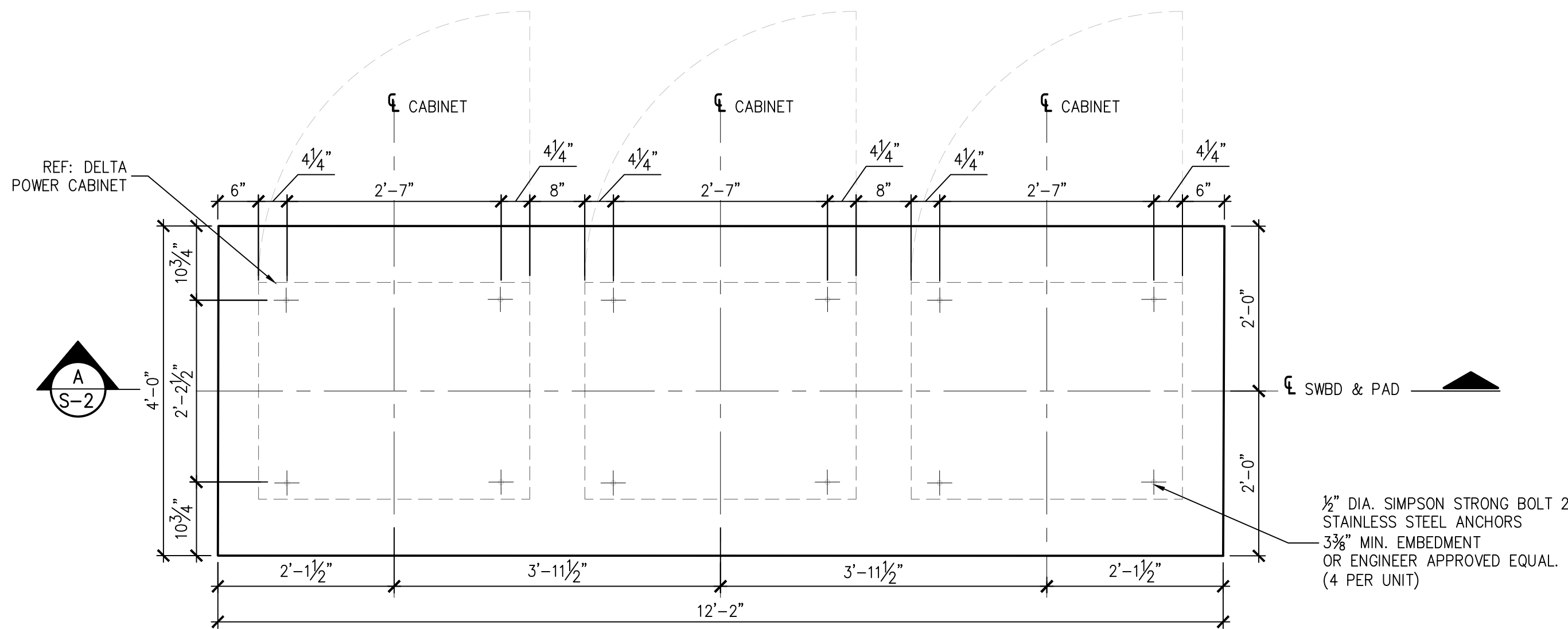
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SHEET TITLE

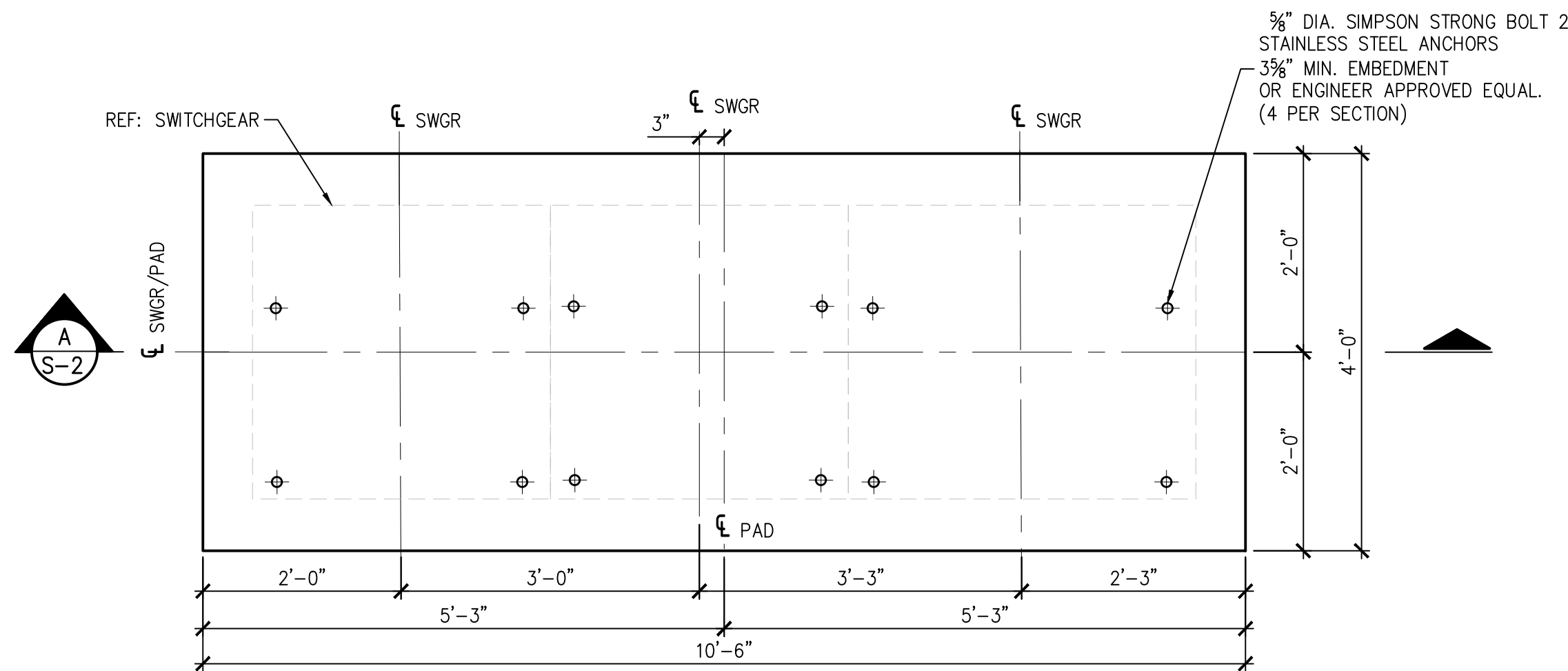
STRUCTURAL
DETAILS

SHEET NUMBER

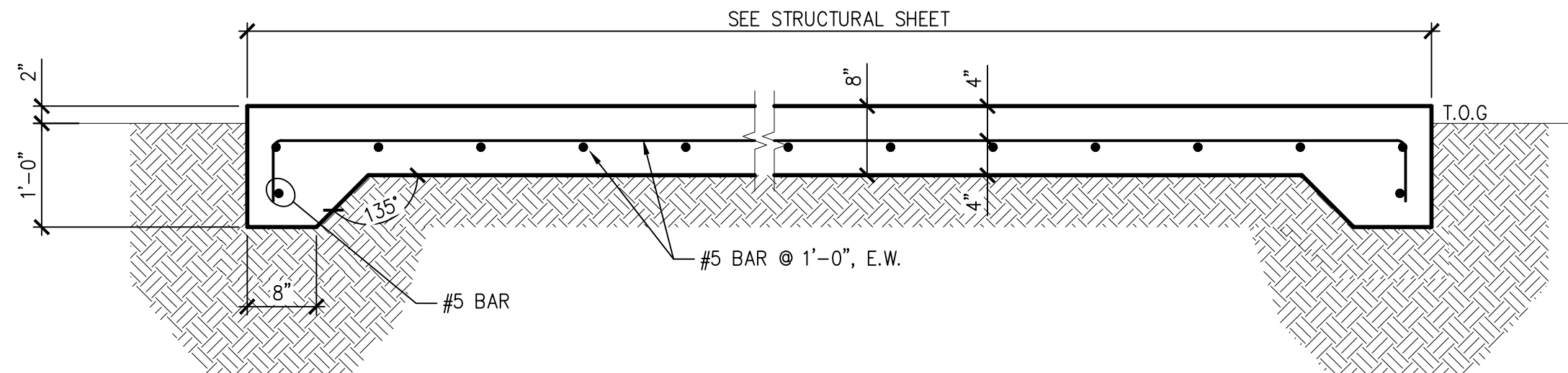
S-1.0



1 DELTA CABINET CONCRETE PAD PLAN
SCALE: 3/4" = 1'-0"



2 SWBD-EV CONCRETE PAD PLAN
SCALE: 3/4" = 1'-0"



A CONCRETE PAD SECTION
SCALE: 3/4" = 1'-0"

CONCRETE NOTES

- ALL CONCRETE WORK SHALL COMPLY WITH ACI 301 & 318 LATEST EDITION.
- ALL SLAB ON GRADE WORK SHALL BE DONE IN ACCORDANCE WITH ACI 302.IR.
- CONCRETE SHALL BE:
2,500 psi @ 28 DAY COMPRESSIVE STRENGTH, TYPE I/TYPE II CONCRETE
- MAXIMUM SLUMP 4". WATER TO CEMENT RATIO: FROM .47 TO .53
- AGGREGATE GRADATION AND QUALITY SHALL BE IN ACCORDANCE WITH ACI 302-IR.
- REINFORCEMENT SHALL BE ASTM A615 GR60.
- MINIMUM CONCRETE COVER SHALL BE 3" TO EARTH, 1.5" TO SKY.

SPECIAL INSPECTIONS

- ANCHOR ELECTRICAL EQUIPMENT WITH SIMPSON STRONG BOLT 2 STAINLESS STEEL ANCHOR BOLTS, OR APPROVED EQUAL. INSTALLATION AND SPECIAL INSPECTION PER SECTION 4.3 AND 4.4 OF ICC REPORT ESR-3037.

ANCHOR BOLT INSTALLATION TORQUE:
3/8" - 30 LB.-FT. TORQUE
1/2" - 60 LB.-FT. TORQUE
5/8" - 90 LB.-FT. TORQUE



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0 1/2" 1"

PROJECT #
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SHEET TITLE
STRUCTURAL
DETAILS

SHEET NUMBER
S-2.0