

**ABBREVIATIONS**

Ø	DIAMETER
AB	ANCHOR BOLT
AESS	ARCHITECTURALLY EXPOSED
ARCH	ARCHITECTURAL
BLDG	BUILDING
BLDG	BLOCKING
BM	BEAM
BOF	BOTTOM OF FOOTING
BOT	BOTTOM
CB	COLUMN BASE
CC	CENTER TO CENTER
CL	CENTER LINE
CJ	CONSTRUCTION JOINT
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONN	CONNECTION
CONT	CONTINUOUS
CJP	COMPLETE JOINT PENETRATION
CTR	CENTER
CTRSK	COUNTERSINK
DOW	DEMAND CRITICAL WELD
DET	DETAIL
DF	DOUGLAS FIR
DWG	DRAWING
(E)	EXISTING
EA	EACH
EF	EACH FACE
EL OR ELEV	ELEVATION
ELECT	ELECTRICAL
EN	END (OR EDGE) NAILING
EQ	EQUAL
EW	EACH WAY
EXT	EXTERIOR
FDN	FOUNDATION
FIN	FLOOR
FL OR FLR	FLOOR
FOC	FACE OF CONCRETE
FOS	FACE OF STUD
FRM/G	FRAMING
FS	FAR SIDE
FTO	FOOTING
GA	GAUGE
GALV	GALVANIZED
GLB	GLU-LAMINATED BEAM
HD	HOLD DOWN
HORIZ	HORIZONTAL
HSB	HIGH STRENGTH BOLT
HT	HOT
INT	INTERIOR
JH	JOIST HANGER
JT	JOINT
LLH (LLV)	LONG LEG HORIZONTAL (VERTICAL)
LT	LIGHT
LT WT	LIGHT WEIGHT
NB	UNFINISHED MACHINE BOLTS
MAX	MAXIMUM
MECH	MECHANICAL
MFR	MANUFACTURER
MTL	METAL
MIN	MINIMUM
MISC	MISCELLANEOUS
(N)	NEW
NIC	NOT IN CONTRACT
NOM	NOMINAL
NS	NEAR SIDE
NTS	NOT TO SCALE
NW	NORMAL WEIGHT
OC	ON CENTER
OD (D)	OUTSIDE (INSIDE) DIAMETER
OPG	OPENING
OPP	OPPOSITE
PA	PURLIN ANCHOR
PAF	POWER ACTUATED FASTENER
PL	PLATE
PJP OR PP	PARTIAL JOINT PENETRATION
PLY	PLYWOOD
PFL	PARALLAM
PT	POINT
PTN	PARTITION
REF	REFERENCE
REIN	REINFORCEMENT
REQ	REQUIRED
RO	ROUGH OPENING
RWD	REDWOOD
SAD	SEE ARCHITECTURAL DRAWINGS
SD	SEE ELECTRICAL DRAWINGS
SCHED	SCHEDULE
SECT	SECTION
SHT	SHEET
SM	SIMILAR
SLRS	SEISMIC LOAD RESISTING SYSTEM
SMD	SEE MECHANICAL DRAWINGS
SFA	SPACE
SPEC	SPECIFICATION
SQ	SQUARE
ST	STRAP TIE
STAGGD	STAGGERED
STD	STANDARD
STL	STEEL
STRUCT	STRUCTURAL
SYMM	SYMMETRICAL
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TD	TIEDOWN
THRD'D	THREADED
TOC	TOP OF CONCRETE
TOF	TOP OF FOOTING
TOP	TOP OF PLATE
TOS	TOP OF STEEL
TOW	TOP OF WALL
TYP	TYPICAL
UN	UNLESS OTHERWISE NOTED
VERT	VERTICAL
W/	WITH
W/O	WITHOUT
WP	WORK POINT
WT	WEIGHT

**EPOXY ANCHORS**

1. EPOXY ANCHOR INSTALLATION VALUES:

EPOXY ANCHORS IN NORMAL-WEIGHT CONCRETE (f <sub>c</sub> = 3000) PSI					
THREADED ROD DIAMETER (in.)	REBAR SIZE	MIN. EMBED. (in.)	ALLOWABLE TENSION (lbs)	ALLOWABLE SHEAR (lbs)	TENSION TEST VALUE (lbs.)
3/8	#3	3"	1,560	1,970	3,120
1/2	#4	4"	2,740	4,320	5,480
5/8	#5	5"	4,160	6,800	8,320
3/4	#6	6"	5,740	9,650	11,480
7/8	#7	7"	6,050	13,160	12,100

- EPOXY SHALL BE MILTI-RE500-SD. INSTALLATION SHALL COMPLY WITH ICC REPORT ESR-2322 DATED 11-1-07. SIMPSON SET-XP ICC-ES REPORT ESR-2508.
- CARBON STEEL THREADED RODS SHALL CONFORM TO ASTM A193 GRADE B7. REINFORCING BARS SHALL COMPLY WITH ASTM A615 GRADE 60.
- SPECIAL INSPECTION BY THE PROJECT INSPECTOR OF ANCHORS IS REQUIRED AND SHALL COMPLY WITH CBC CHAPTER 17A. THE PROJECT INSPECTOR MUST BE ON THE JOB SITE DURING ANCHOR INSTALLATION TO VERIFY ANCHOR TYPE, ANCHOR DIMENSION, CONCRETE STRENGTH AND TYPE, HOLE DIMENSION AND CLEANLINESS, ANCHOR SPACING AND EDGE DISTANCE, CONCRETE THICKNESS, ANCHOR EMBEDMENT AND TIGHTENING TORQUE. THE PROJECT INSPECTOR MUST VERIFY THE INITIAL INSTALLATIONS OF EACH TYPE AND SIZE.
- ALLOWABLE LOADS CORRESPOND TO 100% OF ICC VALUES FOR SINGLE ANCHORS IN CRACKED CONCRETE, TEMPERATURE RANGE A, SEISMIC ZONE C, D, E, OR F WITHOUT EDGE DISTANCE OR SPACING EFFECTS.
- WHEN INSTALLING DRILLED-IN ANCHORS IN EXISTING NON-PRESTRESSED REINFORCED CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE EXISTING REINFORCING BARS. WHEN INSTALLING ANCHORS INTO EXISTING PRESTRESSED CONCRETE (PRE OR POST TENSIONED), LOCATE THE PRESTRESSED TENDONS BY USING A NON DESTRUCTIVE METHOD PRIOR TO INSTALLATION. EXERCISE EXTREME CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE TENDONS DURING INSTALLATION. MAINTAIN A MINIMUM CLEARANCE OF ONE INCH BETWEEN THE REINFORCEMENT AND THE DRILLED-IN ANCHORS.
- TENSION TEST ANCHORS TO VALUES TABULATED ABOVE. TEST 10% OF ANCHORS FOR SILL PLATE BOLTING, 50% OF ANCHORS USED FOR EQUIPMENT ANCHORAGE, AND 100% OF ALL OTHER ANCHORS UNLESS NOTED ON DRAWINGS. TENSION-TESTED ANCHORS SHALL MAINTAIN THE TEST LOAD FOR 15 SECONDS AND SHALL EXHIBIT NO DISCERNIBLE MOVEMENT DURING THE TENSION TEST ; E.G. AS EVIDENCED BY LOOSENING OF THE WASHER UNDER THE NUT.

**SPECIAL INSPECTION:**

SPECIAL INSPECTION SHALL BE PROVIDED PER CBC SECTION 1704A & 1707A FOR THE FOLLOWING:

- EXCAVATION AND GRADING (SOIL ENGINEER).
- SOIL COMPACTION (SOIL ENGINEER).
- CONCRETE PLACEMENT. (PROJECT INSPECTOR)
- REINFORCING STEEL AND TENDONS. (PROJECT INSPECTOR)
- WELDING OF STRUCTURAL STEEL.
- HIGH STRENGTH BOLTS.
- INSTALLATION OF ALL EMBEDDED ANCHORS, EXPANSION ANCHORS, AND EPOXY ANCHORS. (PROJECT INSPECTOR)
- CONTINUOUS INSPECTION OF ALL CMU WALL CONSTRUCTION. (PER SPECIFICATIONS) 410-4A 5.3
- ADHERED MASONRY VENEER.
- BATCH PLANT INSPECTION.

**CONTRACTOR SUBMITTALS:**

- PROVIDE SHOP DRAWINGS FOR ALL REINFORCING STEEL, SHOWING BENDING, PLACEMENT DETAILS, SIZE AND LOCATION.
- PROVIDE CERTIFIED COPIES OF ALL CONCRETE MIX DESIGNS INCLUDING COMPRESSIVE STRENGTH TEST REPORTS ONE WEEK PRIOR TO INSTALLATION OF ANY CONCRETE.
- SUBMIT CERTIFICATIONS OF COMPLIANCE WITH DESIGN REQUIREMENTS AND ASTM C90 FOR CONCRETE MASONRY.
- PROVIDE SHOP DRAWINGS FOR ALL STRUCTURAL STEEL, SHOWING DETAILS INCLUDING CUTS, COPIES, CONNECTIONS, HOLES, FASTENERS, AND WELDS.
- GROUT MIX DESIGNS.

**TESTING:**

- OWNER'S TESTING AGENCY SHALL PERFORM THE FOLLOWING TESTS AND INSPECTIONS (AND PER FORM DSA-103), AND SUBMIT APPROPRIATE REPORTS TO THE ARCHITECT, STRUCTURAL ENGINEER, PROJECT INSPECTOR, DSA AND OWNER.
- PERFORM CONCRETE TESTING FOR CONCRETE IN ACCORDANCE WITH CBC SECTION 1916A AND 1905A6.2.1, MAKE AND CURE THREE SPECIMEN CYLINDERS ACCORDING TO ASTM C31 AND ASTM C172 AND 1905A6.2.1 FOR EACH 50 CUBIC YARDS OF CONCRETE OR 2,000 SQ. FT. OF SURFACE AREA FOR SLABS OR WALLS POURED AT SITE EACH DAY. B. RETAIN ONE CYLINDER FOR SEVEN-DAY TEST AND TWO FOR THE 28-DAY TEST. TEST FOR SPECIFIED STRENGTH ACCORDING TO ASTM C39.
- PERFORM CMU WALL TESTING IN ACCORDANCE WITH CBC SECTION 2105A.2.2.2., 2105A.4 AND 2105A.5
- SUBMIT INSPECTION OF WORK FOR CMU WALL CONSTRUCTION. SEE SPECIFICATIONS.
- SUBMIT INSPECTION OF WORK FOR SHOP AND FIELD WELDING. SEE SPECIFICATIONS.
- SUBMIT INSPECTION OF WORK FOR HIGH STRENGTH BOLTS. SEE SPECIFICATIONS.
- SUBMIT INSPECTION OF WORK FOR INSTALLATION OF EPOXY ANCHORS, EXPANSION ANCHORS, AND DOWELS. SEE SPECIFICATIONS.

**STRUCTURAL DRAWING INDEX**

- S0.1 GENERAL NOTES
- S2.1 BUILDING 30 FOUNDATION PLAN ROOF FRAMING PLAN
- S2.2 BUILDING 16 LOAD CENTER #2 FOUNDATION PLAN ROOF FRAMING PLAN
- S3.1 BUILDING 30 ELEVATIONS
- S3.2 BUILDING 16 LOAD CENTER #2 ELEVATIONS SECTIONS
- S5.1 TYPICAL CONCRETE DETAILS
- S5.2 CONCRETE DETAILS
- S5.3 DETAILS
- S7.1 TYPICAL METAL DECK DETAILS
- S7.2 TYPICAL STEEL DETAILS

**CONCRETE**

1. CONCRETE CLASSES:

CLASS	USE	UNIT WT	28 DAY STRENGTH	SLUMP	MAX AGG SIZE
A	FOUNDATIONS, SLAB	145 PCF	3000 PSI	3 1/2" ± 1/2"	1"
B	WALLS, RETAINING WALLS	145 PCF	3000 PSI	3 1/2" ± 1/2"	3/4"

2. ALL CONCRETE SHALL BE THOROUGHLY CONSOLIDATED.

3. REINFORCING STEEL:

- A. BARS: ASTM A615, GRADE 60.
- B. ALL CONCRETE SHALL BE REINFORCED UNLESS SPECIFICALLY MARKED "NOT REINFORCED"

4. TERMINATION OF REINFORCEMENT

- A. TERMINATE ALL BARS IN LAPS, 90 DEGREE BENDS, OR WITH DOWELS INTO EXISTING CONCRETE.
  - B. BEND TOP FOOTING BARS DOWN TO BOTTOM MAT AT ENDS.
  - C. BEND BOTTOM FOOTING BARS UP WITH STANDARD 90 DEGREE BENDS.
  - D. PROVIDE DOWELS INTO FOOTINGS AT WALLS OF SAME SIZE AND SPACING AS WALL VERTICAL REINFORCEMENT.
  - E. ALL REINFORCEMENT MAY LAP WITH COUPLERS WHICH ARE 125% OF BAR STRENGTH OR GREATER. SUBMIT ICCO REPORT.
5. MINIMUM CONCRETE COVER FOR REINFORCING STEEL:
- A. SURFACES PLACED AGAINST EARTH 3"
  - B. FORMED SURFACES BELOW GRADE 2"
  - C. SURFACES EXPOSED TO WEATHER 2"
  - D. BEAM AND COLUMN BARS (INCLUDING STIRRUPS OR TIES) 1-1/2"
  - E. EXTERIOR WALL AT EXTERIOR FACE 1-1/2"
  - F. SLABS AND WALLS NOT EXPOSED TO WEATHER 1"
6. FINISH: SLABS AGI 301 "FLOATED FINISH", U.O.N.

**STEEL**

- W AND WT SECTIONS: ASTM A572, GR. 50
- CHANNELS, ANGLES, AND PLATES: ASTM A36, U.O.N.
- RECTANGULAR AND ROUND HSS : ASTM A500, GRADE B.
- PIPES: ASTM A53, GRADE B.
- HIGH STRENGTH BOLTS: ASTM A325N.
- MACHINE BOLTS: ASTM A307.
- ANCHOR BOLTS / RODS: ASTM F1554, GR. 36.
- WELDING ELECTRODES: E-70XX.
- STEEL DECK: ASTM A653, GRADE 33 MIN.
- WELDED HEADED STUDS: ASTM A108, TYPE H4L BY NELSON OR EQUAL.
- ALL STEEL SHAPES AND PLATES AND STEEL DECKING EXPOSED TO WEATHER OR UNHEATED SPACES SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH G90 GALVANIZATION. TOUCH UP WELDED AREAS WITH GALV WELD REPAIR. PAINT EXPOSED SURFACES WITH EPOXY PAINT SYSTEMS AS REQUIRED BY ARCHITECTURAL DRAWINGS.

12. PROVIDE CAP PLATES ON ENDS OF ALL HSS SECTIONS PER DETAIL 12/57.1, U.O.N.

**CONCRETE MASONRY**

- MASONRY MATERIALS SHALL CONFORM TO THE FOLLOWING U.O.N.
  - CONCRETE MASONRY UNITS: ASTM C90, TYPE 1 GRADE N, LIGHTWEIGHT, HOLLOW LOAD BEARING UNITS (MINIMUM COMPRESSIVE STRENGTH = 1500 PSI)
  - GROUT: ASTM C476 (MINIMUM COMPRESSIVE STRENGTH = 2000 PSI)
  - MORTAR: ASTM C270, TYPE S (MINIMUM COMPRESSIVE STRENGTH = 1900 PSI)
- ALL CELLS SHALL BE FULLY GROUTED.
- MASONRY INSERTS SHALL BE MANUFACTURED BY BURKE OR APPROVED EQUAL.
- REINFORCING STEEL: ASTM A615, GRADE 60. ALL MASONRY TO BE REINFORCED UNLESS SPECIFICALLY MARKED "NOT REINFORCED".
- JOINT REINFORCING: UBC STANDARD 21-10
- ALL WALLS SHALL BE LAID IN RUNNING BOND TRUE AND PLUMB.
- WHERE BLOCK IS LAID TO A MAXIMUM OF FOUR FEET BEFORE GROUTING, NO CLEANOUT SHALL BE REQUIRED.
- WHERE GROUTING IS STOPPED FOR A PERIOD OF ONE HOUR OR LONGER, HORIZONTAL CONSTRUCTION JOINTS SHALL BE FORMED BY STOPPING THE GROUT POUR 1-1/2" BELOW THE TOP OF THE UPPER MOST UNIT.
- LAP BARS IN MASONRY WALLS 48 BAR DIAMETER.
- VERTICAL WALL STEEL SHALL HAVE DOWELS OF EQUAL SIZE AND EQUAL MATCHED SPACING IN ALL FOOTINGS IN ACCORDANCE W/ CBC SECTION 2106A.5.3.1.

**EXPANSION ANCHORS**

1. EXPANSION ANCHOR INSTALLATION VALUES:

EXPANSION ANCHORS IN NORMAL-WEIGHT CONCRETE (f <sub>c</sub> = 3000) PSI					
ANCHOR DIAMETER (in.)	MINIMUM EMBEDMENT (in.)	INSTALLATION/TEST TORQUE (ft.-lbs)	ALLOWABLE TENSION (lbs)	ALLOWABLE SHEAR (lbs)	TENSION TEST LOAD (lbs.)
3/8	2	25	1102	999	2,204
1/2	3 1/4	40	2386	2,839	4,772
5/8	4	60	3,301	4,678	6,602
3/4	4 3/4	110	4,272	6,313	8,544

- TYPICAL EXPANSION ANCHORS ARE CARBON STEEL, MILTI-KWIK BOLT. INSTALLATION SHALL COMPLY WITH ICC REPORT ESR-1917 DATED 9-1-2007. SIMPSON SET-XP ICC-ES REPORT ESR-2508.
- SPECIAL INSPECTION OF ANCHORS IS REQUIRED AND SHALL COMPLY WITH CBC CHAPTER 17. THE SPECIAL INSPECTOR MUST BE ON THE JOB SITE CONTINUOUSLY DURING ANCHOR INSTALLATION TO VERIFY ANCHOR TYPE, ANCHOR DIMENSION, CONCRETE STRENGTH AND TYPE, HOLE DIMENSION AND CLEANLINESS, ANCHOR SPACING AND EDGE DISTANCE, CONCRETE THICKNESS, ANCHOR EMBEDMENT AND TIGHTENING TORQUE.
- ALLOWABLE LOADS SHOWN CORRESPOND TO 100% OF THE ICC VALUES FOR SINGLE ANCHORS IN CRACKED CONCRETE, SEISMIC LOADS, WITHOUT EDGE DISTANCE OR SPACING EFFECTS.
- WHEN INSTALLING DRILLED-IN ANCHORS IN EXISTING NON-PRESTRESSED REINFORCED CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE EXISTING REINFORCING BARS. WHEN INSTALLING ANCHORS INTO EXISTING PRESTRESSED CONCRETE (PRE OR POST TENSIONED), LOCATE THE PRESTRESSED TENDONS BY USING A NON DESTRUCTIVE METHOD PRIOR TO INSTALLATION. EXERCISE EXTREME CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE TENDONS DURING INSTALLATION. MAINTAIN A MINIMUM CLEARANCE OF ONE INCH BETWEEN THE REINFORCEMENT AND THE DRILLED-IN ANCHORS.
- TENSION TEST OR TORQUE TEST ANCHORS TO VALUES TABULATED ABOVE. TEST 10% OF ANCHORS USED FOR SILL PLATE BOLTING, 50% OF ANCHORS USED FOR EQUIPMENT ANCHORAGE, AND 100% OF ALL OTHER ANCHORS U.O.N. ON DRAWINGS TENSION-TESTED ANCHORS SHALL MAINTAIN THE TEST LOAD FOR A MINIMUM OF 15 SECONDS AND SHALL EXHIBIT NO DISCERNIBLE MOVEMENT DURING THE TENSION TEST ; E.G. AS EVIDENCED BY LOOSENING OF THE WASHER UNDER THE NUT. TORQUE-TESTED ANCHORS MUST ATTAIN THE SPECIFIED TORQUE WITHIN 1/2 TURN OF THE NUT.

**GENERAL**

- 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 STAIRS, CURBS, ETC.
- NO PIPES OR DUCTS SHALL BE PLACED IN SLABS OR WALLS UNLESS SPECIFICALLY DETAILED.
- DRAWINGS AND SPECIFICATIONS REPRESENT FINISHED STRUCTURE. CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO SHORING AND TEMPORARY BRACING. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO INSURE SAFETY OF ALL PERSONS AND STRUCTURES AT THE SITE AND ADJACENT TO THE SITE. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT, ENGINEER OR CONSTRUCTION MANAGER SHALL NOT RELIEVE THE CONTRACTOR OF SUCH RESPONSIBILITY.
- OMISSIONS OR CONFLICTS BETWEEN VARIOUS ELEMENTS OF THE DRAWINGS, NOTES, AND DETAILS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND RESOLVED BEFORE PROCEEDING WITH THE WORK.
- DO NOT USE SCALED DIMENSIONS; USE WRITTEN DIMENSIONS. WHERE NO DIMENSION IS PROVIDED, CONSULT THE ARCHITECT 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. ALL DETAILS REFERENCED ONCE SHALL APPLY TO ALL SIMILAR CONDITIONS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL NECESSARY LICENSES AND PERMITS. THE CONTRACTOR SHALL CONFORM TO ALL STATE AND LOCAL LAWS GOVERNING THE WORK.
- ALL CONSTRUCTION TO BE PERFORMED IN A MANNER TO MINIMIZE IMPACT ON THE CONTINUING OPERATION OF THE BUILDING & SITE. CONTRACTOR TO PROVIDE APPROPRIATE BARRIERS AROUND CONSTRUCTION. COORDINATE ALL OPERATIONS WITH THE OWNER.
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES BEFORE BEGINNING WORK. SPECIAL CARE SHALL BE TAKEN TO PROJECT UTILITIES THAT ARE TO REMAIN IN SERVICE DURING CONSTRUCTION.
- ALL FINISHES, STRUCTURAL ELEMENTS AND ARCHITECTURAL FEATURES AFFECTED BY CONSTRUCTION TO BE REPAIRED AND/OR REPLACED TO MATCH EXISTING CONSTRUCTION.
- THE SCOPE OF WORK INCLUDES CLEANUP NECESSARY TO LEAVE THE BUILDING IN A NEAT AND USABLE CONDITION. ALL REMOVED ITEMS, MATERIALS AND DEBRIS, UNLESS OTHERWISE NOTED, SHALL BECOME THE PROPERTY OF THE DEMOLITION CONTRACTOR AND SHALL BE REMOVED PROMPTLY FROM THE SITE AND DISPOSED OF IN A LEGAL MANNER.

**EXISTING CONSTRUCTION**

- WORK SHOWN IS NEW UNLESS NOTED AS EXISTING: (E).
- THE CONTRACTOR SHALL VERIFY ALL EXISTING JOB CONDITIONS, REVIEW ALL DRAWINGS AND VERIFY DIMENSIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ALL DISCREPANCIES AND EXCEPTIONS BEFORE PROCEEDING WITH THE WORK.
- THE REMOVAL, CUTTING, DRILLING, ETC. OF EXISTING WORK SHALL BE PERFORMED WITH GREAT CARE AND SMALL TOOLS IN ORDER NOT TO JEOPARDIZE THE STRUCTURAL INTEGRITY OF THE BUILDING. IF STRUCTURAL MEMBERS OR MECHANICAL, ELECTRICAL, OR ARCHITECTURAL FEATURES NOT INDICATED FOR REMOVAL INTERFERE WITH THE NEW WORK, THE ARCHITECT SHALL BE IMMEDIATELY NOTIFIED AND PRIOR APPROVAL SHALL BE OBTAINED BEFORE REMOVAL OF MEMBERS.
- THE CONTRACTOR SHALL SAFELY SHORE EXISTING CONSTRUCTION WHEREVER EXISTING SUPPORTS ARE REMOVED TO ALLOW THE INSTALLATION OF THE NEW WORK. ALL SHORING METHODS AND SEQUENCING OF DEMOLITION SHALL BE SPECIFIED BY A LICENSED STRUCTURAL ENGINEER TO BE RETAINED BY THE CONTRACTOR. SEE SPECIFICATIONS FOR DETAILED REQUIREMENTS.

**DESIGN BASIS**

- APPLICABLE CODE: CALIFORNIA BUILDING CODE, 2007 EDITION.
- VERTICAL LIVE LOADS: 20 PSF
- WIND LOADS: DESIGN WIND: 85 MPH, EXPOSURE C I=1.15 OCCUPANCY CATEGORY III CC=20.18 Kd=1.0 Kz=0.85 Kt=0.85
- SEISMIC LOADS: OCCUPANCY CATEGORY III SEISMIC IMPORTANCE FACTOR I=1.25 SITE CLASS B SEISMIC DESIGN CATEGORY E S<sub>s</sub> = 2.367 S<sub>1</sub> = 1.155 S<sub>0.1</sub> = 1.825 S<sub>0.2</sub> = 1.563 C<sub>s</sub> = 0.456 SPECIAL REINFORCED MASONRY SHEARWALL R = 5 Cd = 3/8 P<sub>0</sub> = 2% V = 0.457W ANALYSIS PROCEDURE: STATIC

**FOUNDATIONS**

- SIZES OF FOOTINGS AND ELEVATIONS AT BOTTOMS OF FOOTINGS HAVE BEEN ESTABLISHED BASED ON THE SOILS REPORT "GEOTECHNICAL INVESTIGATION AND GEOLOGIC HAZARDS EVALUATION, CAÑADA COLLEGE ELECTRICAL INFRASTRUCTURE REPLACEMENT" PREPARED BY CONERSTONE EARTH GROUP AND DATED APRIL 23, 2010.
- AS EXCAVATION PROGRESSES, CONDITIONS MAY DEVELOP REQUIRING CHANGES IN THESE ELEVATIONS AND/OR FOOTINGS. SUCH CHANGES SHALL BE MADE ONLY AS DIRECTED BY THE SOILS ENGINEER.
- ALLOWABLE SOIL BEARING PRESSURES ARE:
  - A. DEAD + LIVE LOADS: 3,000 PSF
  - B. DEAD + LIVE + SEISMIC LOADS: 4,000 PSF
- FOOTINGS SHALL EXTEND A MINIMUM OF 18 INCHES BELOW LOWEST ADJACENT GRADE AND BEAR ONLY ON NATURAL COMPETENT ROCK OR ENGINEERED FILL AS RECOMMENDED IN THE SOILS REPORT LISTED.
- EXCAVATIONS SHALL BE MADE AS NEAR AS POSSIBLE TO THE NEAT LINES REQUIRED BY THE SIZE AND SHAPE OF THE STRUCTURE. NO MATERIAL IS TO BE EXCAVATED UNNECESSARILY.
- ALL FOUNDATION EXCAVATIONS MUST BE REVIEWED AND APPROVED BY THE SOILS ENGINEER PRIOR TO PLACEMENT OF CONCRETE.
- VERIFY LOCATION OF UNDERGROUND UTILITIES BEFORE EXCAVATION. NOTIFY ARCHITECT PRIOR TO EXCAVATION IN THE EVENT SUCH UTILITIES ARE ENCOUNTERED.
- FOR DRAINAGE DETAILS, SUMPS, PITS, DAMP PROOFING, TRENCHES, CURBS, EXTERIOR WALKS, UTILITIES, EQUIPMENT DETAILS, STEPS, ETC., SEE DRAWINGS OTHER THAN STRUCTURAL.
- PLACEMENT OF FILL AND RE-COMPACTION OF NATIVE SOILS SHALL BE IN ACCORDANCE WITH THE SOILS REPORT LISTED.

  
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IDENTIFICATION STAMP  
 DIVISION OF THE STATE ARCHITECT  
 APPLICATION NUMBER: 01-111618  
 AC: 11.9  
 DATE: 2/9/11

CALIFORNIA STATE FIRE MARSHAL  
 APPROVED

APPROVAL OF THIS PLAN DOES NOT AUTHORIZE OR APPROVE ANY CHANGES OR DEVIATION FROM APPLICABLE REGULATIONS. FINAL APPROVAL IS SUBJECT TO THE INSPECTOR. ONE SET OF APPROVED PLANS SHALL BE AVAILABLE ON THE PROJECT SITE AT ALL TIMES.  
 REVIEWED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

**CAÑADA COLLEGE**  
 Electrical Infrastructure Replacement Project  
 4200 Farm Hill Blvd  
 Redwood City, CA 94061

  
 REGISTERED PROFESSIONAL ENGINEER  
 No. 4979  
 Exp. 8-31-11  
 STRUCTURAL  
 STATE OF CALIFORNIA

**BID SET**

SHEET TITLE  
**GENERAL SPECIFICATIONS**

REVISIONS	
NO.	DESCRIPTION

DATE: **January 14, 2011**  
 DRAWN: **PIL**  
 CHECKED: **JKW**  
 SCALE:  
 JOB NO.: **2921.01**

SHEET NUMBER  
**S0.1**