



Redwood Coast Energy Authority

**INVITATION FOR BIDS**

**IFB-24-504**

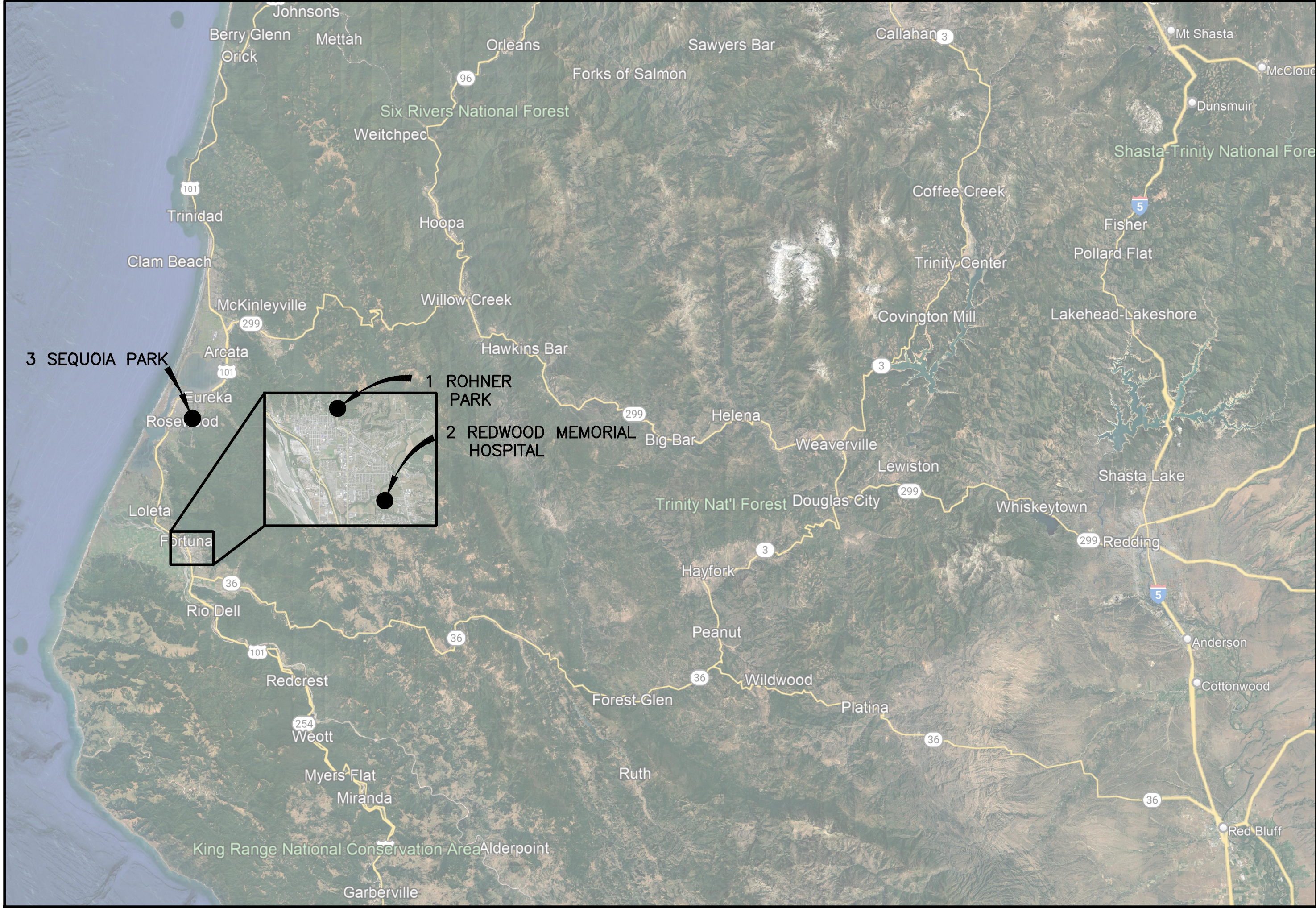
Summary of Work Attachment 1.1  
Plan Drawing and Technical Specifications –  
FORTUNA & EUREKA



# REDWOOD COAST ENERGY AUTHORITY

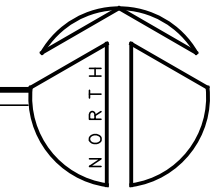
## ELECTRIC VEHICLE CHARGING STATIONS

### 2 LOCATIONS IN FORTUNA & 1 LOCATION IN EUREKA



VICINITY MAP

NO SCALE



**PROJECT INFORMATION:**

APPLICANT:  
REDWOOD COAST ENERGY AUTHORITY  
633 3RD STREET  
EUREKA, CA 95501

APPLICANT AGENT:  
WHITCHURCH ENGINEERING INC.  
610 9TH STREET  
FORTUNA, CA 95540

**PROJECT DESCRIPTION:**

INSTALLATION OF <N> ELECTRIC VEHICLE CHARGING STATIONS AT VARIOUS SITES.

**SITE INDEX:**

SITE #	SITE NAME
1	ROHNER PARK
2	REDWOOD MEMORIAL HOSPITAL
3	SEQUOIA PARK

**SHEET INDEX**

- 1.1 LOCATION MAP & NOTES - ROHNER PARK
- 1.2 SITE & GRADING PLAN - ROHNER PARK
- 1.3 EROSION CONTROL PLAN - ROHNER PARK
- 2.1 VICINITY MAP & NOTES - REDWOOD MEMORIAL HOSPITAL
- 2.2 SITE PLAN - REDWOOD MEMORIAL HOSPITAL
- 2.3 EROSION CONTROL PLAN - REDWOOD MEMORIAL HOSPITAL
- 3.1 LOCATION MAP & NOTES - SEQUOIA PARK
- 3.2 SITE & GRADING PLAN - SEQUOIA PARK
- 3.3 EROSION CONTROL PLAN - SEQUOIA PARK
- C1 CIVIL DETAILS - ALL SITES
- E1 ELECTRICAL DETAILS - ALL SITES

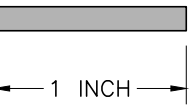
**PROJECT CONSULTANTS**

CIVIL ENGINEERING:  
WHITCHURCH ENGINEERING, INC.  
610 9TH STREET  
FORTUNA, CA 95540  
(707) 444-1420

ELECTRICAL ENGINEERING:  
WHITCHURCH ENGINEERING, INC.  
610 9TH STREET  
FORTUNA, CA 95540  
(707) 444-1420

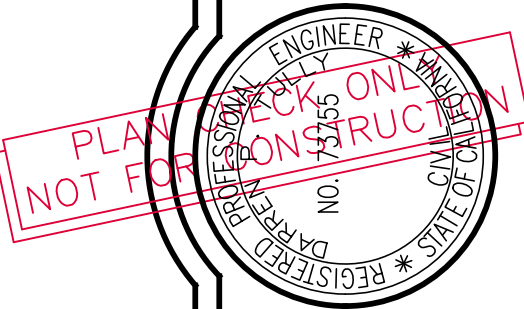
SURVEYOR:  
WHITCHURCH ENGINEERING, INC.  
610 9TH STREET  
FORTUNA, CA 95540  
(707) 444-1420

THESE PLANS ARE ORIGINALLY PRINTED ON 22"x34" PAPER.



This drawing or drawing set shall not be used for construction unless a jurisdictional stamp (County, City, State, Federal) has been issued on the drawing, stating "FOR PERMIT" or similar verbiage, a wet signed professional engineer's stamp, and permit documents have been issued for the project.

REVISIONS	BY



**WHITCHURCH ENGINEERING, INC.**  
610 9th Street Fortuna, California 95540  
Phone (707) 444-1420

**RCEA ELECTRIC VEHICLE CHARGING STATIONS**  
ADDRESS: VARIOUS APNS: 040-381-001, 202-082-064, 013-161-001  
**TITLE SHEET**  
For: REDWOOD COAST ENERGY AUTHORITY, 633 3RD ST., EUREKA, CA 95501

Date	MAY 17 '24
Scale	AS NOTED
Design	ZDJ
Drawn	ALW
Job	REA 2301
Sheet	<b>T1</b>

Z:\Shared\Information\2022-08-01\REA 2301\Map\_Fortuna\Title - Fortuna.dwg 3/19/2024







# ABBREVIATIONS

- AC ASPHALT CONCRETE
- AGG. AGGREGATE
- CC CONCRETE
- CL CENTERLINE
- CONC. CONCRETE
- DI DRAINAGE INLET
- <E> EXISTING
- EL ELEVATION
- ELEC. ELECTRICAL
- EP EDGE OF PAVEMENT
- FF FINISHED FLOOR
- FL FLOW LINE
- GD GROUND
- GM GAS METER
- GRD GROUND
- JP JOINT UTILITY POLE
- JB JUNCTION BOX
- MH MANHOLE
- MIN. MINIMUM
- <N> NEW
- <P> PROPOSED
- RD. ROAD
- R/W RIGHT OF WAY
- SD STORM DRAIN
- S.F. SQUARE FOOT
- SD STANDARD SIDEWALK
- TBR TO BE REMOVED
- TB TOP OF BANK
- TC TOP OF CURB
- TYP. TYPICAL
- THK. THICK
- UTIL. UTILITY
- W WATER
- W/ WITH
- WM WATER METER
- WV WATER VALVE

# GRADING LEGEND

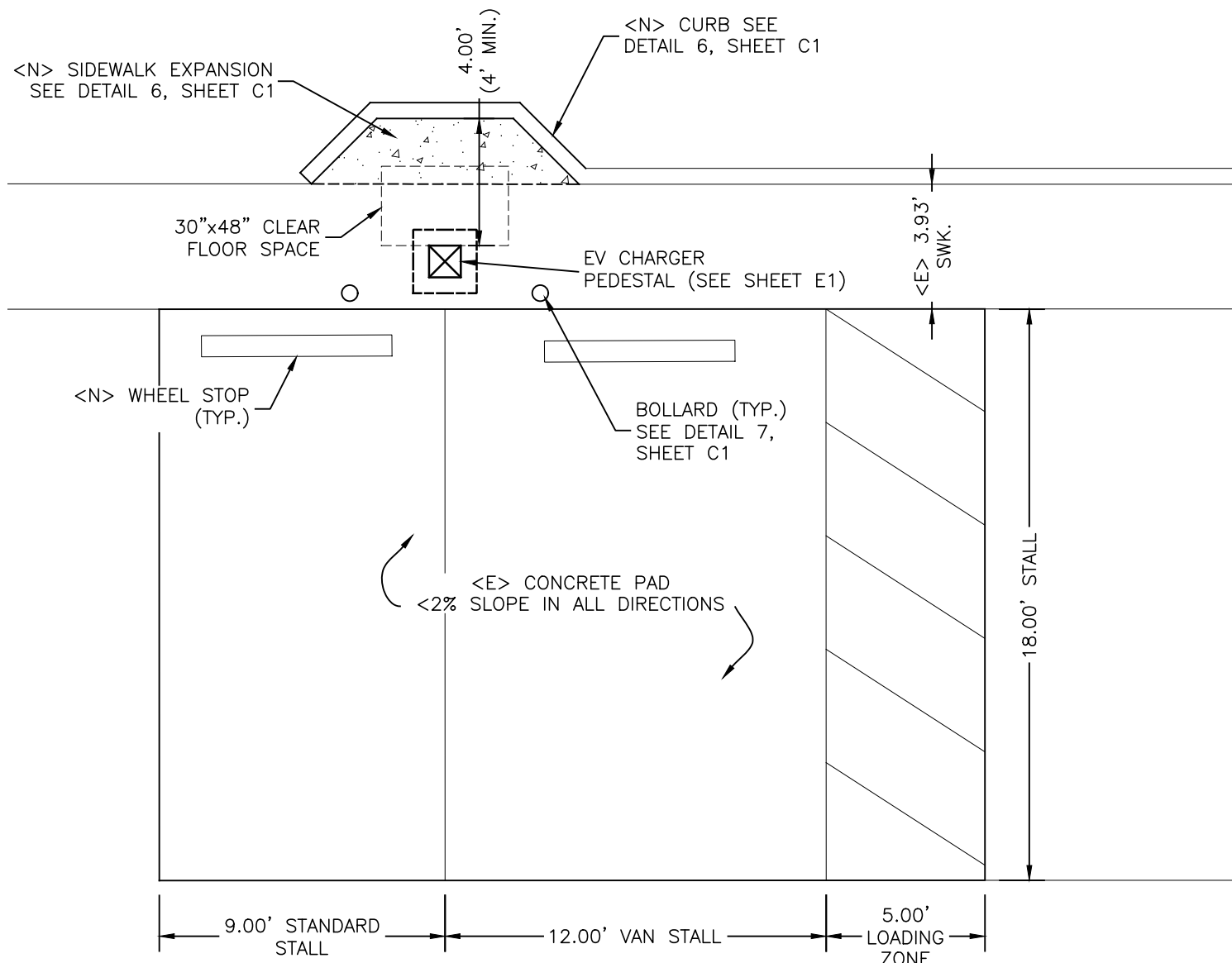
- 0000.00 - EXISTING GRADE
- 0000.00 - PROPOSED GRADE
- 4 4 - PROPOSED CONCRETE
- EXISTING AC PAVING
- EXISTING CONCRETE TO REMAIN
- EXISTING CONCRETE TO BE REMOVED
- MAJOR CONTOUR
- MINOR CONTOUR

# SITE PLAN NOTES

1. SITE PLAN BASED ON TOPOGRAPHIC SURVEY BY WHITCHURCH ENGINEERING, DATED OCTOBER 24, 2023. PROPERTY BOUNDARY LINES ARE ASSUMED AND ARE FOR REFERENCE ONLY.
2. NEW EV CHARGING STATIONS SHOWN TO BE SINGLE STATION, DUAL PORT CHARGEPOINT CP6000 UNITS (OR APPROVED EQUIVALENT).
3. ELECTRICAL LAYOUTS FROM TRANSFORMERS TO SWITCHBOARD AS PER ASSESSMENTS PROVIDED BY PG&E.
4. CONTRACTOR SHALL SAWCUT AS NECESSARY FOR INSTALLATION.
5. CONTRACTOR SHALL MINIMIZE DAMAGE TO <E> SIDEWALKS/LANDSCAPE TO THE EXTENT POSSIBLE.
6. ALL <E> SIDEWALKS SHALL REMAIN.
7. EVCS SIGNAGE IS OPTIONAL. SIGN LOCATION MAY CHANGE AT DISCRETION OF SITE HOST. SIGN MUST BE LOCATED OUTSIDE OF PARKING STALLS AND PATHS OF TRAVEL. SEE ADDITIONAL NOTES, DETAIL 9, SHEET C1.
8. PEDESTAL MOUNTED SWITCHGEAR TO HAVE A MINIMUM OF 8 DISTRIBUTION BREAKER SPACES. CUSTOMER & UTILITY FULL SECTIONS MUST BE SEPARATED, AND UTILITY SECTIONS MUST BE LOCKABLE. PEDESTAL MOUNTED SWITCHGEAR MUST MEET ALL PG&E GREENBOOK STANDARDS, MILLBANK 3P3B11241 OR EQUIVALENT.

# GRADING NOTES

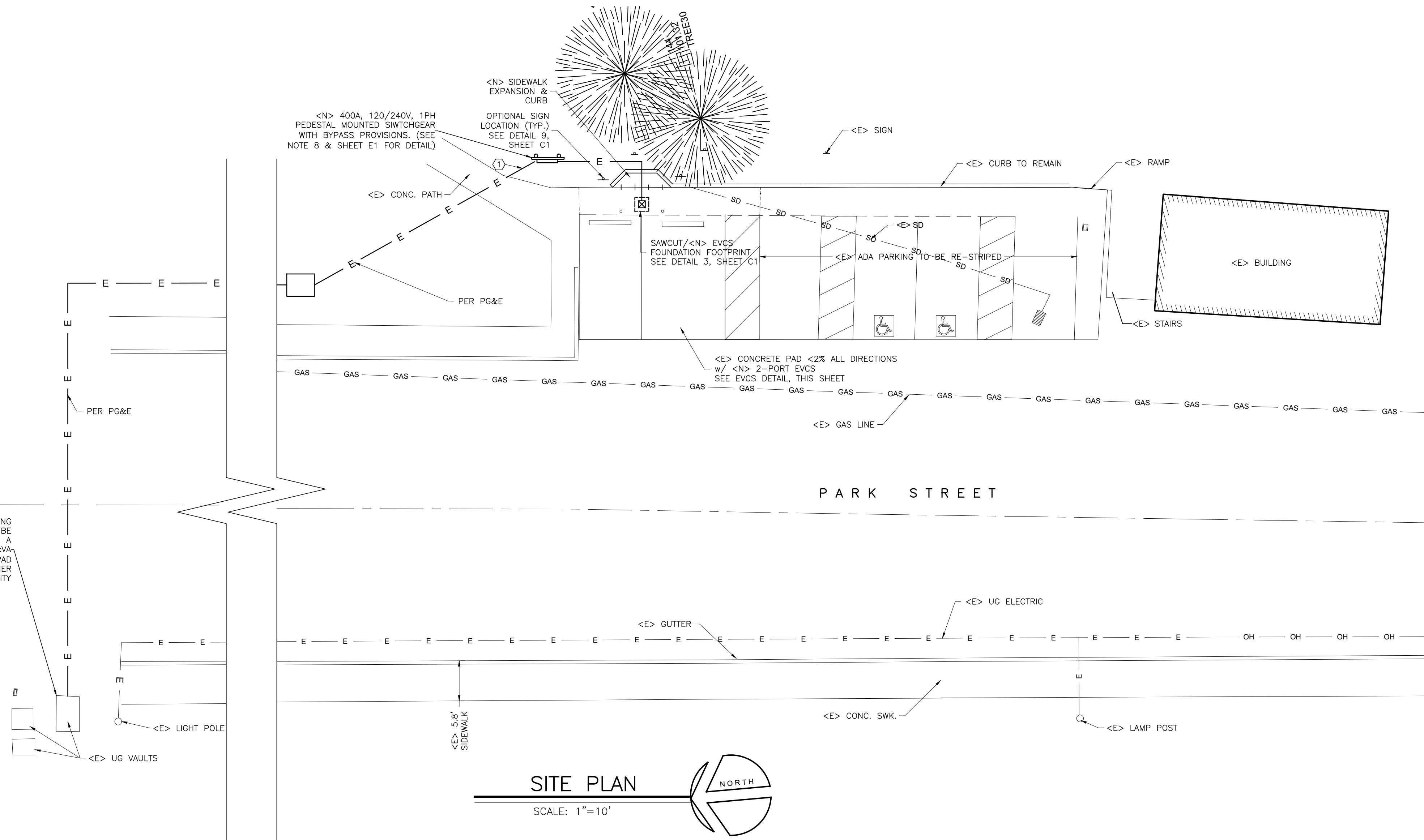
1. STRAIGHT GRADE BETWEEN FINISHED GRADES SHOWN.
2. THE TYPES, LOCATIONS, SIZES AND/OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS TOPOGRAPHIC SURVEY WERE OBTAINED FROM SURFACE FEATURES AND SOURCES OF VARYING RELIABILITY. ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS AND DEPTHS OF SUCH UNDERGROUND UTILITIES. WHITCHURCH ENGINEERING, INC. ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF THE DELINEATION OF SUCH UNDERGROUND UTILITIES WHICH MAY BE ENCOUNTERED.
3. TOPOGRAPHIC DATA IS BASED ON WHITCHURCH ENGINEERING SURVEY DATED OCTOBER 24, 2023. ACTUAL BOUNDARY LINES AND EASEMENTS ARE NOT REPRESENTED IN THIS DRAWING.
4. TEMPORARY BENCHMARK NEAR THE EASTERN EDGE OF PARK STREET. P.K. NAIL & SHINER WITH AN ASSUMED ELEVATION OF 99.62'. VERTICAL DATUM IS ASSUMED.
5. CONTOURS SHOWN AT 1' INTERVAL.
6. DATUM IS NAD83.



# EVCS DETAIL

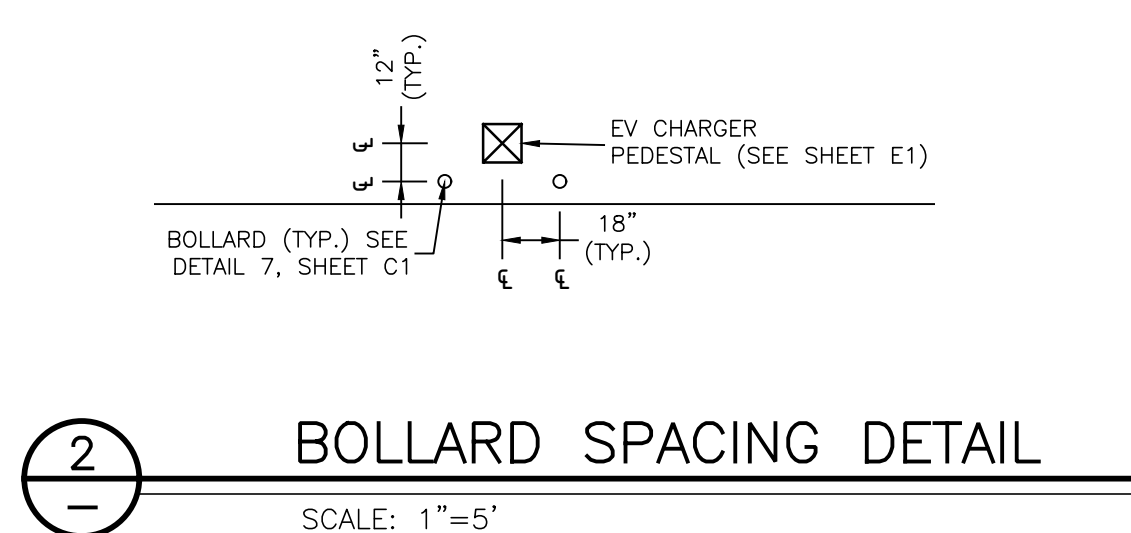
SCALE: 1"=5'

\*EVCS STRIPING PER DETAIL 8, SHEET C1 (TYP.)



# SITE PLAN

SCALE: 1"=10'



# BOLLARD SPACING DETAIL

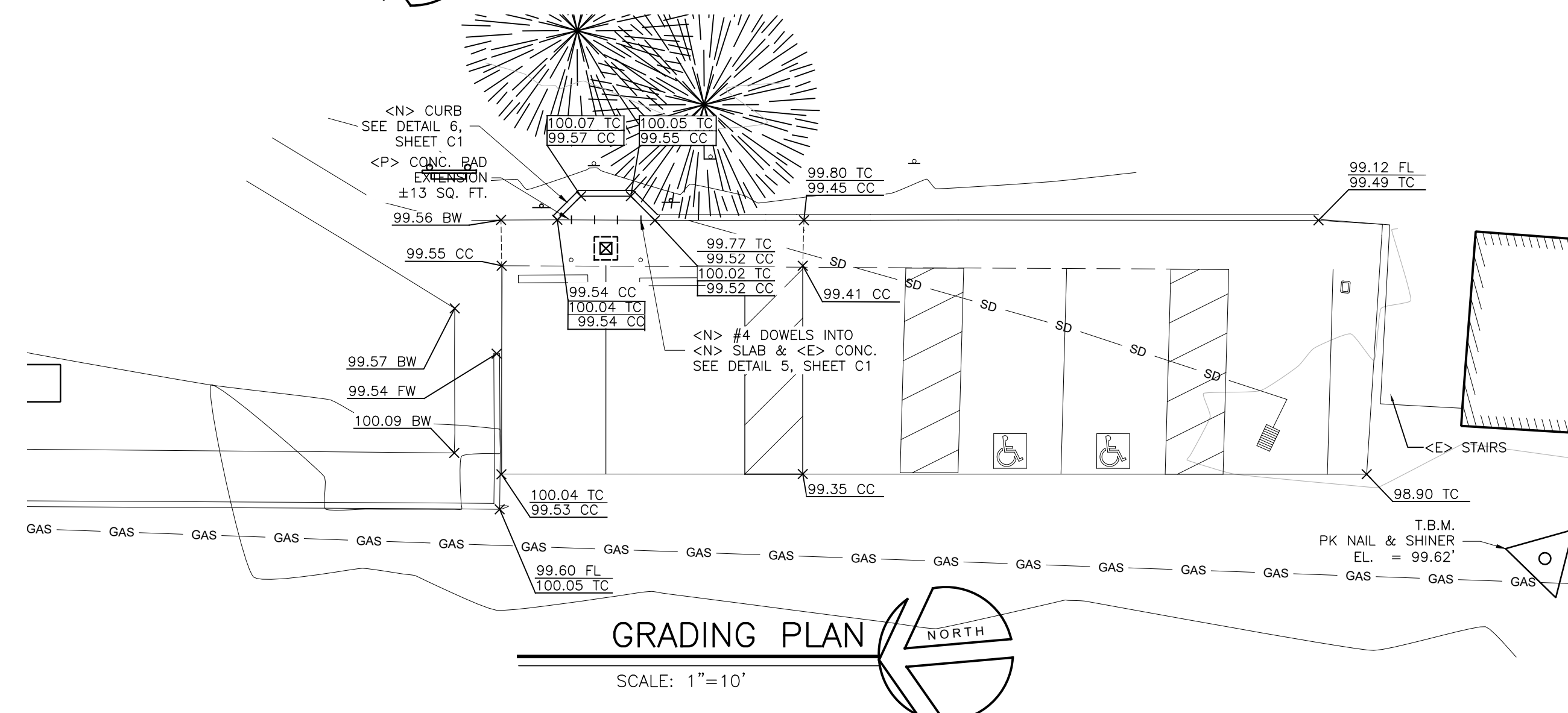
SCALE: 1"=5'

RUN	DESCRIPTION	LENGTH	# OF RUNS (IN CONDUIT)	CONDUCTOR QTY & SIZE (PER RUN)	CONDUIT SIZE	GROUND SIZE (PER RUN)	RATING (SEE NOTES)
1	SWITCHBOARD TO EV (PER PORT)	18'	2	(2X) #3 AWG, CU	1 1/2"	#8 AWG, CU	100A/RUN (2 PER CHARGER)

# CONDUIT & CONDUCTOR SCHEDULE

### NOTE:

- 1) ALL CONDUIT & CONDUCTOR RUNS SIZED FOR 19.2kW, (2) 80A CIRCUITS @ 240V.
- 2) 100A CIRCUIT BREAKERS REQUIRED PER CHARGEPOINT SPECIFICATIONS
- 2) EACH EV CHARGER TO BE SUPPLIED WITH (2) RUNS, (1) FOR EACH CHARGING PORT.

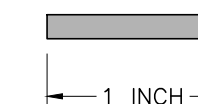


# GRADING PLAN

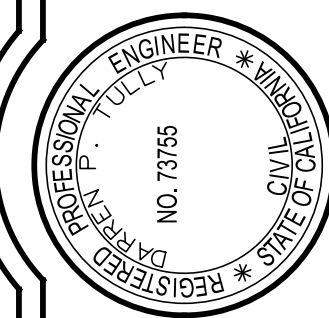
SCALE: 1"=10'

PLAN CHECK ONLY  
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REVISIONS	BY



**WHITCHURCH ENGINEERING, INC.**  
610 9th Street Fortuna, California 95540  
Phone (707) 444-1420

**RCEA ELECTRIC VEHICLE CHARGING STATIONS  
ROHNER PARK**  
9 Park St., Fortuna, CA. 95540 APN: 040-381-001  
**SITE & GRADING PLAN**  
For: Redwood Coast Energy Authority, 633 3rd St., Eureka, CA 95501

Date	MAY 17, '24
Scale	AS NOTED
Design	ZDU
Drawn	ALW
Job	REA2301
Sheet	1.2

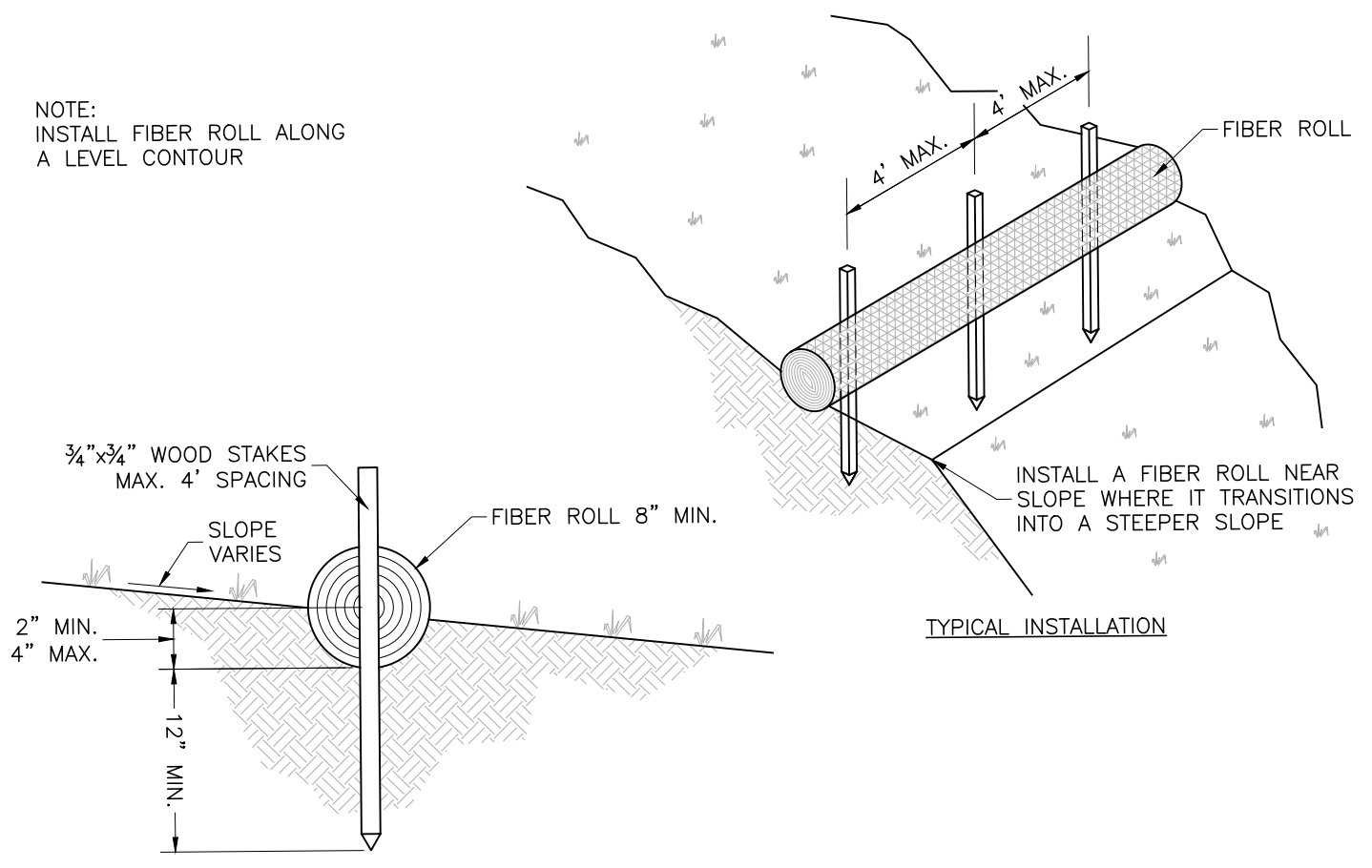


**EROSION CONTROL NOTES**

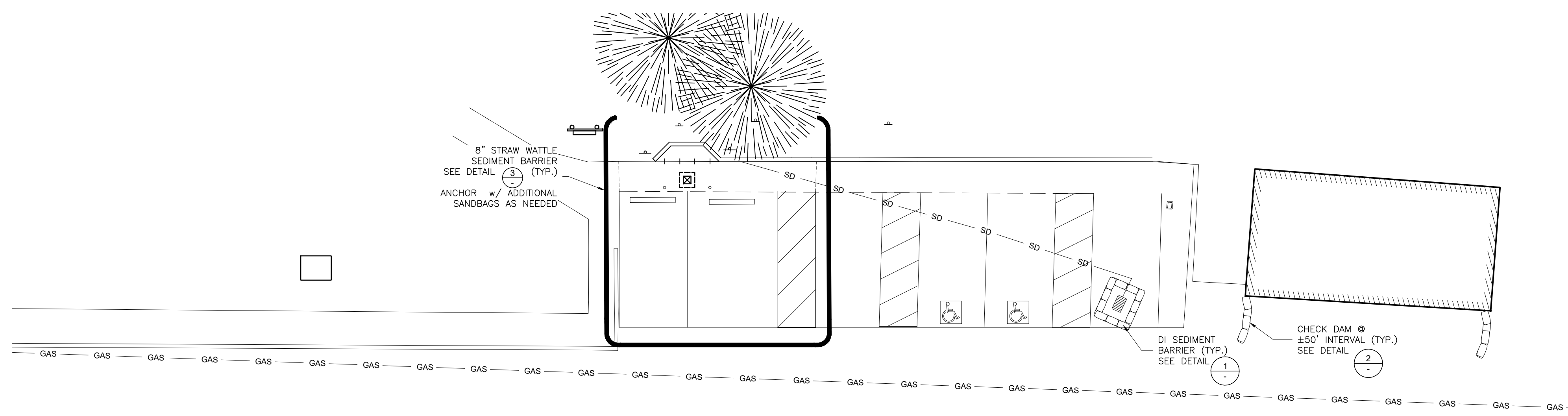
- A. GENERAL**
1. THIS PLAN WAS PREPARED BY A QUALIFIED ENGINEER FROM WHITCHURCH ENGINEERING, INC WHO HAS TRAINING AND EXPERIENCE TO HAVE EXPERT KNOWLEDGE OF EROSION AND SEDIMENT CONTROL METHODS.
  2. THE SOURCE OF THE BMP'S USED IN THIS PLAN PREPARATION ARE FROM CALIFORNIA STORM WATER BEST MANAGEMENT PRACTICE HANDBOOK AND STATE WATER RESOURCES CONTROL BOARD BEST MANAGEMENT PRACTICE CONSTRUCTION HANDBOOK.
  3. THE IMPLEMENTATION OF BMP'S WILL OCCUR WITH THE ONSET OF CONSTRUCTION, IMMEDIATELY AFTER SOIL IS DISTURBED AT SITE. AS SHOWN ON SITE MAP A SILT FENCE WILL BE INSTALLED PARALLEL TO CONSTRUCTION SITE. OTHER EROSION CONTROL ACTIVITIES (HAY BALES, ETC) SHALL BE IMPLEMENTED AS DEEMED BY INSPECTOR.
  4. A REPRESENTATIVE FROM WHITCHURCH ENGINEERING, INC SHALL INSPECT EROSION CONTROL MEASURES AFTER A SIGNIFICANT RAIN EVENT. A LETTER FOR EACH INSPECTION SHALL BE SUBMITTED TO THE JOB FILE. THE EROSION CONTROL MEASURES SHALL BE INSPECTED BY THE ENGINEER AS NECESSARY. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
  5. THIS PROJECT MAY COMMENCE DURING THE WINTER MONTHS (OCTOBER 15-APRIL 15) THEREFORE EFFORTS WILL BE MADE TO MINIMIZE LAND DISTURBANCES.
- B. WATER COURSES**
1. EXISTING AND PROPOSED DRAINAGE PATTERNS, CHANNELS AND FACILITIES ARE SHOWN ON ATTACHED PLAN.
  2. CHANGES IN FLOW QUANTITIES AND VELOCITIES ARE NEGLIGIBLE; EXISTING SLOPES AND DRAINAGE CHANNELS ARE TO REMAIN UNALTERED. SURFACE WATER FLOW IS BY SHEET FLOW. SLOPE PROTECTION MEASURES SHALL CONSIST OF APPLYING A PROTECTIVE LAYER OF STRAW OR ANOTHER SUITABLE MATERIAL TO SOIL SURFACE AREA.
  3. TEMPORARY SLOPE STABILIZATION MEASURES SHALL CONSIST OF MULCHING WITH PROTECTIVE COVERINGS. APPLICATION OF THIS MEASURE SHALL COMMENCE WITH START OF CONSTRUCTION.
  4. TEMPORARY CHANNEL TO CONTROL SURFACE WATER FLOW OVER CUT AND FILL SLOPES SHALL BE AN A.D.S PLASTIC PIPE DIRECTED TO ESTABLISHED DRAINAGE.
  5. EXISTING GRASS VEGETATED FIELD AREA WILL SERVE TO REDUCE DRAINAGE FLOW VELOCITIES.
  6. A TEMPORARY SEDIMENT DETENTION BASIN IS NOT NECESSARY FOR THIS PROJECT.
  7. ALL LOOSE SOIL AND DEBRIS SHALL BE REMOVED FROM THE STREET AREAS UPON STARTING OPERATIONS AND PERIODICALLY THEREAFTER AS DIRECTED BY THE INSPECTOR. ALL ENTRANCES SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY.
- C. DISPOSAL OF EXCAVATED MATERIALS**
1. EXCAVATED MATERIALS SHALL BE HAULED OFF SITE OR USED IN LANDSCAPING ON-SITE.
- D. DUST CONTROL**
1. EXCESSIVE DUST SHALL BE CONTROLLED AT ALL TIMES DURING CONSTRUCTION AND UNTIL FINAL COMPLETION. THE CONTRACTOR, WHEN HE OR HIS SUBCONTRACTOR ARE OPERATING EQUIPMENT ON SITE, SHALL PREVENT THE FORMATION OF EXCESSIVE AIRBORNE NUISANCES BY WATERING AND/OR TREATING THE SITE OF THE WORK IN SUCH A MANNER THAT WILL CONFIRM DUST PARTICLES TO THE IMMEDIATE SURFACE OF THE WORK AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY DUST FROM HIS OWN ACTIVITIES OR HIS SUBCONTRACTORS ACTIVITIES IN PERFORMING THE WORK UNDER THIS CONTRACT AND SHALL BE RESPONSIBLE FOR ANY CITATIONS, FINES, OR CHARGES RESULTING FROM DUST NUISANCES. DUST CONTROL WILL BE DONE ON A DAILY BASIS.
- E. REMOVAL OF VEGETATION AND REVEGETATION**
1. VEGETATION REMOVAL IS TO BE LIMITED TO AREA DIRECTLY UNDER PROPOSED CONSTRUCTION.
  1. FINAL REPORTS AND NOTIFICATION OF COMPLETION
  1. UPON COMPLETION OF THE PERMITTED ROUGH GRADING WORK AND AT THE FINAL COMPLETION OF THE WORK, A SET OF REPORTS, DRAWINGS AND SUPPLEMENTS THERETO ARE REQUIRED FOR ENGINEERED GRADING, OR WHEN PROFESSIONAL INSPECTION IS PERFORMED FOR REGULAR GRADING, AS APPLICABLE.
  2. THE BUILDING OFFICIAL SHALL BE NOTIFIED WHEN THE GRADING OPERATION IS READY FOR FINAL INSPECTION AFTER ALL WORK AND ALL EROSION-CONTROL MEASURES HAVE BEEN COMPLETED IN ACCORDANCE WITH THE FINAL APPROVED GRADING PLAN, AND THE REQUIRED REPORTS HAVE BEEN SUBMITTED.
- POST CONSTRUCTION BMP'S**
1. THE CONTRACTOR IS RESPONSIBLE FOR COMPLETION OF POST-CONSTRUCTION BEST MANAGEMENT PRACTICES.
  2. ALL EROSION CONTROL AND/OR SEDIMENT CONTROL MEASURES SHALL BE REMOVED FROM SITE, INCLUDING SILT FENCES, DI PROTECTION, AND CHECK DAMS UPON APPROVAL OF THE ENGINEER.

**GENERAL NOTE**  
NOTE: ALL EROSION CONTROL AND SEDIMENT CONTROL MEASURES TO BE APPROVED BY ENGINEER OF RECORD.

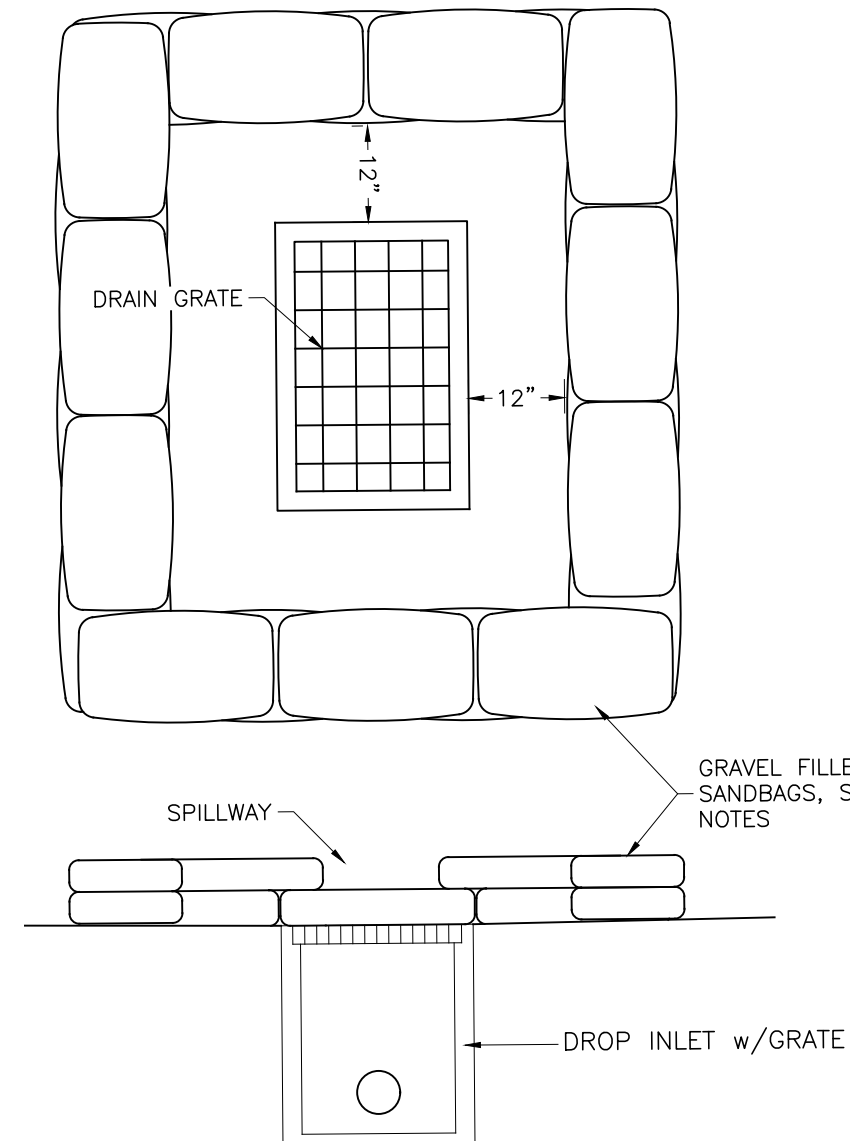
NOTE:  
INSTALL FIBER ROLL ALONG A LEVEL CONTOUR



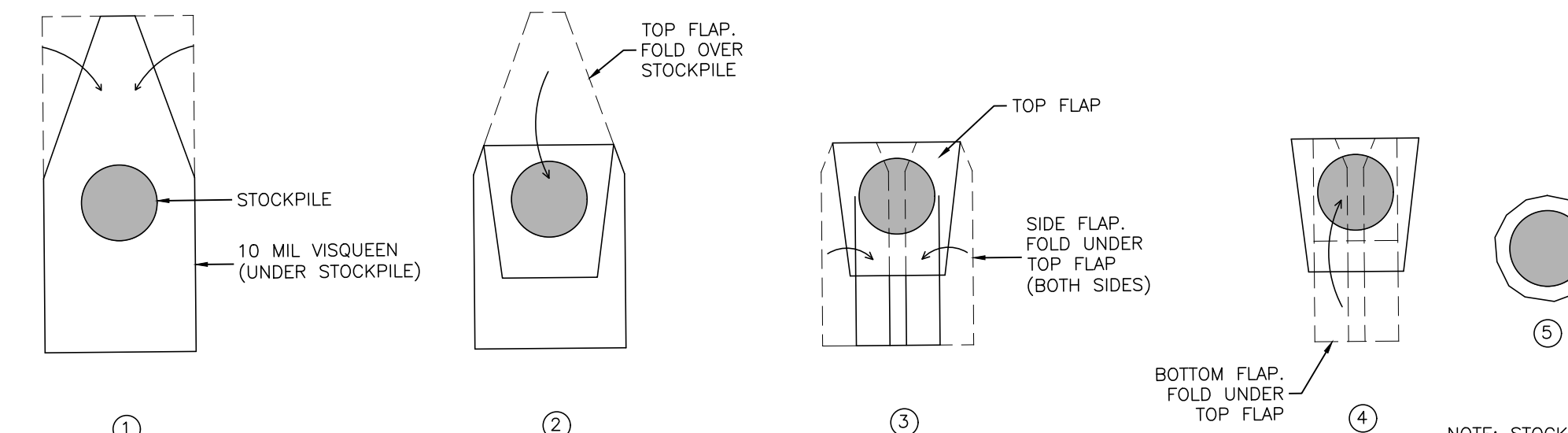
**3** STRAW WATTLE/FIBER ROLL DETAIL  
NO SCALE



**EROSION CONTROL PLAN**  
SCALE: 1"=10'



**1** DI PROTECTION DETAIL  
NO SCALE



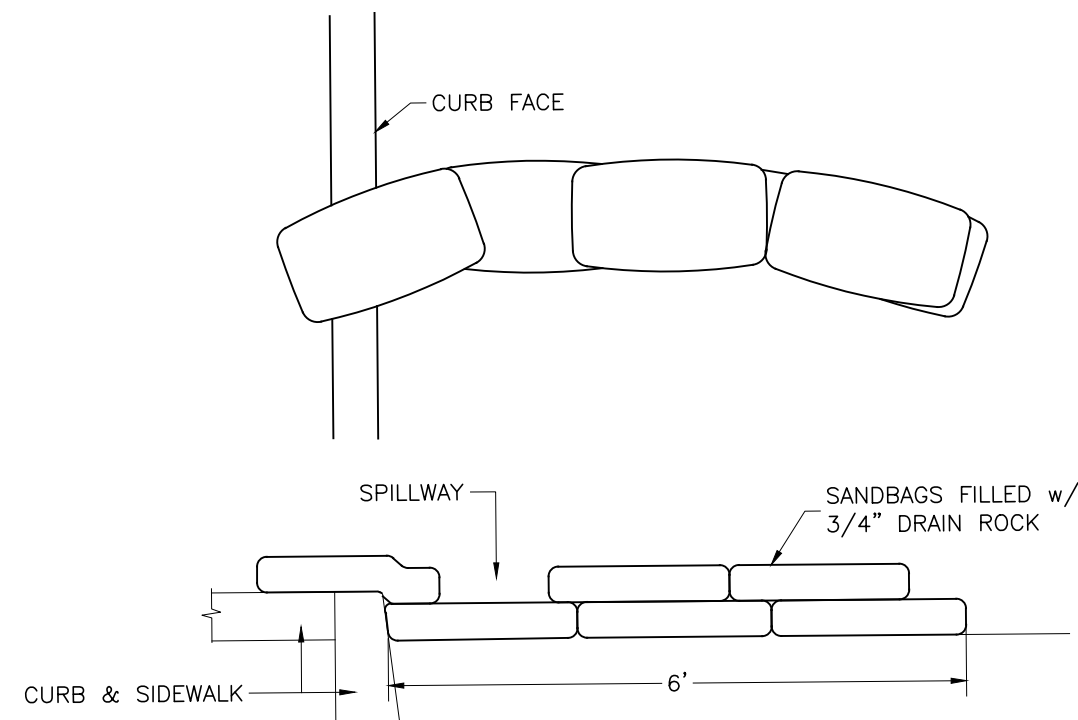
**4** BURRITO WRAP STOCK PILE CONTAINMENT  
NO SCALE

**NOTES:**

- 1.) CONSTRUCT AROUND DRAINAGE INLETS WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE OUT OF SUSPENSION.
- 2.) PLACE SEVERAL LAYERS OF SANDBAGS OVER THE FIRST, OVERLAPPING BAGS AND PACK THEM TIGHTLY TOGETHER TO MINIMIZE THE SPACE BETWEEN BAGS.
- 3.) LEAVE GAP OF ONE SACK IN THE MIDDLE OF THE TOP ROW OF SACKS TO SERVE AS THE SPILLWAY. SPILLWAY HEIGHT SHALL BE LOWER THAN THE CURB HEIGHT AND SUFFICIENT SIZE TO PASS FLOWS FROM SEVERE STORM EVENT.
- 4.) INSPECT AND REPAIR BARRIER AFTER EACH STORM EVENT. REMOVE SEDIMENT WHEN IT REACHES TOP OF SPILLWAY (6").
- 5.) SEDIMENT SHALL BE DEPOSITED IN AN AREA TRIBUTARY TO A SEDIMENT BASIN OR OTHER PROTECTIVE MEASURE AND WILL NOT ENTER STORM DRAIN.
- 6.) SEDIMENT AND GRAVEL SHALL BE IMMEDIATELY REMOVED FROM TRAVELED WAY OF ROAD.
- 7.) SANDBAG SACKS TO BE FILLED WITH 3/4" DRAIN ROCK OR 1/4" PEA GRAVEL.
- 8.) POST ROAD PAVING, FULL DI PROTECTION CAN BE REPLACED WITH CHECK DAMS IN THE GUTTER.

**NOTES:**

- 1.) CONSTRUCT ON GENTLY SLOPING STREETS WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE OUT OF SUSPENSION.
- 2.) PLACE SEVERAL LAYERS OF SANDBAGS OVER THE FIRST, OVERLAPPING BAGS AND PACK THEM TIGHTLY TOGETHER TO MINIMIZE THE SPACE BETWEEN BAGS.
- 3.) LEAVE GAP OF ONE SACK IN THE MIDDLE OF THE TOP ROW OF SACKS TO SERVE AS THE SPILLWAY. SPILLWAY HEIGHT SHALL BE LOWER THAN THE CURB HEIGHT AND SUFFICIENT SIZE TO PASS FLOWS FROM SEVERE STORM EVENT.
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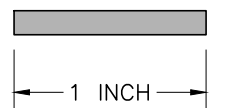


**2** CHECK DAM DETAIL  
NO SCALE

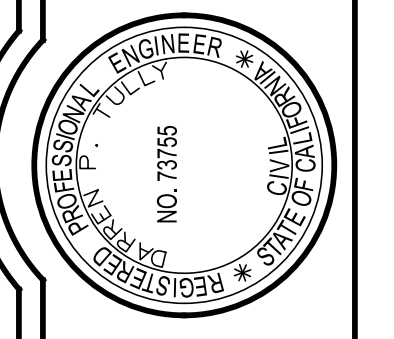
NOTE: STOCK PILE LOCATION IS NOT SHOWN ON MAP.

**PLAN CHECK ONLY  
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REVISIONS	BY



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610 9th Street Fortuna, California 95540  
Phone (707) 444-1420

**RCEA ELECTRIC VEHICLE CHARGING STATIONS  
ROHNER PARK**  
9 Park St., Fortuna, CA. 95540  
APN: 040-381-001

**EROSION CONTROL PLAN**  
For: Redwood Coast Energy Authority, 633 3rd St., Eureka, CA 95501

Date	MAY 17, '24
Scale	AS NOTED
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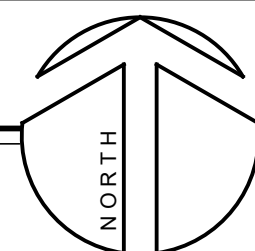
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**LOCATION MAP**

NO SCALE



**PROJECT DATA**

PROJECT ADDRESS – 3300 RENNEN DRIVE, FORTUNA, CA 95540  
 CLIENT – REDWOOD COAST ENERGY AUTHORITY  
 PROPERTY OWNER – PROVIDENCE REDWOOD MEMORIAL HOSPITAL  
 APN: 202-082-064  
 ZONING – PF – PUBLIC FACILITY  
 COASTAL ZONE – NO  
 100-YEAR FLOOD ZONE – NO  
 SRA AREA – NO  
 PROJECT SCOPE – CONSTRUCTION OF 2 DUAL PORT LEVEL 2 ELECTRIC VEHICLE CHARGING STATIONS AND ASSOCIATED PARKING STALLS  
 BUILDING DEPARTMENT – CITY OF FORTUNA  
 BUILDING CODES – 2022 CBC, CPC, CEC, CFC, & ENERGY CODE

**APPLICANT INFO**

**SITE HOST:**  
 JACOB BOLTON  
 ST. JOES REDWOOD MEMORIAL HOSPITAL  
 3300 RENNEN DRIVE  
 FORTUNA, CA 95540  
 (707) 407-6450

**APPLICANT:**  
 REDWOOD COAST ENERGY AUTHORITY  
 c/o MIKE AVCOLLIE  
 633 THIRD STREET  
 EUREKA, CA 95501  
 (707) 269-1700

**PROJECT CONSULTANTS**

**CIVIL ENGINEERING:**  
 WHITCHURCH ENGINEERING, INC.  
 610 9th STREET  
 FORTUNA, CA 95540  
 (707) 725-6926

**SURVEYOR:**  
 WHITCHURCH ENGINEERING, INC.  
 610 9th STREET  
 FORTUNA, CA 95540  
 (707) 725-6926

**GENERAL NOTES**

- ALL CONSTRUCTION, MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE 2022 EDITION OF THE CALIFORNIA BUILDING CODE, 2022 EDITIONS OF THE CALIFORNIA ELECTRICAL AND FIRE CODES, AND ALL APPENDICES THERETO, CALTRANS STANDARD PLANS & SPECIFICATIONS, LATEST EDITION.
- THE CONTRACTOR SHALL PROVIDE WORKMANS COMPENSATION INSURANCE & LIABILITY INSURANCE.
- THE CONTRACTOR SHALL GUARANTEE ALL LABOR AND MATERIAL FOR A MINIMUM OF ONE YEAR.
- THE GENERAL CONTRACTOR SHALL VERIFY ALL THE SITE CONDITIONS AND DIMENSIONS BEFORE STARTING WORK. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES.
- FEATURES OF CONSTRUCTION SHOWN ARE TYPICAL AND SHALL APPLY GENERALLY THROUGHOUT SIMILAR CONDITIONS.
- DETAILS SHOWN ON TYPICAL DETAIL SHEETS SHALL BE USED WHENEVER APPLICABLE, UNLESS OTHERWISE SHOWN. SPECIFIC DETAILS ON THE CIVIL DRAWINGS TAKE PRECEDENCE OVER TYPICAL DETAILS. SPECIFIC NOTES SHOWN ON THE CIVIL DRAWINGS TAKE PRECEDENCE OVER GENERAL NOTES. NOTES AND DETAILS ON THE STRUCTURAL DRAWINGS TAKE PRECEDENCE OVER SPECIFICATIONS.
- ALL CONDITIONS SHOWN OR NOTED AS EXISTING ARE BASED ON BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE DRAWINGS, NO WARRANTY IS IMPLIED AS TO THEIR ACCURACY.
- ALL BUILDING MATERIAL SHALL BE NEW MATERIAL, UNLESS OTHERWISE APPROVED OR SPECIFIED BY ENGINEER.
- CONTRACTORS SHALL VERIFY EASEMENTS (PUBLIC OR PRIVATE) FOR SEWER, WATER, ELECTRICAL, TELEPHONE, CABLE T.V., AND GAS PRIOR TO STARTING CONSTRUCTION.
- VERIFY ALL UTILITY DATA AND LOCATIONS PRIOR TO ANY WORK. ONSITE UTILITIES SHALL BE COORDINATED WITH THE APPROPRIATE AGENCY OR UTILITY COMPANY.
- THE DESIGN CONSULTANTS ASSUMES NO RESPONSIBILITY FOR THE PERFORMANCE OF PRODUCTS OR MATERIALS NOT SPECIFIED IN THESE DRAWINGS.
- WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DRAWINGS. WHERE DISCREPANCIES OCCUR NOTIFY THE OWNER'S REPRESENTATIVE FOR CLARIFICATION.
- ACCEPT NO INK OR PENCIL CORRECTIONS TO THESE DRAWINGS WITHOUT THE OWNER'S REPRESENTATIVE INITIAL OR SIGNATURE. THE DESIGN CONSULTANTS SHALL BE HELD HARMLESS FOR ALL CHANGES NOT IN CONFORMANCE WITH THIS PROVISION.
- ALL USERS OF THESE DRAWINGS AGREE BY USING THESE DRAWINGS TO HOLD THE DESIGN CONSULTANTS HARMLESS FOR ANY AND ALL WORK THAT DOES NOT CONFORM TO THE REQUIREMENTS AND MINIMUM STANDARDS OF THE C.B.C., ORDINANCES, AND ACCEPTABLE STANDARDS.
- THESE DRAWINGS ARE THE PROPERTY OF THE DESIGN CONSULTANTS AND ARE NOT TO BE USED IN PART FOR ANY WORK OTHER THAN THE LOCATION SHOWN HEREON.
- THE DESIGN CONSULTANTS AND THE OWNER SHALL HAVE NO CONTROL OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES FOR ANY SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.
- THE CONTRACTOR SHALL COMPLY WITH ALL OF THE APPLICABLE REQUIREMENTS OF THE FEDERAL WILLIAMS – STEIGER OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) OF 1970 AND ANY AMENDMENTS THERETO. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER, THE ENGINEER OR CITY OF FORTUNA DEPARTMENT OF PUBLIC WORKS.
- THE CONTRACTOR SHALL COMPARE ALL PAGES OF THE PLANS; ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER PRIOR TO PROCEEDING WITH WORK.
- UPON COMPLETION OF THE PROJECT, THE CONTRACTOR AND SUBCONTRACTORS SHALL REMOVE SURPLUS MATERIALS AND DEBRIS FROM THE SITE. CONTRACTOR SHALL REMOVE ALL DELETERIOUS MATERIAL FROM SITE INCLUDING BUT NOT LIMITED TO: BROKEN CONCRETE, STUMPS, ROCKS, DEBRIS, ASPHALT RUBBLE, GARBAGE, ETC. AND LEGALLY DISPOSE OF ABOVE.
- LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN HEREON ARE FROM RECORD INFORMATION ONLY AND ARE SHOWN FOR INFORMATION ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES PRIOR TO EXCAVATION AND CONSTRUCTION IN ANY AREA. CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (USA) AT 1-800-642-2444 A MINIMUM OF 48 HOURS IN ADVANCE OF ANY EXCAVATION. CONTRACTORS SHALL IMMEDIATELY REPORT ANY DISCREPANCIES IN RECORD INFORMATION TO ENGINEER AND DEVELOPER PRIOR TO CONSTRUCTING ANY WORK.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SITE SAFETY REQUIREMENTS.
- CONTRACTOR SHALL PROTECT ALL EXISTING IMPROVEMENTS ON OR ADJACENT TO PROJECT SITE. CONTRACTOR SHALL REPAIR OR REPLACE ALL DAMAGE TO EXISTING IMPROVEMENTS TO THE SATISFACTION OF CITY OF FORTUNA PUBLIC WORKS OR PRIVATE PROPERTY OWNER INVOLVED.

**EARTHWORK AND BACKFILL**

ALL EARTHWORK SHALL COMPLY WITH THE PROVISIONS OF CHAPTERS 18 AND 33 OF THE CBC 2022 EDITION AND THE CITY OF FORTUNA ORDINANCE.

- TOPSOIL- TOPSOIL LAYER SHALL BE REMOVED PRIOR TO ESTABLISHING THE SUBGRADE ON COMPETENT SUBSOILS.
- EXCAVATION – EXCAVATION SHALL INCLUDE ALL EXCAVATION REQUIRED FOR SITE AND/OR BUILDING WORK UNLESS OTHERWISE SPECIFIED. CUT SLOPES SHALL NOT EXCEED 2 (TWO) HORIZONTAL TO 1 (ONE) VERTICAL.
- FILL – FILL MATERIAL FOR THE FOUNDATIONS SHALL BE WELL GRADED CALTRANS CLASS II AGGREGATE SUB-BASE OR OTHER MATERIAL APPROVED BY THE PROJECT ENGINEER. FILL SHALL BE COMPACTED TO 90% (95% FOR TOP 24") RELATIVE COMPACTION. FILL SHALL BE PLACED AND COMPACTED IN 8 INCH LAYERS. COMPACTION TESTING IS REQUIRED. SUCH TESTING SHALL COMPLY TO ASTM LABORATORY TEST METHOD D-1557 SUBJECT TO APPROVAL BY THE ENGINEER OF RECORD.
- BASE – PAVEMENT BASE AND BASE UNDER CONCRETE SHALL BE CLASS II AS SPECIFIED BY CALTRANS. BASE MATERIAL SHALL BE PLACED IN 6" THICK MAXIMUM UNIFORM LAYERS AND COMPACTED TO 95 PERCENT RELATIVE DENSITY.
- STRUCTURAL BACKFILL – STRUCTURAL BACKFILL SHALL BE PLACED IN 8 INCH THICK MAXIMUM UNIFORM LAYERS. COMPACTION EQUIPMENT OR METHODS WHICH MAY CAUSE DISPLACEMENT OR DAMAGE STRUCTURES SHALL NOT BE USED. NO BACKFILL MATERIAL SHALL BE DEPOSITED AGAINST CAST-IN-PLACE CONCRETE STRUCTURES UNTIL THE CONCRETE HAS DEVELOPED A STRENGTH OF NOT LESS THAN 1500 P.S.I COMPRESSIVE STRENGTH.
- PERMEABLE MATERIAL (FILTER GRAVEL) – PERMEABLE MATERIAL SHALL CONFORM TO CLASS 2 AS SPECIFIED BY CALTRANS UNLESS OTHERWISE NOTED ON PLANS.
- ALL TOPSOIL STRIPPED FROM THE SITE SHALL BE DEPOSITED IN A STOCKPILE STORAGE AREA FOR LATER USE AS LANDSCAPING MATERIAL.
- JETTING OF FILL IS NOT RECOMMENDED FOR COMPACTION PURPOSES.
- MINIMUM POSITIVE DRAINAGE OF 5% AWAY FROM ALL BUILDING FOUNDATIONS AND FOOTINGS FOR A MINIMUM OR 10' HORIZONTAL DISTANCE.

**SITE PREPARATION**

- ALL TOPSOIL, VEGETATION, ORGANICS, AND DEBRIS SHOULD BE REMOVED FROM THE PROPOSED BUILDING AND PAVEMENT AREAS. THE GENERAL DEPTH OF STRIPPING SHOULD BE SUFFICIENTLY DEEP TO REMOVE THE ROOT SYSTEMS AND ORGANIC TOP SOILS. FOR ESTIMATE PURPOSES, A MINIMUM STRIPPING DEPTH OF 6 INCHES SHOULD BE USED. THE ACTUAL DEPTH OF STRIPPING SHOULD BE REVIEWED BY THE SOILS CONSULTANT AT THE TIME OF CONSTRUCTION 1'-1.5' IS THE TYPICAL TOP SOIL DEPTH FOR THIS SITE. DEEPER STRIPPING MAY BE REQUIRED IN LOCALIZED AREAS. STRIPPING SHOULD EXTEND LATERALLY A MINIMUM OF 10 FEET OUTSIDE THE BUILDING AND PAVEMENT PERIMETERS. THESE MATERIALS WILL NOT BE SUITABLE FOR USE AS ENGINEERED FILL; HOWEVER, STRIPPED TOPSOIL MAY BE STOCKPILED AND REUSED IN LANDSCAPE AREAS AT THE DISCRETION OF THE OWNER.
- THE CONTRACTOR SHOULD LOCATE ALL FOUNDATIONS, FLOOR SLABS, DEBRIS PITS, FILL SOILS, PAVEMENTS, AND SUBSURFACE STRUCTURES. THESE SOILS OR STRUCTURES SHOULD BE ENTIRELY REMOVED. THE RESULTING EXCAVATIONS SHOULD BE CLEANED OF ALL LOOSE OR ORGANIC MATERIAL, THE EXPOSED NATIVE SOILS SHOULD BE SCARIFIED TO A DEPTH OF 8 INCHES, THEN COMPACTED AS ENGINEERED FILL AND THE EXCAVATION BACKFILLED WITH ENGINEERED FILL.
- ALL UTILITY LINES SHOULD BE LOCATED. THOSE UTILITY LINES NOT ANTICIPATED TO BE USED AFTER CONSTRUCTION SHOULD BE EXCAVATED AND REMOVED. UTILITY LINES SHOULD NOT BE CRUSHED AND LEFT IN PLACE. THE RESULTING EXCAVATIONS SHOULD BE CLEANED OF ALL LOOSE OR ORGANIC MATERIAL, THE EXPOSED NATIVE SOILS SHOULD BE SCARIFIED TO A DEPTH OF 6 INCHES, THEN COMPACTED AS ENGINEERED FILL AND THE EXCAVATION BACKFILLED WITH ENGINEERED FILL.
- THE IN-PLACE DENSITY OF EXISTING UTILITY TRENCH BACKFILLS WHICH ARE ANTICIPATED TO REMAIN SHOULD BE DETERMINED. EXISTING TRENCH BACKFILL WITH A RELATIVE DENSITY LESS THAN 90 PERCENT PER ASTM D1557 SHOULD BE OVER-EXCAVATED AND REPLACED AS ENGINEERED FILL WITH A MINIMUM RELATIVE DENSITY OF 92 PERCENT.
- THE CONTRACTOR SHOULD LOCATE ALL MONITORING AND/OR ON-SITE WATER WELLS. ALL WELLS SCHEDULED FOR DEMOLITION SHOULD BE ABANDONED PER STATE AND LOCAL REQUIREMENTS. ANY WELL (WATER OR MONITORING) THAT FALLS WITHIN THE BUILDING SHOULD BE ABANDONED. THE CONTRACTOR SHOULD OBTAIN AN ABANDONMENT PERMIT FROM THE LOCAL ENVIRONMENTAL HEALTH DEPARTMENT, AND ISSUE CERTIFICATES OF DESTRUCTION TO THE OWNER AND THE SOILS CONSULTANT UPON COMPLETION.
- EXCAVATIONS BELOW GROUNDWATER CAN BE BACKFILLED USING EITHER A SAND-CEMENT SLURRY, OR GRAVEL ENCASED IN A GEOTEXTILE FILTER FABRIC OR ENGINEERED FILL MATERIAL. ONCE THE EXCAVATION IS BACKFILLED ABOVE THE GROUNDWATER TABLE, SILTY SAND SOILS SHOULD BE USED AS BACKFILL.
- THE EXPOSED GROUND SURFACE IN AREAS TO RECEIVE ENGINEERED FILL MATERIAL, FLOOR SLABS OR PAVEMENTS SHOULD BE SCARIFIED TO A DEPTH OF 8 INCHES, MOISTURE CONDITIONED TO WITHIN TWO PERCENT OF OPTIMUM MOISTURE CONTENT AND COMPACTED AS ENGINEERED FILL. THE ZONE OF SCARIFICATION SHOULD EXTEND LATERALLY A MINIMUM OF 10 FEET OUTSIDE THE PERIMETERS OF THE BUILDINGS. THE SCARIFICATION AND COMPACTION SHOULD BE CONDUCTED FOLLOWING STRIPPING OPERATIONS, REMOVAL OF SUBSURFACE STRUCTURES, OVER-EXCAVATION, AND REMOVAL OF ALL SOFT OR PLIANT AREAS.
- ALL FILL REQUIRED TO BRING THE SITE TO FINAL GRADE SHOULD BE PLACED AS ENGINEERED FILL. IN ADDITION, ALL NATIVE SOILS OVER-EXCAVATED SHOULD BE COMPACTED AS ENGINEERED FILL.
- IT SHOULD BE NOTED THAT WATER COULD SEEP INTO EXCAVATIONS. DEWATERING MAY BE REQUIRED. GROUNDWATER WILL ALSO IMPACT THE EXCAVATION, PLACEMENT, AND BACKFILL OF UTILITY LINES. CONTRACTORS SHOULD ANTICIPATE REMOVING WATER SEEPAGE. GRANULAR MATERIALS ENCASED IN A GEOTEXTILE STABILIZATION FABRIC, OR CEMENT-SAND SLURRY BACKFILL MATERIALS SHOULD BE ANTICIPATED WHEN BACKFILLING UTILITY LINES.

**DUST CONTROL DURING CONSTRUCTION. DURING CONSTRUCTION ACTIVITIES,**

THE FOLLOWING DUST CONTROL MEASURES SHALL BE TAKEN:

- WATER ALL ACTIVE CONSTRUCTION AREAS TWICE PER DAY AND USE EROSION CONTROL MEASURES TO PREVENT WATER RUNOFF CONTAINING SILT AND DEBRIS FROM ENTERING THE STORM DRAINAGE SYSTEM.
- COVER TRUCKS HAULING SOIL, SAND AND OTHER LOOSE MATERIAL.
- PAVE, WATER OR APPLY NON-TOXIC SOIL STABILIZERS ON UNPAVED ACCESS ROADS AND PARKING AREAS.
- SWEEP PAVED ACCESS ROADS AND PARKING AREAS DAILY.
- SWEEP STREETS DAILY IF VISIBLE MATERIAL IS CARRIED ONTO ADJACENT PUBLIC STREETS.
- INSTALL EROSION CONTROL MEASURES TO PREVENT SILT RUNOFF TO PUBLIC ROADWAYS.
- REPLANT VEGETATION IN DISTURBED AREAS WITHIN 30 DAYS OF COMPLETION OF PROJECT. THE CONSTRUCTION SITE SHALL BE MAINTAINED IN A CLEAN AND ORDERLY FASHION AND BE KEPT FREE OF DEBRIS. SOLID WASTE GENERATED DURING CONSTRUCTION SHALL BE DISPOSED OF IN AN APPROPRIATE MANNER. SUCH WASTE SHALL INCLUDE, BUT NOT BE LIMITED TO: CONCRETE FORMS, WASTE CONCRETE AND ASPHALT, EMPTY CONTAINERS OF BUILDING MATERIALS AND EXCESS BUILDING MATERIALS.

**DISCOVERY OF PREHISTORIC OR ARCHAEOLOGICAL RESOURCES**

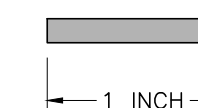
SHOULD CONCENTRATIONS OF ARCHAEOLOGICAL MATERIALS BE ENCOUNTERED DURING CONSTRUCTION OR GRADING OPERATIONS, ALL GROUND-DISTURBING WORK SHALL BE TEMPORARILY HALTED ON THE SITE. WORK NEAR THE ARCHAEOLOGICAL FINDS SHALL NOT BE RESUMED UNTIL A QUALIFIED ARCHAEOLOGIST HAS EVALUATED THE MATERIALS AND OFFERED RECOMMENDATIONS FOR FURTHER ACTION. PREHISTORIC MATERIALS WHICH COULD BE ENCOUNTERED INCLUDE: OBSIDIAN OR CHERT FLAKES OR TOOLS, LOCALLY DARKENED MIDDEN, GROUNDSTONE, ARTIFACTS, DEPOSITIONS OF SHELL, DIETARY BONE, AND HUMAN BURIALS. SHOULD HUMAN REMAINS BE UNCOVERED, STATE LAW REQUIRES THAT THE COUNTY CORONER BE CONTACTED IMMEDIATELY. SHOULD THE CORONER DETERMINE THAT THE REMAINS ARE LIKELY THOSE OF A NATIVE AMERICAN, THE CALIFORNIA NATIVE AMERICAN HERITAGE COMMISSION MUST BE CONTACTED. THE HERITAGE COMMISSION CONSULTS WITH THE MOST LIKELY NATIVE AMERICAN DESCENDANTS TO DETERMINE THE APPROPRIATE TREATMENT OF THE REMAINS.

**DAYS AND HOURS OF CONSTRUCTION AND NOISE CONTROL.**

HOURS OF CONSTRUCTION AND NOISE CONTROL. THE FOLLOWING SHALL APPLY TO CONSTRUCTION NOISE FROM TOOLS AND EQUIPMENT:

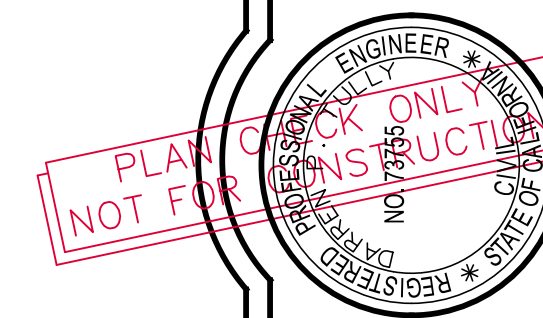
- THE OPERATION OF TOOLS OR EQUIPMENT USED IN CONSTRUCTION, DRILLING, REPAIR, ALTERATION OR DEMOLITION SHALL BE LIMITED TO BETWEEN THE HOURS OF 8 A.M. AND 7 P.M. MONDAY THROUGH FRIDAY, AND BETWEEN 9 A.M. AND 7 P.M. ON SATURDAYS.
- NO HEAVY EQUIPMENT RELATED CONSTRUCTION ACTIVITIES SHALL BE ALLOWED ON SUNDAYS OR HOLIDAYS.
- CONTRACTOR SHALL SELECT STAGING AREAS AS FAR AS FEASIBLY POSSIBLE FROM SENSITIVE RECEPTORS.
- CONTRACTOR SHALL MAINTAIN ALL CONSTRUCTION EQUIPMENT WITH MANUFACTURER'S SPECIFIED NOISE-MUFFLING DEVICES.
- UNNECESSARY IDLING OF INTERNAL COMBUSTION ENGINES SHALL BE PROHIBITED, THIS WOULD MEAN TURNING OFF EQUIPMENT IF IT WILL NOT BE USED FOR 5 OR MORE MINUTES.
- ALL STATIONARY NOISE-GENERATING CONSTRUCTION EQUIPMENT SUCH AS AIR COMPRESSORS AS FAR AS POSSIBLE FROM HOMES AND BUSINESSES.
- CONTRACTOR SHALL SELECT QUIET CONSTRUCTION EQUIPMENT, PRIMARY AIR COMPRESSORS, WHENEVER POSSIBLE.
- TRUCK DRIVER SHALL ADHERE TO POSTED SPEED ON LOCAL ROADS. ALTERNATE TRUCK ROUTES SHALL BE CONSIDERED IF COMPLAINTS OCCUR.

THESE PLANS ARE ORIGINALLY PRINTED ON 22"x34" PAPER.



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REVISIONS	BY



**WHITCHURCH ENGINEERING, INC.**  
 610 9th Street Fortuna, California 95540  
 Phone (707) 444-1420

**RCEA ELECTRIC VEHICLE CHARGING STATIONS**  
 — REDWOOD MEMORIAL HOSPITAL  
 3300 RENNEN DRIVE, FORTUNA, CA 95540  
 APN: 202-082-064

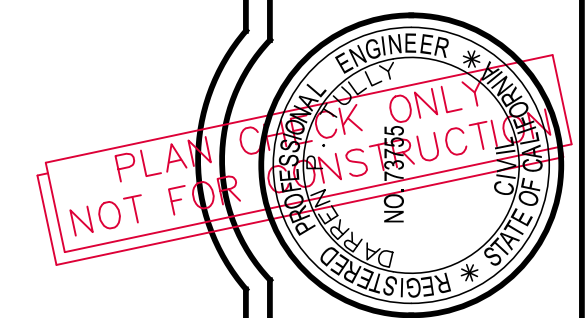
**VICINITY MAP & NOTES**  
 For: REDWOOD COAST ENERGY AUTHORITY, 633 3RD ST., EUREKA, CA 95501

Date	MAY 17, '24
Scale	AS NOTED
Design	ALW
Drawn	ALW
Job	REA 2301
Sheet	

2.1



REVISIONS	BY



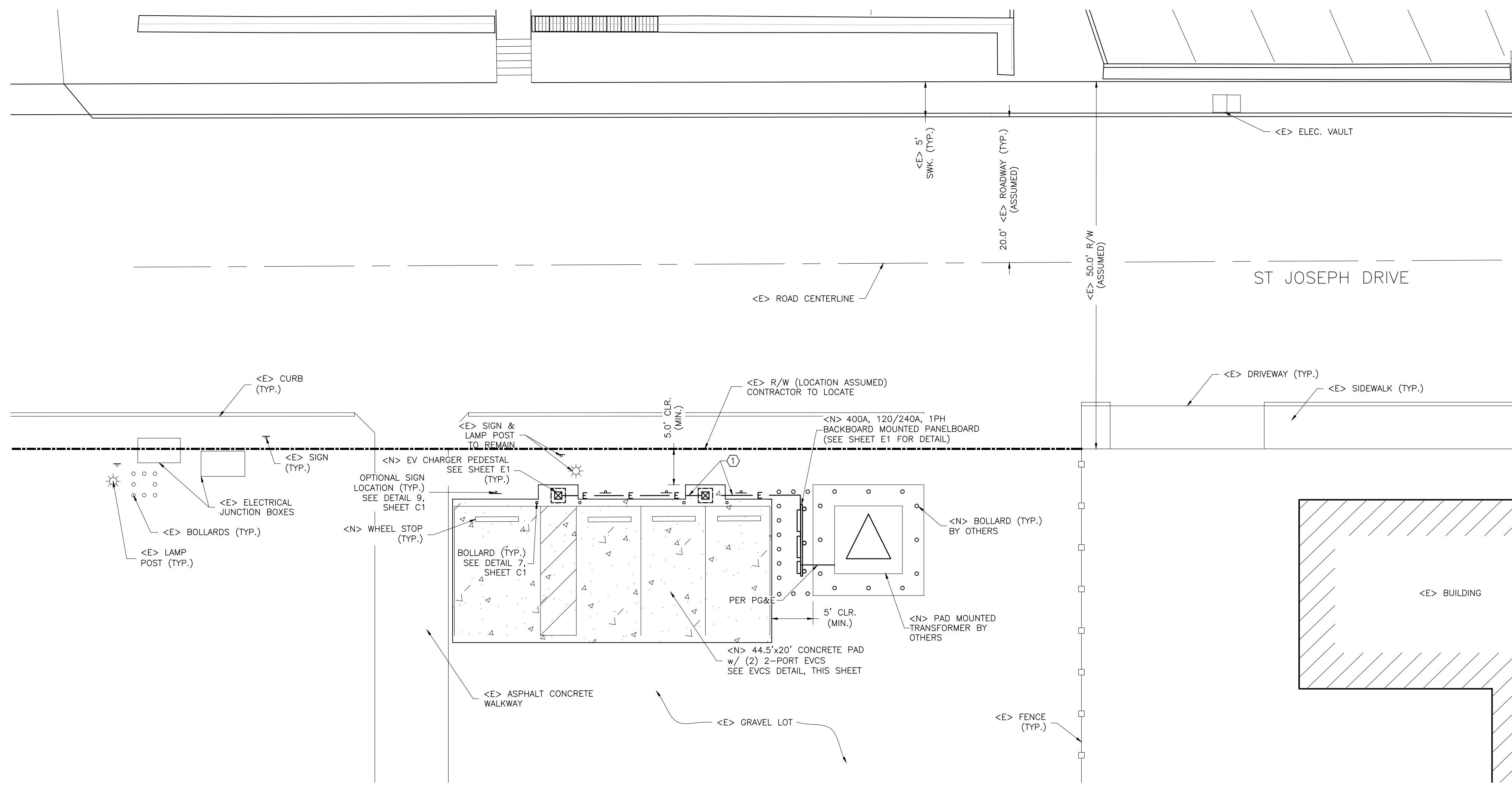
**WHITCHURCH ENGINEERING, INC.**  
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 Phone (707) 444-1420

**REDA ELECTRIC VEHICLE CHARGING STATIONS**  
**REDWOOD MEMORIAL HOSPITAL**  
 3300 RENNERT DRIVE, FORTUNA, CA 95540  
 APN: 202-082-064

**SITE PLAN**  
 For: REDWOOD COAST ENERGY AUTHORITY, 633 3RD ST., EUREKA, CA 95501

Date MAY 17, '24  
 Scale AS NOTED  
 Design ALW  
 Drawn ALW  
 Job REA 2301  
 Sheet

**2.2**



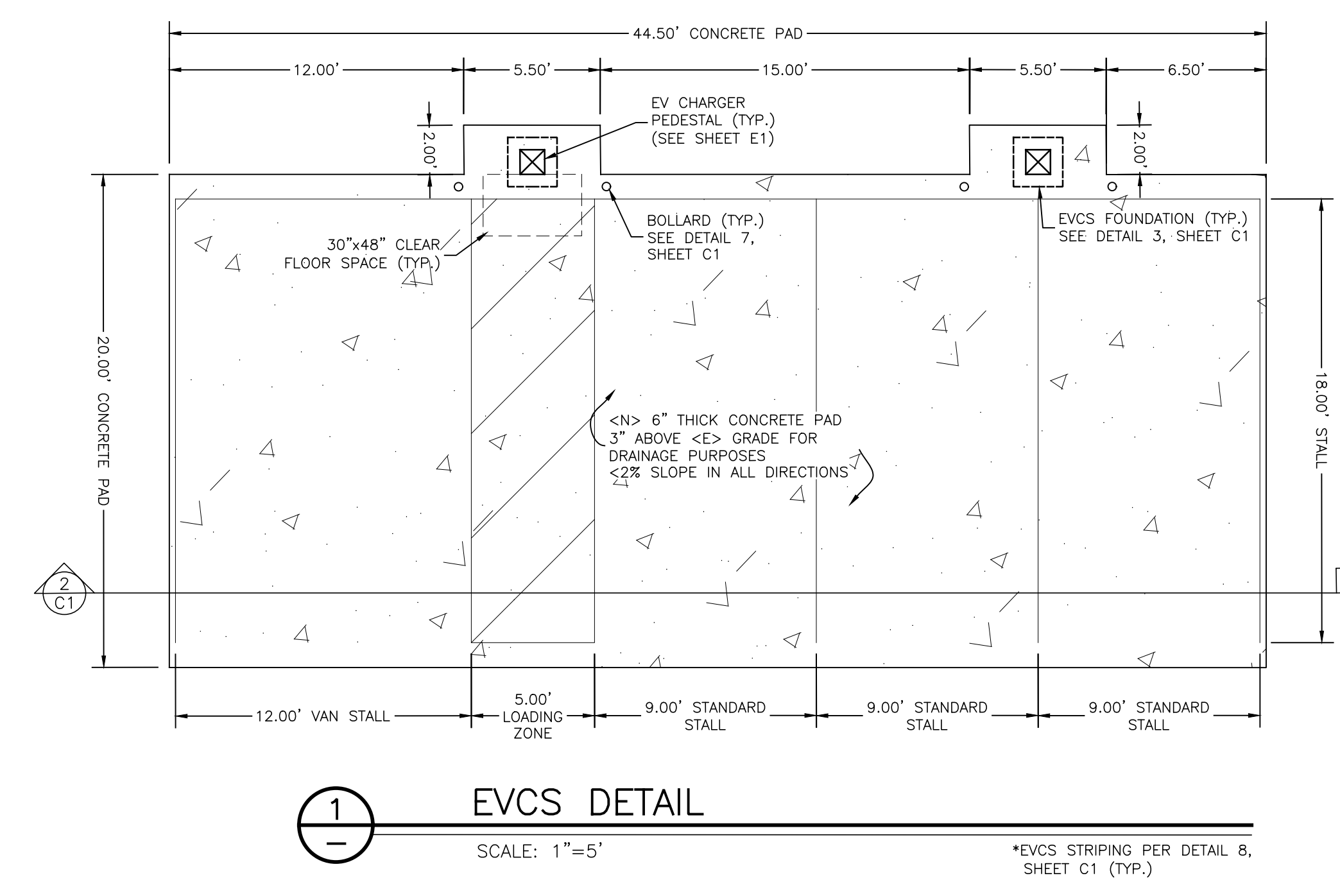
- ### SITE PLAN NOTES
- SITE PLAN BASED ON TOPOGRAPHIC SURVEY BY WHITCHURCH ENGINEERING, DATED OCTOBER 24, 2023 AND GOOGLE EARTH IMAGING.
  - NEW EV CHARGING STATIONS SHOWN TO BE SINGLE STATION, DUAL PORT CHARGEPOINT CP6000 UNITS (OR APPROVED EQUIVALENT).
  - ELECTRICAL LAYOUTS FROM TRANSFORMERS TO SWITCHBOARD AS PER ASSESSMENTS PROVIDED BY PG&E.
  - CITY OF FORTUNA TO APPROVE OF <N> CONSTRUCTION WITH RELATION TO CITY RIGHT OF WAY.
  - CONTRACTOR TO LOCATE RIGHT OF WAY PRIOR TO CONSTRUCTION.
  - PG&E TO APPROVE OF <N> 400A PANEL & BACKBOARD LOCATION PRIOR TO CONSTRUCTION.
  - EVCS SIGNAGE IS OPTIONAL. SIGN LOCATION MAY CHANGE AT DISCRETION OF SITE HOST. SIGN MUST BE LOCATED OUTSIDE OF PARKING STALLS AND PATHS OF TRAVEL. SEE ADDITIONAL NOTES, DETAIL 9, SHEET C1.

**SITE PLAN**  
 SCALE: 1"=10'

RUN	DESCRIPTION	LENGTH	# OF RUNS (IN CONDUIT)	CONDUCTOR QTY & SIZE (PER RUN)	CONDUIT SIZE	GROUND SIZE (PER RUN)	RATING (SEE NOTES)
①	SWITCHBOARD TO EV (PER PORT)	16'	2	(2X) #3 AWG, CU	1 1/2"	#8 AWG, CU	100A/RUN (2 PER CHARGER)

### ABBREVIATIONS

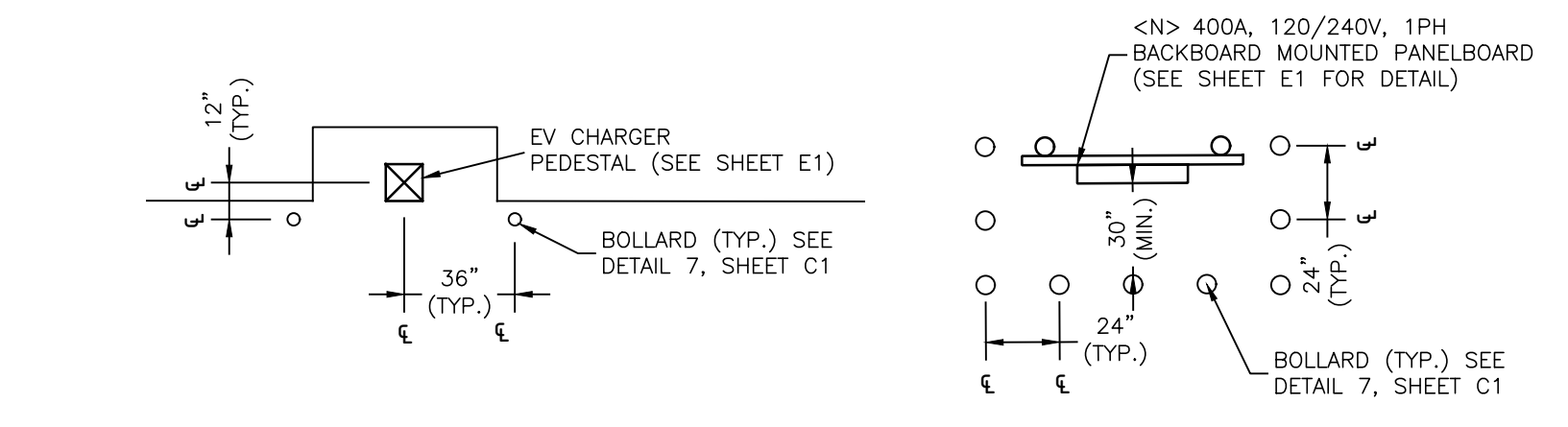
- AC ASPHALT CONCRETE
- AGG. AGGREGATE
- CC CONCRETE
- CL CENTERLINE
- CONC. CONCRETE
- DI DRAINAGE INLET
- <E> EXISTING
- EL ELEVATION
- ELEC. ELECTRICAL
- EP EDGE OF PAVEMENT
- FF FINISHED FLOOR
- FL FLOW LINE
- GD GROUND
- GM GAS METER
- GRD GROUND
- JP JOINT UTILITY POLE
- JB JUNCTION BOX
- MH MANHOLE
- MIN. MINIMUM
- <N> NEW
- <P> PROPOSED
- RD. ROAD
- R/W RIGHT OF WAY
- SD STORM DRAIN
- S.F. SQUARE FOOT
- SD STANDARD
- SWK. SIDEWALK
- TBR TO BE REMOVED
- TC TOP OF CURB
- TPY. TYPICAL
- THK. THICK
- UTIL. UTILITY
- W WATER
- W/ WITH
- WM WATER METER
- WV WATER VALVE



**① EVCS DETAIL**  
 SCALE: 1"=5'      \*EVCS STRIPING PER DETAIL 8, SHEET C1 (TYP.)

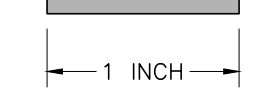
### CONDUIT & CONDUCTOR SCHEDULE

- NOTE:**
- ALL CONDUIT & CONDUCTOR RUNS SIZED FOR 19.2kW, (4) 80A CIRCUITS @ 240V. (4) 100A CIRCUIT BREAKERS REQUIRED PER CHARGEPOINT SPECIFICATIONS.
  - EACH EV CHARGER TO BE SUPPLIED WITH (2) RUNS, (1) FOR EACH CHARGING PORT



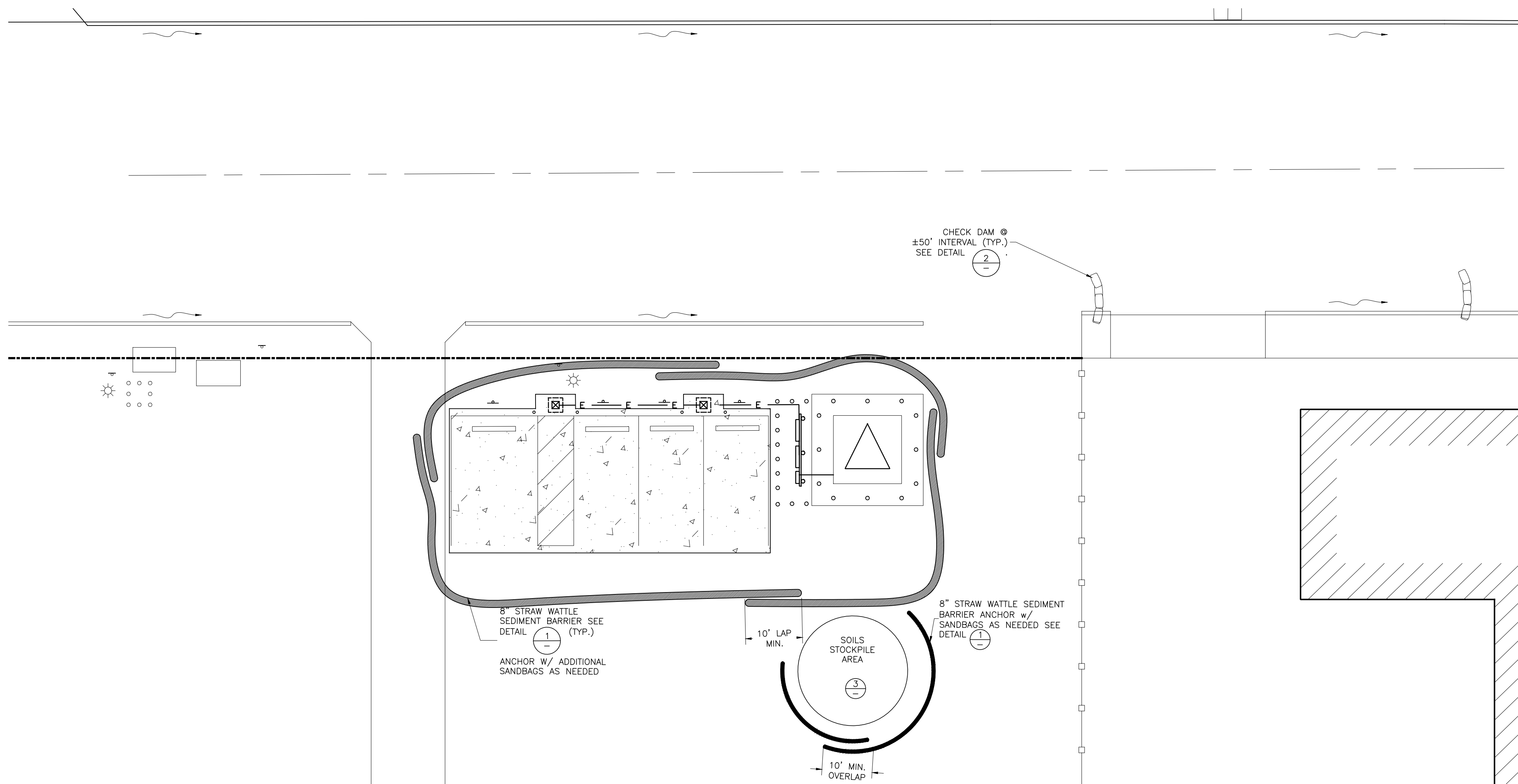
**② BOLLARD SPACING DETAIL**  
 SCALE: 1"=5'

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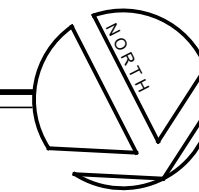
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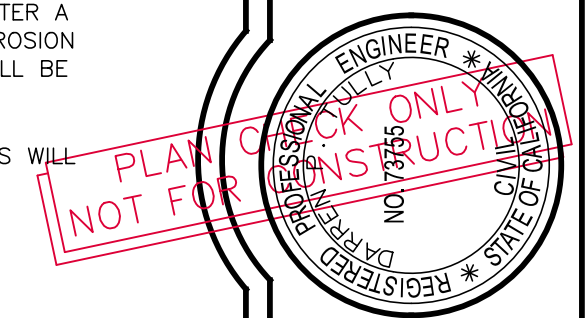
**EROSION CONTROL PLAN**

SCALE: 1"=10'



**EROSION CONTROL NOTES**

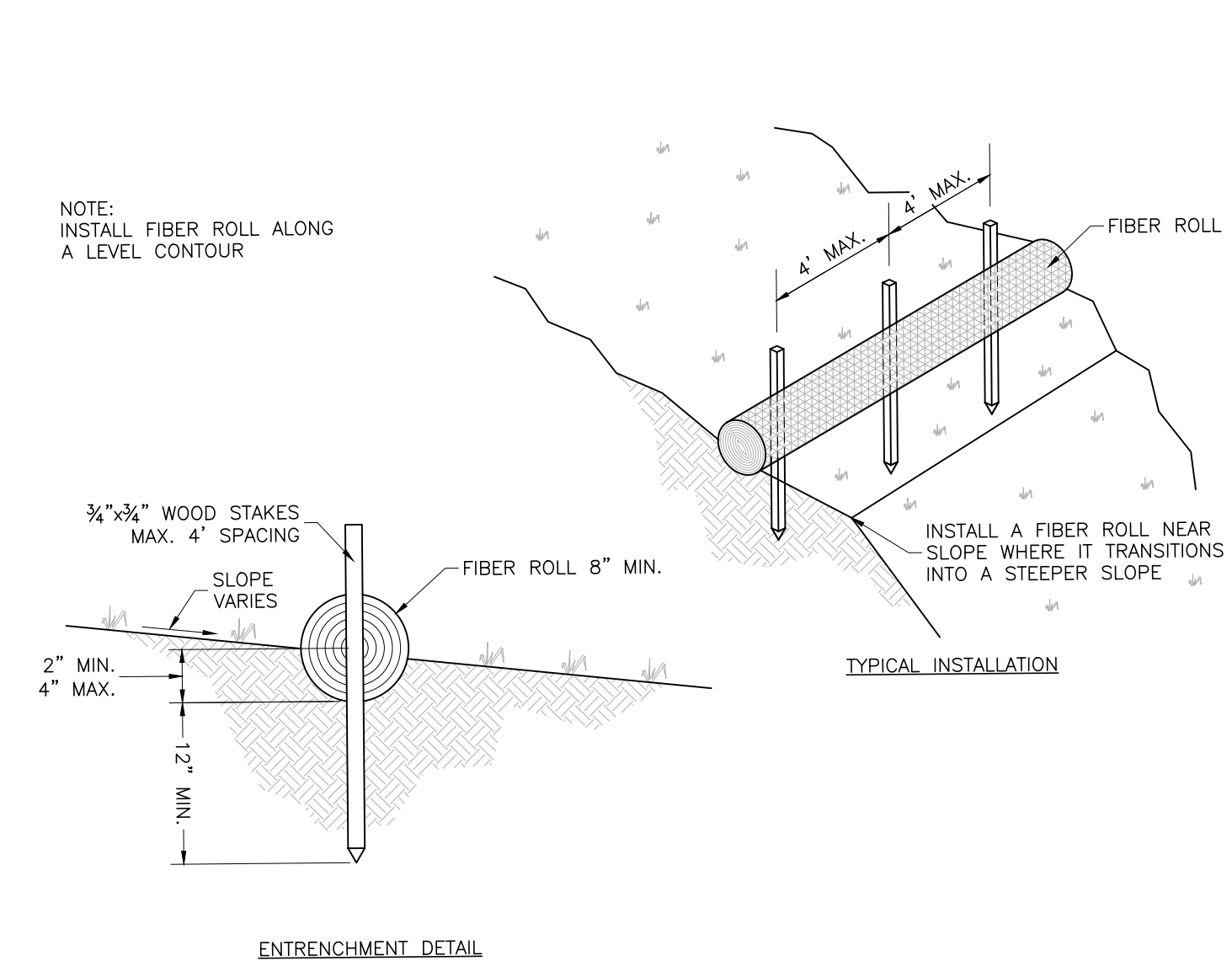
- A. GENERAL
1. THIS PLAN WAS PREPARED BY A QUALIFIED ENGINEER FROM WHITCHURCH ENGINEERING, INC WHO HAS TRAINING AND EXPERIENCE TO HAVE EXPERT KNOWLEDGE OF EROSION AND SEDIMENT CONTROL METHODS.
  2. THE SOURCE OF THE BMP'S USED IN THIS PLAN PREPARATION ARE FROM CALIFORNIA STORM WATER BEST MANAGEMENT PRACTICE HANDBOOK AND STATE WATER RESOURCES CONTROL BOARD BEST MANAGEMENT PRACTICE CONSTRUCTION HANDBOOK.
  3. THE IMPLEMENTATION OF BMP'S WILL OCCUR WITH THE ONSET OF CONSTRUCTION, IMMEDIATELY AFTER SOIL IS DISTURBED AT SITE. AS SHOWN ON SITE MAP A SILT FENCE WILL BE INSTALLED PARALLEL TO CONSTRUCTION SITE. OTHER EROSION CONTROL ACTIVITIES (HAY BALES, ETC) SHALL BE IMPLEMENTED AS DEEMED BY INSPECTOR.
  4. A REPRESENTATIVE FROM WHITCHURCH ENGINEERING, INC SHALL INSPECT EROSION CONTROL MEASURES AFTER A SIGNIFICANT RAIN EVENT. A LETTER FOR EACH INSPECTION SHALL BE SUBMITTED TO THE JOB FILE. THE EROSION CONTROL MEASURES SHALL BE INSPECTED BY THE ENGINEER AS NECESSARY. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
  5. THIS PROJECT MAY COMMENCE DURING THE WINTER MONTHS (OCTOBER 15-APRIL 15) THEREFORE EFFORTS WILL BE MADE TO MINIMIZE LAND DISTURBANCES.
- B. WATER COURSES
1. EXISTING AND PROPOSED DRAINAGE PATTERNS, CHANNELS AND FACILITIES ARE SHOWN ON ATTACHED PLAN.
  2. CHANGES IN FLOW QUANTITIES AND VELOCITIES ARE NEGLIGIBLE; EXISTING SLOPES AND DRAINAGE CHANNELS ARE TO REMAIN UNALTERED. SURFACE WATER FLOW IS BY SHEET FLOW. SLOPE PROTECTION MEASURES SHALL CONSIST OF APPLYING A PROTECTIVE LAYER OF STRAW OR ANOTHER SUITABLE MATERIAL TO SOIL SURFACE AREA.
  3. TEMPORARY SLOPE STABILIZATION MEASURES SHALL CONSIST OF MULCHING WITH PROTECTIVE COVERINGS. APPLICATION OF THIS MEASURE SHALL COMMENCE WITH START OF CONSTRUCTION.
  4. TEMPORARY CHANNEL TO CONTROL SURFACE WATER FLOW OVER CUT AND FILL SLOPES SHALL BE AN A.D.S PLASTIC PIPE DIRECTED TO ESTABLISHED DRAINAGE.
  5. EXISTING GRASS VEGETATED FIELD AREA WILL SERVE TO REDUCE DRAINAGE FLOW VELOCITIES.
  6. A TEMPORARY SEDIMENT DETENTION BASIN IS NOT NECESSARY FOR THIS PROJECT.
  7. ALL LOOSE SOIL AND DEBRIS SHALL BE REMOVED FROM THE STREET AREAS UPON STARTING OPERATIONS AND PERIODICALLY THEREAFTER BY THE INSPECTOR. ALL ENTRANCES SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY.
- C. DISPOSAL OF EXCAVATED MATERIALS
1. EXCAVATED MATERIALS SHALL BE HAULED OFF SITE OR USED IN LANDSCAPING ON-SITE.
- D. DUST CONTROL
1. EXCESSIVE DUST SHALL BE CONTROLLED AT ALL TIMES DURING CONSTRUCTION AND UNTIL FINAL COMPLETION. THE CONTRACTOR, WHEN HE OR HIS SUBCONTRACTOR ARE OPERATING EQUIPMENT ON SITE, SHALL PREVENT THE FORMATION OF EXCESSIVE AIRBORNE NUISANCES BY WATERING AND/OR TREATING THE SITE OF THE WORK IN SUCH A MANNER THAT WILL CONFIRM DUST PARTICLES TO THE IMMEDIATE SURFACE OF THE WORK AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY DUST FROM HIS OWN ACTIVITIES OR HIS SUBCONTRACTORS ACTIVITIES IN PERFORMING THE WORK UNDER THIS CONTRACT AND SHALL BE RESPONSIBLE FOR ANY CITATIONS, FINES, OR CHARGES RESULTING FROM DUST NUISANCES. DUST CONTROL WILL BE DONE ON A DAILY BASIS.
- E. REMOVAL OF VEGETATION AND REVEGETATION
1. VEGETATION REMOVAL IS TO BE LIMITED TO AREA DIRECTLY UNDER PROPOSED CONSTRUCTION.
  2. FINAL REPORTS AND NOTIFICATION OF COMPLETION
- F. UPON COMPLETION OF THE PERMITTED ROUGH GRADING WORK AND AT THE FINAL COMPLETION OF THE WORK, A SET OF REPORTS, DRAWINGS AND SUPPLEMENTS THERETO ARE REQUIRED FOR ENGINEERED GRADING, OR WHEN PROFESSIONAL INSPECTION IS PERFORMED FOR REGULAR GRADING, AS APPLICABLE.
2. THE BUILDING OFFICIAL SHALL BE NOTIFIED WHEN THE GRADING OPERATION IS READY FOR FINAL INSPECTION AFTER ALL WORK AND ALL EROSION-CONTROL MEASURES HAVE BEEN COMPLETED IN ACCORDANCE WITH THE FINAL APPROVED GRADING PLAN, AND THE REQUIRED REPORTS HAVE BEEN SUBMITTED.
- POST CONSTRUCTION BMP'S
1. THE CONTRACTOR IS RESPONSIBLE FOR COMPLETION OF POST-CONSTRUCTION BEST MANAGEMENT PRACTICES.
  2. ALL EROSION CONTROL AND/OR SEDIMENT CONTROL MEASURES SHALL BE REMOVED FROM SITE, INCLUDING SILT FENCES, DI PROTECTION, AND CHECK DAMS UPON APPROVAL OF THE ENGINEER.
- GENERAL NOTE
- NOTE: ALL EROSION CONTROL AND SEDIMENT CONTROL MEASURES TO BE APPROVED BY ENGINEER OF RECORD.



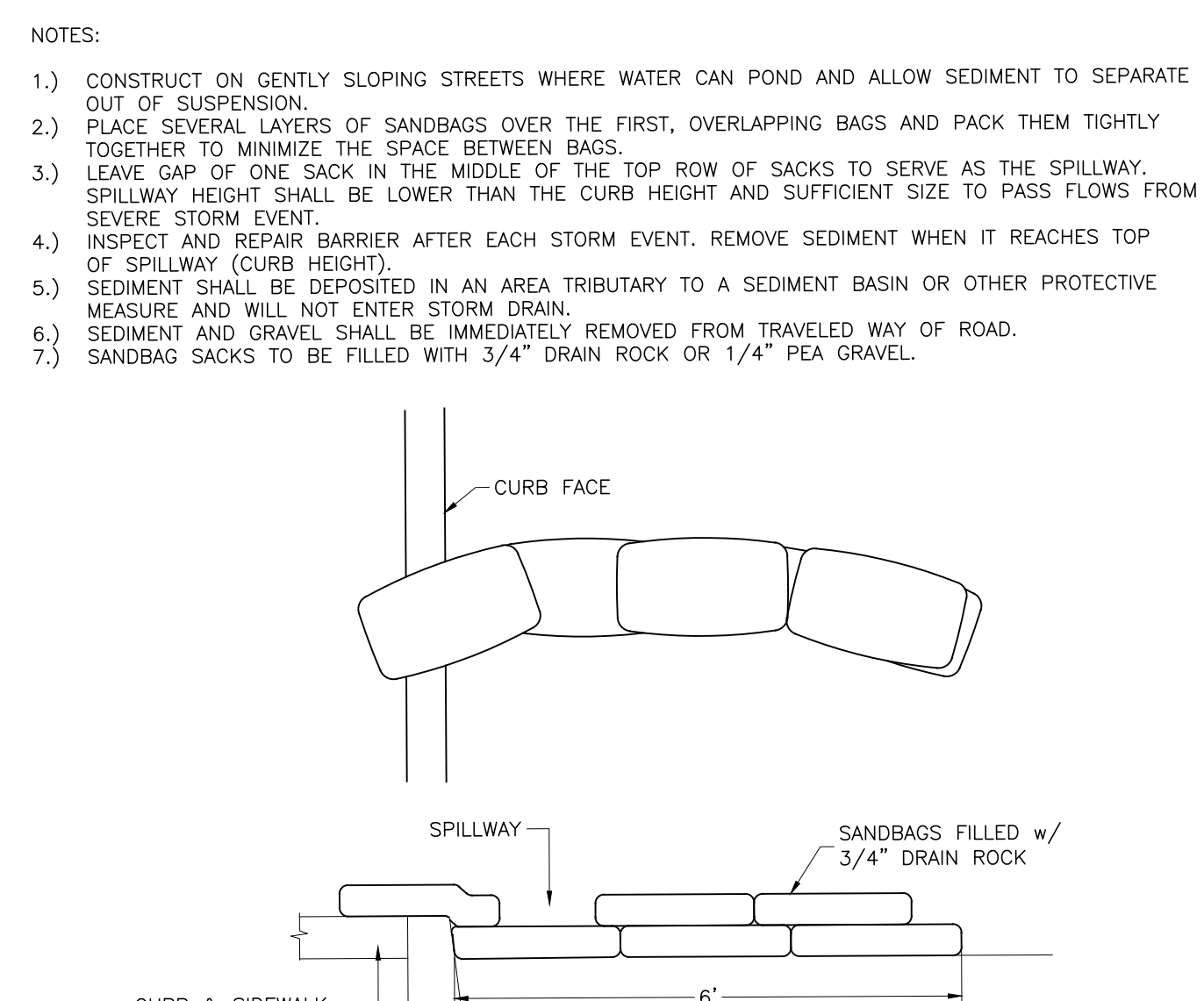
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 3300 RENNERT DRIVE, FORTUNA, CA 95540  
 APN: 202-082-064

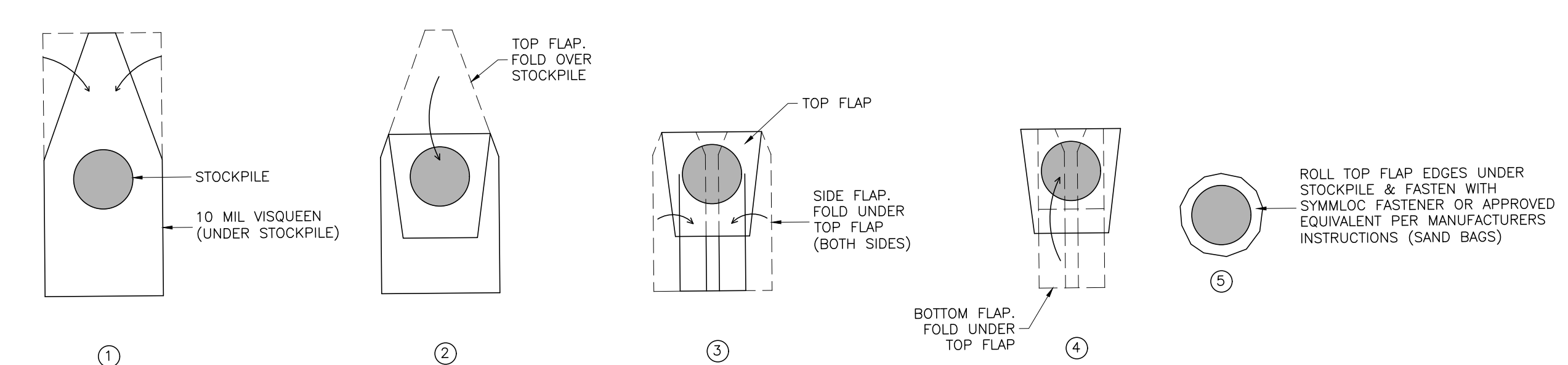
**EROSION CONTROL PLAN**  
 For: REDWOOD COAST ENERGY AUTHORITY: 633 3RD ST., EUREKA, CA 95501



**1** STRAW WATTLE/FIBER ROLL DETAIL  
NO SCALE



**2** CHECK DAM DETAIL  
NO SCALE



**3** BURRITO WRAP STOCK PILE CONTAINMENT  
NO SCALE

THESE PLANS ARE ORIGINALLY PRINTED ON 22"x34" PAPER.

1 INCH

This drawing or drawing set shall not be used for construction unless a jurisdictional stamp (County, City, State, Federal) has been issued on the drawing, stating "FOR PERMIT" or similar verbiage, a wet signed professional engineer's stamp, and permit documents have been issued for the project.

Date	MAY 17, '24
Scale	AS NOTED
Design	ALW
Drawn	ALW
Job	REA 2301
Sheet	2.3

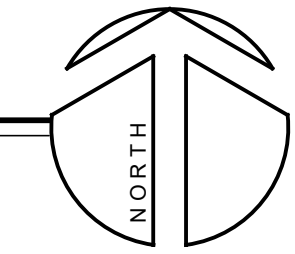




**PROJECT LOCATION**  
**3414 W STREET**  
**EUREKA, CA 95501**

**LOCATION MAP**

NO SCALE



**PROJECT DATA**

PROJECT ADDRESS – 3414 W STREET, EUREKA, CA 95501  
 CLIENT – REDWOOD COAST ENERGY AUTHORITY  
 PROPERTY OWNER – CITY OF EUREKA  
 APN: 013-161-001  
 ZONING – PL – PUBLIC LAND  
 COASTAL ZONE – NO  
 100-YEAR FLOOD ZONE – NO  
 SRA AREA – NO  
 PROJECT SCOPE – CONSTRUCTION OF 2 DUAL PORT LEVEL 2 ELECTRIC VEHICLE CHARGING STATIONS AND ASSOCIATED PARKING STALLS  
 BUILDING DEPARTMENT – CITY OF EUREKA  
 BUILDING CODES – 2022 CBC, CPC, CEC, CFC, & ENERGY CODE

**APPLICANT INFO**

**SITE HOST:**  
 KELLY ALLEN  
 CITY OF EUREKA PUBLIC WORKS  
 3414 W STREET  
 EUREKA, CA 95503  
 (707) 268-5253

**APPLICANT:**  
 REDWOOD COAST ENERGY AUTHORITY  
 c/o MIKE AVCOLLIE  
 633 THIRD STREET  
 EUREKA, CA 95501  
 (707) 269-1700

**PROJECT CONSULTANTS**

**CIVIL ENGINEERING:**  
 WHITCHURCH ENGINEERING, INC.  
 610 9th STREET  
 FORTUNA, CA 95540  
 (707) 725-6926

**SURVEYOR:**  
 WHITCHURCH ENGINEERING, INC.  
 610 9th STREET  
 FORTUNA, CA 95540  
 (707) 725-6926

**GENERAL NOTES**

1. ALL CONSTRUCTION, MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE 2022 EDITION OF THE CALIFORNIA BUILDING CODE, 2022 EDITIONS OF THE CALIFORNIA ELECTRICAL AND FIRE CODES, AND ALL APPENDICES THERETO, CALTRANS STANDARD PLANS & SPECIFICATIONS, LATEST EDITION.
2. THE CONTRACTOR SHALL PROVIDE WORKMANS COMPENSATION INSURANCE & LIABILITY INSURANCE.
3. THE CONTRACTOR SHALL GUARANTEE ALL LABOR AND MATERIAL FOR A MINIMUM OF ONE YEAR.
4. THE GENERAL CONTRACTOR SHALL VERIFY ALL THE SITE CONDITIONS AND DIMENSIONS BEFORE STARTING WORK. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES.
5. FEATURES OF CONSTRUCTION SHOWN ARE TYPICAL AND SHALL APPLY GENERALLY THROUGHOUT SIMILAR CONDITIONS.
6. DETAILS SHOWN ON TYPICAL DETAIL SHEETS SHALL BE USED WHENEVER APPLICABLE, UNLESS OTHERWISE SHOWN. SPECIFIC DETAILS ON THE CIVIL DRAWINGS TAKE PRECEDENCE OVER TYPICAL DETAILS. SPECIFIC NOTES SHOWN ON THE CIVIL DRAWINGS TAKE PRECEDENCE OVER GENERAL NOTES. NOTES AND DETAILS ON THE STRUCTURAL DRAWINGS TAKE PRECEDENCE OVER SPECIFICATIONS.
7. ALL CONDITIONS SHOWN OR NOTED AS EXISTING ARE BASED ON BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE DRAWINGS, NO WARRANTY IS IMPLIED AS TO THEIR ACCURACY.
8. ALL BUILDING MATERIAL SHALL BE NEW MATERIAL, UNLESS OTHERWISE APPROVED OR SPECIFIED BY ENGINEER.
9. CONTRACTORS SHALL VERIFY EASEMENTS (PUBLIC OR PRIVATE) FOR SEWER, WATER, ELECTRICAL, TELEPHONE, CABLE T.V., AND GAS PRIOR TO STARTING CONSTRUCTION.
10. VERIFY ALL UTILITY DATA AND LOCATIONS PRIOR TO ANY WORK. ONSITE UTILITIES SHALL BE COORDINATED WITH THE APPROPRIATE AGENCY OR UTILITY COMPANY.
11. THE DESIGN CONSULTANTS ASSUMES NO RESPONSIBILITY FOR THE PERFORMANCE OF PRODUCTS OR MATERIALS NOT SPECIFIED IN THESE DRAWINGS.
12. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DRAWINGS. WHERE DISCREPANCIES OCCUR NOTIFY THE OWNER'S REPRESENTATIVE FOR CLARIFICATION.
13. ACCEPT NO INK OR PENCIL CORRECTIONS TO THESE DRAWINGS WITHOUT THE OWNER'S REPRESENTATIVE INITIAL OR SIGNATURE. THE DESIGN CONSULTANTS SHALL BE HELD HARMLESS FOR ALL CHANGES NOT IN CONFORMANCE WITH THIS PROVISION.
14. ALL USERS OF THESE DRAWINGS AGREE BY USING THESE DRAWINGS TO HOLD THE DESIGN CONSULTANTS HARMLESS FOR ANY AND ALL WORK THAT DOES NOT CONFORM TO THE REQUIREMENTS AND MINIMUM STANDARDS OF THE C.B.C., ORDINANCES, AND ACCEPTABLE STANDARDS.
15. THESE DRAWINGS ARE THE PROPERTY OF THE DESIGN CONSULTANTS AND ARE NOT TO BE USED IN PART FOR ANY WORK OTHER THAN THE LOCATION SHOWN HEREON.
16. THE DESIGN CONSULTANTS AND THE OWNER SHALL HAVE NO CONTROL OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES FOR ANY SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.
17. THE CONTRACTOR SHALL COMPLY WITH ALL OF THE APPLICABLE REQUIREMENTS OF THE FEDERAL WILLIAMS - STEIGER OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) OF 1970' AND ANY AMENDMENTS THERETO. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER, THE ENGINEER OR CITY OF EUREKA DEPARTMENT OF PUBLIC WORKS.
18. THE CONTRACTOR SHALL COMPARE ALL PAGES OF THE PLANS; ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER PRIOR TO PROCEEDING WITH WORK.
19. UPON COMPLETION OF THE PROJECT, THE CONTRACTOR AND SUBCONTRACTORS SHALL REMOVE SURPLUS MATERIALS AND DEBRIS FROM THE SITE. CONTRACTOR SHALL REMOVE ALL DELETERIOUS MATERIAL FROM SITE INCLUDING BUT NOT LIMITED TO; BROKEN CONCRETE, STUMPS, ROCKS, DEBRIS, ASPHALT RUBBLE, GARBAGE, ETC. AND LEGALLY DISPOSE OF ABOVE.
20. LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN HEREON ARE FROM RECORD INFORMATION ONLY AND ARE SHOWN FOR INFORMATION ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES PRIOR TO EXCAVATION AND CONSTRUCTION IN ANY AREA. CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (USA) AT 1-800-642-2444 A MINIMUM OF 48 HOURS IN ADVANCE OF ANY EXCAVATION. CONTRACTORS SHALL IMMEDIATELY REPORT ANY DISCREPANCIES IN RECORD INFORMATION TO ENGINEER AND DEVELOPER PRIOR TO CONSTRUCTING ANY WORK.
21. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SITE SAFETY REQUIREMENTS.
22. CONTRACTOR SHALL PROTECT ALL EXISTING IMPROVEMENTS ON OR ADJACENT TO PROJECT SITE. CONTRACTOR SHALL REPAIR OR REPLACE ALL DAMAGE TO EXISTING IMPROVEMENTS TO THE SATISFACTION OF CITY OF EUREKA PUBLIC WORKS OR PRIVATE PROPERTY OWNER INVOLVED.

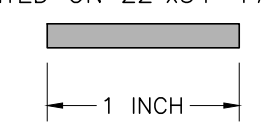
**EARTHWORK AND BACKFILL**

- ALL EARTHWORK SHALL COMPLY WITH THE PROVISIONS OF CHAPTERS 18 AND 33 OF THE CBC 2022 EDITION AND THE CITY OF EUREKA ORDINANCE.
1. TOPSOIL – TOPSOIL LAYER SHALL BE REMOVED PRIOR TO ESTABLISHING THE SUBGRADE ON COMPETENT SUBSOILS. DEPTH OF TOPSOIL AVERAGES 0.5-1.0 FEET.
  2. EXCAVATION – EXCAVATION SHALL INCLUDE ALL EXCAVATION REQUIRED FOR SITE AND/OR BUILDING WORK UNLESS OTHERWISE SPECIFIED. CUT SLOPES SHALL NOT EXCEED 2 (TWO) HORIZONTAL TO 1 (ONE) VERTICAL.
  3. FILL – FILL MATERIAL FOR THE FOUNDATIONS SHALL BE WELL GRADED CALTRANS CLASS II AGGREGATE SUB-BASE OR OTHER MATERIAL APPROVED BY THE PROJECT ENGINEER. FILL SHALL BE COMPACTED TO 90% (95% FOR TOP 24") RELATIVE COMPACTION. FILL SHALL BE PLACED AND COMPACTED IN 8 INCH LAYERS. COMPACTION TESTING IS REQUIRED. SUCH TESTING SHALL COMPLY TO ASTM LABORATORY TEST METHOD D-1557 SUBJECT TO APPROVAL BY THE ENGINEER OF RECORD.
  4. BASE – PAVEMENT BASE AND BASE UNDER CONCRETE SHALL BE CLASS II AS SPECIFIED BY CALTRANS. BASE MATERIAL SHALL BE PLACED IN 6" THICK MAXIMUM UNIFORM LAYERS AND COMPACTED TO 95 PERCENT RELATIVE DENSITY.
  5. STRUCTURAL BACKFILL – STRUCTURAL BACKFILL SHALL BE PLACED IN 8 INCH THICK MAXIMUM UNIFORM LAYERS. COMPACTION EQUIPMENT OR METHODS WHICH MAY CAUSE DISPLACEMENT OR DAMAGE STRUCTURES SHALL NOT BE USED. NO BACKFILL MATERIAL SHALL BE DEPOSITED AGAINST CAST-IN-PLACE CONCRETE STRUCTURES UNTIL THE CONCRETE HAS DEVELOPED A STRENGTH OF NOT LESS THAT 1500 P.S.I. COMPRESSIVE STRENGTH.
  6. PERMEABLE MATERIAL (FILTER GRAVEL) – PERMEABLE MATERIAL SHALL CONFORM TO CLASS 2 AS SPECIFIED BY CALTRANS UNLESS OTHERWISE NOTED ON PLANS.
  7. ALL TOPSOIL STRIPPED FROM THE SITE SHALL BE DEPOSITED IN A STOCKPILE STORAGE AREA FOR LATER USE AS LANDSCAPING MATERIAL.
  8. JETTING OF FILL IS NOT RECOMMENDED FOR COMPACTION PURPOSES.
  9. MINIMUM POSITIVE DRAINAGE OF 5% AWAY FROM ALL BUILDING FOUNDATIONS AND FOOTINGS FOR A MINIMUM OR 10' HORIZONTAL DISTANCE.
  10. EXCESS FILL MATERIAL SHALL BE HAULED TO AN APPROVED DIRT DISPOSAL SITE BY CONTRACTOR.

**SITE PREPARATION**

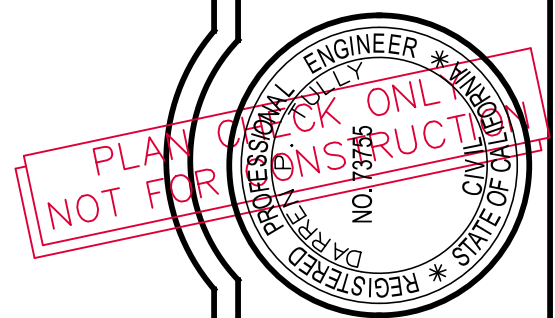
1. ALL TOPSOIL, VEGETATION, ORGANICS, AND DEBRIS SHOULD BE REMOVED FROM THE PROPOSED BUILDING AND PAVEMENT AREAS. THE GENERAL DEPTH OF STRIPPING SHOULD BE SUFFICIENTLY DEEP TO REMOVE THE ROOT SYSTEMS AND ORGANIC TOP SOILS. FOR ESTIMATE PURPOSES, A MINIMUM STRIPPING DEPTH OF 6 INCHES SHOULD BE USED. THE ACTUAL DEPTH OF STRIPPING SHOULD BE REVIEWED BY THE SOILS CONSULTANT AT THE TIME OF CONSTRUCTION 0.5'-1.0' IS THE TYPICAL TOP SOIL DEPTH FOR THIS SITE. DEEPER STRIPPING MAY BE REQUIRED IN LOCALIZED AREAS. STRIPPING SHOULD EXTEND LATERALLY A MINIMUM OF 10 FEET OUTSIDE THE BUILDING AND PAVEMENT PERIMETERS. THESE MATERIALS WILL NOT BE SUITABLE FOR USE AS ENGINEERED FILL; HOWEVER, STRIPPED TOPSOIL MAY BE STOCKPILED AND REUSED IN LANDSCAPE AREAS AT THE DISCRETION OF THE OWNER.
  2. THE CONTRACTOR SHOULD LOCATE ALL FOUNDATIONS, FLOOR SLABS, DEBRIS PITS, FILL SOILS, PAVEMENTS, AND SUBSURFACE STRUCTURES. THESE SOILS OR STRUCTURES SHOULD BE ENTIRELY REMOVED. THE RESULTING EXCAVATIONS SHOULD BE CLEANED OF ALL LOOSE OR ORGANIC MATERIAL. THE EXPOSED NATIVE SOILS SHOULD BE SCARIFIED TO A DEPTH OF 8 INCHES, THEN COMPACTED AS ENGINEERED FILL AND THE EXCAVATION BACKFILLED WITH ENGINEERED FILL.
  3. ALL UTILITY LINES SHOULD BE LOCATED. THOSE UTILITY LINES NOT ANTICIPATED TO BE USED AFTER CONSTRUCTION SHOULD BE EXCAVATED AND REMOVED. UTILITY LINES SHOULD NOT BE CRUSHED AND LEFT IN PLACE. THE RESULTING EXCAVATIONS SHOULD BE CLEANED OF ALL LOOSE OR ORGANIC MATERIAL. THE EXPOSED NATIVE SOILS SHOULD BE SCARIFIED TO A DEPTH OF 6 INCHES, THEN COMPACTED AS ENGINEERED FILL AND THE EXCAVATION BACKFILLED WITH ENGINEERED FILL.
  4. THE IN-PLACE DENSITY OF EXISTING UTILITY TRENCH BACKFILL WHICH ARE ANTICIPATED TO REMAIN SHOULD BE DETERMINED. EXISTING TRENCH BACKFILL WITH A RELATIVE DENSITY LESS THAN 90 PERCENT PER ASTM D1557 SHOULD BE OVER-EXCAVATED AND REPLACED AS ENGINEERED FILL WITH A MINIMUM RELATIVE DENSITY OF 92 PERCENT.
  5. THE CONTRACTOR SHOULD LOCATE ALL MONITORING AND/OR ON-SITE WATER WELLS. ALL WELLS SCHEDULED FOR DEMOLITION SHOULD BE ABANDONED PER STATE AND LOCAL REQUIREMENTS. ANY WELL (WATER OR MONITORING) THAT FALLS WITHIN THE BUILDING SHOULD BE ABANDONED. THE CONTRACTOR SHOULD OBTAIN AN ABANDONMENT PERMIT FROM THE LOCAL ENVIRONMENTAL HEALTH DEPARTMENT, AND ISSUE CERTIFICATES OF DESTRUCTION TO THE OWNER AND THE SOILS CONSULTANT UPON COMPLETION.
  6. EXCAVATIONS BELOW GROUNDWATER CAN BE BACKFILLED USING EITHER A SAND-CEMENT SLURRY, OR GRAVEL ENCASED IN A GEOTEXTILE FILTER FABRIC OR ENGINEERED FILL MATERIAL. ONCE THE EXCAVATION IS BACKFILLED ABOVE THE GROUNDWATER TABLE, SILTY SAND SOILS SHOULD BE USED AS BACKFILL.
  7. THE EXPOSED GROUND SURFACE IN AREAS TO RECEIVE ENGINEERED FILL MATERIAL, FLOOR SLABS OR PAVEMENTS SHOULD BE SCARIFIED TO A DEPTH OF 8 INCHES, MOISTURE CONDITIONED TO WITHIN TWO PERCENT OF OPTIMUM MOISTURE CONTENT AND COMPACTED AS ENGINEERED FILL. THE ZONE OF SCARIFICATION AND COMPACTION SHOULD EXTEND LATERALLY A MINIMUM OF 10 FEET OUTSIDE THE PERIMETERS OF THE BUILDINGS. THE SCARIFICATION AND COMPACTION SHOULD BE CONDUCTED FOLLOWING STRIPPING OPERATIONS, REMOVAL OF SUBSURFACE STRUCTURES, OVER-EXCAVATION, AND REMOVAL OF ALL SOFT OR PLANT AREAS.
  8. ALL FILL REQUIRED TO BRING THE SITE TO FINAL GRADE SHOULD BE PLACED AS ENGINEERED FILL. IN ADDITION, ALL NATIVE SOILS OVER-EXCAVATED SHOULD BE COMPACTED AS ENGINEERED FILL.
  9. IT SHOULD BE NOTED THAT WATER COULD SEEP INTO EXCAVATIONS. DEWATERING MAY BE REQUIRED. GROUNDWATER WILL ALSO IMPACT THE EXCAVATION, PLACEMENT, AND BACKFILL OF UTILITY LINES. CONTRACTORS SHOULD ANTICIPATE REMOVING WATER SEEPAGE. GRANULAR MATERIALS ENCASED IN A GEOTEXTILE STABILIZATION FABRIC, OR CEMENT-SAND SLURRY BACKFILL MATERIALS SHOULD BE ANTICIPATED WHEN BACKFILLING UTILITY LINES.
- DUST CONTROL DURING CONSTRUCTION. DURING CONSTRUCTION ACTIVITIES,**
- THE FOLLOWING DUST CONTROL MEASURES SHALL BE TAKEN:
1. WATER ALL ACTIVE CONSTRUCTION AREAS TWICE PER DAY AND USE EROSION CONTROL MEASURES TO PREVENT WATER RUNOFF CONTAINING SILT AND DEBRIS FROM ENTERING THE STORM DRAINAGE SYSTEM.
  2. COVER TRUCKS HAULING SOIL, SAND AND OTHER LOOSE MATERIAL.
  3. PAVE, WATER OR APPLY NON-TOXIC SOIL STABILIZERS ON UNPAVED ACCESS ROADS AND PARKING AREAS.
  4. SWEEP PAVED ACCESS ROADS AND PARKING AREAS DAILY.
  5. SWEEP STREETS DAILY IF VISIBLE MATERIAL IS CARRIED ONTO ADJACENT PUBLIC STREETS.
  6. INSTALL EROSION CONTROL MEASURES TO PREVENT SILT RUNOFF TO PUBLIC ROADWAYS.
  7. REPLANT VEGETATION IN DISTURBED AREAS WITHIN 30 DAYS OF COMPLETION OF PROJECT. THE CONSTRUCTION SITE SHALL BE MAINTAINED IN A CLEAN AND ORDERLY FASHION AND BE KEPT FREE OF DEBRIS. SOLID WASTE GENERATE DURING CONSTRUCTION SHALL BE DISPOSED OF IN AN APPROPRIATE MANNER. SUCH WASTE SHALL INCLUDE, BUT NOT BE LIMITED TO: CONCRETE FORMS, WASTE CONCRETE AND ASPHALT, EMPTY CONTAINERS OF BUILDING MATERIALS AND EXCESS BUILDING MATERIALS.
- DISCOVERY OF PREHISTORIC OR ARCHAEOLOGICAL RESOURCES**
- SHOULD CONCENTRATIONS OF ARCHAEOLOGICAL MATERIALS BE ENCOUNTERED DURING CONSTRUCTION OR GRADING OPERATIONS, ALL GROUND-DISTURBING WORK SHALL BE TEMPORARILY HALTED ON THE SITE. WORK NEAR THE ARCHAEOLOGICAL FINDS SHALL NOT BE RESUMED UNTIL A QUALIFIED ARCHAEOLOGIST HAS EVALUATED THE MATERIALS AND OFFERED RECOMMENDATIONS FOR FURTHER ACTION. PREHISTORIC MATERIALS WHICH COULD BE ENCOUNTERED INCLUDE: OBSIDIAN OR CHERT FLAKES OR TOOLS, LOCALLY DARKENED MIDDEN, GROUNDSTONE ARTIFACTS, DEPOSITIONS OF SHELL, DIETARY BONE, AND HUMAN BURIALS. SHOULD HUMAN REMAINS BE UNCOVERED, STATE LAW REQUIRES THAT THE COUNTY CORONER BE CONTACTED IMMEDIATELY. SHOULD THE CORONER DETERMINE THAT THE REMAINS ARE LIKELY THOSE OF A NATIVE AMERICAN, THE CALIFORNIA NATIVE AMERICAN HERITAGE COMMISSION MUST BE CONTACTED. THE HERITAGE COMMISSION CONSULTS WITH THE MOST LIKELY NATIVE AMERICAN DESCENDANTS TO DETERMINE THE APPROPRIATE TREATMENT OF THE REMAINS.
- DAYS AND HOURS OF CONSTRUCTION AND NOISE CONTROL.**
- HOURS OF CONSTRUCTION AND NOISE CONTROL. THE FOLLOWING SHALL APPLY TO CONSTRUCTION NOISE FROM TOOLS AND EQUIPMENT:
1. THE OPERATION OF TOOLS OR EQUIPMENT USED IN CONSTRUCTION, DRILLING, REPAIR, ALTERATION OR DEMOLITION SHALL BE LIMITED TO BETWEEN THE HOURS OF 8 A.M. AND 7 P.M. MONDAY THROUGH FRIDAY, AND BETWEEN 9 A.M. AND 7 P.M. ON SATURDAYS.
  2. NO HEAVY EQUIPMENT RELATED CONSTRUCTION ACTIVITIES SHALL BE ALLOWED ON SUNDAYS OR HOLIDAYS.
  3. CONTRACTOR SHALL SELECT STAGING AREAS AS FAR AS FEASIBLY POSSIBLE FROM SENSITIVE RECEPTORS.
  4. CONTRACTOR SHALL MAINTAIN ALL CONSTRUCTION EQUIPMENT WITH MANUFACTURER'S SPECIFIED NOISE-MUFFLING DEVICES.
  5. UNNECESSARY IDLING OF INTERNAL COMBUSTION ENGINES SHALL BE PROHIBITED, THIS WOULD MEAN TURNING OFF EQUIPMENT IF IT WILL NOT BE USED FOR 5 OR MORE MINUTES.
  6. ALL STATIONARY NOISE-GENERATING CONSTRUCTION EQUIPMENT SUCH AS AIR COMPRESSORS AS FAR AS POSSIBLE FROM HOMES AND BUSINESSES.
  7. CONTRACTOR SHALL SELECT QUIET CONSTRUCTION EQUIPMENT, PRIMARY AIR COMPRESSORS, WHENEVER POSSIBLE.
  8. TRUCK DRIVER SHALL ADHERE TO POSTED SPEED ON LOCAL ROADS. ALTERNATE TRUCK ROUTES SHALL BE CONSIDERED IF COMPLAINTS OCCUR.

THESE PLANS ARE ORIGINALLY PRINTED ON 22"x34" PAPER.



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REVISIONS	BY



**WHITCHURCH ENGINEERING, INC.**  
 610 9th Street Fortuna, California 95540  
 Phone (707) 444-1420

**RCEA ELECTRIC VEHICLE CHARGING STATION – SEQUOIA PARK**  
 3414 W STREET, EUREKA, CA 95501  
 APN: 013-161-001

**SITE VICINITY MAP & NOTES**

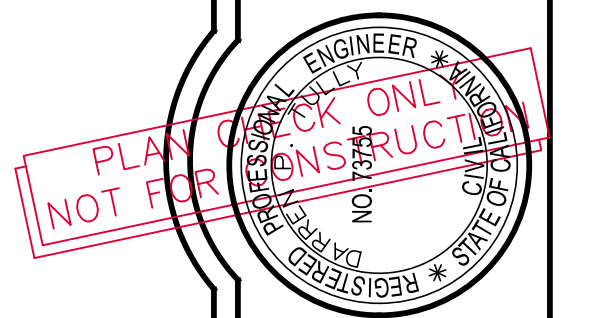
For: REDWOOD COAST ENERGY AUTHORITY, 633 3RD ST., EUREKA, CA 95501

Date	MAY 17, '24
Scale	AS NOTED
Design	ZDJ
Drawn	ZDJ
Job	REA 2301
Sheet	<b>3.1</b>

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REVISIONS	BY

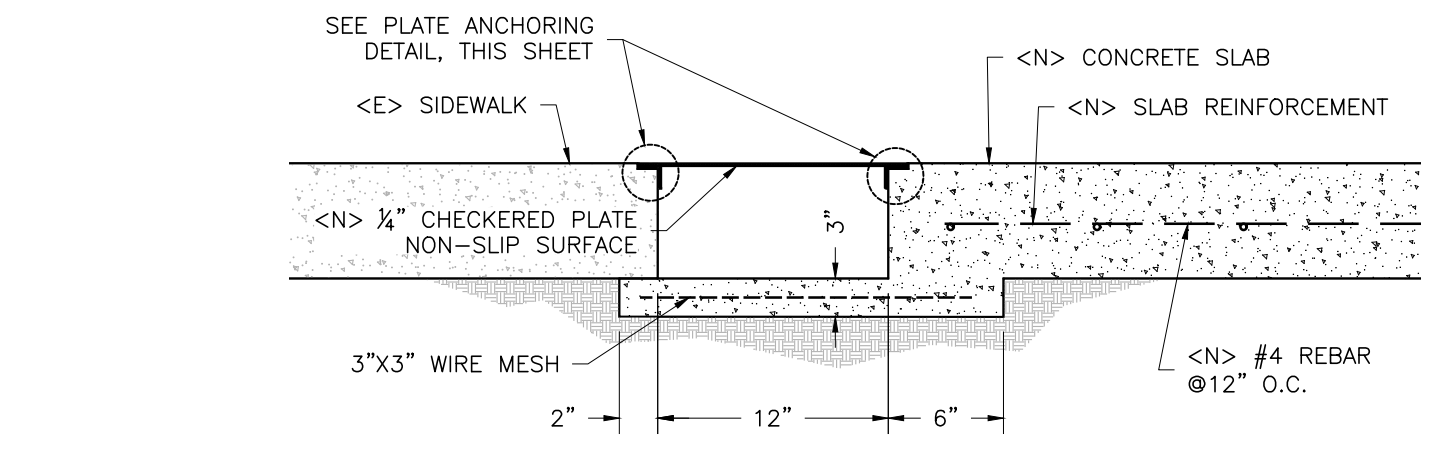
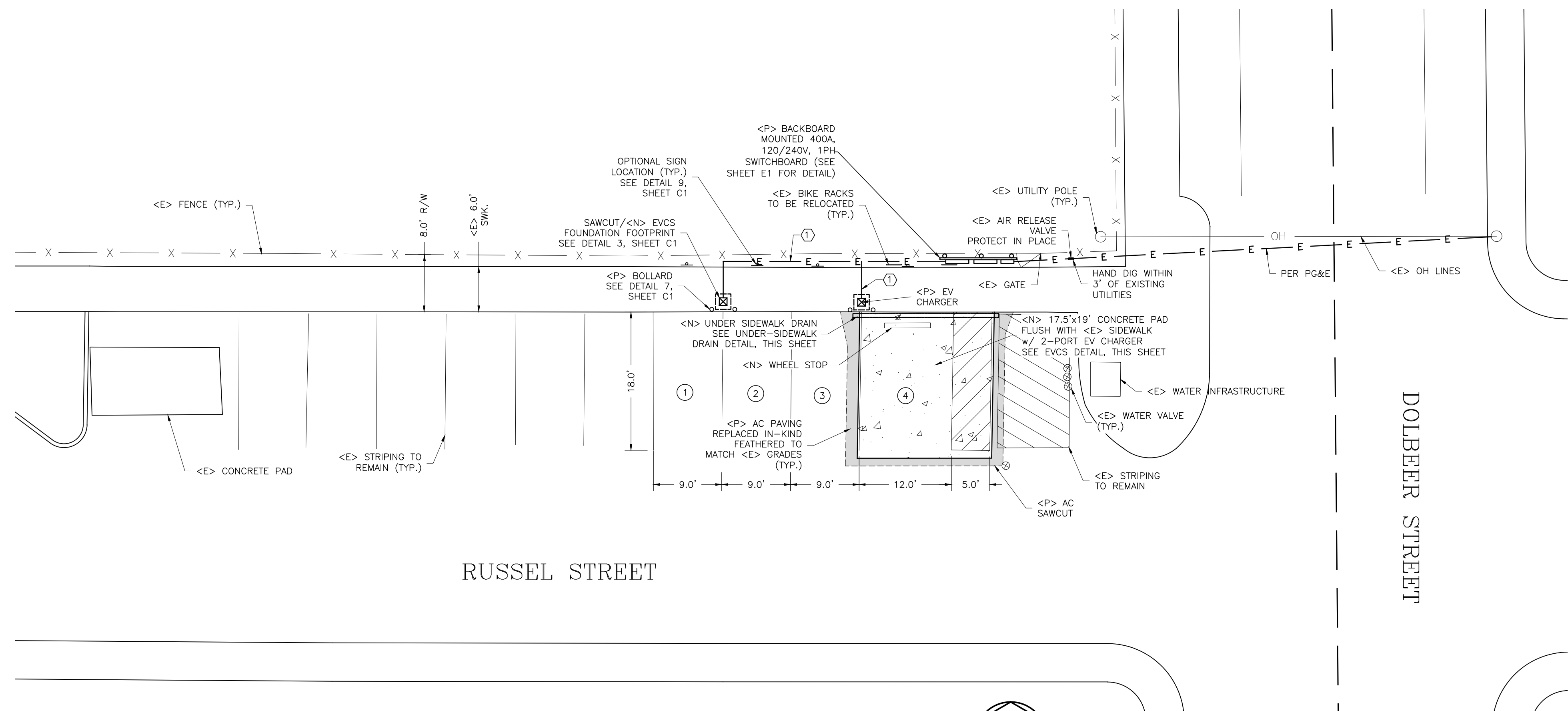


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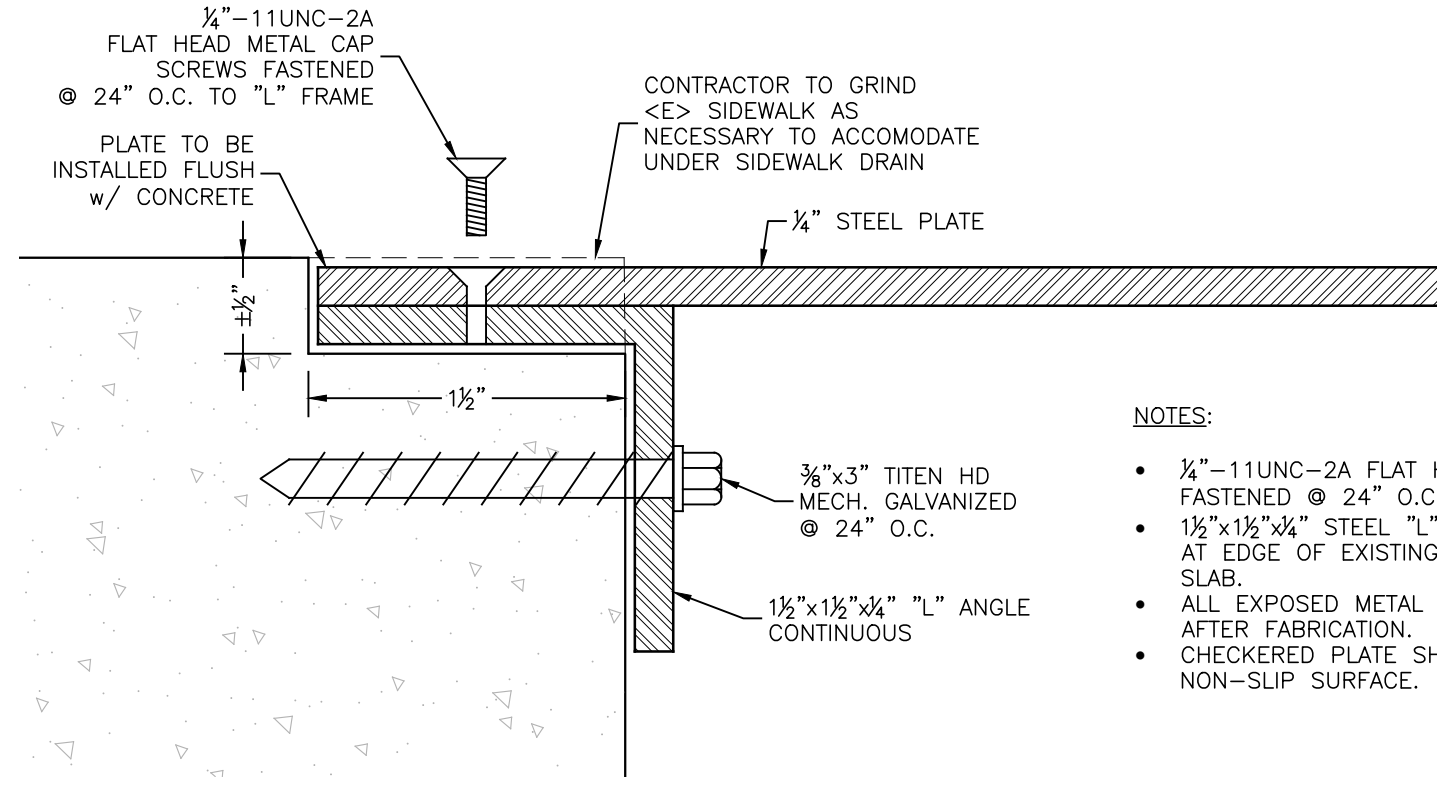
**RCEA ELECTRIC VEHICLE CHARGING STATION - SEQUOIA PARK**  
 3414 W STREET, EUREKA, CA 95501  
 APN: 013-161-001  
**SITE & GRADING PLAN**  
 For: REDWOOD COAST ENERGY AUTHORITY, 633 3RD ST., EUREKA, CA 95501

Date MAY 17, '24  
 Scale AS NOTED  
 Design ZDJ  
 Drawn ZDJ  
 Job REA 2301  
 Sheet

3.2



**1 UNDER-SIDEWALK DRAIN DETAIL**  
NO SCALE



**2 PLATE ANCHORING DETAIL**  
NO SCALE

RUN	DESCRIPTION	LENGTH	# OF RUNS (IN CONDUIT)	CONDUCTOR QTY & SIZE (PER RUN)	CONDUIT SIZE	GROUND SIZE (PER RUN)	RATING (SEE NOTES)
①	SWITCHBOARD TO EV (PER PORT)	35'	2	(2X) #3 AWG, CU	1 1/2"	#8 AWG, CU	100A/RUN (2 PER CHARGER)

**CONDUIT & CONDUCTOR SCHEDULE**

NOTE:  
 1) ALL CONDUIT & CONDUCTOR RUNS SIZED FOR 19.2kW, (4) 80A CIRCUITS @ 240V.  
 (4) 100A CIRCUIT BREAKERS REQUIRED PER CHARGEPOINT SPECIFICATIONS.  
 2) EACH EV CHARGER TO BE SUPPLIED WITH (2) RUNS, (1) FOR EACH CHARGING PORT.

- SITE PLAN NOTES**
- SITE PLAN BASED ON TOPOGRAPHIC SURVEY BY WHITCHURCH ENGINEERING, DATED OCTOBER 12, 2023.
  - NEW EV CHARGING STATIONS SHOWN TO BE SINGLE STATION, DUAL PORT CHARGEPOINT CP6000 UNITS (OR APPROVED EQUIVALENT).
  - ELECTRICAL LAYOUTS FROM TRANSFORMERS TO SWITCHBOARD AS PER ASSESSMENTS PROVIDED BY PG&E.
  - CONTRACTOR SHALL SAWCUT AS NECESSARY FOR INSTALLATION.
  - CONTRACTOR SHALL MINIMIZE DAMAGE TO <E> SIDEWALKS/LANDSCAPE TO THE EXTENT POSSIBLE.
  - ALL <E> SIDEWALKS SHALL REMAIN.
  - CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES IN PLACE.
  - CONTRACTOR TO TAKE ADDITIONAL CARE OF EXISTING UTILITIES IN NO-PARKING ZONE ADJACENT TO NEW EVCS STALL.
  - EVCS SIGNAGE IS OPTIONAL. SIGN LOCATION MAY CHANGE AT DISCRETION OF SITE HOST. SIGN MUST BE LOCATED OUTSIDE OF PARKING STALLS AND PATHS OF TRAVEL. SEE ADDITIONAL NOTES, DETAIL 9, SHEET C1.

**SITE PLAN**

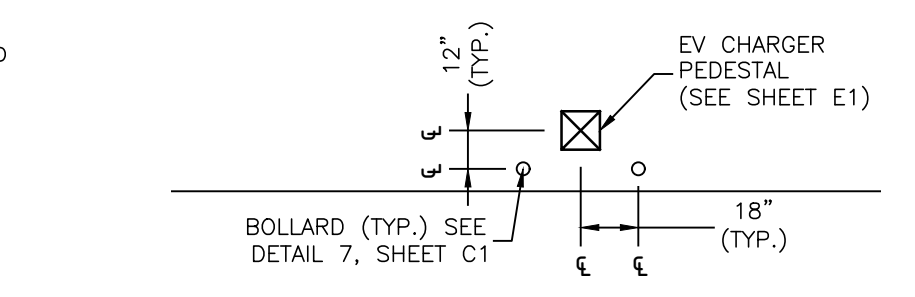
SCALE: 1"=10'

**GRADING LEGEND**

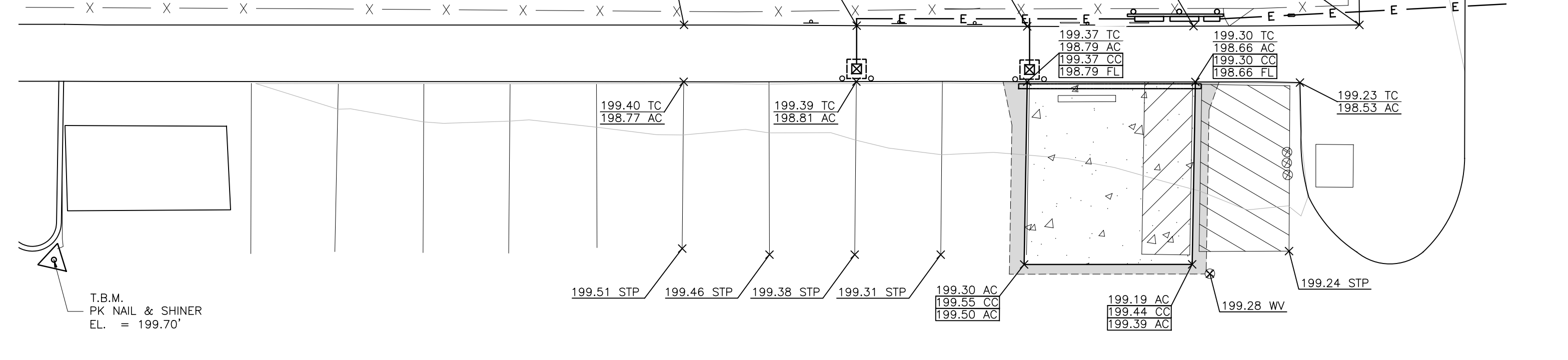
- 000.00 - EXISTING GRADE
- 000.00 - PROPOSED GRADE
- PROPOSED CONCRETE
- PROPOSED AC PAVING
- EXISTING CONCRETE TO REMAIN
- EXISTING CONCRETE TO BE REMOVED
- MAJOR CONTOUR
- MINOR CONTOUR

**3 BOLLARD SPACING DETAIL**

SCALE: 1"=5'

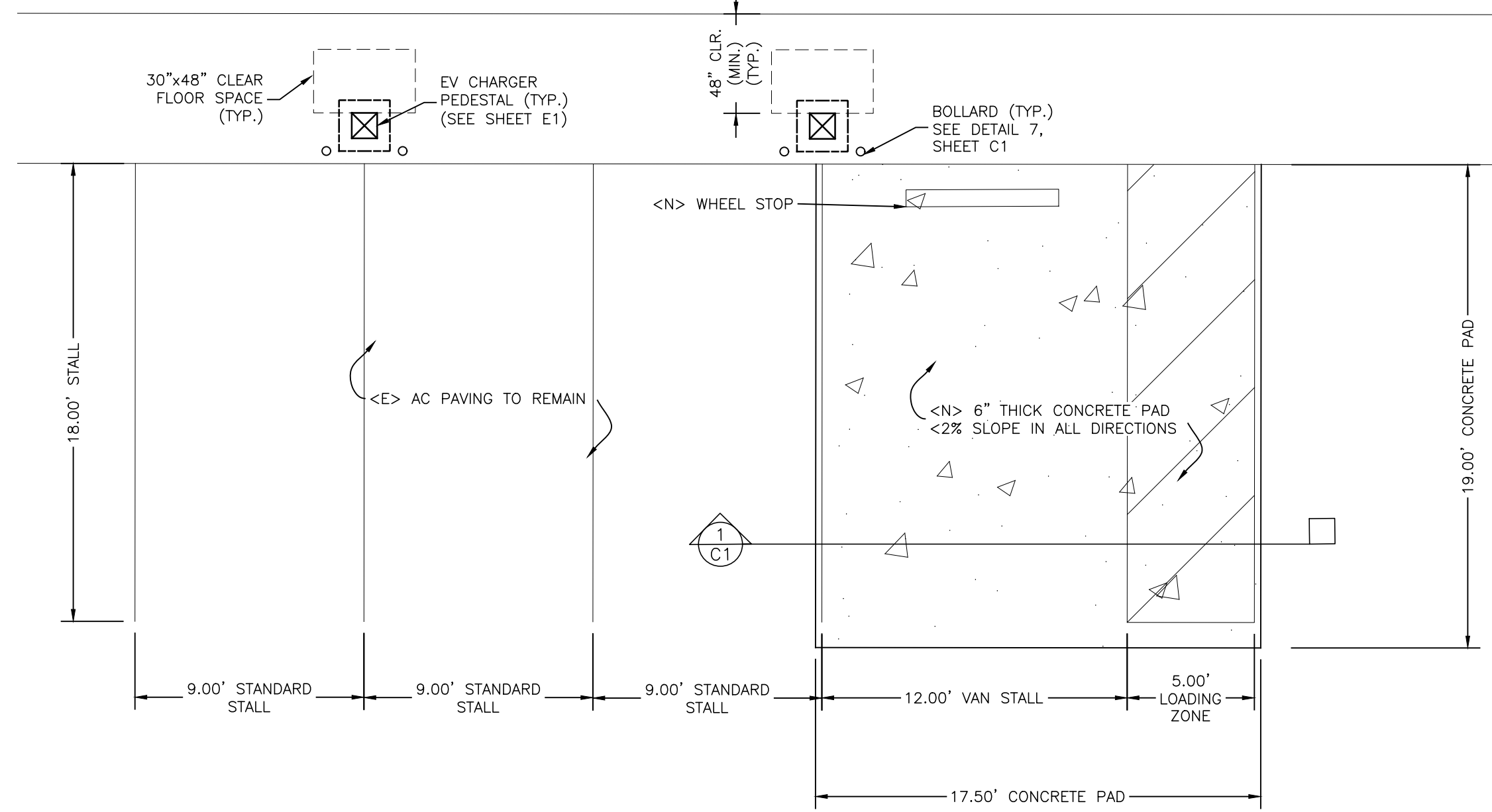


- GRADING NOTES**
- STRAIGHT GRADE BETWEEN FINISHED GRADES SHOWN.
  - THE TYPES, LOCATIONS, SIZES AND/OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS TOPOGRAPHIC SURVEY WERE OBTAINED FROM SURFACE FEATURES AND SOURCES OF VARYING RELIABILITY. ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS AND DEPTHS OF SUCH UNDERGROUND UTILITIES. WHITCHURCH ENGINEERING, INC. ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF THE DELINEATION OF SUCH UNDERGROUND UTILITIES WHICH MAY BE ENCOUNTERED.
  - TOPOGRAPHIC DATA IS BASED ON WHITCHURCH ENGINEERING SURVEY DATED OCTOBER 12, 2023 AND EXISTING RIGHT OF WAY SURFACE FEATURES FOUND ON SITE. ACTUAL BOUNDARY LINES AND EASEMENTS ARE NOT REPRESENTED IN THIS DRAWING.
  - TEMPORARY BENCHMARK LOCATED NEAR THE CENTER OF RUSSEL STREET. P.K. NAIL & SHINER WITH AN ASSUMED ELEVATION OF 199.70'. VERTICAL DATUM IS ASSUMED.
  - CONTOURS SHOWN AT 1' INTERVAL.
  - DATUM IS NAD83.



**GRADING PLAN**

SCALE: 1"=10'



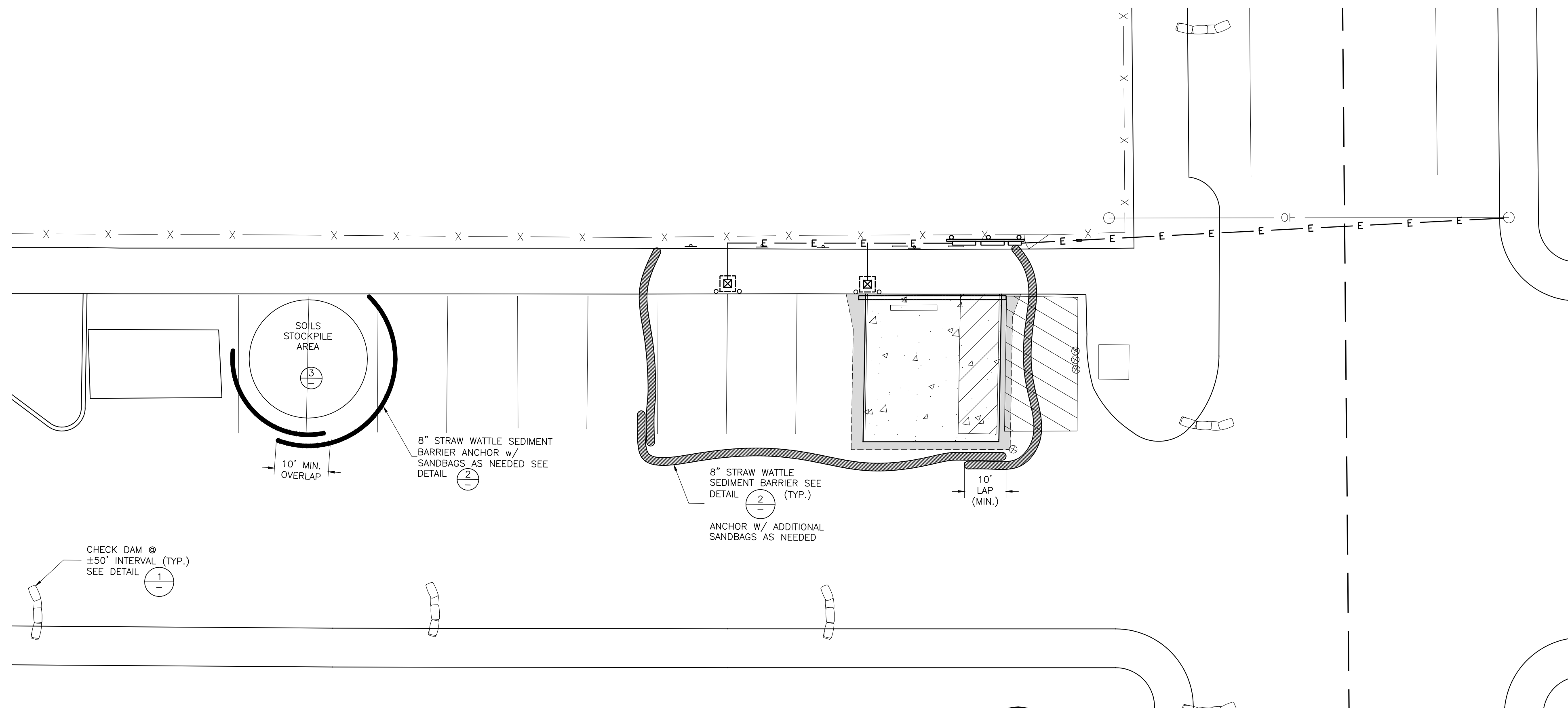
**4 EVCS DETAIL**

SCALE: 1"=5'

THESE PLANS ARE ORIGINALLY PRINTED ON 22"x34" PAPER.  
 \*EVCS STRIPING PER DETAIL B, SHEET C1 (TYP.)

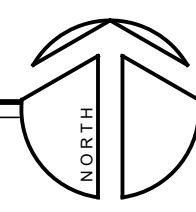
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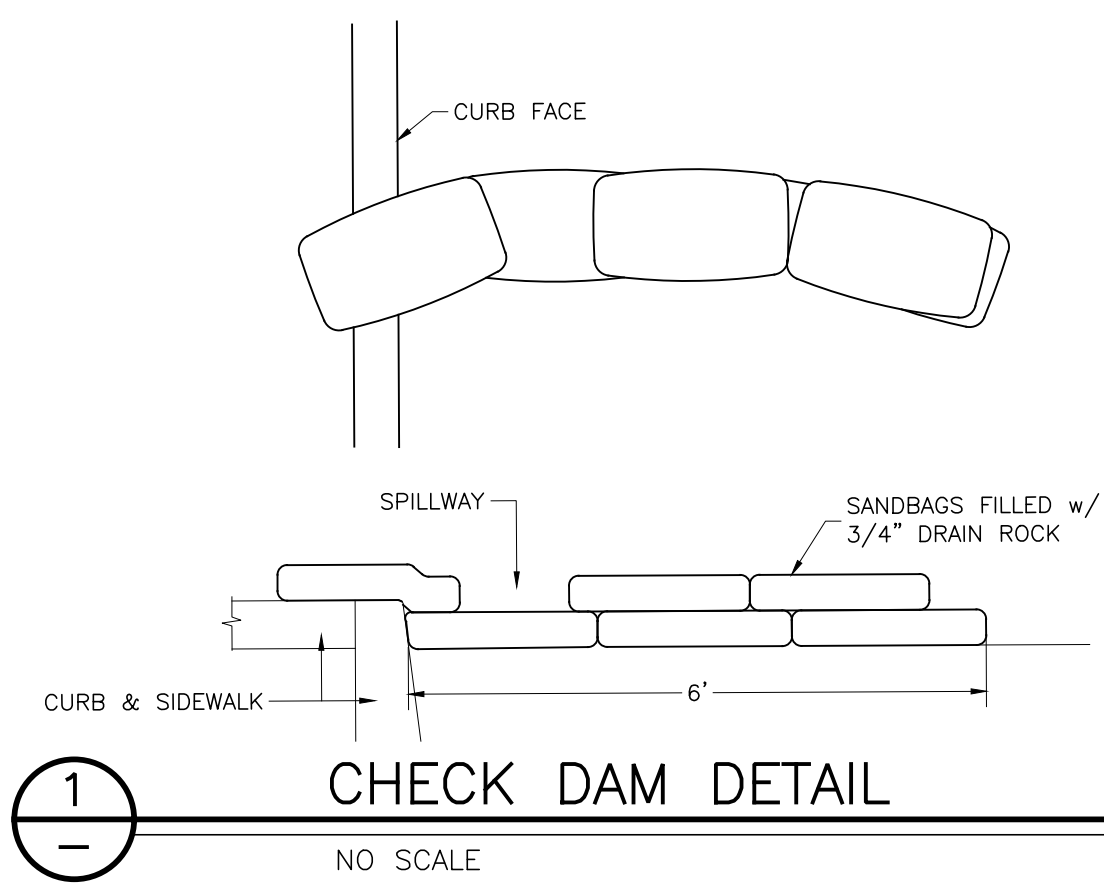
**EROSION CONTROL PLAN**

SCALE: 1"=10'



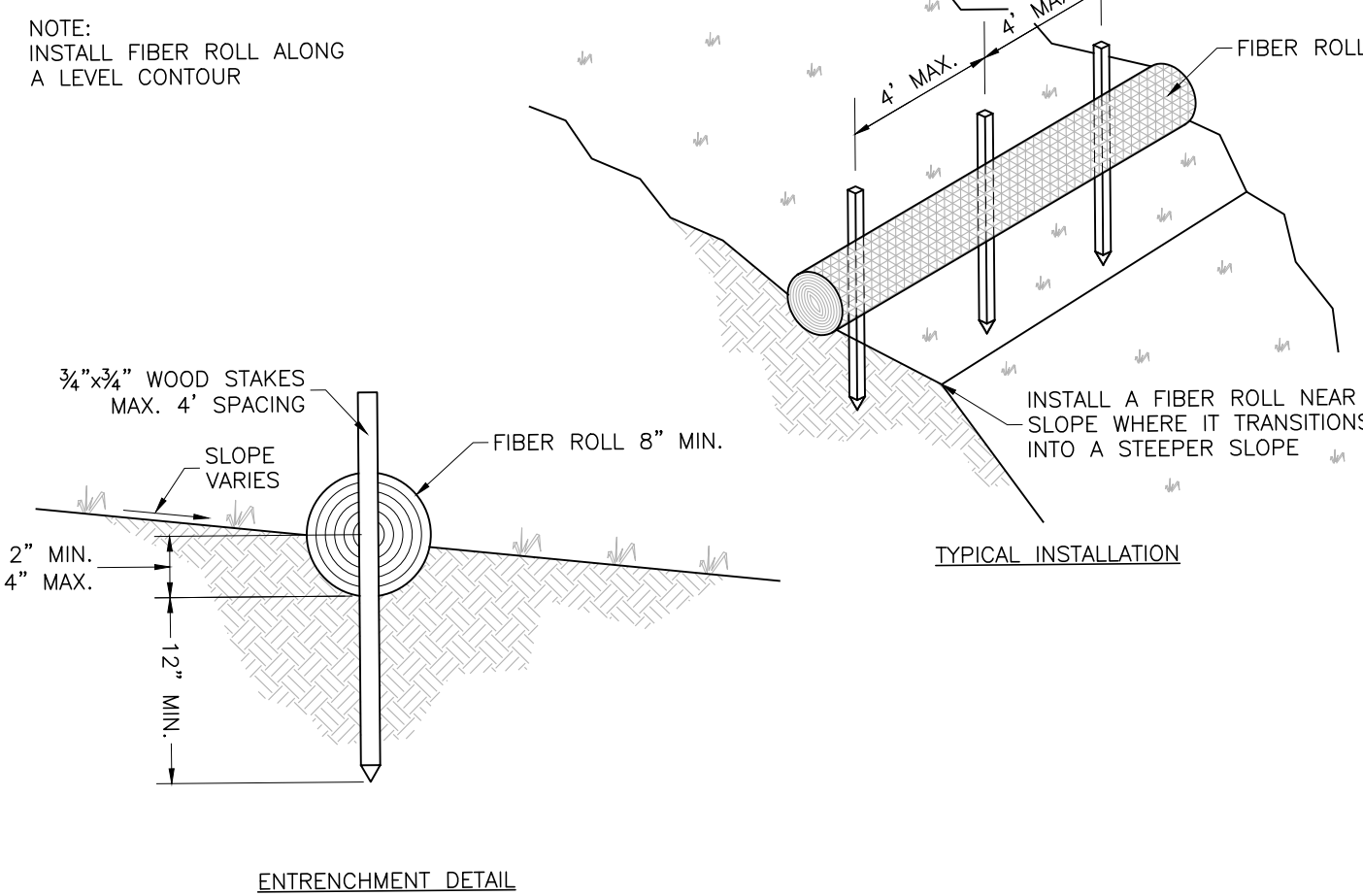
**NOTES:**

- CONSTRUCT ON GENTLY SLOPING STREETS WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE OUT OF SUSPENSION.
- PLACE SEVERAL LAYERS OF SANDBAGS OVER THE FIRST, OVERLAPPING BAGS AND PACK THEM TIGHTLY TOGETHER TO MINIMIZE THE SPACE BETWEEN BAGS.
- LEAVE GAP OF ONE SACK IN THE MIDDLE OF THE TOP ROW OF SACKS TO SERVE AS THE SPILLWAY. SPILLWAY HEIGHT SHALL BE LOWER THAN THE CURB HEIGHT AND SUFFICIENT SIZE TO PASS FLOWS FROM SEVERE STORM EVENT.
- INSPECT AND REPAIR BARRIER AFTER EACH STORM EVENT. REMOVE SEDIMENT WHEN IT REACHES TOP OF SPILLWAY (CURB HEIGHT).
- SEDIMENT SHALL BE DEPOSITED IN AN AREA TRIBUTARY TO A SEDIMENT BASIN OR OTHER PROTECTIVE MEASURE AND WILL NOT ENTER STORM DRAIN.
- SEDIMENT AND GRAVEL SHALL BE IMMEDIATELY REMOVED FROM TRAVELED WAY OF ROAD.
- SANDBAG SACKS TO BE FILLED WITH 3/4" DRAIN ROCK OR 1/4" PEA GRAVEL.



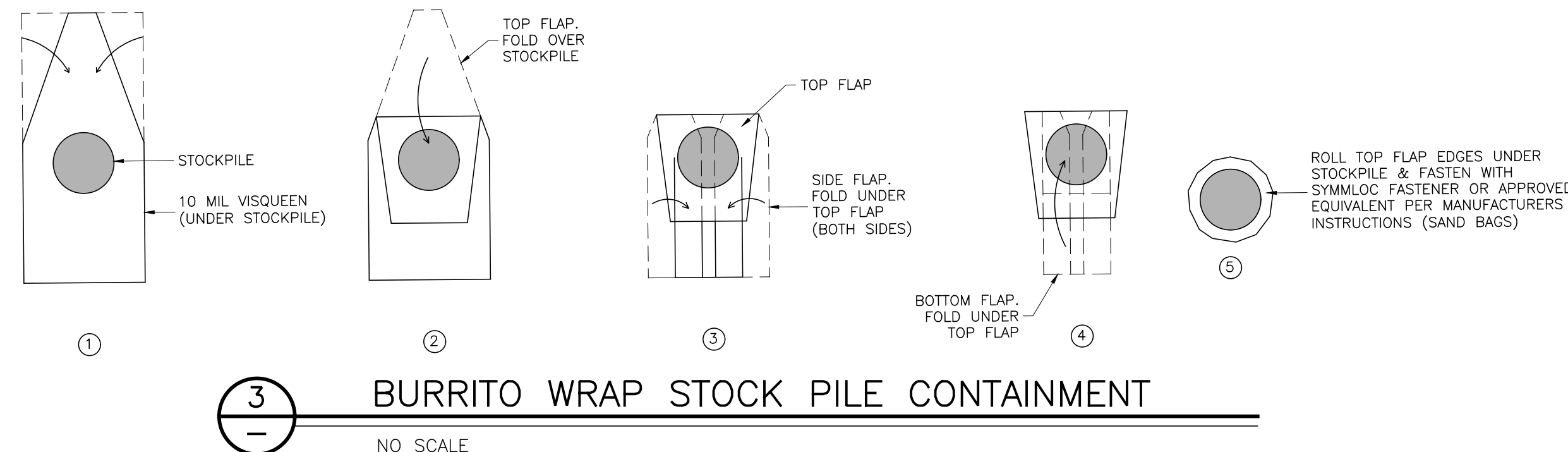
**CHECK DAM DETAIL**

NO SCALE



**STRAW WATTLE/FIBER ROLL DETAIL**

NO SCALE



**BURRITO WRAP STOCK PILE CONTAINMENT**

NO SCALE

**EROSION CONTROL NOTES**

- A. GENERAL
- THIS PLAN WAS PREPARED BY A QUALIFIED ENGINEER FROM WHITCHURCH ENGINEERING, INC WHO HAS TRAINING AND EXPERIENCE TO HAVE EXPERT KNOWLEDGE OF EROSION AND SEDIMENT CONTROL METHODS.
  - THE SOURCE OF THE BMP'S USED IN THIS PLAN PREPARATION ARE FROM CALIFORNIA STORM WATER BEST MANAGEMENT PRACTICE HANDBOOK AND STATE WATER RESOURCES CONTROL BOARD BEST MANAGEMENT PRACTICE CONSTRUCTION HANDBOOK.
  - THE IMPLEMENTATION OF BMP'S WILL OCCUR WITH THE ONSET OF CONSTRUCTION, IMMEDIATELY AFTER SOIL IS DISTURBED AT SITE. AS SHOWN ON SITE MAP A SILT FENCE WILL BE INSTALLED PARALLEL TO CONSTRUCTION SITE. OTHER EROSION CONTROL ACTIVITIES (HAY BALES, ETC) SHALL BE IMPLEMENTED AS DEEMED BY INSPECTOR.
  - A REPRESENTATIVE FROM WHITCHURCH ENGINEERING, INC SHALL INSPECT EROSION CONTROL MEASURES AFTER A SIGNIFICANT RAIN EVENT. A LETTER FOR EACH INSPECTION SHALL BE SUBMITTED TO THE JOB FILE. THE EROSION CONTROL MEASURES SHALL BE INSPECTED BY THE ENGINEER AS NECESSARY. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
  - THIS PROJECT MAY COMMENCE DURING THE WINTER MONTHS (OCTOBER 15-APRIL 15) THEREFORE EFFORTS WILL BE MADE TO MINIMIZE LAND DISTURBANCES.
- B. WATER COURSES
- EXISTING AND PROPOSED DRAINAGE PATTERNS, CHANNELS AND FACILITIES ARE SHOWN ON ATTACHED PLAN.
  - CHANGES IN FLOW QUANTITIES AND VELOCITIES ARE NEGLIGIBLE; EXISTING SLOPES AND DRAINAGE CHANNELS ARE TO REMAIN UNALTERED. SURFACE WATER FLOW IS BY SHEET FLOW. SLOPE PROTECTION MEASURES SHALL CONSIST OF APPLYING A PROTECTIVE LAYER OF STRAW OR ANOTHER SUITABLE MATERIAL TO SOIL SURFACE AREA.
  - TEMPORARY SLOPE STABILIZATION MEASURES SHALL CONSIST OF MULCHING WITH PROTECTIVE COVERINGS. APPLICATION OF THIS MEASURE SHALL COMMENCE WITH START OF CONSTRUCTION.
  - TEMPORARY CHANNEL TO CONTROL SURFACE WATER FLOW OVER CUT AND FILL SLOPES SHALL BE AN A.D.S PLASTIC PIPE DIRECTED TO ESTABLISHED DRAINAGE.
  - EXISTING GRASS VEGETATED FIELD AREA WILL SERVE TO REDUCE DRAINAGE FLOW VELOCITIES.
  - A TEMPORARY SEDIMENT DETENTION BASIN IS NOT NECESSARY FOR THIS PROJECT.
  - ALL LOOSE SOIL AND DEBRIS SHALL BE REMOVED FROM THE STREET AREAS UPON STARTING OPERATIONS AND PERIODICALLY THEREAFTER AS DIRECTED BY THE INSPECTOR. ALL ENTRANCES SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY.
- C. DISPOSAL OF EXCAVATED MATERIALS
- EXCAVATED MATERIALS SHALL BE HAULED OFF SITE OR USED IN LANDSCAPING ON-SITE.
- D. DUST CONTROL
- EXCESSIVE DUST SHALL BE CONTROLLED AT ALL TIMES DURING CONSTRUCTION AND UNTIL FINAL COMPLETION. THE CONTRACTOR, WHEN HE OR HIS SUBCONTRACTOR ARE OPERATING EQUIPMENT ON SITE, SHALL PREVENT THE FORMATION OF EXCESSIVE AIRBORNE NUISANCES BY WATERING AND/OR TREATING THE SITE OF THE WORK IN SUCH A MANNER THAT WILL CONFIRM DUST PARTICLES TO THE IMMEDIATE SURFACE OF THE WORK AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY DUST FROM HIS OWN ACTIVITIES OR HIS SUBCONTRACTORS ACTIVITIES IN PERFORMING THE WORK UNDER THIS CONTRACT AND SHALL BE RESPONSIBLE FOR ANY CITATIONS, FINES, OR CHARGES RESULTING FROM DUST NUISANCES. DUST CONTROL WILL BE DONE ON A DAILY BASIS.
- E. REMOVAL OF VEGETATION AND REVEGETATION
- VEGETATION REMOVAL IS TO BE LIMITED TO AREA DIRECTLY UNDER PROPOSED CONSTRUCTION.
- F. FINAL REPORTS AND NOTIFICATION OF COMPLETION
- UPON COMPLETION OF THE PERMITTED ROUGH GRADING WORK AND AT THE FINAL COMPLETION OF THE WORK, A SET OF REPORTS, DRAWINGS AND SUPPLEMENTS THERETO ARE REQUIRED FOR ENGINEERED GRADING, OR WHEN PROFESSIONAL INSPECTION IS PERFORMED FOR REGULAR GRADING, AS APPLICABLE.
  - THE BUILDING OFFICIAL SHALL BE NOTIFIED WHEN THE GRADING OPERATION IS READY FOR FINAL INSPECTION AFTER ALL WORK AND ALL EROSION-CONTROL MEASURES HAVE BEEN COMPLETED IN ACCORDANCE WITH THE FINAL APPROVED GRADING PLAN, AND THE REQUIRED REPORTS HAVE BEEN SUBMITTED.

**POST CONSTRUCTION BMP's**

- THE CONTRACTOR IS RESPONSIBLE FOR COMPLETION OF POST-CONSTRUCTION BEST MANAGEMENT PRACTICES.
- ALL EROSION CONTROL AND/OR SEDIMENT CONTROL MEASURES SHALL BE REMOVED FROM SITE, INCLUDING SILT FENCES, DI PROTECTION, AND CHECK DAMS UPON APPROVAL OF THE ENGINEER.

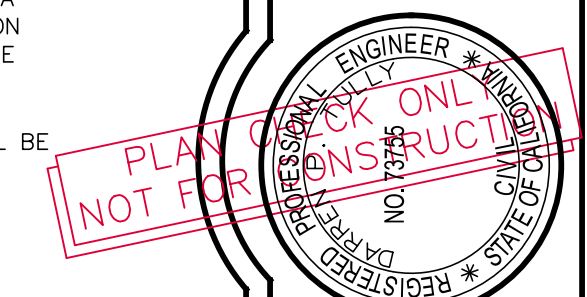
**GENERAL NOTE**

NOTE: ALL EROSION CONTROL AND SEDIMENT CONTROL MEASURES TO BE APPROVED BY ENGINEER OF RECORD.

THESE PLANS ARE ORIGINALLY PRINTED ON 22"x34" PAPER.



REVISIONS	BY



**WHITCHURCH ENGINEERING, INC.**  
 610 9th Street Fortuna, California 95540  
 Phone (707) 444-1420

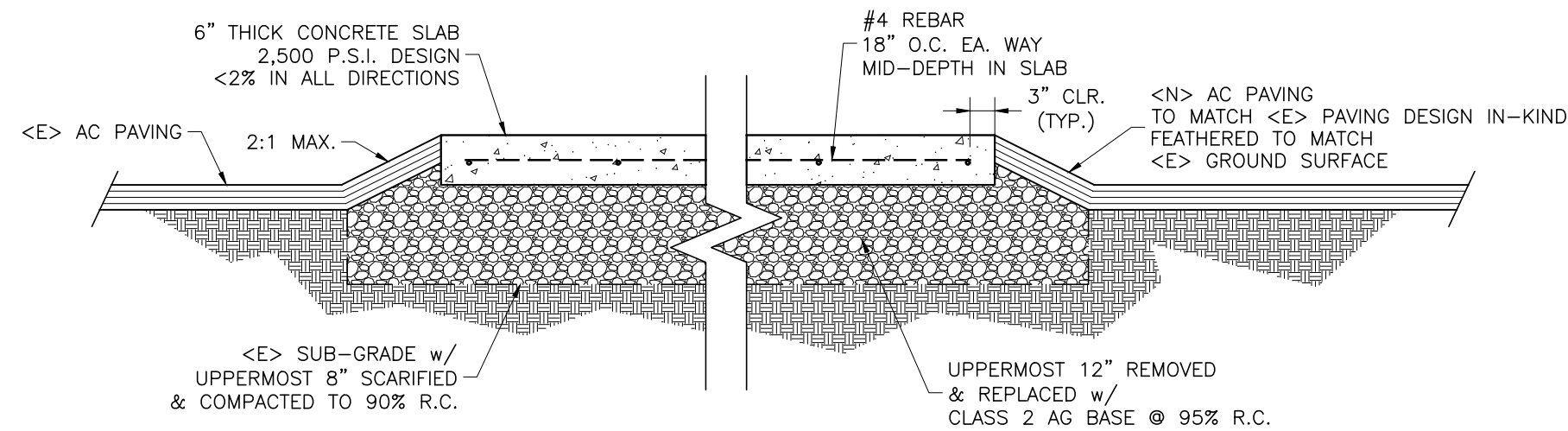
**RCEA ELECTRIC VEHICLE CHARGING STATION - SEQUOIA PARK**  
 3414 W STREET, EUREKA, CA 95501  
**EROSION CONTROL PLAN**  
 For: REDWOOD COAST ENERGY AUTHORITY, 633 3RD ST., EUREKA, CA 95501

Date MAY 17, '24  
 Scale AS NOTED  
 Design ZDJ  
 Drawn ZDJ  
 Job REA 2301  
 Sheet

**3.3**

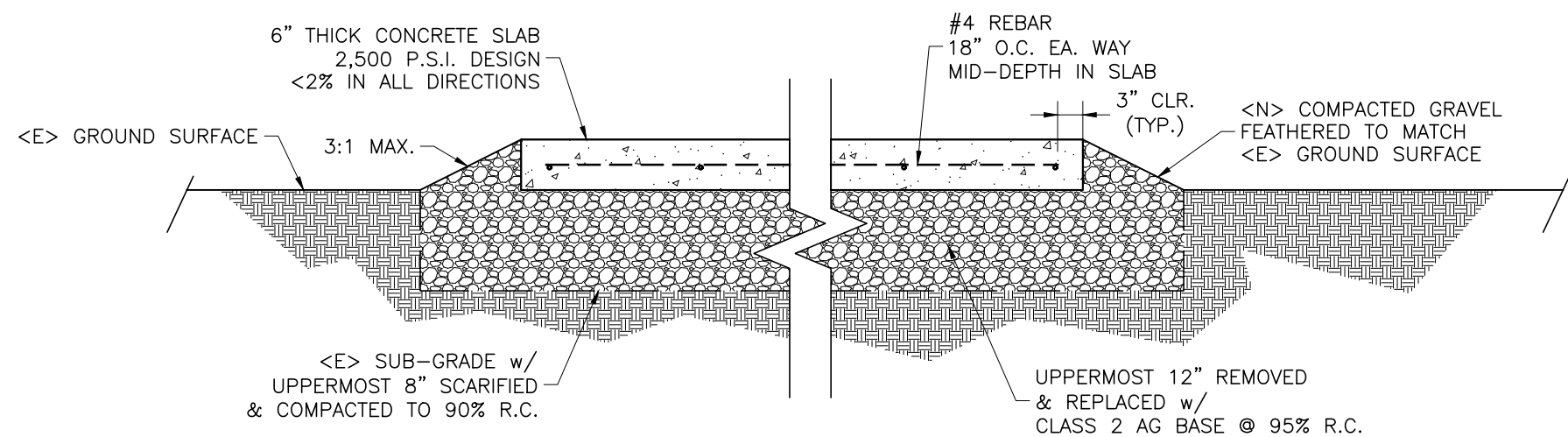
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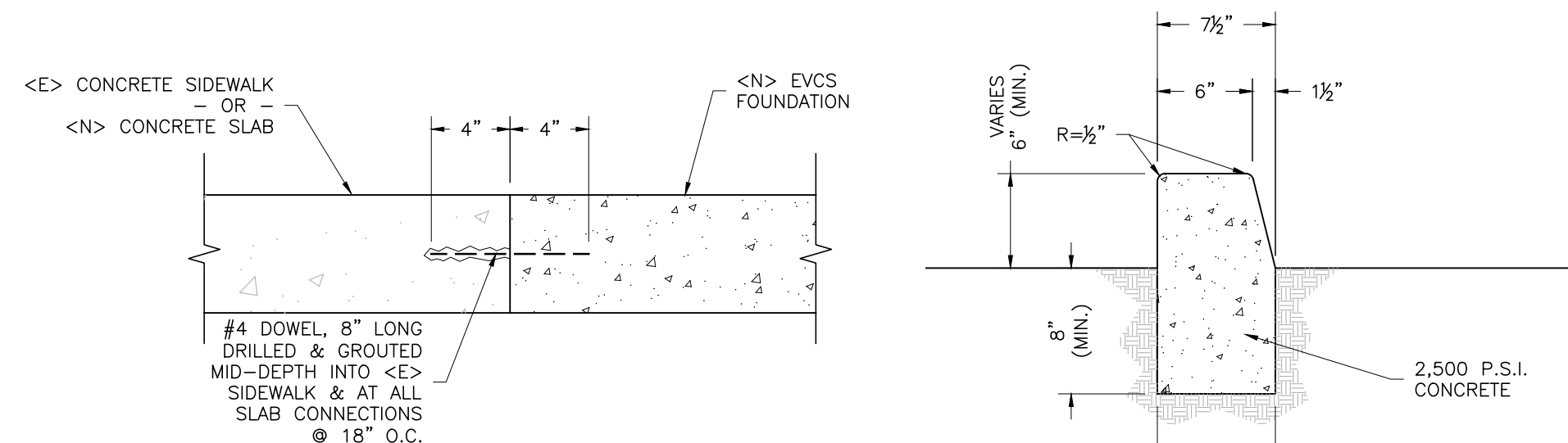
1 TYPICAL SLAB CROSS-SECTION

NO SCALE



2 TYPICAL SLAB CROSS-SECTION

NO SCALE

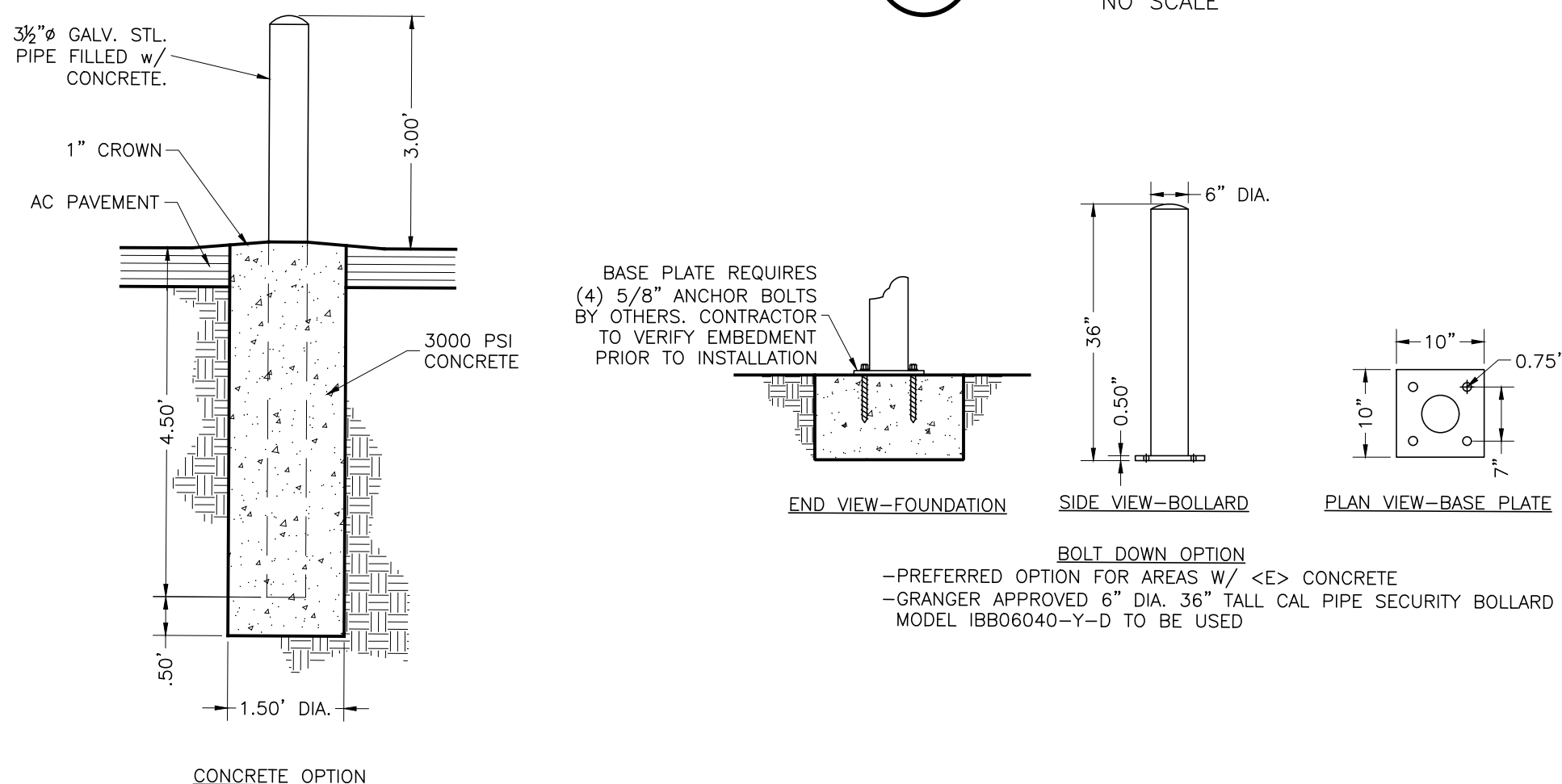


5 DOWELING DETAIL

NO SCALE

6 CURB DETAIL

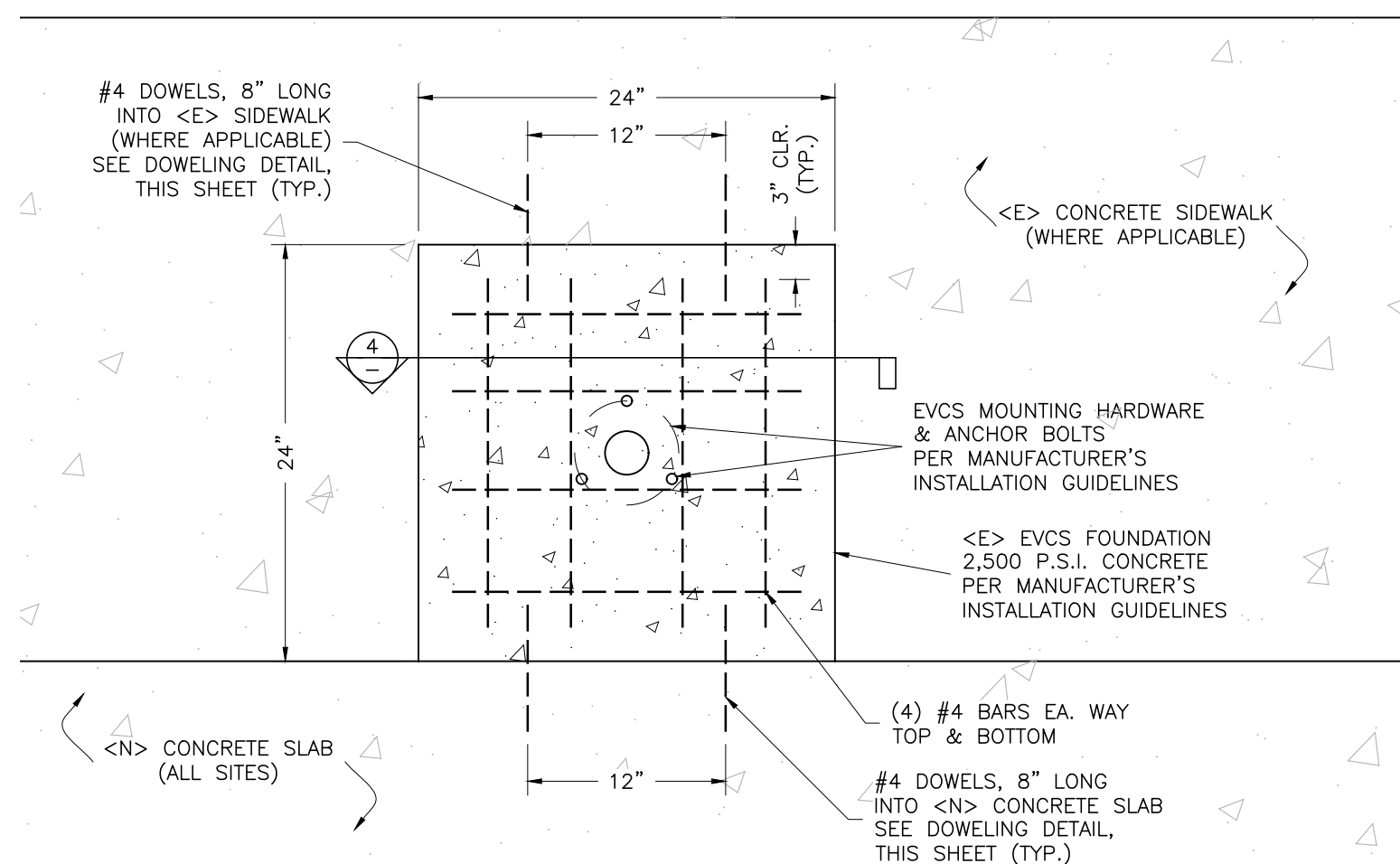
NO SCALE



7 BOLLARD DETAIL\*

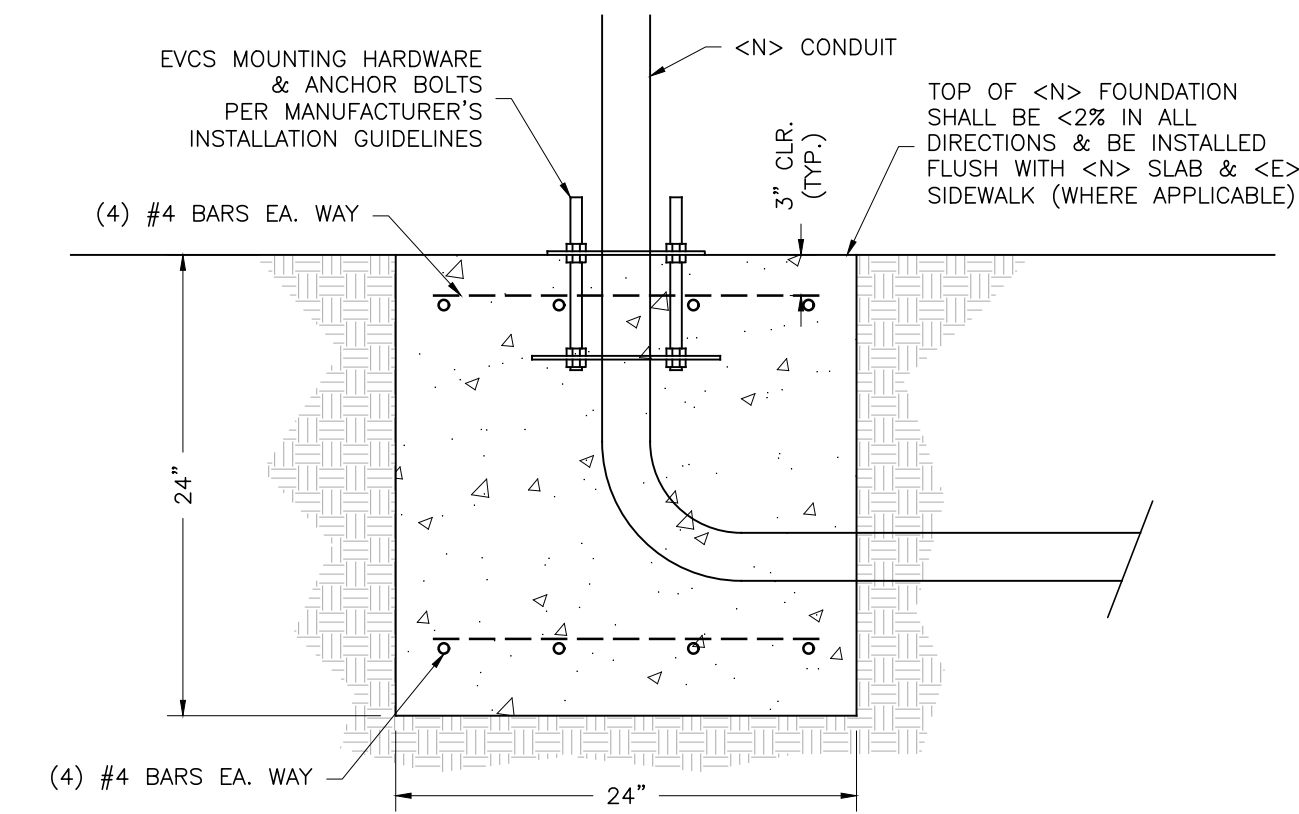
NO SCALE

\*OR APPROVED EQUIVALENT



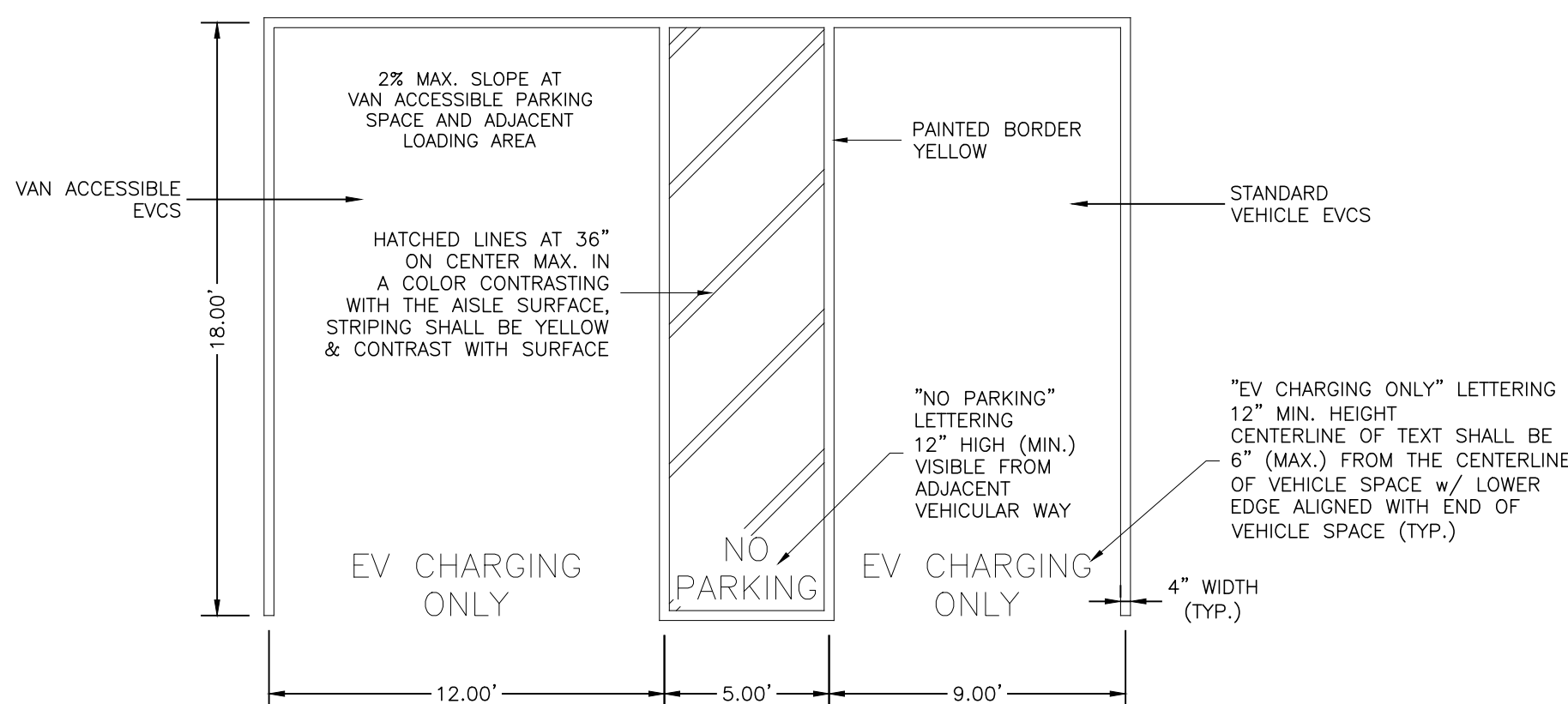
3 EVCS FOUNDATION DETAIL

NO SCALE



4 EVCS FOUNDATION SECTION

NO SCALE



8 EVCS PARKING STALL DETAIL

NO SCALE

EVCS SIGNAGE NOTE:

PER CBC 11B-812.8.1 - WHERE FOUR OR FEWER TOTAL EVCS ARE PROVIDED, IDENTIFICATION WITH AN INTERNATIONAL SYMBOL OF ACCESSIBILITY (ISA) AND SIGNS IDENTIFYING VAN ACCESSIBLE SPACES SHALL NOT BE REQUIRED.

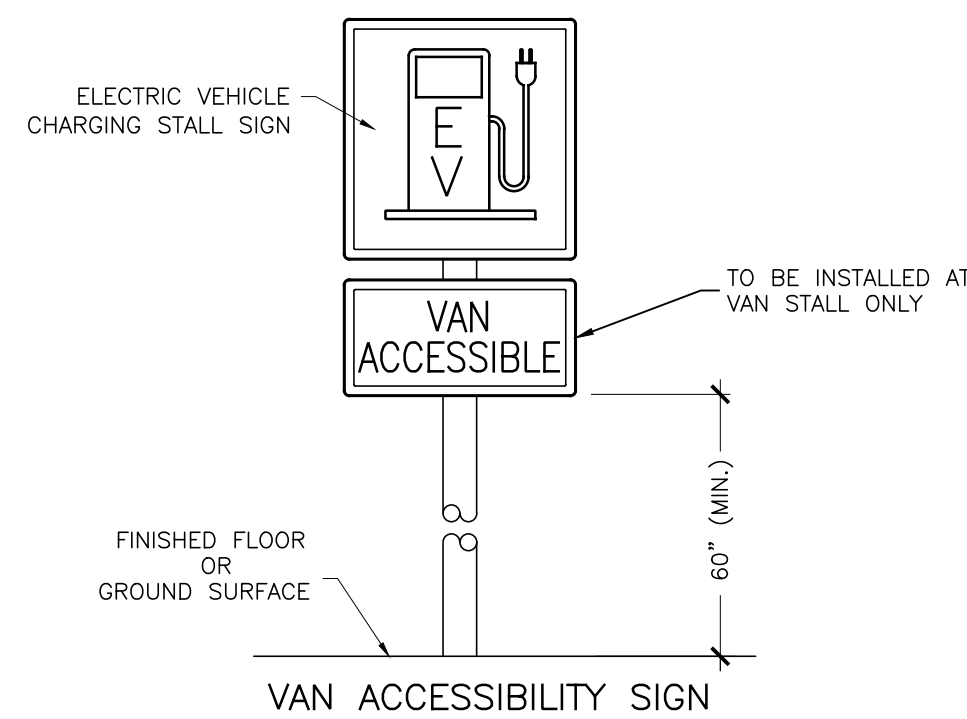
SHOULD ADDITIONAL EVCS BE INSTALLED IN THE FUTURE, SIGNS MAY BE REQUIRED AT EXISTING EVCS, PER CBC.

EVCS NOTE:

PER CBC 11B-308, OPERABLE PARTS SHALL BE A MINIMUM OF 15" AND A MAXIMUM OF 48" ABOVE GRADE.

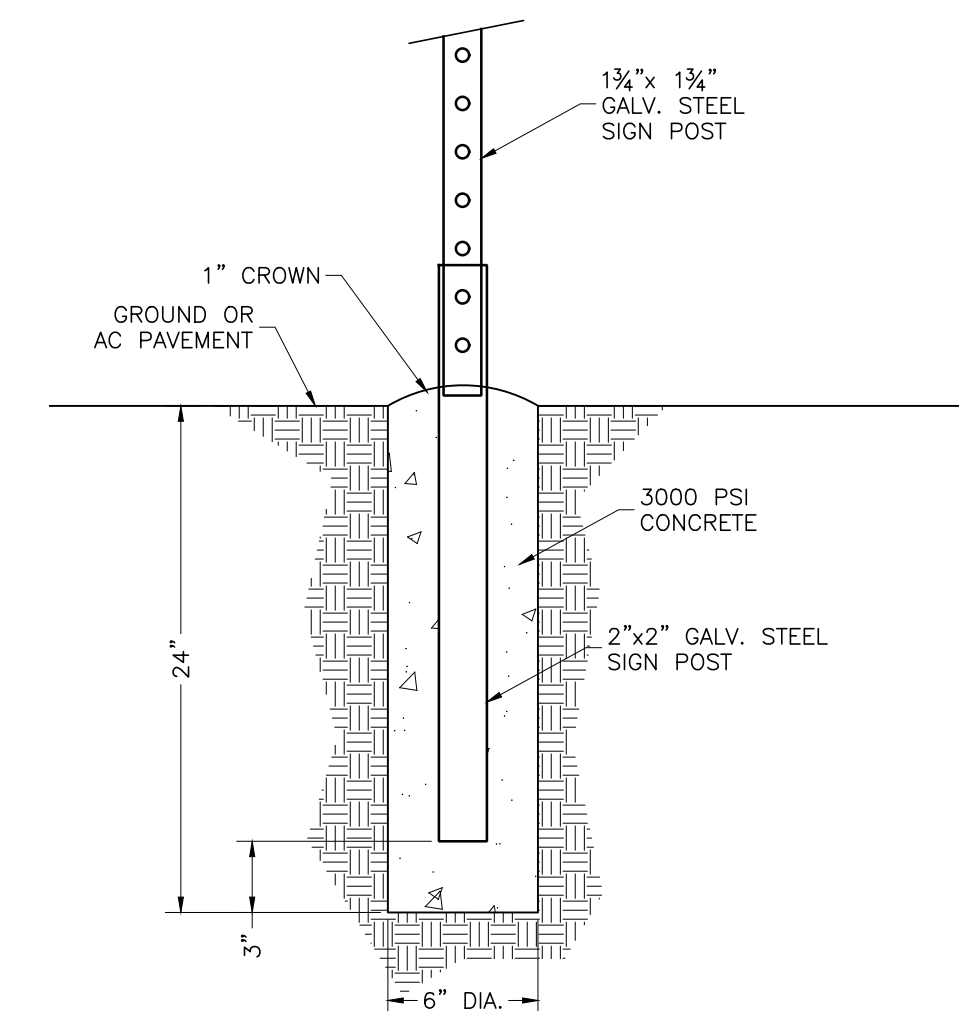
PER CBC 11B-305.3, A CLEAR FLOOR SPACE OF 30" x 48" IS REQUIRED.

PER CBC 11B-309.4, ELECTRIC VEHICLE CONNECTORS SHALL NOT BE REQUIRED TO PROVIDE OPERABLE PARTS THAT HAVE AN ACTIVATING FORCE OF 5 LBS. MAXIMUM.



10 EVCS SIGNAGE DETAILS (OPTIONAL)

NO SCALE



9 SIGN POST DETAIL (OPTIONAL)

NO SCALE

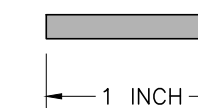
NOTE:

PER CBC 11B-812.8.1, WHERE FOUR OR FEWER TOTAL EVCS ARE PROVIDED, ACCESSIBILITY SIGNAGE IS NOT REQUIRED (SEE EVCS SIGNAGE NOTE, DETAIL 8, THIS SHEET).

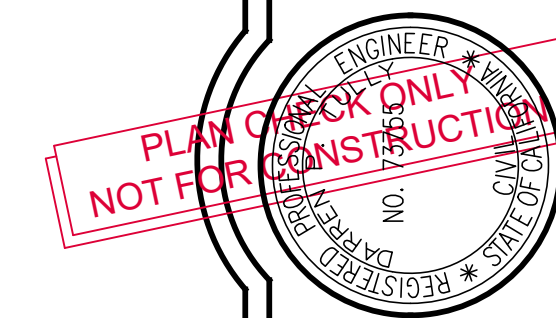
THIS DETAIL IS PROVIDED WHERE SITE HOSTS OPTION FOR NON-REQUIRED SIGNAGE, SUCH AS "ELECTRIC VEHICLE ONLY" SIGNS.

ALL SIGNAGE SHALL MEET LOCATION REQUIREMENTS PER CBC 11B-812 (60" ABOVE FINISH FLOOR OR GROUND SURFACE TO BOTTOM OF SIGN, 80" IF SIGN IS LOCATED WITHIN A CIRCULATION PATH). SEE DETAIL 10, THIS SHEET FOR ADDITIONAL VAN ACCESSIBLE PARKING SIGNAGE.

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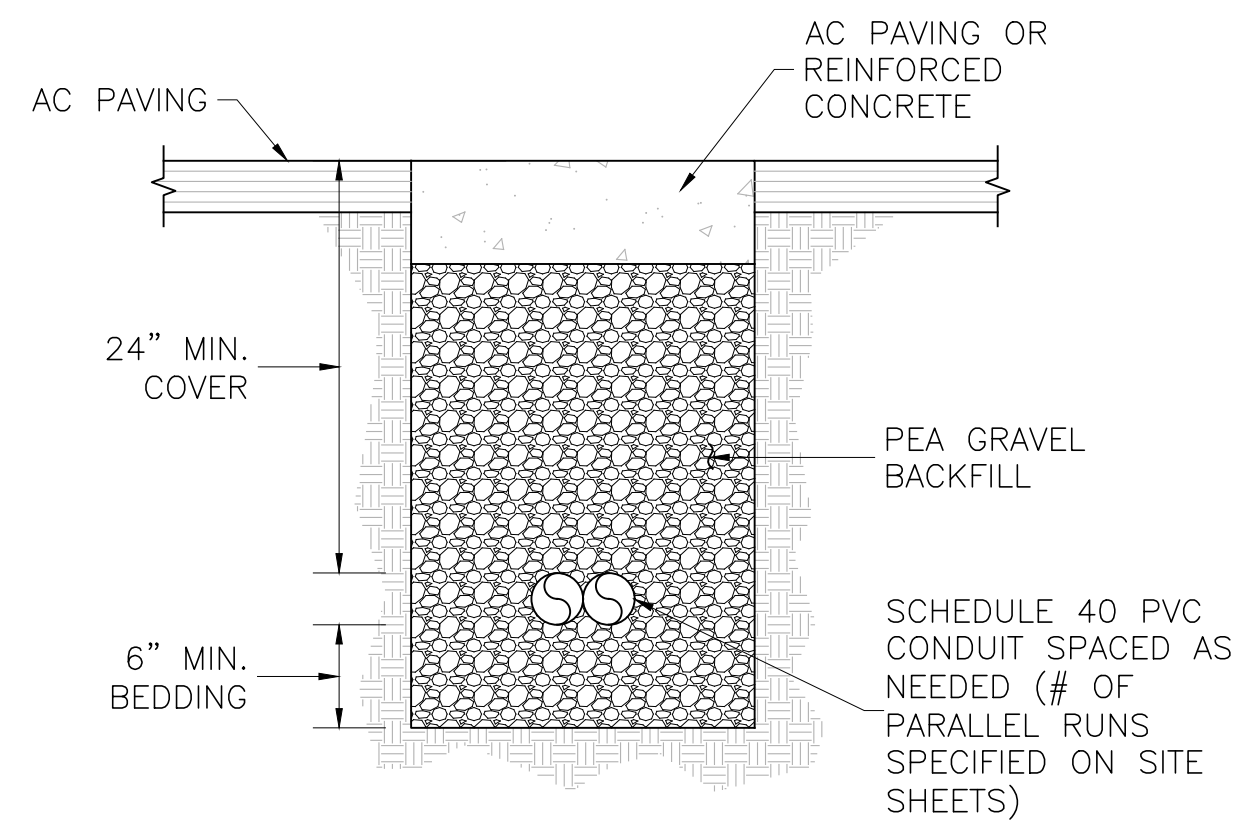
WHITCHURCH ENGINEERING, INC.  
610 9th Street, Fortuna, California 95540  
Phone (707) 444-1420

RCEA ELECTRIC VEHICLE CHARGING STATION  
ADDRESS: VARIOUS APNS: 040-381-001, 202-082-064, 013-161-001  
For: REDWOOD COAST ENERGY AUTHORITY, 633 3RD ST., EUREKA, CA 95501  
CIVIL DETAILS

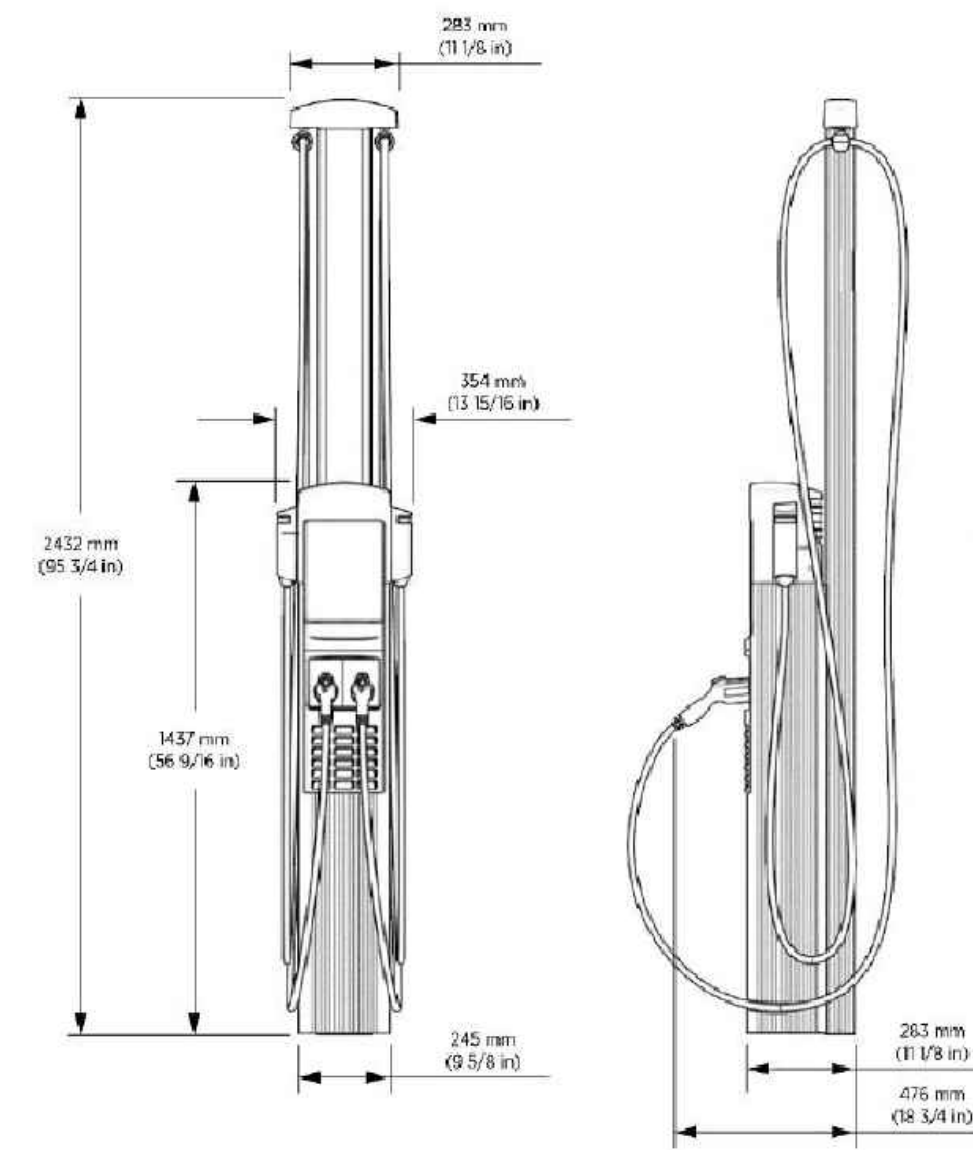
Date	MAY 17, '24
Scale	AS NOTED
Design	ZDJ
Drawn	ZDJ
Job	REA 2301
Sheet	C1

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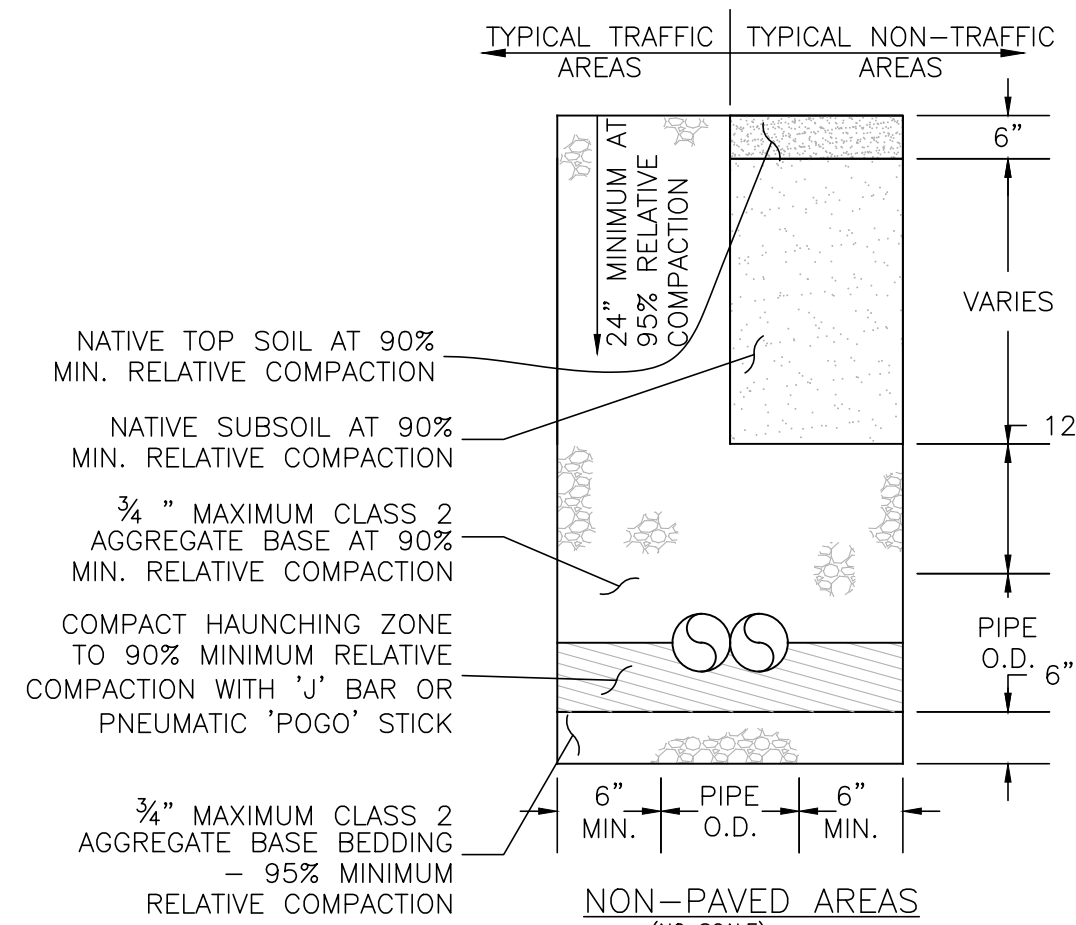


**1 ELECTRICAL TRENCH DETAIL**  
NO SCALE

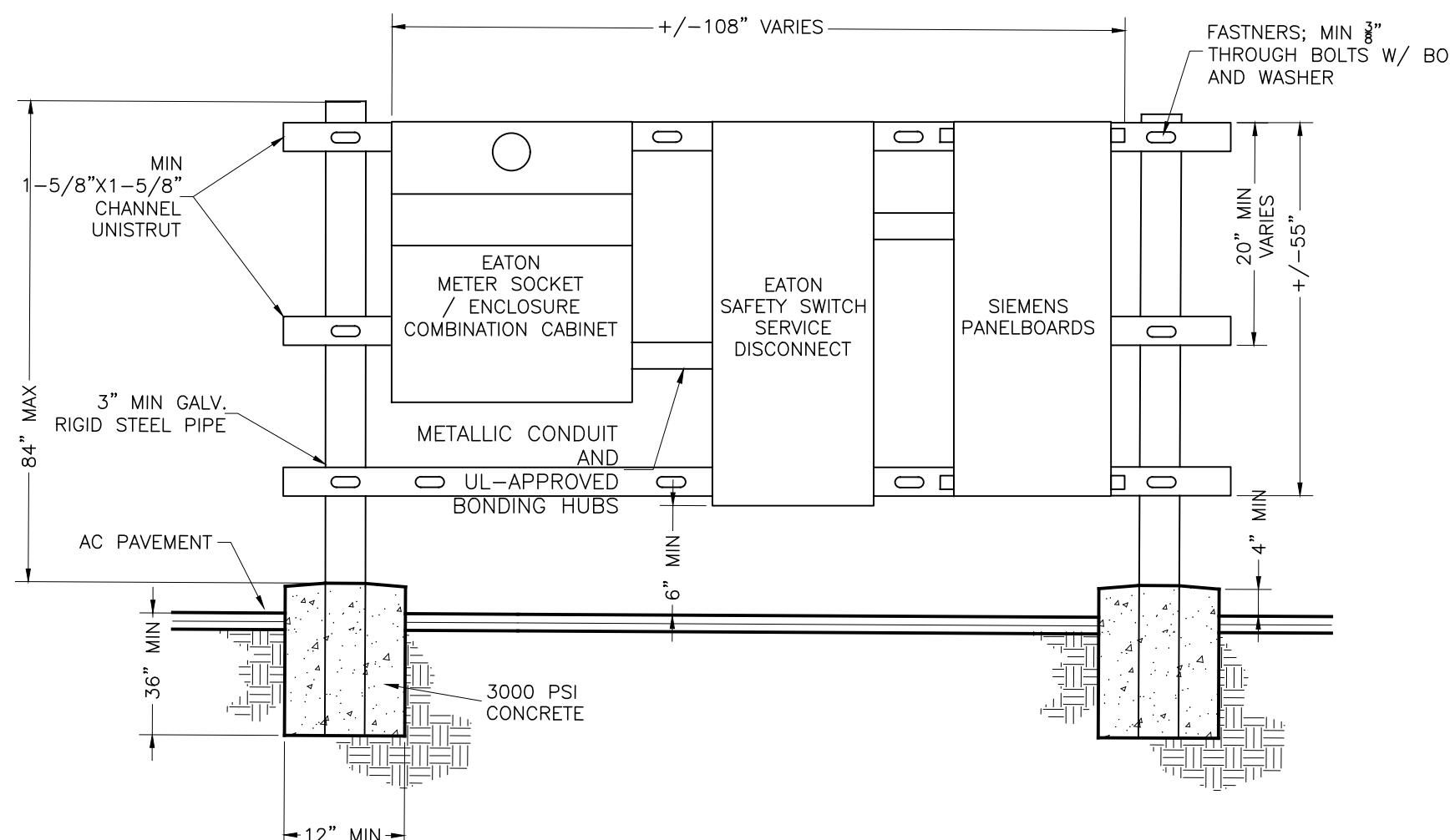


**2 EV CHARGING STATION w/ 23' CORD DETAIL**  
NO SCALE

NOTE: PROVIDED BY CHARGEPOINT 6000 COMMERCIAL DATASHEET



**4 ELECTRICAL TRENCH DETAIL**  
NO SCALE



**3 BACKBOARD MOUNTED SWITCHBOARD DETAIL**  
NO SCALE

MSB - Site IDs, 1-Rohrer Park, 2-Redwood Memorial, 3-Sequoia Park											
ENCLOSURE: NEMA 3R WALL MOUNT											
CKT	LOAD DESCRIPTION	KW		AMPS		PHASE: 1		WIRE: 3			
		A	B	BREAKER	BREAKER	A	B	LOAD DESCRIPTION	CKT		
1	EV CHARGER 1 - PORT 1	9.6		100		100		9.6		EV CHARGER 2 - PORT 1	2
3	"		9.6	100		100			9.6	"	4
5	EV CHARGER 1 - PORT 2	9.6		100		100		9.6		EV CHARGER 2 - PORT 2	6
7	"		9.6	100		100			9.6	"	8
SUBTOTAL KW		19	19					19	19	SUBTOTAL AMPS	
TOTAL KW		38	38								
TOTAL AMPS		160	160								

120/240V, 1PH PANEL SCHEDULE (SEE STD. SINGLE LINE DIAGRAM)

**PANEL SCHEDULE**

**EV CHARGING STATION CONSTRUCTION NOTES:**

- INSTALL CHARGING STATIONS PER MANUFACTURER RECOMMENDATIONS, INSTALLATION INSTRUCTIONS, CEC 2022, AND ALL STATE AND LOCAL BUILDING CODES.
- RECOMMEND CHARGEPOINT CHARGING STATIONS (OR APPROVED EQUIVALENT). SEE SITE SPECIFIC CIVIL SHEETS FOR SPECIFIC CHARGING STATION MODELS.
- EV CHARGERS ARE TO BE TYPE 1, LEVEL 2 CHARGERS.
- CHARGERS SHALL BE INSTALLED WITH EITHER A RCD (RESIDUAL CURRENT DETECTION) 30mA TYPE B OR A RCD TYPE A + 6mA RCD-DD (IEC 60364-7-722).
- A MAXIMUM OF ONE CHARGING STATION CAN BE INSTALLED DOWNSTREAM OF RCD TYPE A (IEC 60364-7-722).
- A DEDICATED CIRCUIT SHALL BE USED FOR EACH CONNECTING POINT ON A CHARGER (IEC 60364-7-722).
- EACH CHARGING STATION SUPPLIED BY AN UNDERGROUND ELECTRICAL LINE SHALL BE EQUIPPED WITH AN EARTHING ROD AND BE EQUIPPED WITH A TYPE 2 SURGE PROTECTIVE DEVICE, INSTALLED LOAD SIDE OF THE MAIN SERVICE (IEC 60364-7-722).
- A MEANS OF DISCONNECT INSTALLED IN A READILY ACCESSIBLE LOCATION WITHIN EYESIGHT OF THE CHARGING STATIONS (CEC 625.43).
- EV CHARGING CABLES MUST NOT EXCEED 25 FEET IN LENGTH AND HAVE NO MID-CORD COUPLINGS (CEC 625.17) AND BE INTERLOCKED TO DE-ENERGIZE WHEN UNPLUGGED FROM A VEHICLE OR SUBJECTED TO STRESS (CEC 625.18).
- ALL CONDUCTORS AND CONDUIT HAVE BEEN SIZED TO ACCOMMODATE 19KW CHARGING STATIONS. CHARGING STATION EQUIPMENT TO BE SPECIFIED BY LOCATION.

**GENERAL ELECTRICAL NOTES:**

- ALL WORK TO CONFORM TO CALIFORNIA ELECTRIC AND CALIFORNIA ENERGY CODE, LATEST EDITIONS, AND APPLICABLE LOCAL CODES. ANY DEVIATION FROM APPROVED ELECTRICAL PLANS WILL REQUIRE APPROVAL FROM THE ELECTRICAL DESIGNER OF RECORD, PER CALIFORNIA BUSINESS AND PROFESSION CODE.
- PROVIDE ALL PARTS AND LABOR FOR A COMPLETE AND WORKING FACILITY IN ACCORDANCE WITH THE INTENT OF THESE DRAWINGS. COORDINATE ELECTRICAL WORK WITH OTHER TRADES. CONFIRM THE WORK SCOPE WITH GENERAL CONTRACTOR. CONTRACTOR TO ARRANGE FOR AND PAY FOR ALL PERMITS AND INSPECTIONS REQUIRED FOR THE WORK. PROVIDE OWNER WITH FINAL APPROVAL AND AS-BUILT DOCUMENTS AS PART OF THE CONTRACT CLOSEOUT.
- ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW EXACT LOCATIONS OF EQUIPMENT. CONTRACTOR SHALL VERIFY EXACT DIMENSIONS OF PROPOSED EQUIPMENT AND ITS FIT IN THE INTENDED SPACE. CHECK ALL SYMBOLS AND UNDERSTAND WHAT THEY MEAN ON THESE PLANS.
- PANEL AND EQUIPMENT FEEDERS: INDIVIDUAL CONDUCTORS IN CONDUIT PER FEEDER SCHEDULE.
- ALL WIRING DEVICES TO BE COMMERCIAL SPECIFICATION GRADE.
- ALL CONDUCTOR RUNS TO HAVE GROUND WIRE RATED FOR THE CURRENT CARRYING CONDUCTORS PER N.E.C. 250.66 AND 250.122.
- PROVIDE ELEC. PANELS WITH TYPED CIRCUIT DIRECTORIES.
- MAIN PANEL GROUND BUS WILL BE BONDED TO NEUTRAL BUS WITH #2/0 AWG CU OR EQUIVALENT BUS BAR NEC TABLE 250.102.C.1.
- 240V PANELS WILL BE GROUNDED TO DEDICATED 8" X 8" GROUNDING ELECTRODES USING A GROUNDING CONDUCTOR WHICH SIZE IS LISTED ON RESPECTIVE GROUNDING DIAGRAM.
- 240V PANELS WILL BE BONDED BETWEEN GROUND BUS AND NEUTRAL BUS WITH CU WIRE OR BUS BAR WITH KCMIL NOT LESS THAN THE GROUND WIRE SIZE STATED ON PANEL SCHEDULE.
- TRANSFORMERS ARE TO BE GROUNDED TO MAIN PANEL GROUND BUS ONLY. SEE ONE-LINE DIAGRAM FOR GROUND WIRE SIZE.
- ALL GROUND WIRES ARE TO BE PROTECTED IN FLEXIBLE METAL CONDUIT.
- TRANSFORMERS ARE TO HAVE PRIMARY OVERCURRENT PROTECTIVE DEVICE (OCPD) VIA BREAKERS 125% OF TRANSFORMER NAMEPLATE (OR NEXT SIZE UP) LOCATED IN HIGH VOLTAGE PANELS. SECONDARY OCPD IS NOT REQUIRED PER NEC 240.21.C.2.
- MAIN SWITCHBOARD SHALL BE LEGIBLY FIELD MARKED WITH MAX AVAILABLE FAULT CIRCUIT AND THE DATE THESE PLANS WERE SIGNED BY THE RESPONSIBLE ENGINEER PER CEC 110.24(A).
- ARC FLASH HAZARD WARNING LABEL SHALL BE PLACED ON SWITCHBOARD I.A.W. CEC 110.16.
- MAIN SERVICE DISCONNECT SHALL BE PERMANENTLY MARKED.
- CONTRACTOR IS TO PROVIDE AS BUILT MARKUPS TO THE OWNER AND RESPONSIBLE ENGINEER REFLECTING ANY DEVIATIONS FROM THE ORIGINAL DESIGN PLANS OR SPECIFIC DETAIL OF NOTE THAT COULD BE USEFUL INFORMATION FOR FUTURE MODIFICATIONS OR TROUBLESHOOTING. AS BUILT MARKUPS ARE TO REFLECT THE COMPLETELY INSTALLED, OPERATIONAL SYSTEM AFTER TESTING AND INSPECTION.
- CONTRACTOR SHALL CHOOSE A GROUND ROD LOCATION AT EACH SITE IN ORDER TO MINIMIZE TRIPPING HAZARDS. CONTRACTOR SHALL VERIFY LOCATION OF ANY UNDERGROUND PIPING OR OTHER UTILITIES BEFORE INSTALLATION. GROUND ROD SHALL COMPLY WITH CEC 250, THE PG&E GREENBOOK STANDARDS, AND LOCAL CODES.
- WIRE TYPE TO BE THWN MINIMUM, OR SIMILARLY RATED WET RATED CONDUCTOR TYPE.

EV Charging Station Load Calcs		
	2 Port	
Service Voltage	240	V
Input Voltage	208/240	V
Input Current	160	A
Breaker Size	100 x 2	A

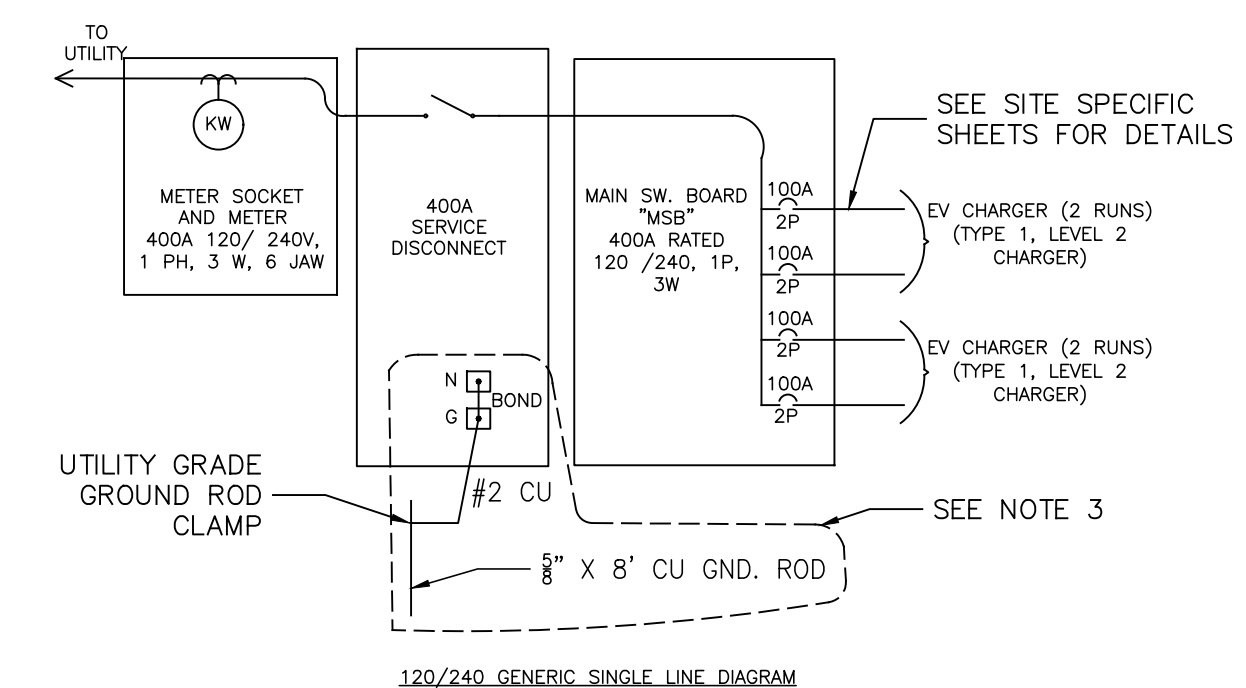
**TWO PORT LOAD CALCULATIONS**

NOTE: LOADS BASED ON DEMAND FROM 19.2 kW RATED CHARGER (CHARGEPOINT CP6000 OR EQUIVALENT).

Equipment Specifications				
Amperage	Service	Meter Cabinet	Disconnect Switch	Service Panel
400A	120/240 1ph (Site specific)	Eaton Meter Socket / Enclosure Cabinet (Eaton # 121816) with Eaton 6019HA CT Mounting Base	Eaton Safety Switch DH265URK	Siemens Panelboard P1A18ML400A TS
<b>Or approved equivalent</b>				

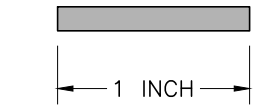
**NOTE:**

- SEE CIVIL SHEETS FOR CONDUCTOR AND CONDUIT SCHEDULE.
- EV CHARGING STATIONS TO BE TYPE 1, LEVEL 2 CHARGERS. CHARGEPOINT MODEL CP6000 (OR APPROVED EQUIVALENT).
- GROUNDING BONDING OF CT ENCLOSURE, MAIN DISCONNECT, AND SERVICE PANEL TO BE IN ACCORDANCE WITH PGE GREENBOOK SECTION 5.8.

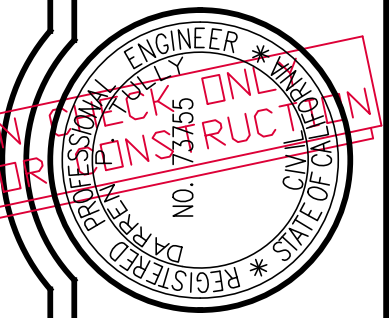


**SINGLE LINE DIAGRAM**  
NO SCALE

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REVISIONS	BY



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610 9th Street, Fortuna, California 95540  
Phone (707) 444-1420

**RCEA ELECTRIC VEHICLE CHARGING STATION**  
ADDRESS: VARIOUS APNS: 040-381-001, 202-082-064, 013-161-001  
**ELEC. DETAILS & ONE LINE DIAGRAMS**  
For: REDWOOD COAST ENERGY AUTHORITY, 633 3RD ST., EUREKA, CA 95501

Date MAY 17, '24  
Scale AS NOTED  
Design JMM  
Drawn JMM  
Job REA 2301  
Sheet **E1**

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