

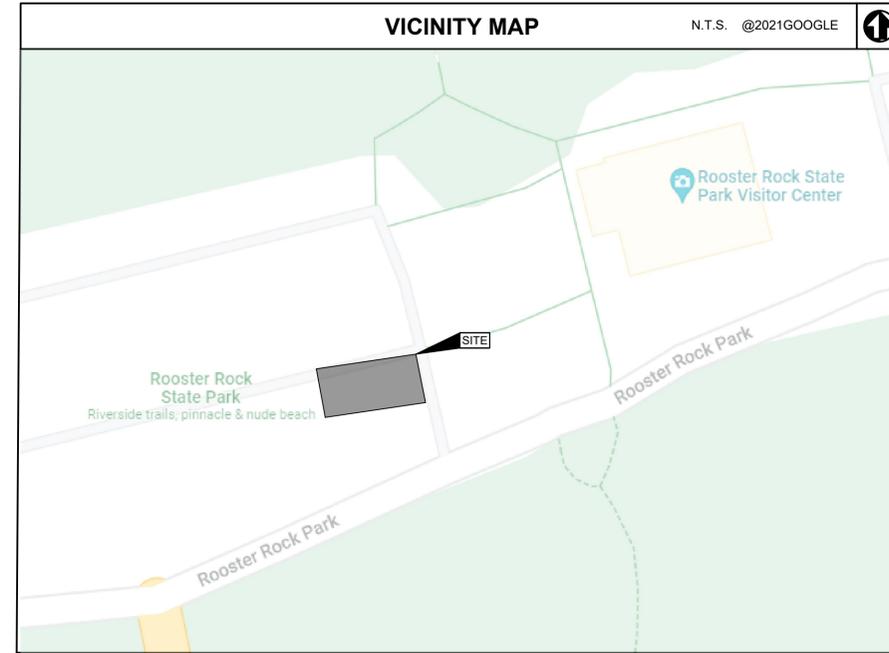


PROJECT INFORMATION	
SITE ADDRESS	ROOSTER ROCK STATE PARK CORBETT, OR 97019
COORDINATES	45.54696, -122.23621, 0.00000
COUNTY	MULTNOMAH

PROJECT DESCRIPTION
INSTALLATION OF (04) RIVIAN LEVEL 2 CHARGERS, ALL RELATED ELECTRICAL AND CIVIL ACTIVITIES, AND INSTALLATION OF NECESSARY PARKING SIGNS.

ODOT SPECIFICATION
THE STANDARD SPECIFICATIONS OF THE STATE OF OREGON, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

APPLICABLE CODES
2018 INTERNATIONAL BUILDING CODE (IBC) 2020 NATIONAL ELECTRIC CODE (NEC)



INDEX	
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C1	CIVIL GENERAL NOTES
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E1	ELECTRICAL GENERAL NOTES
E2	SYSTEM ONE-LINE DIAGRAM & PANEL SCHEDULE
E3	ELECTRICAL DETAILS



Oregon Utility Notification Center  
811 or 800-332-2344

NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION
	05.20.2022	CD 90
	07.12.2022	CD 90 REV A



ROOSTER ROCK STATE PARK CORBETT, OR 97019

PROJECT MANAGER  
A. TALARICO

DESIGNER / ENGINEER  
P. RAO

PROJECT NO.  
XXXXX

SHEET NAME  
COVER SHEET

SHEET NO.  
C0

## RIVIAN WAYPOINTS CHARGER: KEY FEATURES

- Max charge speed of 11.5kW<sup>1</sup>, compared to common 6.8 or 7.2kW varieties
- Aesthetic exterior design and SAE J1772 plug provides maximum compatibility
- Plug and Charge (ISO 15118) compatible
- Enables for over-the-air firmware updates via ethernet, cellular, or Wi-Fi
- Remotely view and control settings via a Rivian-developed online portal, Rivian Energy Cloud
- Time of sale information communicated via user-friendly display screen (\$/kWh)
- Provides charger location, real-time charging updates, and payment details to drivers

<sup>1</sup> When plugged into a vehicle with sufficiently sized on-board charger and at 240V AC

<sup>2</sup> Pending



Wall-Mount Waypoints Charger



Single Pedestal Waypoints Charger



Dual Pedestal Waypoints Charger



## RIVIAN WAYPOINTS CHARGER: TECHNICAL SPECIFICATIONS

ELECTRICAL	
Input	2-Pole, Single Phase, Nominal Voltage: 208 / 240V AC, 60Hz
Max. Continuous Current	48A
DIP Switch Adjustable Max. Current Values	40A, 32A, 24A, 20A, 16A, 12A, 6A
Vehicle Connector Type	SAE J1772 (IEC 62196 Type 1)
Output Cable Length	18 ft [5.49m]
Recommended Installation Type	Hardwired with non-GFCI type Service Panel Breaker
Wiring	L1, L2, Ground (no neutral)

MECHANICAL, ENVIRONMENTAL, AND CERTIFICATIONS	
Operating Ambient Temperature	-35°C to +50°C
Ventilation	Not Required
Dimensions (Ind. Mount Plate) HxWxD	16.27 x 7.32 x 5.75in [413.23 x 185.79 x 146.02mm]
Enclosure Rating	NEMA 3R, Outdoor Use
Certifications	UL and cUL Listed to UL2594, UL2231, UL1998
Codes & Standards	FCC Part 15 Class B, NEC 265 compliant, ENERGY STAR <sup>2</sup>
Mounting Configurations	Wall Mount, Rivian Pedestal Mounted (single or dual)

CONNECTIVITY	
Card Reader (NFC)	ISO 14443 A/B, ISO 151693, and FeliCa
Bluetooth	Version 5.0
Local Area Network (LAN)	Wi-Fi – 2.4GHz (802.11 b/g/n), Ethernet – 10/100BASE-T
Wide Area Network (WAN)	Cellular – LTE Cat M1 / LTE Cat NB1
Vehicle Communication	ISO 15118 <sup>2</sup>

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NOT FOR CONSTRUCTION	FOR REFERENCE ONLY	REV.	DATE	DESCRIPTION		<b>ROOSTER ROCK STATE PARK CORBETT, OR 97019</b>	PROJECT MANAGER A. TALARICO	DESIGNER / ENGINEER P. RAO	PROJECT NO. XXXXX
			05.20.2022	CD 90					
			07.12.2022	CD 90 REV A					

**GENERAL CONSTRUCTION NOTES (ALL MAY NOT APPLY)**

- ALL WORK SHALL COMPLY WITH ALL STATE AND LOCAL CODES AND ANY OTHER REGULATING AUTHORITIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK.
- PRIOR TO COMMENCEMENT OF ANY WORK, THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND NOTIFY THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE FROM RIVIAN OF ANY DISCREPANCIES. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS SHALL BE CORRECTED AT THE SUBCONTRACTORS SOLE EXPENSE.
- SUBCONTRACTOR INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO RIVIAN FOR APPROVAL BEFORE MAKING ANY CHANGES. DEVIATION FROM PLANS BEFORE WRITTEN APPROVAL FROM RIVIAN PLACES LIABILITY ON THE SUBCONTRACTOR.
- ALL EQUIPMENT SHALL BE MOUNTED AS SHOWN. WHERE DETAILS ARE NOT PROVIDED, CONTRACTOR SHALL USE BEST CONSTRUCTION PRACTICES.
- ALL SURFACES SHALL BE PATCHED AND PAINTED AROUND NEW DEVICES AND EQUIPMENT TO MATCH EXISTING FINISHES.
- ANY METAL SHAVINGS FROM SITE WORK SHALL BE CLEANED FROM ALL SURFACES WHERE OXIDIZED OR CONDUCTIVE METAL SHAVINGS MAY CAUSE RUST, ELECTRICAL SHORT CIRCUITS, OR OTHER DAMAGE.
- APPROVALS FROM BUILDING INSPECTORS SHALL NOT CONSTITUTE AUTHORITY TO DEVIATE FROM THE DRAWINGS.
- NEW PAVEMENT INSTALLED AS PART OF THIS PROJECT SHALL MATCH EXISTING PAVEMENT SECTION. ASPHALT AND GAB DEPTHS SHALL BE MAINTAINED
- EXISTING CURB, PAVEMENT MARKINGS, AND OTHER EXISTING ENTITIES ARE OBTAINED FROM AERIAL IMAGERY. SURVEY AND/OR FIELD VERIFICATION IS REQUIRED TO OBTAIN TRUE LOCATION AND DIMENSIONS.
- THESE DRAWINGS WERE PRODUCED WITHOUT THE BENEFIT OF A CURRENT LAND SURVEY. ALL PROPERTY LINES, EASEMENTS, AND SETBACKS SHALL BE VERIFIED PRIOR TO START OF CONSTRUCTION. RIVIAN & GPD GROUP DOES NOT GUARANTEE THE ACCURACY OF SAID PROPERTY LINES, EASEMENTS, ROADS, AND SETBACKS IF APPROXIMATE LOCATIONS ARE SHOWN IN PLAN.
- THE GENERAL CONTRACTOR SHALL VISIT THE SITE AND SHALL FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
- ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND FEDERAL, STATE AND LOCAL JURISDICTION CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATION ON THE DRAWINGS.
- PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS OTHERWISE NOTED. DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS THE MINIMUM REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS, SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK. DETAILS ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF WORK AND PREPARED BY THE ENGINEER PRIOR TO PROCEEDING WITH WORK.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE ENGINEER PRIOR TO PROCEEDING.
- THE GENERAL CONTRACTOR SHALL COORDINATE WORK AND SCHEDULE WORK ACTIVITIES WITH OTHER DISCIPLINES.
- CONSTRUCTION SHALL BE DONE IN A WORKMANLIKE MANNER BY COMPETENT EXPERIENCED WORKMAN IN ACCORDANCE WITH APPLICABLE CODES AND THE BEST ACCEPTED PRACTICE.
- THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
- THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES SHALL BE PROTECTED AT ALL TIMES.
- CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE FEDERAL AND LOCAL JURISDICTION FOR EROSION AND SEDIMENT CONTROL.
- INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM SITE VISITS AND/OR DRAWINGS PROVIDED BY THE SITE OWNER. CONTRACTORS SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- FIELD TESTING OF EARTHWORK COMPACTION AND CONCRETE CYLINDERS SHALL BE PERFORMED BY AN INDEPENDENT TESTING LAB. THIS WORK TO BE COORDINATED BY THE CONTRACTOR.
- PROVIDE EROSION CONTROL MEASURES IN ACCORDANCE WITH STATE DOT, LOCAL PERMITTING AGENCY AND EPA REQUIREMENTS.
- PROVIDE AND MAINTAIN ALL TEMPORARY FENCING, BARRICADES, WARNING SIGNALS AND SIMILAR DEVICES NECESSARY TO PROTECT AGAINST THEFT FROM PROPERTY DURING THE ENTIRE PERIOD OF CONSTRUCTION. REMOVE ALL SUCH DEVICES UPON COMPLETION OF THE WORK.
- EXISTING UTILITIES: DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED BY THE OWNER OR OTHERS, EXCEPT WHEN PERMITTED IN WRITING RIVIAN.
- GRANULAR BACKFILL: SHALL MEET THE FOLLOWING GRADATION PER THE TABLE BELOW:

SIEVE SIZE	TOTAL PERCENT PASSING
1 1/2 INCH (37.5 MM)	100
1 INCH (25.0 MM)	75 TO 100
3/4 INCH (19.00 MM)	80 TO 100
3/8 INCH (9.5 MM)	35 TO 75
NO. 4 (4.75 MM)	30 TO 60
NO. 30 (0.600 MM)	7 TO 30
NO. 200 (0.75 MM)	3 TO 15

- GRANULAR BEDDING AND TRENCH BACKFILL: WELL-GRADED SAND MEETING THE GRADATION REQUIREMENTS OF ASTM D2487 (SW OR SW-SM).
- UNSUITABLE MATERIAL: HIGH AND MODERATELY PLASTICS SILTS AND CLAYS (LL>45). MATERIAL CONTAINING REFUSE, FROZEN LUMPS, DEMOLISHED BITUMINOUS MATERIAL, VEGETATIVE MATTER, WOOD, STONES IN EXCESS OF 3 INCHES IN ANY DIMENSION, AND DEBRIS AS DETERMINED BY THE CONSTRUCTION MANAGER. TYPICAL THESE WILL BE SOILS CLASSIFIED BY ASTM AS PT, MH, CH, OH, ML, AND OL.
- BEFORE STARTING GENERAL SITE PREPARATION ACTIVITIES, INSTALL EROSION AND SEDIMENT CONTROL MEASURES PER APPLICABLE PLAN

PREPARED BY CONTRACTOR. THE WORK AREA SHALL BE CONSTRUCTED AND MAINTAINED IN SUCH CONDITION THAT IN THE EVENT OF RAIN THE SITE WILL BE DRAINED AT ALL TIMES.

- PERFORM ALL GRADING TO PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND SMOOTH, EVEN SURFACE DRAINAGE OF THE ENTIRE AREA WITHIN THE LIMITS OF CONSTRUCTION. GRADING SHALL BE COMPATIBLE WITH ALL SURROUNDING TOPOGRAPHY AND STRUCTURES.

**GENERAL FOUNDATION NOTES (ALL MAY NOT APPLY)**

- DETERMINATION OF FINAL BEARING ELEVATIONS, TOPSOIL AND EXCAVATION STRIPPING DEPTH, INSPECTION OF ALL SUBSOIL EXPOSED DURING STRIPPING, SITE GRADING, EXCAVATION OPERATIONS, APPROVAL OF FILL MATERIALS, DENSITY TESTING OF FILLS TO ENSURE PLACEMENT PER SPECIFICATION REQUIREMENTS, INSPECTION OF FOUNDATION BEARING SURFACES, AND VERIFICATION OF ALLOWABLE BEARING PRESSURES ARE THE TESTING LABORATORY'S RESPONSIBILITY.
- ALL FOUNDATIONS ARE TO REST ON FIRM UNDISTURBED SOIL OR COMPACTED FILL FREE FROM ORGANIC MATTER. IF POOR SOIL CONDITIONS ARE ENCOUNTERED AT FOUNDATION DEPTHS SHOWN, NOTIFY OWNER'S REPRESENTATIVE BEFORE PROCEEDING WITH CONSTRUCTION.
- CONTRACTOR SHALL COMPACT SUBGRADE. SEE FROST/NO FROST DESIGN NOTES BELOW.
- FOUNDATIONS HAVE BEEN DESIGNED BASED ON AN ASSUMED ALLOWABLE SOIL BEARING CAPACITY OF 1500 PSF.
- NEW FOOTINGS PLACED ADJACENT TO EXISTING FOOTINGS SHALL BEAR AT THE SAME ELEVATION, UNLESS NOTED OTHERWISE.
- STEP FOOTINGS AT A RATIO OF ONE (1) VERTICAL TO TWO (2) HORIZONTAL WITH A MAXIMUM VERTICAL STEP OF 2'-0" UNLESS NOTED OTHERWISE.
- INUNDATION AND LONG TERM EXPOSURE OF BEARING SURFACES, WHICH WILL RESULT IN DETERIORATION OF BEARING FORMATIONS, SHALL BE PREVENTED. FOOTINGS SHALL BE PLACED IMMEDIATELY FOLLOWING FOOTING EXCAVATIONS AND BEARING SURFACE INSPECTION.
- UTILITY LINES SHALL NOT BE PLACED THROUGH OR BELOW FOUNDATIONS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.
- GROUNDWATER ASSUMED TO BE BELOW EXCAVATION DEPTH. IF GROUNDWATER IS ENCOUNTERED DURING EXCAVATION ON SITE, CONTRACTOR SHALL PROVIDE FOR ANY SITE DRAINAGE AND DE-WATERING REQUIRED.
- CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING PUBLIC AND PRIVATE UTILITIES PRIOR TO EXCAVATION. IF NECESSARY, UTILITIES SHALL BE RELOCATED PRIOR TO FOUNDATION INSTALLATION.

**L2 CHARGING STATION FOUNDATIONS - FROST DESIGN NOTES (BOTTOM OF FOUNDATION ABOVE FROST LEVEL):**

- CONCRETE FOUNDATIONS SHOULD BEAR DIRECTLY ON A PROPERLY COMPACTED FREE-DRAINING GRANULAR FILL CONSISTING OF NO. 57 STONE OR AN APPROVED EQUIVALENT.
- GRANULAR FILL SHOULD EXTEND VERTICALLY TO THE MINIMUM RECOMMENDED REGIONAL FROST DEPTH AND LATERALLY 2/3D FROM THE FOUNDATION PERIMETER (EXCLUDING SIDE OF PERIMETER ADJACENT TO CURB). GRANULAR FILL SHOULD BE PLACED IN 8 INCH LOOSE LIFTS AND COMPACTED WITH A VIBRATORY COMPACTOR. THE COMPACTION EQUIPMENT SHOULD BE OPERATED OVER THE FULL WIDTH OF THE FOUNDATION UNDERCUT AREA UNTIL VISIBLE DEFORMATION OF THE BACKFILL CEASES. SEE SHEET T-1 FOR LOCAL FROST DEPTH.
- GEOTEXTILE (FILTER FABRIC) SHOULD BE PLACED BETWEEN THE GRANULAR BACKFILL AND COHESIVE SOILS TO PRECLUDE THE INFILTRATION OF FINES.

**L2 CHARGING STATION FOUNDATIONS - NO FROST DESIGN NOTES (BOTTOM OF FOUNDATION BELOW FROST LEVEL):**

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

**CONCRETE (ALL MAY NOT APPLY)**

- ALL CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 301-10, "STANDARD SPECIFICATION FOR STRUCTURAL CONCRETE" AND ACI 302, 305 AND 306 UNLESS NOTED OTHERWISE.
- ALL DETAILING, FABRICATION AND PLACING OF CONCRETE SHALL CONFORM TO ACI 318-14, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" AND THE LATEST ACI "MANUAL OF STANDARD PRACTICE FOR DETAIL REINFORCED CONCRETE STRUCTURES" UNLESS NOTED OTHERWISE.
- SAFETY AND PERFORMANCE OF THE STRUCTURE ARE THE RESPONSIBILITY OF THE CONTRACTOR INsofar AS THEY ARE AFFECTED BY THE LOCATION AND DETAILS OF CONSTRUCTION JOINTS. SHOP DRAWINGS OF THE PROPOSED CONSTRUCTION JOINT LOCATIONS AND DETAILS ARE TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL.
- MAXIMUM SIZE OF AGGREGATE SHALL NOT EXCEED SIZE SUITABLE FOR INSTALLATION METHOD UTILIZED OR 1/3 CLEAR DISTANCE BEHIND OR BETWEEN REINFORCING. MAXIMUM SIZE MAY BE INCREASED TO 2/3 CLEAR DISTANCE PROVIDED WORKABILITY AND METHODS OF CONSOLIDATION SUCH AS VIBRATING WILL PREVENT HONEYCOMBS OR VOIDS.
- ALL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS AS FOLLOWS: ALL CONCRETE - 2500 PSI. ALL CONCRETE EXPOSED TO WEATHER SHALL CONTAIN 6% (± 1%) AIR ENTRAINMENT.
- REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60.
- WELDED WIRE FABRIC REINFORCING SHALL CONFORM TO ASTM A1064 AND BE FURNISHED IN FLAT SHEETS AND INSTALLED ON CHAIRS OR PRECAST CONCRETE BLOCKS.
- NO TACK WELDING OF REINFORCING IN THE FIELD IS PERMITTED.
- PROVIDE CORNER BARS AT ALL LOCATIONS WHERE REINFORCEMENT CHANGES DIRECTION.
- PROVIDE STRAIGHT AND DIAGONAL BARS AT EDGES OF ALL OPENINGS.
- REINFORCING EMBEDMENT AND LAP SPLICES (INCHES) FOR 2500 PSI CONCRETE.

BAR SIZE	OTHER		TOP*	
	ANCHORAGE	SPLICE	ANCHORAGE	SPLICE
# 3	15	19	19	24
# 4	19	25	25	33
# 5	24	31	31	41
# 6	29	37	37	49

\* HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE BELOW BAR

- NON-SHRINK GROUT SHALL MEET A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 6000 PSI.

**WHEN ALLOWED OR SPECIFIED, FIBER REINFORCED CONCRETE SHALL MEET THE FOLLOWING SPECIFICATION (ALL MAY NOT APPLY)**

STRENGTH	2500 PSI CNS-F*
MINIMUM CEMENT FACTOR	800#
MAXIMUM W/C	0.42
ENTRAINED AIR	6.5% AVG.
SLUMP	4" MAX. UNLESS HRWR OR MID RANGE WR; THEN 6" - 8"
WATER REDUCER	NORMAL TYPE A
RETARDER	NORMAL TYPE D AS NEEDED (REQUIRED IF CONCRETE TEMPERATURE EXCEEDS 85° F)
CONCRETE TEMPERATURE	50° - 90° F
ACCELERATOR	NON-CHLORIDE TYPE ONLY THE USE OF CALCIUM CHLORIDE IS PROHIBITED.
FIBER	1.5' @ 1.5 LBS. PER CUBIC YARD (AS FIBERMESH 300 OR EQUIVALENT)

\*CNS: DESIGNATES A CONCRETE MIX DESIGN WITH 2 GALLON PER CUBIC YARD OF CALCIUM NITRITE CORROSION-INHIBITOR AT 7.5% SILICA FUME.

\*F: DESIGNATES A CONCRETE MIX DESIGN WITH 1.5 LBS. FIBRILLATED MONOFILAMENT FIBER 1.5 INCHES IN LENGTH REINFORCEMENT PER CUBIC YARD OF CONCRETE

**LANDSCAPE/IRRIGATION NOTES (ALL MAY NOT APPLY)**

- ALL DISTURBED AREAS THAT ARE NOT TO BE PAVED OR MULCHED SHALL BE GRADED TO MATCH EXISTING CONDITIONS.
- SOD SHALL BE SELECTED PER ZONE AND MATCHED TO EXISTING SITE. SOD SHALL BE A FIRST GRADE CERTIFIED BLEND CONTAINING NO MORE THAN 30 PERCENT OF OTHER GRASSES AND CLOVERS, AND FREE FROM ALL NOXIOUS WEEDS.  
  
ZONES 3, 4 & 5: APPROVED BLUE GRASS BLEND  
ZONE 6: APPROVED FESCUE BLEND  
ZONES 7 & 8: APPROVED BERMUDA BLEND  
ZONES 9 & 10: APPROVED ST AUGUSTINE FLORATAM BLEND
- ALL DISTURBED AND PROPOSED LANDSCAPE AREAS SHALL RECEIVE X" OF XX MULCH TO MATCH EXISTING CONDITIONS.
- PLANT GUARANTEE (IF APPLICABLE): CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM DATE OF PROJECT ACCEPTANCE BY THE OWNER.
- IRRIGATION RELOCATION: CONTRACTOR FIELD VERIFY IF EXISTING IRRIGATION IS PRESENT, DETERMINE POINT OF CONNECTION, SYSTEM PRESSURE, FIXTURE TYPES, AND POTENTIAL FOR EXPANSION. IF FOUND THAT THE EXISTING IRRIGATION SYSTEM IS CAPABLE OF EXPANSION AND REUSE THEN IT SHALL BE MODIFIED TO PROVIDE 100% COVERAGE OF THE LANDSCAPE AREA. IF THE EXISTING IRRIGATION SYSTEM IS NOT CAPABLE OF EXPANSION, CONTRACTOR TO INSTALL A NEW CONTROLLER, BOOSTER PUMP, AND OTHER APPARATUSES NEEDED FOR A COMPLETE IRRIGATION SYSTEM. IRRIGATED AREAS SHALL BE IRRIGATED BY DRIP IRRIGATION OR SIMILAR FIXTURES BY THE SAME SUPPLIER. CONTRACTOR SHALL ENSURE BUILDING WALLS AND WINDOWS WILL NOT BE DAMAGED OR STAINED BY IMPROPER IRRIGATION INSTALLATION OR POOR SELECTION OF FIXTURES. SYSTEM SHALL INCLUDE ALL SPRINKLER FIXTURES, DRIP TUBING, PIPING, VALVES, WIRING AND CONTROLS TO PROVIDE A COMPLETE FUNCTIONAL SYSTEM THAT SHALL COMPLY WITH CITY CODE. PRIOR TO UPDATING THE IRRIGATION SYSTEM, A CERTIFIED IRRIGATION DESIGNER SHALL PROVIDE SHOP DRAWINGS TO ENGINEER FOR APPROVAL. UPON APPROVAL OF SHOP DRAWINGS, THE UPDATED IRRIGATION SYSTEM SHALL BE APPROVED BY OWNER FOR FINAL ACCEPTANCE.

**PAVEMENT MARKING NOTES (ALL MAY NOT APPLY)**

- ALL PAVEMENT MARKINGS TO BE WHITE PAVEMENT PAINT, UNLESS STATED OTHERWISE. ALL PAVEMENT MARKINGS WITHIN ADA AREAS SHALL BE PAINTED BLUE EXCEPT FOR COLORS DEFINED ON THE ADA PAVEMENT SYMBOL.
- MARKING (STRIPING) PAINT FOR PARKING SPACES, TRAFFIC ARROWS, ADA PARKING AND SYMBOLS, ETC., PER LOCAL REQUIREMENTS AND AS FOLLOWS:
- PAVEMENT MARKINGS PAINT SHALL BE WATER BASE FAST DRYING 100% ACRYLIC TYPE: WATER BASE TO MEET FEDERAL SPECIFICATION TTP-01952B. FOR COLD WEATHER APPLICATION PAINT PRODUCT SHALL BE IN ACCORDANCE WITH ASTM-D2369. D1394, D3723, D1475, D562 AND D711.
- PROVIDE A NON-SLIP AGGREGATE ADDITIVE TO MARKING PAINT USED AT ADA ACCESS RAMPS.
- APPLY 2 COATS WITHIN THE SAME DAY, UTILIZING STRAIGHT EDGES, YELLOW ON CONCRETE/WHITE ON ASPHALT EXCEPT WHEN MATCHING ADJACENT OR EXISTING COLOR WHEN THE PAVING IS AN EXPANSION OR SEGMENT OF A LARGER LOT.

**TRAFFIC CONTROL NOTES (ALL MAY NOT APPLY)**

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

**SPECIAL INSPECTIONS (ALL MAY NOT APPLY)**

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

**EXISTING SLAB REINFORCEMENT INVESTIGATION/X-RAY (ALL MAY NOT APPLY)**

- CONTRACTOR SHALL VERIFY POST TENSIONING AND REINFORCEMENT LOCATION IN EXISTING CONCRETE SLAB PRIOR TO DRILLING.

REV.	DATE	DESCRIPTION	PROJECT MANAGER		DESIGNER / ENGINEER		PROJECT NO.
	05.20.2022	CD 90	A. TALARICO		P. RAO		XXXXX
	07.12.2022	CD 90 REV A					
							SHEET NO.
							C1

NOT FOR CONSTRUCTION



ROOSTER ROCK STATE PARK CORBETT, OR 97019

CIVIL GENERAL NOTES



EVCS CIRCUIT SCHEDULE		
EV CS #	EVCS STALL TYPE	CHARGING LEVEL
01	STANDARD	LEVEL 2
02	STANDARD	LEVEL 2
03	STANDARD	LEVEL 2
04	STANDARD ACCESSIBLE	LEVEL 2

PARKING STALL SCHEDULE	
EXISTING STANDARD STALLS UTILIZED AS A RESULT OF THIS PROJECT	4
PROPOSED RIVIAN STALLS	4
PROPOSED STANDARD STALLS	0
NET STALL COUNT	+0

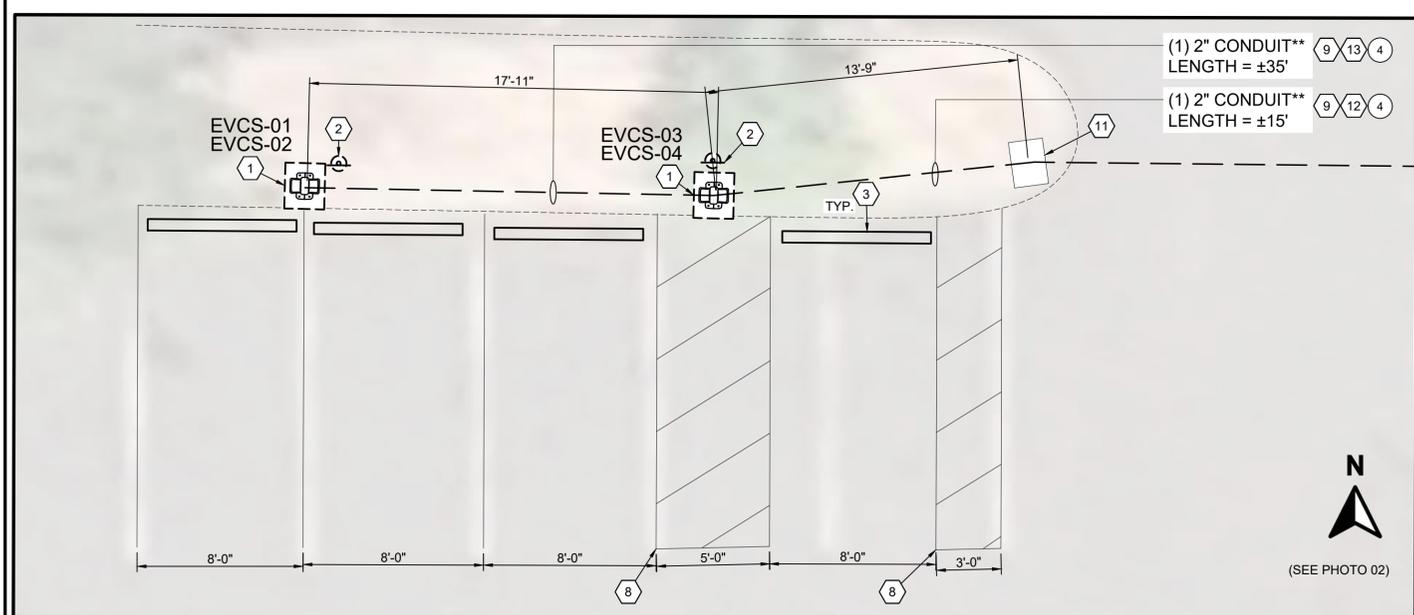
  

FEEDER REFERENCE	
#	DENOTES FEEDER REFERENCE. REFER TO SHEET E2 FOR FEEDER/CIRCUIT SCHEDULE.

**NOTE:**  
AERIAL IMAGERY FROM GOOGLE EARTH DATED ON 08/2017. THIS PLAN IS FOR REFERENCE ONLY. MAP DATA: GOOGLE, LANDSAT/ COPERNICUS

- CONSTRUCTION KEYNOTES (#)**
- PROPOSED RIVIAN LEVEL 2 DISPENSER (04) MOUNTED ON RIVIAN DUAL PORT PEDESTAL(02) WITH INDIVIDUAL CAST IN PLACE CONCRETE FOUNDATION WITH BOLLARDS. SEE DETAILS ON SHEET C4.
  - PROPOSED PARKING SIGN (TYPICAL OF 2). SEE DETAILS ON SHEET C4.
  - PROPOSED WHEELSTOPS ( TYPICAL OF 4). SEE DETAIL ON SHEET C4.
  - EXISTING TRANSFORMER.
  - EXISTING 200A PANEL AND UTILITY METER.
  - CONTRACTOR SHALL INSTALL NEW 200A PANEL WITH MORE BREAKER SLOTS TO ACCOMMODATE EV CHARGERS.
  - RIVIAN PROPOSING TO OCCUPY FOUR (4), 2POLE, 50A BREAKERS FOR EV CHARGERS - EVCS-01, EVCS-02 AND EVCS-03, EVCS-04.
  - RE-STRIPE 4" WIDE SOLID EV ACCESSIBLE STALLS AS SHOWN IN THE DRAWING.
  - PROPOSED CONDUIT(S) SHALL BE DIRECTIONALLY BORED. SEE DETAILS ON SHEET E3.
  - PROPOSED (2) 2" CONDUIT SHALL BE DIRECTIONALLY BORED FROM 200A PANEL TO HANDHOLE.
  - PROPOSED HAND HOLE.
  - PROPOSED (1) 2" CONDUIT SHALL BE DIRECTIONALLY BORED FROM HANDHOLE TO EV CHARGERS: EVCS-01 and EVCS-02.
  - PROPOSED (1) 2" CONDUIT SHALL BE DIRECTIONALLY BORED FROM HANDHOLE TO EV CHARGERS: EVCS-03 and EVCS-04.
  - ALL DISTURBED AREAS SHALL BE SODDEN/MULCHED UNLESS OTHERWISE NOTED. SEE LANDSCAPE/IRRIGATION NOTES ON SHEET C1.
  - EXISTING TREE(S) TO REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNER PRIOR TO PERFORMING WORK IF TREE DISTURBANCE IS UNAVOIDABLE.
  - CONTRACTOR SHALL TAKE EXTRA CARE TO PRESERVE THE EXISTING CONDITION / SIDEWALK / TREES / PLANTS. MAINTAIN DISTURBANCE TO THE MINIMUM AND RESTORE WHEN WORK IS COMPLETE.
  - APPROXIMATE LOCATION OF THE EXISTING KIOSK. CONTRACTOR SHALL COORDINATE UNDERGROUND ELECTRICAL WITH ANY CHARGING INFRASTRUCTURE THAT MIGHT INTERFERE DURING INSTALLATION. SEE PHOTO 01.
- \*\* CONTRACTOR SHALL COORDINATE CONDUIT ROUTING WITH PROPERTY OWNER AND INSTALL THE FOLLOWING CONDUIT TYPE WHERE APPLICABLE (UNLESS OTHERWISE NOTED):
- PVC SCH 40 BELOW GRADE. PVC SCH 80 BELOW DRIVES AND PARKING LOTS.
  - RGS 8'-0" OR LESS ABOVE GRADE.
  - RGS TO BE USED IN PARKING GARAGES.
  - EMT 8'-0" MINIMUM ABOVE GRADE AND WHERE NOT SUBJECT TO DAMAGE. CONTRACTOR SHALL VERIFY WITH ELECTRICAL INSPECTOR IF EMT IS APPROVED AT THIS PROJECT PRIOR TO ROUGH-IN.



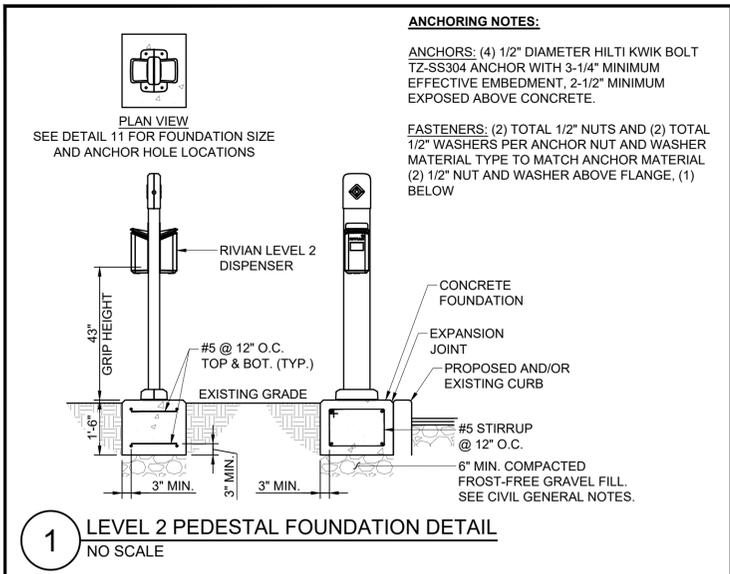
**NOTE:**  
PROPOSED GEOMETRICS ARE BASED ON EXISTING AERIAL IMAGERY. THE CONTRACTOR SHALL FIELD VERIFY DIMENSIONS PRIOR TO CONSTRUCTION ACTIVITIES. CONTACT RIVIAN IMMEDIATELY SHOULD A DISCREPANCY EXIST.

**EVCS ENLARGEMENT**  
SCALE: 3"=1'-0"

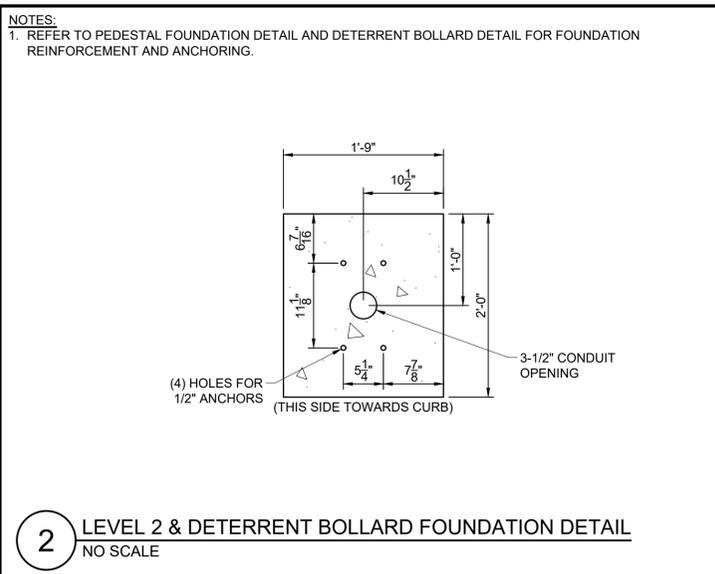


- GENERAL SHEET NOTES**
- CONTRACTOR SHALL REMOVE EXISTING PAVEMENT AND/OR CURB AS NECESSARY USING CLEAN SAWCUTS TO INSTALL PROPOSED UNDERGROUND CONDUITS AND REPLACE PAVEMENT AND/OR CURB AFTER CONDUITS HAVE BEEN INSTALLED. CONTRACTOR SHALL MEET OR EXCEED EXISTING PAVEMENT SPECIFICATIONS. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO PERFORMING WORK.
  - APPLY LIQUID ASPHALT AT ALL JOINTS BETWEEN CONCRETE AND ASPHALT AND WHERE PROPOSED ASPHALT MEETS EXISTING, INCLUDING SAW CUT JOINTS.
  - CONTRACTOR RESPONSIBILITIES INCLUDES CHARGING STATION PAD, TRENCHING, CONDUIT INSTALLATION, AND WIRING.
  - CONTRACTOR SHALL RETURN SIDEWALKS, LANDSCAPING, PLANTERS, IRRIGATION SYSTEMS, AND ANY OTHER FACILITIES DISTURBED BY THE WORK TO THE SAME OR BETTER CONDITION THAN EXISTED PRIOR TO THE COMMENCEMENT OF THE WORK.
  - EXACT PLACEMENT AND ORIENTATION OF THE RIVIAN CHARGING STATIONS MAY VARY. VERIFY WITH RIVIAN PM PRIOR TO INSTALLATION.
  - CONTRACTOR SHALL CONTACT UTILITY LOCATION SERVICES PRIOR TO THE START OF CONSTRUCTION. EXTREME CAUTION SHOULD BE USED WHEN EXCAVATING OR ROUTING CONDUIT AROUND OR NEAR UTILITIES.
  - CONTRACTOR TO PAINT PROPOSED EV PARKING SPACES PER JURISDICTIONAL REQUIREMENTS.
  - EXISTING CURB, PAVEMENT MARKINGS, AND OTHER EXISTING ENTITIES ARE OBTAINED FROM AERIAL IMAGERY. SURVEY AND/OR FIELD VERIFICATION IS REQUIRED TO OBTAIN TRUE LOCATION AND DIMENSIONS.
  - THESE DRAWINGS WERE PRODUCED WITHOUT THE BENEFIT OF A CURRENT LAND SURVEY. ALL PROPERTY LINES, EASEMENTS, AND SETBACKS SHALL BE VERIFIED PRIOR TO START OF CONSTRUCTION. RIVIAN & GPD GROUP DOES NOT GUARANTEE THE ACCURACY OF SAID PROPERTY LINES, EASEMENTS, ROADS, AND SETBACKS IF APPROXIMATE LOCATIONS ARE SHOWN IN PLAN.
  - CONTRACTOR SHALL HAND DIG AROUND ALL EXISTING UTILITIES.
  - CONDUIT ELBOWS SHALL BE SIZED PER NEC. CONTRACTOR SHALL VERIFY MANUFACTURER ALLOWABLE FILL. SEE FEEDER SCHEDULE FOR CONDUCTOR SPECIFICATIONS.
  - ALL CONDUITS ACCESSIBLE TO THE PUBLIC OR WHICH CAN BE DAMAGED SHALL BE RIGID GALVANIZED STEEL.
  - CONTRACTOR SHALL PROVIDE WATER TIGHT & FIRE TIGHT FITTINGS IN ALL PENETRATIONS.
  - CONTRACTOR SHALL COORDINATE ANY/ALL BUILDING OUTAGES WITH BUILDING OWNER.
  - CONDUIT ROUTING IS SHOWN DIAGRAMMATICALLY ONLY. CONDUIT PLACEMENT TO BE VERIFIED BY CONTRACTOR BASED ON EXISTING SITE CONDITIONS AND PHYSICAL MEASUREMENTS.
  - ALL UNDERGROUND CONDUITS ROUTED TO PROPOSED EQUIPMENT SHALL BE ROUTED UP THROUGH CONCRETE SLAB.

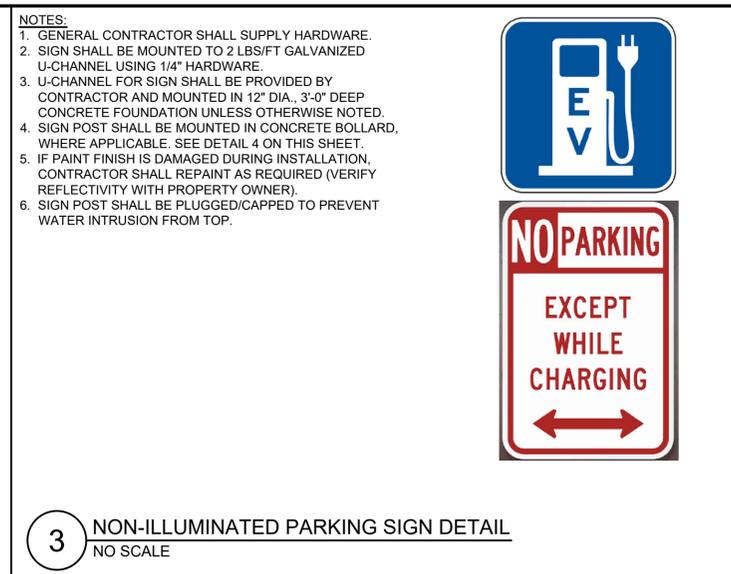
<b>NOT FOR CONSTRUCTION</b>	<table border="1"> <thead> <tr> <th>REV.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td></td> <td>05.20.2022</td> <td>CD 90</td> </tr> <tr> <td></td> <td>07.12.2022</td> <td>CD 90 REV A</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>	REV.	DATE	DESCRIPTION		05.20.2022	CD 90		07.12.2022	CD 90 REV A														<b>ROOSTER ROCK STATE PARK CORBETT, OR 97019</b>	PROJECT MANAGER A. TALARICO	DESIGNER / ENGINEER P. RAO	PROJECT NO. <b>XXXXX</b>
		REV.	DATE	DESCRIPTION																							
	05.20.2022	CD 90																									
	07.12.2022	CD 90 REV A																									
SHEET NAME <b>SITE PLAN</b>		SHEET NO. <b>C3</b>																									



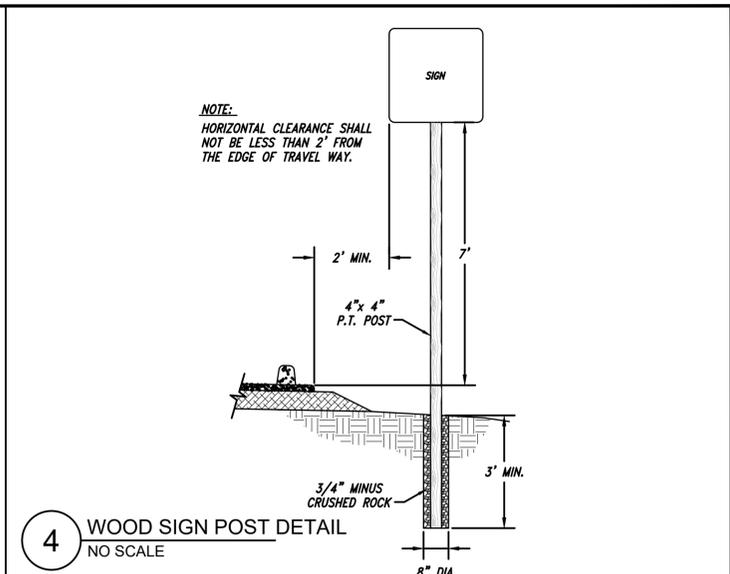
**1 LEVEL 2 PEDESTAL FOUNDATION DETAIL**  
NO SCALE



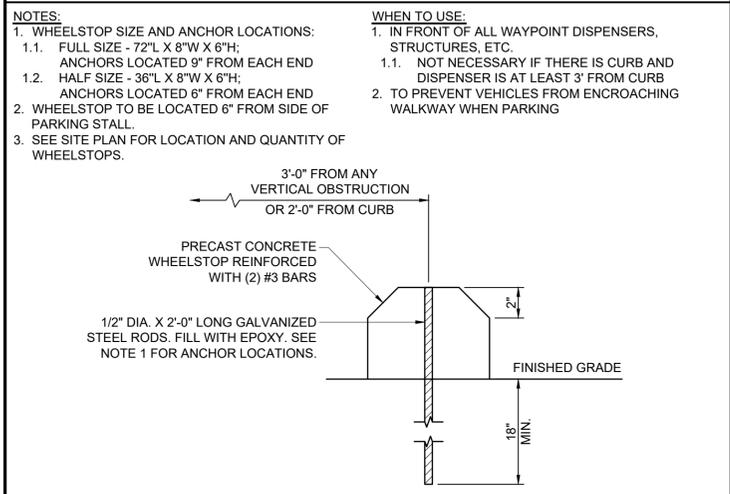
**2 LEVEL 2 & DETERRENT BOLLARD FOUNDATION DETAIL**  
NO SCALE



**3 NON-ILLUMINATED PARKING SIGN DETAIL**  
NO SCALE



**4 WOOD SIGN POST DETAIL**  
NO SCALE



**5 WHEELSTOP DETAIL**  
NO SCALE

**NOTES:**  
1. WHEELSTOP SIZE AND ANCHOR LOCATIONS:  
1.1. FULL SIZE - 72\"/>

**WHEN TO USE:**  
1. IN FRONT OF ALL WAYPOINT DISPENSERS, STRUCTURES, ETC.  
1.1. NOT NECESSARY IF THERE IS CURB AND DISPENSER IS AT LEAST 3' FROM CURB  
2. TO PREVENT VEHICLES FROM ENCRDACHING WALKWAY WHEN PARKING

**NOTES:**  
1. REFER TO PEDESTAL FOUNDATION DETAIL AND DETERRENT BOLLARD DETAIL FOR FOUNDATION REINFORCEMENT AND ANCHORING.

**NOTES:**  
1. GENERAL CONTRACTOR SHALL SUPPLY HARDWARE.  
2. SIGN SHALL BE MOUNTED TO 2 LBS/FT GALVANIZED U-CHANNEL USING 1/4\"/>

**NOTE:**  
HORIZONTAL CLEARANCE SHALL NOT BE LESS THAN 2' FROM THE EDGE OF TRAVEL WAY.

**NOT FOR CONSTRUCTION**

REV.	DATE	DESCRIPTION

REV.	DATE	DESCRIPTION



**ROOSTER ROCK STATE PARK CORBETT, OR 97019**

PROJECT MANAGER  
A. TALARICO

DESIGNER / ENGINEER  
P. RAO

SHEET NAME  
**CIVIL DETAILS**

PROJECT NO.  
XXXXX

SHEET NO.  
**C4**



GENERAL SHEET NOTES

- ALL CONDUIT & WIRING FURNISHED AND INSTALLED BY CONTRACTOR UNLESS NOTED OTHERWISE.
- ALL CONDUITS ACCESSIBLE TO THE GENERAL PUBLIC OR WHICH CONDUITS CAN BE DAMAGED SHALL BE RIGID GALVANIZED STEEL.
- THE AFOREMENTIONED STANDARDS IDENTIFY THE REQUIREMENTS MET BY THE LEVEL 2 CHARGERS, INCLUDING BUT NOT LIMITED TO:
  - PROTECTION AGAINST ELECTRIC SHOCK
  - OVERLOAD AND SHORT CIRCUIT PROTECTION
  - FAULT PROTECTION
  - DEGREES OF PROTECTION AGAINST ACCESS TO HAZARDOUS LIVE PARTS
  - THE INTERNAL COMPONENTS OF THE SYSTEM ARE PROPRIETARY. ANY QUESTIONS CONCERNING ACTUAL INTERNAL PROTECTIVE DEVICES MUST BE COORDINATED DIRECTLY WITH RIVIAN.
- TENANT SUB-METERING NOT REQUIRED.
- CONTRACTOR SHALL FIELD VERIFY EXACT PLACEMENT OF PROPOSED EQUIPMENT AND MAINTAIN REQUIRED CLEARANCES PER NEC.
- LEVEL 2 CHARGERS CAN OPERATE ON 240V OR 208V SINGLE PHASE.
  - LEVEL 2 CHARGERS USED ON THIS PROJECT COMPLY WITH THE FOLLOWING STANDARDS:
    - UL AND cUL LISTED TO UL2594, UL2231, UL1998

<b>PANEL NAME:</b>	PANEL	<b>MAINS TYPE:</b>	MCB	<b>DISTRIBUTION TYPE:</b>	120/240V, 1-PH, 3-WIRE
<b>STATUS:</b>	NEW	<b>MAINS RATING (A):</b>	200	<b>RATED FAULT CURRENT:</b>	10 KAIC (VERIFY W/ UTILITY PRIOR TO ORDERING)
<b>LOCATION:</b>	PARKING	<b>BUS RATING (A):</b>	200	<b>RATING TYPE:</b>	FULLY RATED
<b>SUPPLY FROM:</b>	EXISTING 50KVA TRANSFORMER	<b>ENCLOSURE:</b>	NEMA 3R	<b>SERVICE ENTRANCE RATED:</b>	YES
		<b>MOUNTING:</b>	H-FRAME	<b>ISOLATED GND BAR:</b>	YES

CKT #	LOAD					DESCRIPTION	NOTE	AMP	TOTAL PER PHASE IN KVA		AMP	POLE	NOTE	DESCRIPTION	LOAD					CKT #	
	L	R	HV	M	C				A	B					L	R	HV	M	C		
1					4.80	PROPOSED RIVIAN LEVEL 2 CHARGER EVCS-01		50	2	9.60	9.60	50	2	PROPOSED RIVIAN LEVEL 2 CHARGER EVCS-03						4.80	2
3					4.80	PROPOSED RIVIAN LEVEL 2 CHARGER EVCS-02		50	2	9.60	9.60	50	2	PROPOSED RIVIAN LEVEL 2 CHARGER EVCS-04						4.80	4
5					4.80	EXISTING		20	1	0.00	0.00	30	1	EXISTING						4.80	6
7					4.80															4.80	8
9																					10
11																					12
13																					14
15																					16
17																					18
19																					20
21																					22
23																					24
TOTAL KVA =									19.20	19.20	38.40 TOTAL CONN KVA										
TOTAL AMPS =									160.0	160.0	160.00 TOTAL CONN AMPS										

DEMAND FACTOR	TOTAL		NOTES	
	A	B		
LIGHTING	1.25	0.00	0.00	
FIRST 10KVA RECEPTACLES (3.33 KVA PER PHASE)	1.00	0.00	0.00	
REMAINING RECEPTACLES	0.50	0.00	0.00	
HVAC EQUIP	1.00	0.00	0.00	
25% OF LARGEST MOTOR	0.25	0.00	0.00	
MISCELLANEOUS	1.00	0.00	0.00	
CONTINUOUS	1.25	24.00	48.00	
TOTALS (KVA)		24.00	24.00	48.00
TOTALS (A)		200.00	200.00	200.00

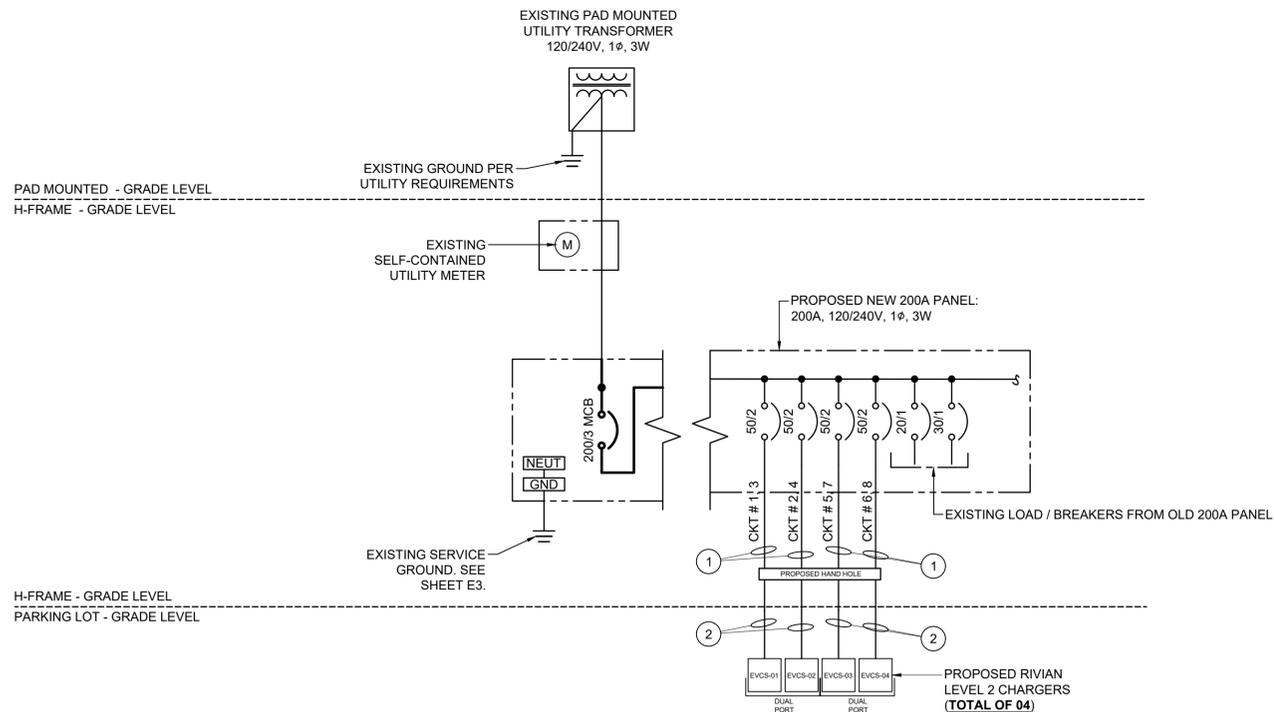
PANEL BOARD NOTES:

- CIRCUITS SHALL BE REARRANGED AS REQUIRED TO MAINTAIN THE MOST BALANCED LOADS ON EACH PHASE WITHIN EACH PANEL. PROVIDE TYPED PANEL DIRECTORY MOUNTED PER MANUFACTURERS RECOMMENDATIONS WITH SERVICE EQUIPMENT.
- CONTRACTOR IS RESPONSIBLE FOR LOADING ON ALL PANELS AND FEEDERS PER THE N.E.C. CONTRACTOR SHALL KEEP CIRCUIT CONTINUITY TO DEVICES TO REMAIN. E.C. SHALL VERIFY THAT ALL LOADS PLACED ON EXISTING PANELS AND FEEDERS DO NOT EXCEED THE MAXIMUM LOADING REQUIREMENT PER THE LATEST EDITION OF THE NEC. NOTIFY A/E IF OVERLOAD IS POSSIBLE.
- PROVIDE EQUIPMENT WITH SUFFICIENT INTERRUPTING CAPACITY (AIC) REQUIRED FOR A SAFE INSTALLATION. AIC RATING NOTED ON EACH PANELBOARD SCHEDULE IS MINIMUM RATING ACCEPTED WITHOUT ADDITIONAL DOCUMENTATION THAT INDICATES DIFFERENTLY.

NO	FROM	TO	NOMINAL VOLTAGE (V <sub>AC</sub> - PHASE)	NOMINAL CURRENT (AMPS)	UPSTREAM OCPD (AMPS)	CONDUCTOR SPECIFICATION (THWN-2, 90°C)
1	NEW 200A PANEL AND EXISTING UTILITY METER	PROPOSED HANDHOLE	240V - 1φ	SEE PANEL SCHEDULE	SEE PANEL SCHEDULE	(4) #6 AWG Cu (1) #10 AWG Cu GND IN (2) 2" CONDUIT
2	PROPOSED HANDHOLE	PROPOSED RIVIAN LEVEL 2 CHARGERS (TOTAL OF 02)	240V - 1φ	40	50	(4) #6 AWG Cu (1) #10 AWG Cu GND IN (1) 2" CONDUIT
2		PROPOSED RIVIAN LEVEL 2 CHARGERS (TOTAL OF 02)	240V - 1φ	40	50	(4) #6 AWG Cu (1) #10 AWG Cu GND IN (1) 2" CONDUIT

FEEDER/CIRCUIT SCHEDULE NOTES

- CONDUCTORS FOR UP TO (2) STATIONS CAN BE IN THE SAME CONDUIT. IF LESS THAN (2) STATIONS WORTH OF CONDUCTORS ARE ROUTED IN A SINGLE CONDUIT, CONTRACTOR SHALL DECREASE SPECIFIED CONDUIT SIZE ACCORDINGLY BASED ON NUMBER OF STATIONS PER NEC. SEE PLAN FOR CONDUIT SIZE.
- ALL SPECIFIED CONDUCTOR SIZES ACCOUNT FOR VOLTAGE DROP AND HAVE BEEN DE-RATED FOR (4) CURRENT CARRYING CONDUCTORS IN A SINGLE CONDUIT.
- CONTRACTOR SHALL INSTALL THE FOLLOWING WHERE APPLICABLE (UNLESS OTHERWISE NOTED):
  - PVC SCH 40 BELOW GRADE. PVC SCH 80 BELOW DRIVES AND PARKING LOTS.
  - RGS 8'-0" OR LESS ABOVE GRADE AND IN PARKING GARAGES
  - EMT 8'-0" MINIMUM ABOVE GRADE AND WHERE NOT SUBJECT TO DAMAGE. CONTRACTOR SHALL VERIFY WITH ELECTRICAL INSPECTOR IF EMT IS APPROVED AT THIS PROJECT PRIOR TO ROUGH-IN.
- MAXIMUM OF #6 WIRE CAN BE FED INTO LEVEL 2 CHARGER. FOR RUNS BEYOND 130' A CABLE REDUCER WILL BE REQUIRED WITHIN 10' OF CHARGERS AND LOCATED IN A JUNCTION BOX. CABLE REDUCER MAY ALSO BE REQUIRED FOR TERMINATIONS AT BRANCH BREAKER. CONTRACTOR TO VERIFY WITH MANUFACTURER.



PARTIAL ONE-LINE DIAGRAM

REV.	DATE	DESCRIPTION
	05.20.2022	CD 90
	07.12.2022	CD 90 REV A



ROOSTER ROCK STATE  
PARK CORBETT, OR  
97019

PROJECT MANAGER  
A. TALARICO

DESIGNER / ENGINEER  
P. RAO

SHEET NAME  
SYSTEM ONE-LINE DIAGRAM  
AND PANEL SCHEDULE

PROJECT NO.

XXXXX

SHEET NO.

E2

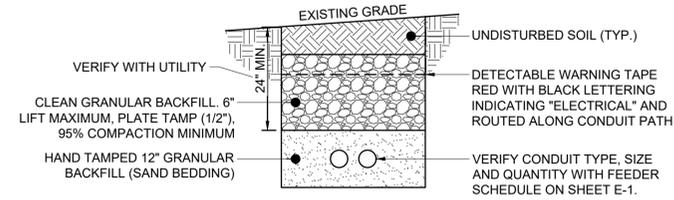
NOT FOR  
CONSTRUCTION

CURRENT	CIRCUIT BREAKER SPECIFICATION	TYPICAL WIRE SPECIFICATION*	DIP SWITCH			FIGURE
			SWITCH 1	SWITCH 2	SWITCH 3	
6A	7.5A	14-12 AWG Cu	OFF	OFF	OFF	
12A	15A	14-12 AWG Cu	OFF	OFF	ON	
16A	20A	12-10 AWG Cu	OFF	ON	OFF	
20A	25A	10 AWG Cu	OFF	ON	ON	
24A	30A	10 AWG Cu	ON	OFF	OFF	
32A	40A	8 AWG Cu	ON	OFF	ON	
40	50A	8 AWG Cu	ON	ON	OFF	
48A (DEFAULT)	60A	6 AWG Cu	ON	ON	ON	

\* THESE TYPICAL WIRE SIZES ARE BASED ON THE 90°C COLUMN IN THE NATIONAL ELECTRICAL CODE.

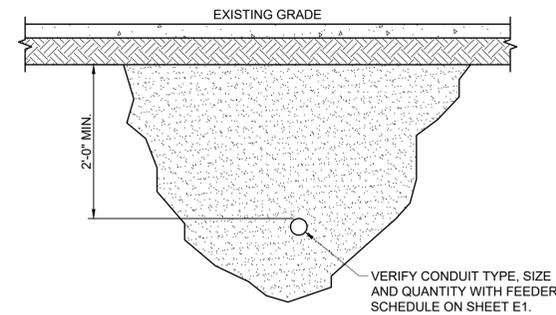
**1** OPERATING CURRENT - DIP SWITCH SETTINGS DETAIL  
NO SCALE

- NOTES:
- ANY EXCAVATION LEFT OPEN SHOULD BE SECURELY FENCED OFF.
  - ANY PAVEMENT DAMAGE DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO PRECONSTRUCTION CONDITIONS OR BETTER.
  - CONTRACTOR SHALL INSTALL CONDUITS BELOW LOCAL FROST LINE. SHOULD FIELD CONDITIONS VARY, CONTRACTOR SHALL COORDINATE WITH CONTACT ENGINEER LISTED ON SHEET T-1.
  - VERIFY WIDTH OF TRENCH REQUIRED. REFER TO SITE PLAN ON SHEET C-1 FOR ROUTING.
  - PROVIDE 1" OF GRANULAR BACKFILL BETWEEN CONDUITS.
  - CONDUITS UNDER DRIVES AND PARKING LOTS SHALL BE PVC SCHEDULE 80
  - CONTRACTOR IS RESPONSIBLE TO CALL AN UNDERGROUND LOCATING COMPANY TO MARK ALL EXISTING UNDERGROUND UTILITIES
  - CONTRACTOR SHALL COORDINATE WITH ALL EXISTING UTILITIES AND VERIFY AND KEEP REQUIRED DISTANCES FROM EXISTING UTILITIES.
  - CONTRACTOR IS RESPONSIBLE FOR ANY/ALL DAMAGES TO EXISTING UTILITIES AND MAKE ALL REPAIRS IF REQUIRED AND PAY ALL DAMAGE FEES.



**2** TYPICAL CONDUIT UNDER SOLID TRENCH DETAIL  
NO SCALE

- NOTES:
- CONTRACTOR SHALL INSTALL CONDUITS BELOW LOCAL FROST LINE. SHOULD FIELD CONDITIONS VARY, CONTRACTOR SHALL COORDINATE WITH CONTACT ENGINEER LISTED ON SHEET C0.
  - CONDUITS UNDER DRIVES AND PARKING LOTS SHALL BE PVC SCHEDULE 80.
  - CONTRACTOR IS RESPONSIBLE TO CALL AN UNDERGROUND LOCATING COMPANY TO MARK ALL EXISTING UNDERGROUND UTILITIES.
  - CONTRACTOR SHALL COORDINATE WITH ALL EXISTING UTILITIES AND VERIFY AND KEEP REQUIRED DISTANCES FROM EXISTING UTILITIES.
  - CONTRACTOR IS RESPONSIBLE FOR ANY/ALL DAMAGES TO EXISTING UTILITIES AND MAKE ALL REPAIRS IF REQUIRED AND PAY ALL DAMAGE FEES.



**3** DIRECTIONAL BORE SECTION DETAIL  
NO SCALE

NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION
	05.20.2022	CD 90
	07.12.2022	CD 90 REV A



ROOSTER ROCK STATE  
PARK CORBETT, OR  
97019

PROJECT MANAGER  
A. TALARICO

DESIGNER / ENGINEER  
P. RAO

PROJECT NO.

XXXXX

SHEET NAME

ELECTRICAL DETAILS

SHEET NO.

E3