

STRUCTURAL GENERAL NOTES

THESE NOTES APPLY TO CONTRACTORS, SUBCONTRACTORS, MANUFACTURERS, SUPPLIERS, FABRICATORS, ERECTORS, ETC. ENGAGED IN THE EXECUTION OF WORK INDICATED ON THESE DRAWINGS.

A. CODES AND STANDARDS

THE FOLLOWING CODES AND STANDARDS, INCLUDING ALL SPECIFICATIONS REFERENCED WITHIN, SHALL APPLY TO THE DESIGN, CONSTRUCTION, QUALITY CONTROL AND SAFETY OF ALL WORK PERFORMED ON THE PROJECT. USE THE LATEST EDITION UNLESS NOTED OTHERWISE.

1. BUILDING CODES:
 - a. "INTERNATIONAL BUILDING CODE – 2006".
 - b. "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" (ASCE 7-05).
2. AMERICAN CONCRETE INSTITUTE (ACI)
 - a. "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, ACI 318-05".
 - b. "ACI MANUAL OF CONCRETE PRACTICE – PARTS 1 THROUGH 5".
3. CONCRETE REINFORCING STEEL INSTITUTE (CRSI)
 - a. "MANUAL OF STANDARD PRACTICE", CONCRETE REINFORCING STEEL INSTITUTE.

B. DESIGN DATA

1. WIND LOADS (IN ACCORDANCE WITH ASCE 7, CHAPTER 6)
 - a. BASIC WIND SPEED (3 SECOND GUST): 90 MPH
 - b. OCCUPANCY CATEGORY: II
 - c. SITE EXPOSURE CATEGORY: B
 - d. WIND IMPORTANCE FACTOR (I_w): 1.0
 - e. ANALYSIS PROCEDURE: ANALYTICAL PROCEDURE

C. FOUNDATIONS / GEOTECHNICAL REPORT

1. NO NEW GEOTECHNICAL REPORT HAS BEEN PREPARED FOR THIS PROJECT. FOUNDATIONS PLACED ON UNDISTURBED SOIL AT ELEVATIONS INDICATED HAVE BEEN DESIGNED FOR ANET ALLOWABLE BEARING PRESSURE OF 2000 PSF.

D. MATERIALS

THE FOLLOWING ASTM STANDARDS AND DESIGN STRESSES SHALL BE USED FOR THE APPROPRIATE MATERIALS USED IN THE CONSTRUCTION OF THIS PROJECT.

1. CEMENT: ASTM C150, TYPE I OR III
2. BLENDED HYDRAULIC CEMENT: ASTM C595, TYPE IS (LIMIT SLAG TO 35% MAX CONTENT BY WEIGHT)
3. AGGREGATES: ASTM C33 (NORMAL WEIGHT); ¾" NOMINAL MAXIMUM AGGREGATE SIZE.
4. ADMIXTURES: AIR ENTRAINING ADMIXTURES ASTM C260
CHEMICAL ADMIXTURES ASTM C494

5. CONCRETE: AIR ENTRAIN ALL CONCRETE 6% ± 1½% BY VOLUME.

| APPLICATION | F°C @ 28 DAYS (PSI) | WT (PCF) | W/C (MAX) |
|-------------|---------------------------|-------------|-----------|
| a. FOOTINGS | 4000 | 145 | 0.50 |

6. REINFORCEMENT:

- a. DEFORMED REINFORCING BARS ASTM A615, GRADE 60

E. CONSTRUCTION

1. GENERAL:
 - a. THESE DRAWINGS REPRESENT THE COMPLETED PROJECT WHICH HAS BEEN DESIGNED FOR THE LOADS INDICATED IN THE DESIGN DATA. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE PROPER ERECTION PROCEDURES.
 - b. **IMPLEMENTING JOB SITE SAFETY AND CONSTRUCTION PROCEDURES ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.**
 - c. THE STRUCTURAL DRAWINGS ARE INTENDED TO ONLY INDICATE THE FOUNDATION FEATURES FOR THE PROJECT. ANY NON-STRUCTURAL INFORMATION SHOWN IS SCHEMATIC IN NATURE AND MAY NOT REFLECT THE COMPLETE CONSTRUCTION.
 - d. DO NOT SCALE THE STRUCTURAL DRAWINGS.
 - e. STORE AND HANDLE STRUCTURAL CONSTRUCTION MATERIALS TO PREVENT ANY ADVERSE EFFECTS ON THE PHYSICAL PROPERTIES OF THE MATERIAL.
 - f. PAY ALL COSTS, INCLUDING INVESTIGATION AND/OR REDESIGN, DUE TO CONTRACTOR MISLOCATION OF STRUCTURAL ELEMENTS OR OTHER LACK OF CONFORMANCE WITH THE CONTRACT DOCUMENTS TO BRING WORK IN COMPLIANCE WITH THE CONTRACT DOCUMENTS.
2. INSPECTION AND TESTING:
 - a. THE OWNER SHALL ENGAGE AN APPROVED, QUALIFIED, TESTING AGENCY TO PROVIDE TESTING AND INSPECTION SERVICES, AS INDICATED BELOW. SUBMIT REPORTS TO THE SER AND CODE OFFICIAL (AS APPLICABLE).
 - b. SOILS TESTING
 - 1) TEST FOUNDATION SUBGRADE SOIL STRATA FOR MINIMUM REQUIRED BEARING CAPACITY (INDICATED EARLIER IN THESE NOTES).
 - 2) NOTIFY CONTRACTOR AND SER OF AREAS FAILING TO MEET DESIGN REQUIREMENTS.

- c. CAST-IN-PLACE CONCRETE:

- 1) THE AGENCY SHALL INSPECT THE REINFORCING STEEL PLACEMENT FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS. THE AGENCY SHALL MONITOR ALL STRUCTURAL CONCRETE PLACEMENTS FOR CONFORMANCE WITH APPLICABLE ACI REQUIREMENTS.

F. FOUNDATIONS AND STRUCTURAL EARTHWORK

1. GENERAL:

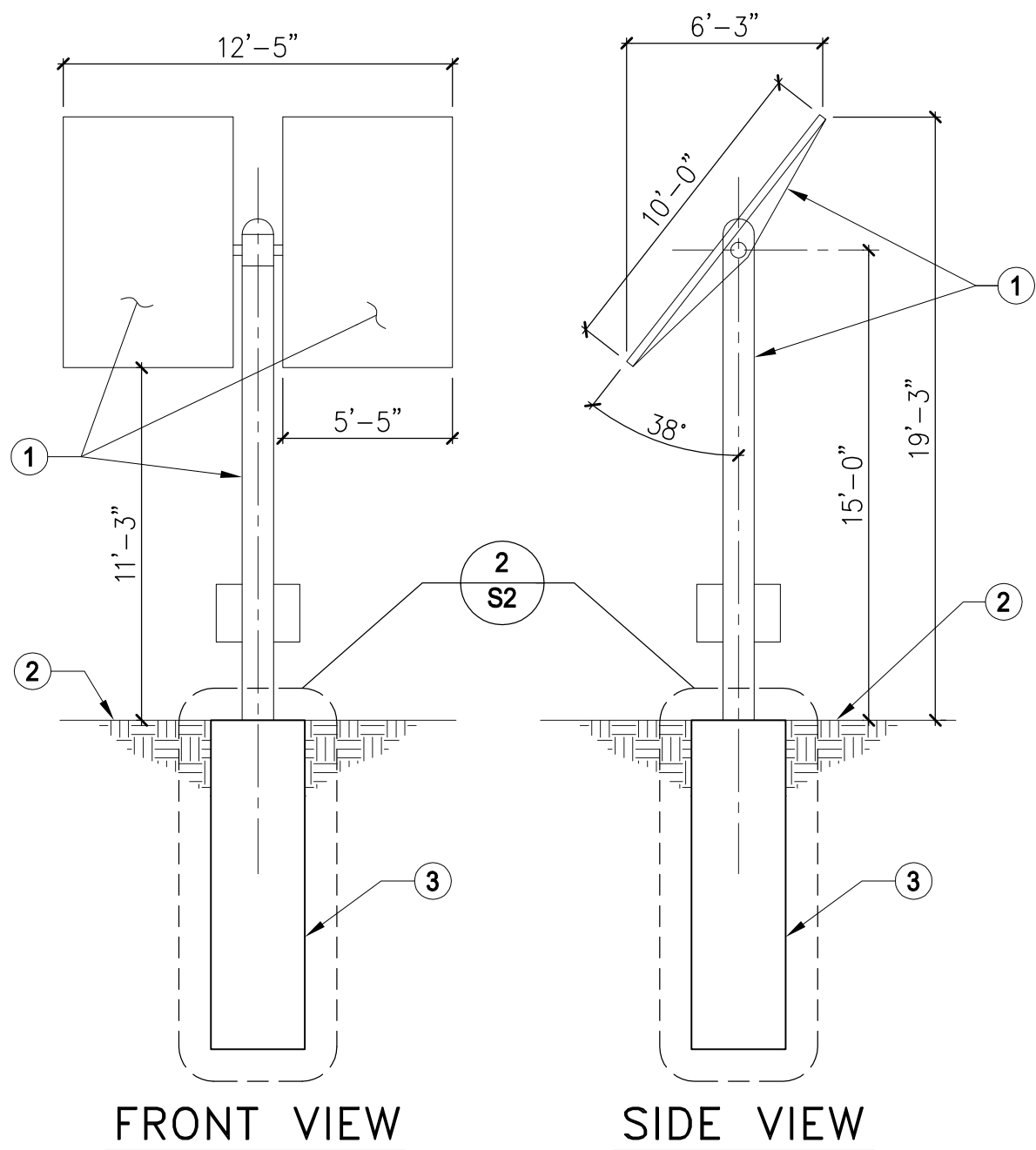
- a. VERIFY ALL EXISTING FIELD CONDITIONS THAT MAY AFFECT THE INSTALLATION OF THE FOUNDATION SYSTEM AS SHOWN PRIOR TO STARTING WORK.
- b. LOCATE AND PROTECT ALL EXISTING UTILITIES, WHETHER INDICATED OR NOT, WHICH MAY BE AFFECTED BY THE CONSTRUCTION PROCESS.
- c. PROTECT EXISTING AND NEW STRUCTURES FROM DAMAGE BY CONSTRUCTION EQUIPMENT. REPAIR DAMAGE OF EXISTING AND NEW CONSTRUCTION CAUSED BY CONSTRUCTION TECHNIQUES.
- d. DO NOT PLACE UTILITY LINES THROUGH OR BELOW FOUNDATIONS WITHOUT THE APPROVAL OF THE SER.
- e. BEAR ALL FOUNDATIONS ON UNDISTURBED SOIL OR COMPACTED STRUCTURAL FILL. DETERMINATION OF FINAL BEARING ELEVATIONS AND FIELD VERIFICATION OF ALLOWABLE BEARING PRESSURE SHALL BE MADE BY A LICENSED GEOTECHNICAL ENGINEER PRIOR TO PLACING FOUNDATIONS.
- f. PLACE CONCRETE FOR FOUNDATIONS ON THE SAME DAY SUBGRADE APPROVAL IS GIVEN BY THE GEOTECHNICAL ENGINEER.
- g. PROTECT CONCRETE FOUNDATIONS FROM FREEZING DURING PLACING AND FOR A PERIOD OF NOT LESS THAN 5 DAYS THEREAFTER.

G. CAST-IN-PLACE CONCRETE

1. GENERAL:

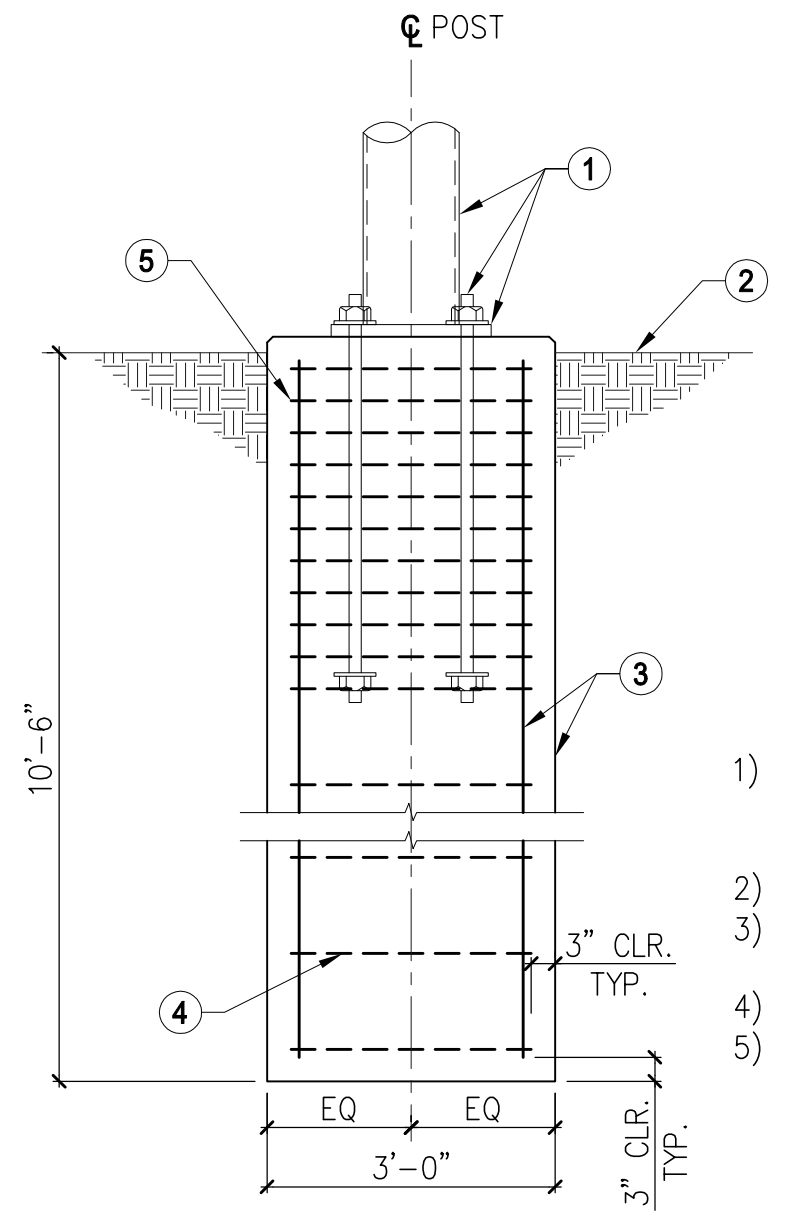
- a. COMPLY WITH REQUIREMENTS OF "STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE" (ACI 301-05), EXCEPT AS MODIFIED BY THESE NOTES.
- b. WELDING OF REINFORCING IS NOT PERMITTED.
- c. FURNISH ALL ACCESSORIES, CHAIRS, SPACE BARS, SUPPORTS, ETC. NECESSARY TO SECURE REINFORCING.
- d. HORIZONTAL JOINTS ARE NOT PERMITTED IN FOUNDATIONS.
- e. CHAMFER EXPOSED CONCRETE CORNERS, ¾" x ¾" MINIMUM.

**EVCG-1410 SOLAR CAR CHARGING STATION
SAMPLE FOUNDATION DETAIL**
LOCAL REQUIREMENTS MAY DICTATE SITE SPECIFIC FOUNDATION DRAWINGS



- 1) SOLAR PANELS AND STEEL SUPPORT FRAME (BY OTHERS).
- 2) FINISHED GRADE.
- 3) CONCRETE PIER FOUNDATION - SEE 2/S2.

1 SOLAR PANEL COLLECTION STATION ELEVATION $3/16"=1'-0"$



- 1) SOLAR PANEL SUPPORT POST, BASE PLATE, AND ANCHOR BOLTS (BY OTHERS).
- 2) FINISHED GRADE.
- 3) CONCRETE PIER W/ 7#8 BARS VERTICAL.
- 4) #3 TIES @ 12" O.C. TYPICAL.
- 5) PROVIDE #3 TIES @ 4" O.C. AT ANCHOR BOLTS.

2 FOUNDATION PIER DETAIL $1/2"=1'-0"$

EVCG-1410 SOLAR CAR CHARGING STATION SAMPLE FOUNDATION DETAIL

LOCAL REQUIREMENTS MAY DICTATE SITE SPECIFIC FOUNDATION DRAWINGS