

### STRUCTURAL GENERAL NOTES

#### GENERAL NOTES

- THE INTENT OF THESE DRAWINGS IS TO SHOW ALL ITEMS NECESSARY TO COMPLETE THE STRUCTURE. FOR ITEMS, METHODS AND/OR MATERIALS NOT SHOWN, THE MINIMUM REQUIREMENTS OF THE 2010 CBC SHALL GOVERN. ALL WORK AND CONSTRUCTION SHALL COMPLY WITH ALL OTHER APPLICABLE BUILDING CODES, SOIL REPORTS, REGULATIONS AND SAFETY REQUIREMENTS.
- TYPICAL DETAILS AND NOTES ON THESE SHEETS SHALL APPLY UNLESS SPECIFICALLY SHOWN OR NOTED OTHERWISE. DETAILS NOT FULLY SHOWN OR NOTED SHALL BE SIMILAR TO DETAILS SHOWN FOR SIMILAR CONDITIONS.
- DRAWINGS AND SPECIFICATIONS REPRESENT FINISHED STRUCTURE. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO DESIGN AND PROVIDE ADEQUATE SHORING, TEMPORARY BRACING AND FORMWORK, ETC., AS REQUIRED FOR THE PROTECTION OF LIFE AND PROPERTY DURING THE CONSTRUCTION OF THIS BUILDING. SHORING AND BRACING SHALL REMAIN IN PLACE UNTIL FLOORS, ROOF AND WALL SHEATHING HAVE BEEN ENTIRELY CONSTRUCTED. SHORING DRAWINGS AND CALCULATIONS SHALL BE SEALED BY REGISTERED ENGINEER AND SUBMITTED TO ARCHITECT/ENGINEER FOR REVIEW. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT, ENGINEER OR CONSTRUCTION MANAGER SHALL NOT RELIEVE THE CONTRACTOR OF SUCH RESPONSIBILITY.
- THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS WITH THE ARCHITECTURAL, ELECTRICAL AND MECHANICAL DRAWINGS BEFORE PREPARING SHOP DRAWINGS, FABRICATION OR CONSTRUCTION. SEE ARCHITECTURAL, ELECTRICAL AND MECHANICAL DRAWINGS FOR SIZE AND LOCATIONS OF PIPES, SLEEVES, PITS, VENTS, DUCTS, ETC. AND DETAILS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
- CONSTRUCTION MATERIAL SHALL BE SPREAD OUT IF PLACED ON FRAMED ROOF OR FLOOR. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT. PROVIDE ADEQUATE SHORING AND/OR BRACING WHERE STRUCTURE HAS NOT ATTAINED DESIGN STRENGTH.
- ALL DRAWINGS ARE CONSIDERED TO BE A PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES THAT OCCUR SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR ENGINEER PRIOR TO START OF CONSTRUCTION SO THAT A CLARIFICATION CAN BE ISSUED. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS OR ANY CODE REQUIREMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT THEIR OWN EXPENSE AND AT NO EXPENSE TO THE OWNER OR ARCHITECT OR ENGINEER.
- NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAIL IS GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK.
- THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT LIMITED TO BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.
- SEE DRAWINGS OTHER THAN STRUCTURAL FOR: TYPES OF FLOOR FINISH AND THEIR LOCATION, FOR DEPRESSIONS IN FLOOR SLABS, FOR OPENINGS IN WALLS AND FLOORS REQUIRED BY ARCHITECTURAL AND MECHANICAL FEATURES, FOR ROADWAY PAVING, WALKS, RAMPS, STAIRS, CURBS, ETC.
- HOLES AND OPENINGS THROUGH WALLS AND FLOORS FOR DUCTS, PIPING AND VENTILATION SHALL BE COORDINATED BY THE CONTRACTOR WHO SHALL VERIFY SIZE AND LOCATION OF SUCH HOLES OR OPENINGS WITH THE MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS AND THEIR SUB-CONTRACTORS.
- NO PIPES OR DUCTS SHALL BE EMBEDDED IN WALLS UNLESS SPECIFICALLY DETAILED OR APPROVED BY THE ENGINEER.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AT JOB SITE BEFORE COMMENCING WORK AND SHALL REPORT ANY DISCREPANCIES TO THE ARCHITECT AND ENGINEER.
- OMISSIONS OR CONFLICTS BETWEEN VARIOUS ELEMENTS OF THE DRAWINGS, NOTES, AND DETAILS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER AND RESOLVED BEFORE PROCEEDING WITH THE WORK.
- DO NOT USE SCALED DIMENSIONS; USE WRITTEN DIMENSIONS. WHERE NO DIMENSION IS PROVIDED, CONSULT THE ARCHITECT AND ENGINEER FOR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
- IF CERTAIN FEATURES ARE NOT FULLY SHOWN OR CALLED FOR ON THE DRAWINGS OR SPECIFICATIONS, THEIR CONSTRUCTION SHALL BE OF THE SAME CHARACTER AS FOR SIMILAR CONDITIONS THAT ARE CALLED FOR OR SHOWN.

#### DESIGN BASIS

- APPLICABLE CODE: 2010 CALIFORNIA BUILDING CODE (CBC), 2010 EDITION WITH ADOPTION OF THE INTERNATIONAL BUILDING CODE (IBC) 2009 EDITION.
- WIND LOADS: SIMPLIFIED DESIGN WIND PRESSURE-ASCE 07-05 SECTION 6.5.13 AND SECTION 6.5.14  
BASIC WIND SPEED: 90 MPH  
EXPOSURE: C  
TOPOGRAPHIC FACTOR: 1.0  
IMPORTANCE FACTOR: 1.0  
ADJUSTMENT FACTOR FOR HEIGHT AND EXPOSURE: 1.0  
NET DESIGN WIND PRESSURE COMPONENTS (h=15FT, l=1.0): 15 psf PER SECTION 6.5.14

#### GEOTECHNICAL CRITERIA:

- FOUNDATIONS HAVE BEEN DESIGNED BASED ON THE FOUNDATION RECOMMENDATIONS BY CLEARY CONSULTANTS, REPORT # 1103.2 DATED NOVEMBER 19, 2001
- 2000 psf DEAD + LIVE
- 250 psf LATERAL PASSIVE PRESSURE

#### CONCRETE:

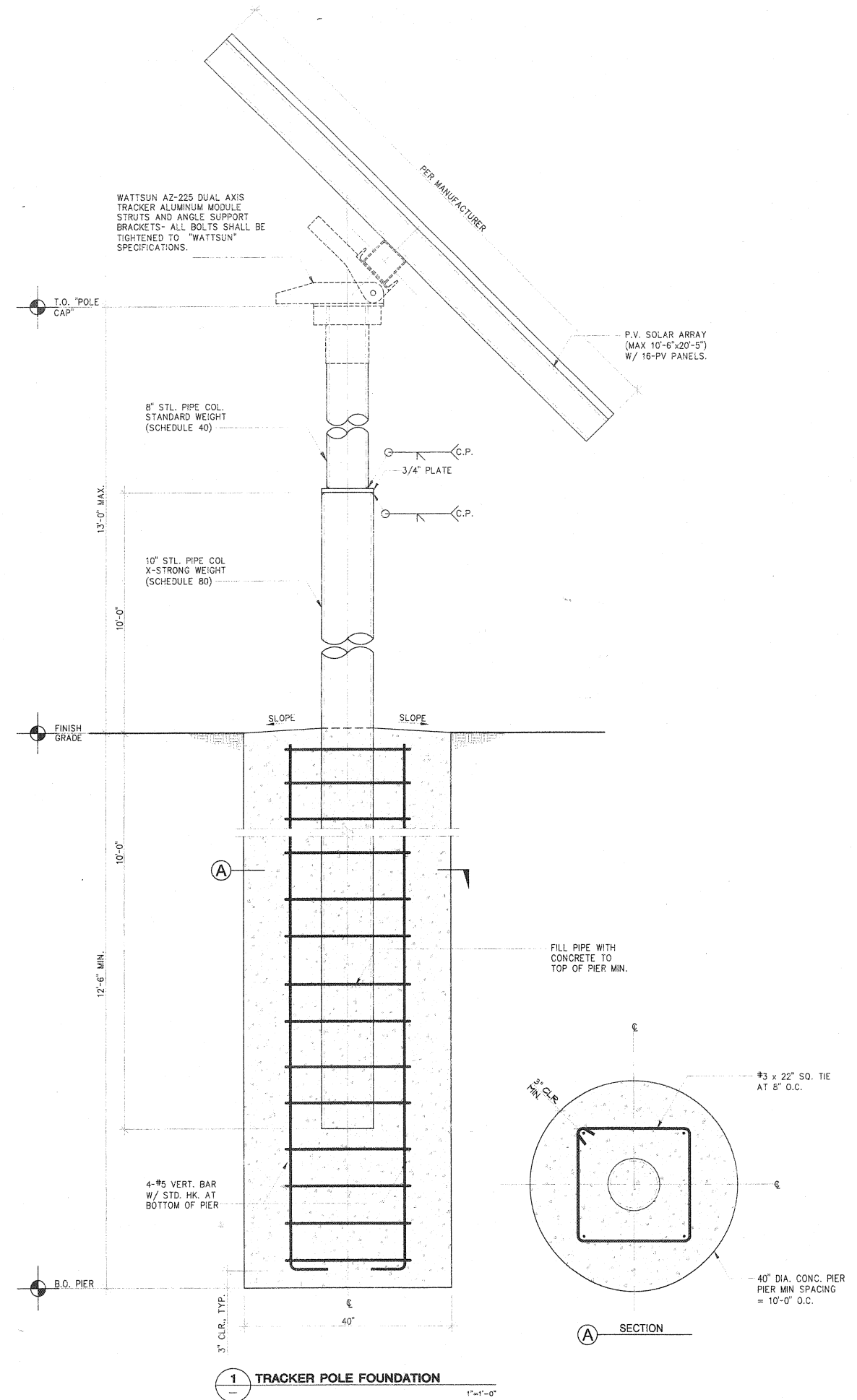
- CONCRETE SHALL BE SUPPLIED AND PLACED IN ACCORDANCE WITH ACI 318.
- CONCRETE WEIGHT : 145 PCF, U.O.N.
- CONCRETE AGGREGATE: 3/4" LIMESTONE
- CONCRETE STRENGTH: 2500 psi MINIMUM AT 28 DAYS
- MINIMUM REINF. COVER FOR CAST-IN-PLACE CONCRETE:  
A. CONC. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH . . . . 3"  
B. CONC. FORMED BELOW GRADE OR EXPOSED TO WEATHER:  
NO. 6 AND GREATER . . . . . 2"  
NO. 5 AND SMALLER . . . . . 1 1/2"  
C. CONC. NOT EXPOSED TO WEATHER NOR IN CONTACT WITH GROUND:  
SLABS, WALLS, AND JOISTS: NO. 11 AND SMALLER . . . . . 1"  
BEAMS AND COL: PRIMARY REINF., TIES, STIRRUPS, SPIRALS . . . . 1 1/2"
- PLACEMENT  
A. ALL REINFORCING BARS, ANCHOR BOLTS, AND ALL OTHER CONC. INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE.  
B. CHAMFER ALL CORNERS OF CONCRETE TO PREVENT DAMAGE.  
C. CONSTRUCTION TOLERANCE SHALL COMPLY TO ACI 117.  
D. CONCRETE SHALL BE PLACED IN A CONTINUOUS OPERATION BETWEEN PREDETERMINED CONSTRUCTION JOINTS.  
E. USE VIBRATORS TO CONSOLIDATE CONCRETE. DO NOT USE VIBRATORS TO MOVE CONCRETE.  
F. CONCRETE SHALL BE CONTINUOUSLY CURED FOR 7 DAYS AFTER PLACEMENT IN ANY APPROVED MANNER. FOOTINGS ARE EXEMPTED FROM THIS REQUIREMENT.  
G. PATCHING OF CONCRETE: ALL INSERT HOLES AND OTHER IMPERFECTIONS ON THE SURFACES OF THE CONCRETE SHALL BE FILLED WITH GROUT, BRUSHED AND SACKED TO A UNIFORM FINISH.

#### REINFORCING STEEL

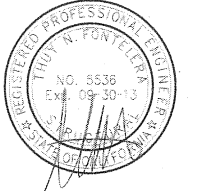
- REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH ACI 315 AND ACI 318.
- REINFORCING STEEL SHALL BE AS FOLLOWS:  
a. BARS: ASTM A615 GRADE 40 FOR #4 BARS AND SMALLER  
ASTM A615 GRADE 60 FOR #5 BARS AND LARGER  
b. WELDED BARS: ASTM A706  
c. TIE WIRES AND SPIRALS: ASTM A82  
d. WELDED WIRE FABRIC: ASTM A185  
e. MECHANICAL BAR SPLICE: BAR LOCK OR APPROVED EQUAL.
- DO NOT FIELD BEND OR STRAIGHTEN IN ANY MANNER THAT WILL DAMAGE REINFORCING.
- PROVIDE SPLICES IN REINFORCING ONLY WHERE SHOWN ON DRAWINGS OR APPROVED IN WRITING BY PROFESSIONAL OF RECORD.
- WELDING TO CONFORM TO AWS D1.4.

#### STEEL

- STRUCTURAL STEEL TO BE SUPPLIED DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH A.I.S.C. SPECIFICATIONS.
- U.O.N. STEEL SHALL BE AS FOLLOWS:  
a. WIDE FLANGE SHAPES: ASTM A992  
b. HOLLOW STRUCTURAL SECTIONS: ASTM A500B  
c. PIPES: ASTM A53, GR. B  
d. OTHER SHAPES AND PLATES: ASTM A36, ASTM A572 GR. 50 AS NOTED.  
e. BOLTS: ASTM A307  
f. HIGH STRENGTH BOLTS: ASTM A325, U.O.N.  
g. THREADED RODS: ASTM A36, U.O.N.  
h. ANCHOR RODS: F1554 GR. 36 TYP., U.O.N.  
i. WELDING ELECTRODES: E-70xx U.O.N.  
j. WELDED STUDS: FLUX FILLED HEADED STUDS CONFORMING TO ASTM A108 BY NELSON OR EQUAL.
- WELDING TO CONFORM TO AWS AND TO BE PERFORMED BY CERTIFIED WELDERS.
- BUTT WELDS ARE TO BE COMPLETE PENETRATION U.O.N. ALL FILLET WELDS SHOWN ARE MINIMUM REQUIRED BY STRESS. INCREASE WELDS TO A.I.S.C. MINIMUM SIZES BASED ON THICKNESS OF MATERIAL JOINED U.O.N.
- STEEL BEAMS ARE EQUALLY SPACED BETWEEN DIMENSION POINTS OR GRID LINES, U.O.N.
- STEEL NOT RECEIVING FIRE PROOFING SHALL BE SHOP PRIMED.
- ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIP ZINC GALVANIZED U.O.N.
- NON SHRINK GROUT: 7500 psi COMPRESSIVE STRENGTH, NON METALLIC CONFORMING TO ASTM 1107, MASTERFLOW 928 OR EQUAL.
- PAINTING - AFTER MATERIAL HAS BEEN PROPERLY CLEANED AND TREATED, APPLY SHOP PRIME COAT OF PAINT TO ALL SURFACES EXCEPT THOSE INTENDED FOR EMBEDMENT INTO CONCRETE OR THOSE RECEIVING FIELD WELDING. PROVIDE "TOUCH-UP" AT SITE.
- FOR SPECIAL REQUIREMENTS FOR THE SEISMIC LOAD RESISTING SYSTEM SEE SHEETS: S7.3



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#### REVISION

DESCRIPTION	BY

#### GENERAL STRUCTURAL NOTES

Date: 10-19-2011  
Scale: AS-NOTED  
Drawn: TF  
Job: 2058  
Sheet:

**S1.0**