GENERAL NOTES

1) ALL WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE MINIMUM STANDARDS OF THE 2008 EDITION OF THE LOS ANGELES BUILDING CODE (L.A.B.C.) AND SUCH OTHER REGULATING AGENCIES EXERCISING AUTHORITY OVER ANY PORTION OF THE WORK. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE L.A.B.C. AT THE SITE AT ALL TIMES.

2) THE CONTRACTOR SHALL EXAMINE THE DRAWINGS AND SPECIFICATIONS (CONTRACT DOCUMENTS) AND VERIFY ALL DIMENSIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION. THE ARCHITECTURAL PLANS SHALL BE USED FOR ALL DIMENSIONS AND WALL LAYOUTS.

3) ALL INFORMATION ON EXISTING CONDITIONS SHOWN ON THE DRAWINGS ARE BASED ON BEST PRESENT KNOWLEDGE AVAILABLE, BUT WITHOUT GUARANTEE OF ACCURACY. THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS AT THE SITE. DURING CONSTRUCTION THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND THE ENGINEER OF ANY UNUSUAL OR UNFORESEEN CONDITION PRIOR TO CONTINUING WITH CONSTRUCTION. SHOULD ANY CONDITION ARISE WHERE THE INTENT OF THE DRAWINGS IS IN DOUBT, OR WHERE THERE APPEARS TO BE A DISCREPANCY BETWEEN THE DRAWINGS AND THE CONDITION IN THE FIELD, THE ARCHITECT AND THE ENGINEER SHALL BE NOTIFIED PRIOR TO CONTINUING WITH WORK.

4) THERE SHALL BE NO DEVIATION FROM THE PLANS, DETAILS, NOTES, AND SPECIFICATIONS WITHOUT THE WRITTEN APPROVAL OF THE THE ARCHITECT AND THE STRUCTURAL ENGINEER.

5) DO NOT SCALE STRUCTURAL PLANS OR DETAILS. ONLY WRITTEN DIMENSIONS SHALL BE USED.

6) THE FOLLOWING NOTES, TYPICAL DETAILS AND SCHEDULES SHALL APPLY TO ALL PHASES OF THIS PROJECT UNLESS NOTED OR SHOWN OTHERWISE ON PLANS.

7) SPECIFIC NOTES AND DETAILS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.

8) THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY CONDITION WHICH, IN HIS OPINION, MIGHT ENDANGER THE STABILITY OF THE STRUCTURE OR CAUSE DISTRESS OF THE STRUCTURE.

9) ALL WORK SHALL CONFORM TO THE BEST PRACTICE PREVAILING IN THE VARIOUS TRADES COMPRISING THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES.

10) THESE NOTES, DETAILS, DRAWINGS AND SPECIFICATIONS (CONTRACT DOCUMENTS) REPRESENT THE FINISHED STRUCTURE, AND DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES.

11) THE CONTRACTOR SHALL REFER TO THE SPECIFICATIONS FOR INFORMATION NOT COVERED BY THESE DRAWINGS AND GENERAL NOTES.

12) THE CONTRACTOR SHALL PROVIDE THE DESIGN, MATERIALS, AND FABRICATION OF ALL TEMPORARY BRACING AND SHORING FOR ALL STRUCTURAL MEMBERS AS REQUIRED FOR STRUCTURAL STABILITY OF THE STRUCTURE DURING ALL PHASES OF THE CONSTRUCTION.

13) THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO ENSURE PROPER ALIGNMENT OF THE STRUCTURE AFTER THE INSTALLATION OF ALL STRUCTURAL AND FINISH MATERIALS. THIS SHALL INCLUDE ANY NECESSARY PRE-LOADING OF THE STRUCTURE TO DETERMINE FINAL POSITION OF THE COMPLETED WORK.

14) OBSERVATION VISITS TO THE PROJECT SITE BY FIELD REPRESENTATIVES OF THE ARCHITECT AND THE ENGINEER (SUPPORT SERVICES) SHALL NOT INCLUDE INSPECTIONS OF SAFETY OR PROTECTIVE MEASURES, NOR CONSTRUCTION PROCEDURES, TECHNIQUES OR METHODS. ANY SUPPORT SERVICES PERFORMED BY THE ENGINEER DURING ANY PHASE OF THE CONSTRUCTION, SHALL BE DISTINGUISHED FROM CONTINUOUS AND DETAILED INSPECTION SERVICES (AS REQUIRED BY ANY REGULATING GOVERNMENTAL AGENCY, I.E. LOCAL BUILDING DEPARTMENT) PROVIDED BY OTHERS. THESES SUPPORT SERVICES, WHETHER MATERIAL OR WORK, ARE PERFORMED SOLELY FOR THE PURPOSE OF ASSISTING IN QUALITY CONTROL AND IN ACHIEVING CONFORMANCE TO THE CONSTRUCTION DOCUMENTS, BUT DO NOT GUARANTEE THE CONTRACTOR'S PERFORMANCE AND SHALL NOT BE CONSTRUED AS SUPERVISION OF CONSTRUCTION.

15) PROVIDE OPENINGS AND SUPPORTS AS REQUIRED PER TYPICAL DETAILS AND NOTES FOR MECHANICAL AND ELECTRICAL

16) THESE NOTES, DETAILS, DRAWINGS, AND SPECIFICATIONS (CONTRACT DOCUMENTS) DO NOT CARRY NECESSARY PROVISIONS FOR CONSTRUCTION SAFETY. THESE DOCUMENTS AND ALL PHASES OF CONSTRUCTION HEREBY CONTEMPLATED ARE TO GOVERNED, AT ALL TIMES, BY APPLICABLE PROVISIONS OF THE CURRENT LOS ANGELES OCCUPATIONAL AND HEALTH ACT.

17) WHERE ANY CONFLICT OCCURS BETWEEN THE REQUIREMENTS OF FEDERAL, STATE, AND LOCAL LAWS, CODES, ORDINANCES, RULES, REGULATIONS AND RESEARCH REPORTS, THE MOST STRINGENT (OR CONSERVATIVE) SHALL GOVERN. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND THE ENGINEER OF SUCH CONFLICT IMMEDIATELY.

18) PRIOR TO COMMENCING WITH THE CONSTRUCTION, THE CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS TO COORDINATE WITH STRUCTURAL DRAWINGS, AND ANY DISCREPANCY BETWEEN THESE DRAWINGS SHALL BE REFERRED TO THE ARCHITECT AND THE ENGINEER FOR CLARIFICATION BEFORE START OF CONSTRUCTION.

19) IN THE EVENT THAT CERTAIN FEATURES OF THE CONSTRUCTION ARE NOT FULLY SHOWN ON THE DRAWINGS OR CALLED FOR IN THE GENERAL NOTES OR SPECIFICATIONS, THEN THEIR CONSTRUCTION SHALL BE OF THE SAME CHARACTER AS FOR SIMILAR (SIM.) CONDITIONS THAT ARE SHOWN OR CALLED FOR.

20) ASTM DESIGNATIONS AND STANDARDS, AND LARR REPORTS, REFER TO THE LATEST AMENDMENTS.

21) ONLY "APPROVED AND PERMITTED" STRUCTURAL WORKING DRAWINGS (AND ALL OTHER CONSTRUCTION DOCUMENTS) ARE PERMITTED TO BE USED FOR CONSTRUCTION ON THIS PROJECT. ALL OTHER DRAWINGS ARE OBSOLETE AND ARE NOT PERMITTED ON THE JOB SITE, NOR SHALL THEY BE USED FOR ANY CONSTRUCTION PURPOSES (INCLUDING THE CALCULATION OF ALL FINAL ESTIMATES AND BIDS). ANY CONTRACTOR USING UNAPPROVED DRAWINGS WILL BE HELD SOLELY RESPONSIBLE FOR ALL WORK NOT PERFORMED IN ACCORDANCE WITH THE "APPROVED" DRAWINGS.

22) THE CONTRACTOR SHALL SUBMIT TO THE ARCHITECT AND ENGINEER A CONSTRUCTION SCHEDULE OUTLINING THE SEQUENCE OF THE CONSTRUCTION EVENTS AND ACTIVITIES (INCLUDING BUILDING DEPARTMENT SUBMITTALS AND PERMIT ACQUISITIONS) PRIOR TO COMMENCING WITH THIS PROJECT. THE CONTRACTOR

CONCRETE

1) ALL APPLICABLE SECTIONS OF AMERICAN CONCRETE INSTITUTE (ACI) 318 - 05 ('SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS') SHALL BE CONSIDERED AS A PART OF THESE SPECIFICATIONS. THE CONTRACTOR SHALL MAINTAIN A COPY OF THIS PUBLICATION AT THE JOB SITE AT ALL TIMES.

2) ALL CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH (F'C') OF 2500 P.S.I. AT TWENTY-EIGHT (28) DAYS. ALL CONCRETE SHALL BE REGULAR WEIGHT (UNLESS SPECIFICALLY NOTED OTHERWISE). THE MAXIMUM WATER TO CEMENT RATIO SHALL BE 0.45 AND THE MAXIMUM SLUMP SHALL BE 4" AS VERIFIED BY A DEPUTY INSPECTOR AND PATCH PLANT RECORDS.

3) ALL CONCRETE WORK SHALL COMPLY WITH LOS ANGELES BUILDING CODE (L.A.B.C.) CHAPTER 19.

4) SPECIAL INSPECTION (AS REQUIRED OR SPECIFIED) SHALL CONFORM TO L.A.B.C. SECTION 1901.5. SPECIAL INSPECTION SERVICES SHALL BE PROVIDED BY AN I.C.C. CERTIFIED DEPUTY INSPECTOR OR BUILDING DEPARTMENT APPROVED ENGINEER.

5) CEMENT SHALL CONFORM TO A.C.I. CHAPTER 3.2
TYPE I OR II LOW ALKALI.

6) AGGREGATES SHALL CONFORM TO A.C.I. CHAPTER 3.3
AGGREGATE SIZE SHALL NOT EXCEED 3/4".

7) WHERE NOT SPECIFICALLY DETAILED, THE MINIMUM CONCRETE COVER ON REINFORCING STEEL SHALL BE:

A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH OR WEATHER: 3"
B. CONCRETE PLACED AGAINST FORMS, BUT EXPOSED TO EARTH OR WEATHER: 2"
C. SLABS, WALLS AND JOISTS, NOT EXPOSED TO EARTH OR WEATHER: 3/4"
D. BEAMS, GIRDERS, AND COLUMNS, NOT EXPOSED TO EARTH OR WEATHER: 1 1/2"

8) MINIMUM LAP SPLICE FOR ALL REINFORCING BARS AT SPLICES: (SPLICES TO BE STAGGERED):

#3, #4, #5, AND #6: 30" #7: 36" #8: 42"

9) THE MINIMUM RADIUS OF BEND FOR REINFORCING STEEL (MEASURED ON THE INSIDE OF THE BAR) SHALL BE AS FOLLOWS:

#3: 1 1/8" #4:1 1/2" #5:1 7/8" #6:2 1/4" #7:2 5/8" #8:3"

10) ALL ANCHOR BOLTS USED IN CONCRETE CONSTRUCTION SHALL HAVE A MINIMUM TOTAL EMBEDMENT AS FOLLOWS, UNLESS NOTED OTHERWISE:

5/8" DIAMETER OR SMALLER: 8" 3/4" DIAMETER: 9"
7/8" DIAMETER: 9" 1" DIAMETER: 10"

11) LOCATION OF ALL CONSTRUCTION JOINTS, OTHER THAN SPECIFIED, SHALL BE APPROVED BY THE ARCHITECT AND THE ENGINEER PRIOR TO POURING. CONSTRUCTION JOINTS SHALL BE THOROUGHLY AIR AND WATER CLEANED AND HEAVILY ROUGHENED SO AS TO EXPOSE COARSE AGGREGATES. ALL SURFACES TO RECEIVE CONCRETE SHALL BE MAINTAINED CONTINUOUSLY WET AT LEAST THREE HOURS IN ADVANCE OF POURING.

12) ALL REINFORCING STEEL, ANCHOR BOLTS, DOWELS, INSERTS, AND ANY OTHER HARDWARE TO BE SET INTO CONCRETE SHALL BE WELL SECURED IN POSITION PRIOR TO POURING OF CONCRETE.

13) THE ARCHITECT, ENGINEER, AND INSPECTOR SHALL BE NOTIFIED, IN A TIMELY MANNER, FOR REINFORCING INSPECTION PRIOR TO THE POURING OF ANY CONCRETE.

14) THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ARCHITECT AND THE ENGINEER PRIOR TO PLACING SLEEVES, PIPES, DUCTS, CHASES, CORING, AND OPENING ON OR THROUGH STRUCTURAL CONCRETE BEAMS, WALLS, FLOORS AND ROOF SLABS, UNLESS SPECIFICALLY NOTED OR DETAILED. ALL PIPES OR CONDUITS PASSING THROUGH CONCRETE MEMBERS SHALL BE SLEEVED WITH STANDARD STEEL PIPES.

15) FORMWORK DESIGN AND REMOVAL SHALL CONFORM TO L.A.B.C. SECTION 1906.1.

16) VIBRATE ALL CONCRETE (INCLUDING SLABS ON GRADE) AS IT IS PLACED WITH A MECHANICAL VIBRATOR OPERATED BY EXPERIENCED PERSONNEL. THE VIBRATOR SHALL BE USED TO CONSOLIDATE THE CONCRETE, NOT TRANSPORT IT. REINFORCING STEEL AND FORMS SHALL NOT BE VIBRATED.

17) ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN CONCRETE INSTITUTE (A.C.I.) BUILDING CODE (A.C.I. 318-05) AND THE LATEST EDITIONS OF THE A.C.I. MANUALS OF CONCRETE PRACTICE AND SPECIFICATIONS.

18) FORM REMOVAL: REMOVE FORMS IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

SIDE FORMS AT FOOTINGS: MINIMUM 2 DAYS.
EDGE FORMS OF SLAB ON GRADE STRIP 1: MINIMUM 1 DAY.

19) CONCRETE SHALL BE MAINTAINED IN A MOIST CONDITION FOR A MINIMUM OF FIVE DAYS AFTER PLACEMENT.

20) THE CONTRACTOR SHALL SUBMIT REQUESTS FOR THE USE OF ADMIXTURES TO THE ARCHITECT AND ENGINEER FOR THEIR REVIEW AND APPROVAL.

21) MIX DESIGNS SHALL BE PREPARED BY AN APPROVED TESTING LABORATORY AND SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL.

22) ONLY ONE GRADE OF CONCRETE SHALL BE ALLOWED ON THE PROJECT SITE AT ANY ONE TIME.

23) UNLESS SPECIFICALLY DETAILED OR NOTED OTHERWISE, CONSTRUCTION AND CONTROL JOINTS SHALL BE PROVIDED IN ALL CONCRETE SLABS, AND SHALL BE LOCATED SUCH THAT THE AREA WITHIN THE JOINTS DOES NOT EXCEED 400 SQUARE FEET.

24) CONCRETE STRENGTH SHALL BE VERIFIED BY STANDARD CYLINDER TESTS (IN ACCORDANCE WITH L.A.B.C. STANDARD NO. 19-7) MADE BY AN APPROVED TESTING LABORATORY. THE CONTRACTOR SHALL MAINTAIN COPIES OF THE TEST REPORTS AT THE JOB SITE AND AVAILABLE FOR REVIEW AND INSPECTION BY THE BUILDING OFFICIALS. MAKE 3 TEST CYLINDERS FOR EACH DAY'S POUR. TEST EACH BATCH OF CYLINDERS AS FOLLOWS:1 AT 7 DAYS, AND 2 AT 28 DAYS.

25) REINFORCING BARS LARGER THAN #8 ARE NOT PERMITTED ON THE JOB UNLESS NOTED OTHERWISE.

26) CONCRETE SHALL NOT FREE FALL MORE THAN SIX FEET. USE TREMIE, PUMP, OR OTHER APPROVED METHODS.

FOUNDATION

1) BASIS:
FOUNDATION DESIGN AND CONSTRUCTION SHALL BE PER 2008 LOS ANGELES BUILDING CODE (L.A.B.C.) CHAPTERS 18.

2) ALLOWABLE SOILS BEARING PRESSURE (FROM CHAPTER 18)

DEAD LOAD PLUS LIVE LOAD: 1,500 P.S.F. (COMPACTED FILL @ 95% RELATIVE DENSITY),

3) UNEXPECTED SOIL CONDITIONS: ALLOWABLE VALUES AND FOUNDATION DESIGN ARE BASED UPON SOIL CONDITIONS WHICH ARE TYPICALLY FOUND IN THIS LOCALE. ACTUAL SOIL CONDITIONS WHICH DEVIATE APPRECIABLY FROM THOSE ANTICIPATED SHALL BE REPORTED TO THE ARCHITECT, AND STRUCTURAL ENGINEER IMMEDIATELY.

4) ALL COMPACTION, FILL, BACKFILLING, AND SITE PREPARATION REQUIREMENTS AND PROCEDURES SHALL COMPLY WITH THE L.A.B.C. CHAPTERS 18 AND 33.

5) EXCAVATE TO REQUIRED DEPTHS AND DIMENSIONS (AS INDICATED IN THE DRAWINGS), CUT SQUARE AND SMOOTH WITH FIRM LEVEL BOTTOMS. CARE SHALL BE TAKEN NOT TO OVER-EXCAVATE FOUNDATION AT LOWER ELEVATION AND PREVENT DISTURBING OF SOILS AROUND HIGH ELEVATION.

6) FOOTINGS SHALL BE POURED IN NEAT EXCAVATIONS, WITHOUT SIDE FORMS WHENEVER POSSIBLE.

7) CARRY ALL FOUNDATIONS TO REQUIRED DEPTHS INTO COMPACTED FILL, NATURAL SOIL, OR BEDROCK AS VERIFIED BY THE APPROPRIATE BUILDING OFFICIAL.

8) FOUNDATIONS SHALL NOT BE POURED UNTIL ALL REQUIRED REINFORCING STEEL, SLEEVES, INSERTS, CONDUITS, PIPES,ETC. AND FORMWORK IS PROPERLY PLACED AND INSPECTED BY THE APPROPRIATE BUILDING OFFICIAL/INSPECTOR(S).

9) THE SIDES AND BOTTOMS OF EXCAVATIONS WHICH ARE TO HAVE CONCRETE CONTACT MUST BE MOISTENED SEVERAL TIMES JUST PRIOR TO POURING UPON THEM.

10) DE-WATER FOOTINGS AS REQUIRED TO MAINTAIN DRY WORKING CONDITIONS.

11) ALL FOUNDATION EXCAVATIONS SHALL BE INSPECTED BY THE APPROPRIATE BUILDING OFFICIAL, PRIOR TO FORMING AND PLACEMENT OF REINFORCING OR CONCRETE.

REINFORCING STEEL

1) ALL REINFORCING STEEL SHALL BE DEFORMED INTERMEDIATE GRADE BARS CONFORMING TO A.S.T.M. A-615, GRADE 60 AND A.C.I. CHAPTER 3.5.3.

2) REINFORCING STEEL SHALL NOT BE WELDED, UNLESS SPECIFICALLY NOTED OTHERWISE.

3) TO HOLD REINFORCING BARS IN THEIR TRUE POSITION AND PREVENT DISPLACEMENT, STANDARD TIE AND ANCHORAGE DEVICES MUST BE PROVIDED.

4) SHOP DRAWINGS FOR FABRICATION OF ANY REINFORCING STEEL SHALL BE APPROVED BY THE CONTRACTOR AND SUBMITTED TO THE ARCHITECT AND THE ENGINEER, FOR THEIR REVIEW, PRIOR TO FABRICATION.

5) REFER TO CONCRETE AND CONCRETE BLOCK NOTES FOR MINIMUM SPLICE LENGTH AND MINIMUM RADIUS OF BEND OF REINFORCING STEEL.

6) STAGGER SPLICES IN REINFORCING STEEL UNLESS SPECIFICALLY NOTED OTHERWISE.

7) ALL REINFORCING BAR BENDS SHALL BE MADE COLD.

8) FABRICATION, ERECTION, AND PLACEMENT OF REINFORCING STEEL SHALL CONFORM TO CONCRETE REINFORCING STEEL INSTITUTE C.R.S.I.) OF STANDARD PRACTICE.

9) ALL SLAB ON GRADE REINFORCING TO BE #4 AT 16" ON CENTER IN EACH DIRECTION. PLACE STEEL AT MID HEIGHT OF SLAB CROSS SECTION.

10) REINFORCING STEEL SHALL BE CLEAN OF RUST, GREASE, OR OTHER MATERIAL LIKELY TO IMPAIR BOND.

11) WELDING OF REINFORCING STEEL (WHERE SPECIFICALLY NOTED OR DETAILED) SHALL CONFORM TO A.C.I. CHAPTER 3.5.2.

IMPORTANT NOTES & REQUIREMENTS

1. THE SPECIAL INSPECTOR SHALL BE APPROVED BY THE CITY BEFORE PERFORMING ANY INSPECTION DUTIES.

2. THE SPECIAL INSPECTOR WILL NOT BE APPROVED BY THE CITY UNTIL THE IDENTIFICATION OF SPECIAL INSPECTION PROGRAM AND APPROVAL OF SPECIAL INSPECTORS FORM HAS BEEN COMPLETED BY THE ARCHITECT OR ENGINEER OF RECORD AND RETURNED TO THE CITY.

3. THE SPECIAL INSPECTOR WILL NOT BE APPROVED BY THE CITY UNTIL THE APPLICATION TO PROVIDE SPECIAL INSPECTION FORM HAS BEEN COMPLETED AND RETURNED TO THE CITY.

4. THE CITY BUILDING DIVISION WILL MAKE NO INSPECTIONS OF WORK REQUIRING SPECIAL INSPECTION UNTIL THE CITY APPROVED SPECIAL INSPECTOR HAS COMPLETED HIS INSPECTION AND HAS PROVIDED WRITTEN APPROVAL OF THE CONSTRUCTION TO THE BUILDING INSPECTOR.

5. NO CONCRETE SHALL BE PLACED, NO MASONRY SHALL BE GROUTED, AND NO WORK REQUIRING SPECIAL INSPECTION SHALL BE CONCEALED WITHOUT WRITTEN APPROVAL FROM THE CITY BUILDING INSPECTOR.

6. THE ARCHITECT OR ENGINEER OF RECORD SHALL APPROVE EACH SPECIAL INSPECTOR.

7. THE SPECIAL INSPECTOR SHALL BE EMPLOYED BY THE OWNER, THE ENGINEER OR THE ARCHITECT OF RECORD, OR THE AGENT OF THE OWNER, BUT NOT THE CONTRACTOR OR ANY OTHER PERSON RESPONSIBLE FOR THE WORK.

8. THE SPECIAL INSPECTOR SHALL COMPLY WITH ALL CITY REQUIREMENTS MAY RESULT IN REVOCATION OF THE SPECIAL INSPECTOR'S PRIVILEGE TO INSPECT IN THE CITY.

TIMBER

1) FRAMING:

2X AND SMALLER TO BE DOUGLAS FIR GRADE #2 OR BETTER UNLESS NOTED OTHERWISE (FLOOR JOISTS TO BE DOUGLAS FIR #1). 4X AND LARGER TO BE #1 OR BETTER UNLESS NOTED OTHERWISE. POSTS TO BE DOUGLAS FIR #1. STUDS AT BEARING WALLS TO BE DOUGLAS FIR #2 OR BETTER AND STUDS AT NON-BEARING WALLS TO BE STUD GRADE OR BETTER.

2) FOUNDATION SILL PLATES SHALL BE CALIFORNIA REDWOOD (CLOSE GRAIN) OR PRESSURE TREATED DOUGLAS FIR (PTDF). SEE SHEAR WALL SCHEDULES AND FOUNDATION PLAN FOR ANCHOR BOLT SIZE AND SPACING. (MINIMUM SILL PLATE BOLTING SHALL BE 5/8" DIAMETER X 10" ANCHOR BOLT AT 4'-0" O.C. PROVIDE A MINIMUM OF TWO BOLTS PER PLATE WITH ONE BOLT WITHIN 12" OF EACH END OF PLATE),

3) BOLTS IN TIMBER TO HAVE STANDARD CUT WASHERS, UNLESS NOTED OTHERWISE. BOLTS USED WITH STEEL PLATES OR ANGLES MAY NOT REQUIRE WASHERS. HOLES FOR BOLTS TO BE A MAXIMUM OF 1/16 INCH LARGER THAN BOLT DIAMETER. ALL BOLTS SHALL CONFORM TO A.S.T.M. 307-68. ALL HOLDOWN BOLT HOLES SHALL BE DRILLED 1/32" TO 1/16" OVERSIZED. ALL HOLDOWN ANCHOR NUTS SHALL BE TIGHTENED JUST PRIOR TO COVERING. INSPECTOR TO VERIFY. SPECIAL DEPUTY INSPECTION FOR THE INSTALLATION OF HOLDOWN ANCHORS IS REQUIRED.

4) NAILS SHALL BE COMMON WIRE NAILS UNLESS NOTED OTHERWISE. NAILS SHALL NOT BE DRIVEN CLOSER THAN 1/2 THEIR LENGTH, NOT CLOSER TO THE EDGE OF THE MEMBER THAN 1/4 LENGTH, EXCEPT FOR SHEATHING. SUB-BORE WHEN NAILS TEND TO SPLIT WOOD. SUB-BORE FOR 20D AND LARGER NAILS. DRILL DIAMETER TO BE 0.75 TIMES NAIL DIAMETER. PREDRILL FOR ALL LAG SCREWS AND BOLTS (ALSO SEE SHEARWALL SCHEDULE)

5) STRUCTURAL HARDWARE CALLOUTS (JOIST HANGERS, POST BASES, HOLDOWNS AND ALL OTHER HARDWARE) SHOWN ON STRUCTURAL DRAWINGS REFER TO REFERENCE NUMBERS CONTAINED IN THE SIMPSON STRONG-TIE CO. INC. CATALOG UNLESS NOTED OTHERWISE. EQUIVALENT HARDWARE MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ARCHITECT AND THE STRUCTURAL ENGINEER.

6) PLYWOOD SHALL BE STRUCTURAL I (OR BETTER) WITH EXTERIOR GLUE, AS GRADED BY A.P.A. PLYWOOD SHALL CONFORM TO L.A.B.C.

7) ALL HORIZONTAL PLYWOOD SHALL BE LAID WITH FACE GRAIN PERPENDICULAR TO JOISTS AND WITH STAGGERED JOINTS.

8) SHEATHING

ROOF SHEATHING:

5/8" PLYWOOD (INDEX 24/0) NAILED WITH 10D COMMON WIRE NAILS 3" ON CENTER AT BUILDING BOUNDARIES, DRAG STRUTS AND AT PANEL EDGES AND AT 12" ON CENTER AT INTERMEDIATE SUPPORTS. PANEL EDGES TO BE UNBLOCKED.

FLOOR SHEATHING:

3/4" STRUCT 1 PLYWOOD (PANEL INDEX 48/24) GLUED AND NAILED WITH 10D COMMON WIRE NAILS AT 4" ON CENTER AT BUILDING BOUNDARIES AND DRAG STRUTS, 6" ON CENTER AT PANEL EDGES AND 12" ON CENTER AT INTERMEDIATE SUPPORTS. PANEL EDGES TO BE BLOCKED.

SHEAR PANELS:

SEE DETAILS AND SHEAR WALL SCHEDULE. SHEAR WALLS TO EXTEND FULL LENGTH OF WALL BETWEEN DOOR OR WINDOW OPENINGS OR END OF WALL UNLESS NOTED OTHERWISE. PLYWOOD SHEATHING AND FRAMING MUST EXTEND THE FULL HEIGHT OF THE WALL TO THE ROOF OR FLOOR DIAPHRAGM ABOVE. SEE SHEAR TRANSFER DETAILS FOR THE PROPER CONNECTION OF THE ROOF AND FLOOR DIAPHRAGMS TO ALL SHEAR WALLS. PLYWOOD SHEAR WALLS TO BE BLOCKED AND NAILED WITH COMMON NAILS. CONSTRUCTION OBSERVATION BY THE STRUCTURAL ENGINEER REQUIRED.

STRUCTURAL WOOD PANEL SHEARWALLS SHALL BE COVERED WITH A MINIMUM 2 LAYERS 15# FELT UNDERLAYMENT PRIOR TO PLACING FINISH MATERIAL.

9) ALL FLUSH FRAMED JOISTS OR BEAMS SHALL SEAT IN 'SIMPSON' JOIST HANGERS, SEE PLANS.

10) BUILT-UP OR MULTIPLE JOIST BEAMS SHALL NOT BE SUBSTITUTED FOR SOLID BEAMS.

11) PROVIDE 2X SOLID BLOCKING BETWEEN ALL JOISTS AND RAFTERS AT ALL SUPPORTS AND UNDER ALL PARTITIONS. 2 X 12 OR LARGER FLOOR JOISTS AND RAFTERS SHALL BE SUPPORTED LATERALLY BY BLOCKING AT INTERVALS NOT EXCEEDING EIGHT FEET AND AT ALL SUPPORTS. REFER TO L.A.B.C. SECTION 2308.10.6 FOR ALL BLOCKING REQUIREMENTS.

12) SLICES IN TOP PLATES SHALL HAVE A MINIMUM 4 FOOT LAP SPLICE WITH 20-16D NAILS.

13) ALL BEAMS SHALL BE SUPPORTED BY POSTS OR GIRDERS. FOR 4X8 AND SMALLER BEAMS 2-2X4 POSTS SHALL BE USED UNLESS NOTED OTHERWISE. FOR LARGER BEAMS A 4X4 POST SHALL BE USED UNLESS NOTED OTHERWISE. ALL POSTS SHALL PROVIDE FULL BEARING WIDTH FOR THE BEAM UNLESS NOTED OTHERWISE.

14) ALL POSTS SHALL CONTINUE THROUGH FLOORS (OR SOLID BLOCKED BETWEEN FLOORS) UNTIL A 4X (MINIMUM) BEAM OR FOUNDATION IS ENCOUNTERED.

15) ALL POSTS INSIDE WALLS MAY BEAR ON THE SILL PLATE UNLESS NOTED OTHERWISE. ISOLATED POSTS SHALL BE SEATED IN SIMPSON POST BASES.

16) FOR STUD WALLS HIGHER THAN 10' USE 2X6 D.F. #2 MINIMUM (U.N.O.). SEE SHEARWALL SCHEDULE FOR 3X6 STUD REQUIREMENTS FOR SHEARWALLS WITH STUDS 10 FEET AND TALLER.

17) NAILING TO COMPLY WITH FASTENING SCHEDULE - TABLE 2304.9.1 2008 L.A.B.C. UNLESS NOTED OTHERWISE. NAILING REQUIREMENTS STATED IN THE SPECIFICATIONS, PLANS OR DETAILS SHALL SUPERSEDE TABLE 2304.9.1

TABLE NO. 2304.9.1 FASTENING SCHEDULE (ABBREVIATED VERSION)

CONNECTION	NAILING
A) JOIST TO SILL OR GIRDER (TOENAIL)	3-8D
B) BRIDGING TO JOIST, TOENAIL EACH END.	2-8D
C) SOLE PLATE TO JOIST OR BLOCKING FACE NAIL	16D AT 16" O.C.
D) TOP PLATE TO STUD, END NAIL	2-16D
E) STUD TO SOLE PLATE	4-8D, TOENAIL OR 2-16D, END NAIL
F) DOUBLE STUDS, FACE NAIL	16D AT 24" O.C.
G) DOUBLED TOP PLATES, FACE NAIL	16D AT 16" O.C.
H) TOP PLATE INTERSECTIONS, FACE NAIL	2-16D
I) CONTINUOUS HEADER, TWO PIECES	16D AT 16" O.C. ALONG EACH EDGE.
J) CEILING JOISTS TO PLATE, TOENAIL	3-8D
K) CONTINUOUS HEADER TO STUD, TOENAIL	4-8D
L) CEILING JOIST, LAPS OVER PARTITIONS,	3-16D
M) CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	3-16D
N) RAFTER TO PLATE, TOENAIL	3-8D
O) 1" BRACE TO EACH STUD AND PLATE, FACE NAIL	2-8D
P) BUILT-UP CORNER STUDS	16D AT 24" O.C.

18) ALL LUMBER SHALL CONFORM TO L.A.B.C. SECTION 2303.

19) MAXIMUM MOISTURE CONTENT FOR ALL STRUCTURAL MEMBERS SHALL NOT EXCEED 19% (UNLESS SPECIFICALLY NOTED OTHERWISE).

20) PROVIDE 2X SOLID FIRE BLOCKING IN ALL STUD WALLS AT A MAXIMUM OF 8'-0" VERTICAL SPACING.

21) PLACE ALL BEAMS WITH NATURAL CAMBER UPWARD.

22) WHERE WOOD STUD WALLS ABUT CONCRETE OR MASONRY WALLS, THE END STUD (PTDF OR REDWOOD) SHALL BE BOLTED TO THE CONCRETE/MASONRY WITH 1/2" DIAMETER ANCHOR BOLTS (WITH EMBEDMENT OF 2/3 THE WALL THICKNESS) 12" FROM TOP AND BOTTOM OF THE STUD AND AT 4'-0" ON CENTER.

23) NO STRUCTURAL MEMBERS (JOISTS, PLATES, STUDS, BEAMS, COLUMNS, ETC.) SHALL BE NOTCHED, CUT, OR DRILLED (EXCEPT FOR THOSE HOLES REQUIRED FOR BOLTING) UNLESS SPECIFICALLY NOTED (SEE NOTES #24 AND #25) OR DETAILED OTHERWISE, OR WITH THE WRITTEN APPROVAL OF THE ARCHITECT AND THE STRUCTURAL ENGINEER.

24) HOLES AND NOTCHES IN JOISTS:

A. NOTCHES IN THE TOP AND BOTTOM OF JOISTS SHALL NOT EXCEED ONE SIXTH THE DEPTH AND SHALL NOT BE LOCATED IN THE MIDDLE THIRD OF THE SPAN OR WITHIN 18" OF THE SUPPORTS.
B. HOLES BORED IN JOISTS SHALL NOT EXCEED ONE SIXTH OF THE JOIST DEPTH AND SHALL BE LOCATED WITHIN THE MIDDLE 2/3 OF THE SPAN AND WITHIN THE MIDDLE THIRD OF THE JOIST'S DEPTH.
C. THE ABOVE GUIDELINES DO NOT APPLY TO TRUSJOIST PLYWOOD WEB "I" JOISTS. REFER TO TRUSJOIST MACMILLIAN FOR ALLOWABLE BORING OF TJI PRODUCTS.

25) HOLES AND NOTCHES IN STUDS, PLATES, AND SILLS: BORED HOLES MAY BE PLACED IN STUDS, PLATES,AND SILLS PROVIDED THAT THEY ARE ACCURATELY CENTERED ABOUT STUD, SPACED A MINIMUM OF 12" APART AND THE HOLE DIAMETER DOES NOT EXCEED 25% OF THE STUD WIDTH. STUDS MAY BE NOTCHED PROVIDED NOTCH DEPTH DOES NOT EXCEED 25% OF STUD WIDTH. SHOULD THE BORED HOLE EXCEED 25%, CONTACT THE ARCHITECT AND THE STRUCTURAL ENGINEER IMMEDIATELY.

EPOXY SET DOWELS AND RODS

1) EPOXY OR RESIN ADHESIVE WILL BE USED IN ALL LOCATIONS WHERE EITHER ALL-THREAD ROD OR REBAR ARE BEING EMBEDDED INTO EXISTING CONCRETE OR MASONRY AS TENSION ROD OR SHEAR ELEMENTS.

2) CONTRACTOR SHALL MIX AND INSTALL RESIN AND HARDENER PER MANUFACTURER'S SPECIFICATION. ALL EPOXY SET THREADED RODS SHALL BE SET UNDER SPECIAL DEPUTY INSPECTION.

3) HOLES IN CONCRETE MAY BE DRILLED WITH ROTARY HAMMER DRILL. FOR HOLES IN MASONRY, A HAMMER ACTION DRILL SHALL NOT BE USED. SIZE SHALL BE PER MANUFACTURER'S RECOMMENDATION. IMMEDIATELY BEFORE APPLYING ADHESIVE, HOLES SHALL BE REAMED WITH A CIRCULAR WIRE BRUSH ATTACHED TO A DRILL MOTOR AND THEN BLOWN OUT WITH OIL-FREE COMPRESSED AIR.

4) ADHESIVE FOR DOWNWARD HOLES MAY BE EITHER NON-