

**SPECIAL INSPECTION NOTES:**

- OWNER SHALL EMPLOY LICENSED DEPUTY INSPECTION FIRM TO PROVIDE THE FOLLOWING SPECIAL INSPECTIONS. THE FIRM EMPLOYED SHALL FORWARD ALL CORRESPONDENCE TO THE ARCHITECT / ENGINEER OF RECORD.
- SPECIAL INSPECTION IS REQUIRED FOR ALL WELDING.**
  - FOR ALL HOLES DRILLED LARGER THAN 1/2" OR ANY NOTCHES IN BOLTS OR JOISTS SHALL BE APPROVED BY THE ARCH. PRIOR TO INSTALLATION. SEE DETAIL 1-A.
  - ALL STEEL FABRICATION SHALL BE DONE IN CERTIFIED SHOP, APPROVED BY THE CITY PER SECT. 1104.2.2
  - ALL SHOP WELDING SHALL BE DONE BY A FABRICATOR APPROVED BY DEPARTMENT OF BUILDING AND SAFETY PER 2007 C.B.C. CHAPTER 1102. IN LIEU OF FABRICATOR APPROVAL, THE OWNER MAY EMPLOY A SPECIAL INSPECTOR WHICH IS TO BE APPROVED BY THE DEPARTMENT OF BUILDING AND SAFETY. WHO WILL INSPECT ALL PHASES OF SHOP WELDING DURING SUCH TIMES THE WELDING IS TAKING PLACE. THE FABRICATOR OR SPECIAL INSPECTOR SHALL SUBMIT THEIR CREDENTIALS FOR REVIEW AND APPROVAL BY THE DEPARTMENT OF BUILDING AND SAFETY PRIOR TO THE START OF FABRICATION OR INSPECTION.
  - ALL FIELD WELDING SHALL BE DONE BY CERTIFIED WELDERS.
  - FULL PENETRATION WELDS AND FILLET WELDS 5/16" OR LARGER SHALL BE DONE UNDER THE OBSERVATION OF AN APPROVED SPECIAL INSPECTOR. SUCH INSPECTOR SHALL SUBMIT HIS / HER CREDENTIALS FOR REVIEW BY THE DEPARTMENT OF BUILDING AND SAFETY PRIOR TO REPORTING TO THE JOBSITE.

**REQUIRE SPECIAL INSPECTION.**  
 ALL SPECIAL INSPECTION SHALL BE DONE IN ACCORDANCE WITH CHAPTER 11 OF THE 2007 C.B.C. AND SUBSECTIONS 1104, 1105, 1106, AND 1107.  
 IN ADDITION TO THE REGULAR INSPECTION, THE FOLLOWING ITEMS WILL ALSO REQUIRE SPECIAL INSPECTION.

**SEE SPECIAL INSPECTION TABLES THIS SHEET FOR PERIODIC AND CONTINUOUS SPECIAL INSPECTIONS (NOT LISTED BELOW PER 2007 C.B.C.)**

**ALL ITEMS LISTED BELOW, IN ADDITION TO SPECIAL INSPECTION TABLES, REQUIRE PERIODIC SPECIAL INSPECTIONS**

- SOILS COMPLIANCE BY SOILS ENGINEER.
- ALL CONCRETE GREATER THAN 2500psi (GRADE BEAMS 3000psi)
- WOOD SHEAR WALLS, SHEAR PANELS AND DIAPHRAGMS, INCLUDING NAILING, BOLTING, ANCHORING AND OTHER FASTENING TO OTHER COMPONENTS OF THE SEISMIC-FORCE-RESISTING SYSTEM, WHERE THE FASTENER SPACING OF SHEATHING IS LESS THAN 4" ON CENTER.
- COLD FORMED STEEL FRAMING, WELDING OPERATIONS OF ELEMENTS OF THE SEISMIC-FORCE-RESISTING SYSTEM, SCREW ATTACHMENT, BOLTING, ANCHORING AND OTHER FASTENING TO THE SEISMIC-FORCE-RESISTING SYSTEM, INCLUDING STRUTS, BRACES, AND HOLD-DOWNS.
- HIGH STRENGTH BOLTS (BRACED FRAMES & MOMENT FRAMES)
- STEEL BAR JOIST SHEAR STUD CONNECTORS.
- ARCHITECTURAL, MECHANICAL AND ELECTRICAL COMPONENTS FOR SEISMIC RESISTANCE.

**ALL ITEMS LISTED BELOW, IN ADDITION TO SPECIAL INSPECTION TABLES, REQUIRE CONTINUOUS SPECIAL INSPECTIONS**

- FIELD WELDING
  - SPECIAL MOMENT FRAMES
  - BRACED STEEL FRAMES
- WELDS FOR ALL MOMENT FRAMES & BRACED FRAMES SHALL HAVE ULTRASONIC TESTING BY A REGISTERED TESTING LABORATORY
- ALL CONCRETE SHALL BE COMPRESSION TESTED BY A REGISTERED DESIGN PROFESSIONAL
- ALL SPECIAL INSPECTION SHALL BE PERFORMED BY INDEPENDENT INSPECTION AGENCY EMPLOYED BY THE OWNER OR ARCHITECT AND NOT THE CONTRACTOR PER SEC. 1101

AGENCY OR INSPECTOR DOING SPECIAL INSPECTION MUST BE APPROVED BY THE DEPARTMENT OF BUILDING AND SAFETY, COUNTY OF RIVERSIDE.

THE OWNER OR ARCHITECT / ENGINEER OF RECORD ACTING AS OWNER'S AGENT MUST SIGN STATEMENT CERTIFYING SATISFACTORY COMPLETION OF SPECIAL INSPECTION PRIOR TO THE FINAL INSPECTION.

**GENERAL**

- THE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE BUT NOT BE LIMITED TO: BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC.
- ANY CHANGE, MODIFICATION OR ALTERATION OF THESE PLANS SHALL BE AT THE SOLE RISK OF THE PERSON MAKING OR CAUSING THE SAME, AND SHOULD BE REVIEWED BY A LICENSED ARCHITECT FOR CONFORMITY WITH THESE PLANS.
- THE OWNER AGREES TO HOLD HARMLESS, INDEMNIFY, AND DEFEND THE ARCHITECT, HIS EMPLOYEES, AND ENGINEERS AGAINST ANY AND ALL LIABILITY, CLAIMS, DAMAGES, AND COST OF DEFENSE ARISING OUT OF THE ERRORS OR OMISSIONS, OR NEGLIGENT ACTS CAUSED BY THE MODIFICATIONS TO THE PLANS AND SPECIFICATIONS.
- ALL WORK SHALL CONFORM TO THE 2007 CALIFORNIA BUILDING CODE STANDARDS, AND THE REGULATIONS OF THE STATE OF CALIFORNIA DIVISION OF INDUSTRIAL SAFETY, AND THOSE CODES AND STANDARDS LISTED IN THESE NOTES.
- THESE NOTES AND SPECIFICATIONS ON STRUCTURAL DRAWINGS GOVERN IN CASE OF CONFLICT WITH OTHER SPECIFICATIONS, NOTIFY ENGINEER OF CONFLICTS WITH OTHER SPECIFICATIONS IMMEDIATELY.
- NOTES AND DETAILS ON STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES, SPECIFICATIONS AND DETAILS PROVIDED ON 5-I SHEET. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT.
- THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE STARTING WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER/ARCH. IMMEDIATELY.
- DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALES SHOWN ON DRAWINGS. TYPICAL DETAILS AND GENERAL NOTES ARE MINIMUM REQUIREMENTS TO BE USED WHEN CONDITIONS ARE NOT SHOWN OTHERWISE.
- CONTRACTOR SHALL INVESTIGATE SITE DURING CLEARING AND EARTHWORK OPERATIONS FOR FILLED EXCAVATIONS OR BURIED STRUCTURES SUCH AS CESSPOOLS, CISTERNS, FOUNDATIONS ETC. IF ANY SUCH STRUCTURES ARE FOUND, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
- CONSTRUCTION MATERIAL SHALL BE SPREAD OUT IF PLACED ON ROOF. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT. PROVIDE ADEQUATE SHORING AND/OR BRACING. SEE ROOF FRAMING NOTES 2 AND 3.
- WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENDUM.
- GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL SUBMIT WRITTEN R.F.I. (REQUEST FOR INFORMATION) FORMS FOR SPECIFIC CLARIFICATIONS AND OR QUESTIONS RELATIVE TO THE APPROVED PLANS AND DETAILS, DIRECTED TO THE ENGINEER. ALL R.F.I. CORRESPONDENCE MUST BE DIRECTED THROUGH THE ARCHITECT IN WRITING. R.F.I.'S MUST INCLUDE: NAME OF COMPANY AND SPECIFIC TRADE, WITH ADDRESS. NAME OF INDIVIDUAL TO CONTACT, WITH TELEPHONE AND FAX NUMBERS. SPECIFICS OF QUESTION INCLUDING ALL DETAIL AND PLAN REFERENCES WITH CLEARLY WRITTEN REQUEST. R.F.I.'S MUST INCLUDE DATE, AND R.F.I. NUMBERS THAT COORDINATE THE ARCHITECT.

**CONCRETE**

- ALL CONCRETE SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI AT 28-DAYS, UNLESS NOTED OTHERWISE. THE WATER TO CEMENT RATIO SHALL NOT EXCEED 8 1/2 - GAL. PER SACK OF CEMENT. MINIMUM OF 5 SACKS OF CEMENT PER CUBIC YARD (lbs. of water/lb. of cement = 5lbs. water max./1 lb. of cement). MAX. SLUMP = 4"
- ALL CONCRETE SHALL CONFORM TO THE LATEST EDITION OF THE CALIFORNIA BUILDING CODE.
- ALL CEMENT SHALL CONFORM TO A.S.T.M. C-150, TYPE I OR II, LOW ALKALI
- FINE AND COARSE AGGREGATE SHALL CONFORM TO A.S.T.M. C-33 FOR STANDARD WEIGHT CONCRETE.
- ALL AGGREGATE SHALL BE COMPARABLE TO "SAN GABRIEL VALLEY" AGGREGATE. THE SHRINKAGE SHALL BE AS PER A.S.T.M. C-33 WITH THE AVERAGE DRYING SHRINKAGE AT 28-DAYS OF DRYING NOT EXCEEDING 0.048.
- DRY PACK SHALL BE COMPOSED OF ONE PART PORTLAND CEMENT TO NOT MORE THAN THREE PARTS SAND, (3000 P.S.I. MIN.) CONCRETE SHALL BE CURED BY KEEPING CONTINUOUSLY WET FOR 10- DAYS OR BY AN APPROVED CURING COMPOUND.
- FURNISH AND INSTALL CONCRETE AS INDICATED IN THE PLANS AND FOLLOWING NOTES AND IN ACCORDANCE WITH THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.

**GENERAL FOUNDATION NOTES**

- ALLOWABLE SOIL PRESSURES: 1500 PSF PER TABLE 1004.2 OF THE C.B.C.
- ALL REQUIRED FILL AND BACKFILL SHALL BE COMPACTED TO AT LEAST 90% OF THE MAXIMUM DENSITY OBTAINABLE BY THE A.S.T.M. DESIGNATION D-1551 METHOD OF COMPACTION. FLOODING OR JETTING IS NOT PERMITTED.
- ALL FOOTINGS SHALL EXTEND TO A DEPTH OF AT LEAST 12" BELOW THE ADJACENT FINAL GRADE OR FLOOR LEVEL, WHICHEVER IS LOWER UNLESS NOTED OTHERWISE ON PLANS AND DETAILS.
- UNDER ALL INTERIOR CONCRETE FLOOR SLABS ON GRADE PROVIDE A 2" LAYER OF MOIST SAND OVER PROPERLY GRADED SUBGRADE.

**DESIGN CRITERIA**

- DESIGN LOADS @ SLOPED ROOF:  
 LIVE LOAD = 20 PSF
- NOT USED
- SEISMIC DESIGN CRITERIA 2007 C.B.C. SEISMIC COEFFICIENTS FOR CHAPTER 16 SEISMIC PROVISIONS  
 SEISMIC DESIGN CATEGORY: "D"  
 SITE CLASS: "B"  
 ZIP CODE: 92408  
 MAXIMUM CONSIDERED EARTHQUAKE (MCE) GROUND MOTION  
 SHORT PERIOD SPECTRAL RESPONSE, S<sub>s</sub> = 1.012  
 1 SECOND SPECTRAL RESPONSE, S<sub>1</sub> = 0.635g  
 SITE COEFFICIENT, F<sub>s</sub> = 1.00  
 SITE COEFFICIENT, F<sub>v</sub> = 1.00  
 S<sub>w</sub> = 1.182  
 S<sub>w</sub> = 0.635g  
 DESIGN EARTHQUAKE GROUND MOTION  
 SHORT PERIOD SPECTRAL RESPOND, S<sub>w</sub> = 1.208  
 1 SECOND SPECTRAL RESPONSE, S<sub>w</sub> = 0.24g  
 C<sub>s</sub> = .9664

- ALL SOILS SHALL BE PLACED UNDER THE SUPERVISION OF THE SOILS ENGINEER.
- PRIOR TO PLACEMENT OF REINFORCING STEEL THE SOILS ENGINEER SHALL INSPECT FOUNDATION EXCAVATIONS
- ALL REQUIRED FILL AND BACKFILL SHALL BE COMPACTED TO AT LEAST 90% OF THE MAXIMUM DENSITY OBTAINABLE BY THE A.S.T.M. DESIGNATION D-1551 METHOD OF COMPACTION. FLOODING OR JETTING IS NOT PERMITTED.
- ALL FOOTINGS SHALL EXTEND TO A DEPTH OF AT LEAST 12" BELOW THE ADJACENT FINAL GRADE OR FLOOR LEVEL, WHICHEVER IS LOWER UNLESS NOTED OTHERWISE ON PLANS AND DETAILS.
- UNDER ALL INTERIOR CONCRETE FLOOR SLABS ON GRADE PROVIDE A 2" LAYER OF MOIST SAND OVER PROPERLY GRADED SUBGRADE.

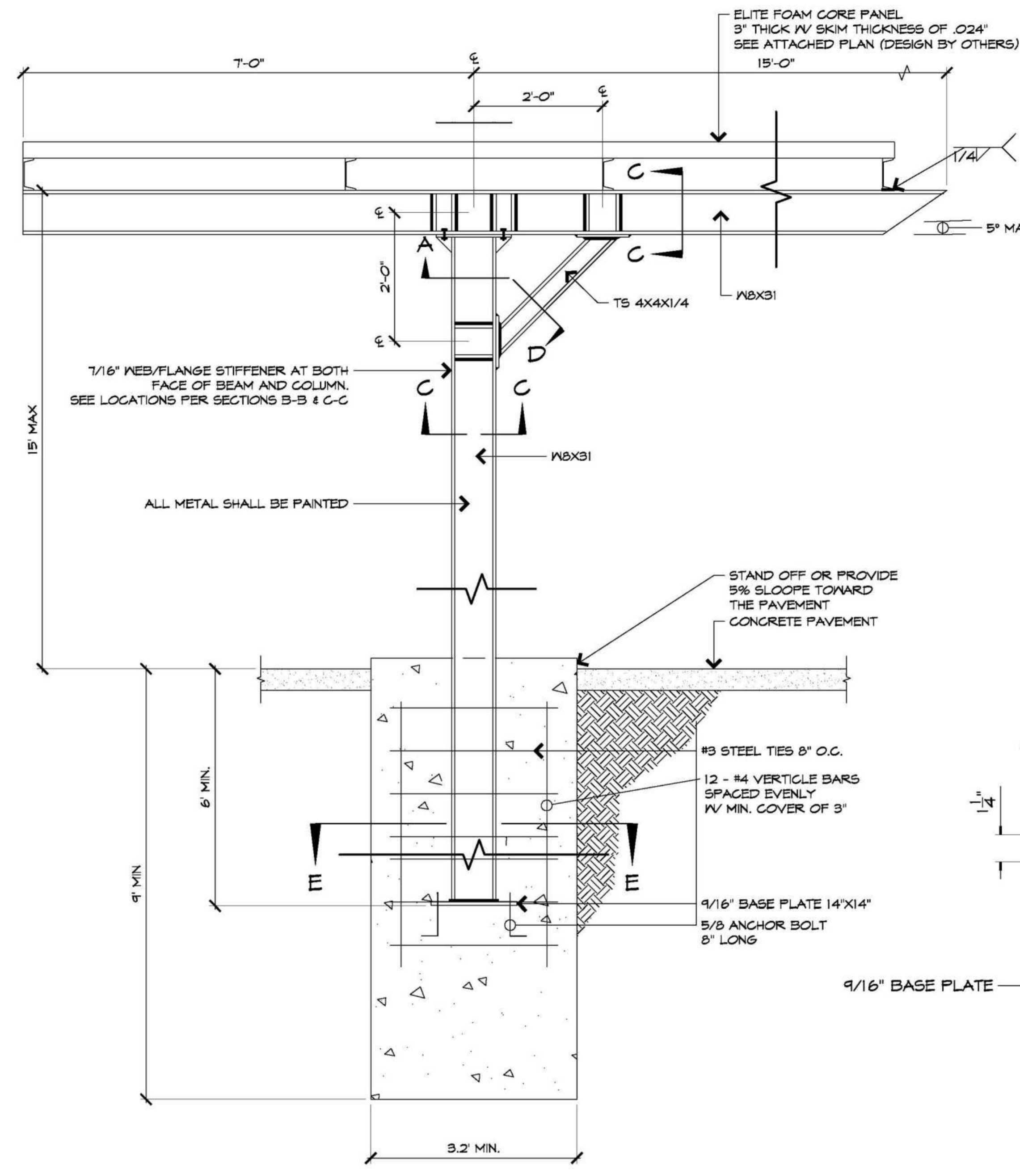
**REINFORCING STEEL**

- ALL REINFORCING SHALL BE A.S.T.M. A-615 GRADE 60 UNO.
- ALL REINFORCING TO BE WELDED SHALL BE OF A WELDABLE GRADE SUCH AS ASTM A706.
- REINFORCING BARS MARKED CONTINUOUS SHALL BE SPLICED WITH A LAP OF 44 BAR DIAMETERS MIN. IN CONCRETE AND 66 BAR DIAMETERS IN MASONRY. ALL CHORD BARS & END BARS SHALL HAVE 66 BAR DIAMETERS LAPS MIN. SEE DETAIL 4-S12
- ALL REINFORCING SHALL BE SECURELY TIED AND BRACED IN PLACE PRIOR TO POURING CONCRETE OR PLACING MASONRY.
- USE LOW HYDROGEN ELECTRODES, GRADE E-80 FOR WELDED REINFORCING BARS.
- PROVIDE THE FOLLOWING MINIMUM COVERING OF CONCRETE: BELOW GRADE (INFORMED) \_\_\_\_\_ 3" CLR. BELOW GRADE (FORMED) \_\_\_\_\_ 2" CLR.
- REINFORCING STEEL SHOP DRAWINGS FOR STRUCTURAL CONCRETE SLAB AND BEAMS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER THROUGH ARCHITECT FOR REVIEW PRIOR TO FABRICATION.

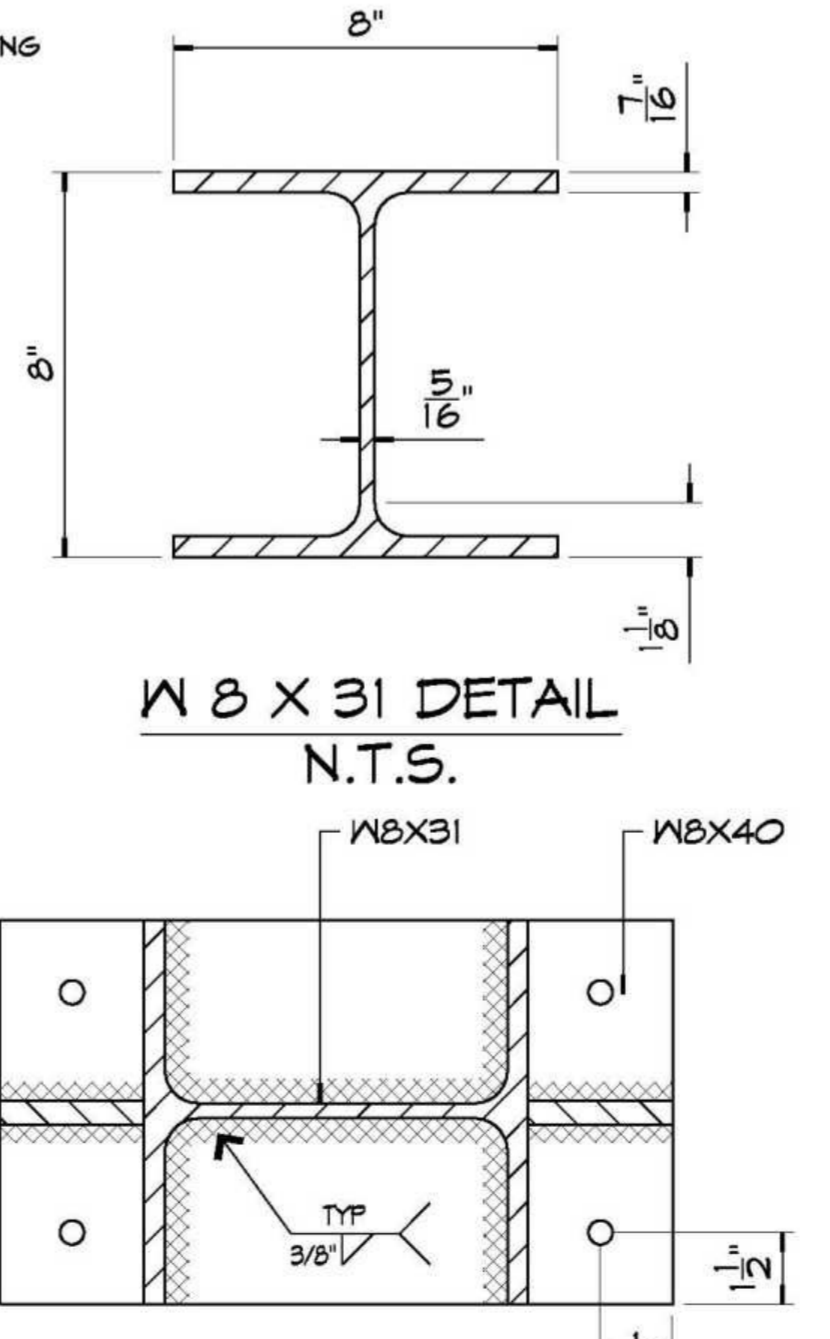
**GENERAL STRUCTURAL STEEL NOTES**

- STRUCTURAL STEEL I- SHAPES SHALL CONFORM TO A.S.T.M. (A992), (A50) ALL MOMENT FRAMES & BRACED FRAMES. ALL ANGLES CHANNELS, TEES & PLATES SHALL CONFORM TO (A572) GRADE 50 SPECIFICATION. ALL STRUCTURAL STEEL SHALL CONFORM TO THE A.I.S.C. SPECIFICATIONS FOR FABRICATION AND ERECTION. ALL MISCELLANEOUS ANGLES CHANNELS, TEES & PLATES SHALL CONFORM TO A36 SPECIFICATION. ALL STRUCTURAL STEEL SHALL CONFORM TO THE A.I.S.C. SPECIFICATIONS FOR FABRICATION AND ERECTION.
- ALL STEEL TUBES SHALL CONFORM TO A.S.T.M. A-500, GRADE "B". ALL STEEL PIPE SHALL CONFORM TO A.S.T.M. A-53, GRADE "B".
- ALL STRUCTURAL STEEL SHALL BE FABRICATED IN THE SHOP OF A LICENSED FABRICATOR AND SHOP DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER THROUGH THE ARCHITECT FOR APPROVAL PRIOR TO FABRICATION.
- ALL SHOP WELDING SHALL BE DONE BY A FABRICATOR APPROVED BY THE DEPARTMENT OF BUILDING AND SAFETY PER C.B.C. SECTION 1101.7 (F). IN LIEU OF FABRICATOR APPROVAL, THE OWNER MAY EMPLOY A SPECIAL INSPECTOR WHICH IS TO BE APPROVED BY THE DEPARTMENT OF BUILDING AND SAFETY. WHO WILL INSPECT ALL PHASES OF SHOP WELDING DURING SUCH TIMES THE WELDING IS TAKING PLACE. THE FABRICATOR OR SPECIAL INSPECTOR SHALL SUBMIT THEIR CREDENTIALS FOR REVIEW AND APPROVAL BY THE DEPARTMENT OF BUILDING AND SAFETY PRIOR TO THE START OF FABRICATION OR INSPECTION.
- ALL FIELD WELDING EXCEPT MINOR OR TACK WELDING SHALL BE DONE BY CERTIFIED WELDERS UNDER THE OBSERVATION OF AN APPROVED SPECIAL INSPECTOR. SUCH INSPECTOR SHALL SUBMIT HIS / HER CREDENTIALS FOR REVIEW OF APPROVAL BY THE DEPARTMENT OF BUILDING AND SAFETY PRIOR TO REPORTING TO THE JOBSITE.
- ALL STUDS WELDED TO STEEL BEAMS AND COLUMNS SHALL BE FULLY THREADED STEEL STUDS WITH 1/4" FILLET WELDS ALL AROUND, OR STUDS WELDED TO STEEL BEAMS AND COLUMNS SHALL BE NELSON STUDS OR OTHER APPROVED WFS.
- STRUCTURAL STEEL MEMBERS REQUIRED TO BE FIREPROOFED, NEED NOT BE PAINTED.
- ALL BOLTS SHALL CONFORM TO A.S.T.M. (A-307) FOR UNFINISHED BOLTS EXCEPT WHERE SPECIFICALLY NOTED AS HIGH STRENGTH BOLTS WHICH SHALL CONFORM TO A.S.T.M. (A-325). ALL (A-325) BOLTS SHALL HAVE SPECIAL INSPECTION.
- ALL THREADED RODS SHALL CONFORM TO A.S.T.M. (A-36) EXCEPT WHERE SPECIFICALLY NOTED AS HIGH STRENGTH THREADED RODS WHICH SHALL CONFORM TO A.S.T.M. (A-449).
- ALL WELDING SHALL CONFORM TO THE A.M.S. SPECIFICATIONS.
- ALL BOLTS FOR STEEL MEMBERS SHALL BE TRUE. BURNING OF HOLES FOR CONNECTIONS WILL NOT BE PERMITTED.
- PROVIDE FULL BEARINGS ON UNTHREADED PORTION OF BOLT SHANK FOR ALL STEEL CONNECTIONS.
- ALL BOLT SPACINGS IN STRUCTURAL STEEL CONNECTIONS TO BE 3" MIN. BETWEEN BOLTS AND 1 1/2" MIN. EDGE DISTANCE, UNLESS NOTED OTHERWISE.
- ALL NUTS FOR STRUCTURAL STEEL CONNECTIONS SHALL BE HEAVY HEXAGONAL NUTS.
- PROVIDE BEVELLED WASHERS UNDER NUTS AT STEEL CONNECTIONS, WHEN THE BEVEL EXCEEDS 1:20.
- PROVIDE LEVELING NUTS FOR ALL BOLTS AT BEAM SEATS AND COLUMN BASE PLATES.
- PROVIDE STANDARD HOLES FOR ALL BOLTED CONNECTIONS.
- PER AISC 341-05 SECTION 13B, WHERE WELDS ARE DESIGNATED AS "DEMAND CRITICAL", THEY SHALL BE MADE WITH A FILLER METAL CAPABLE OF PROVIDING A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT-LB (27J) AT -20°F (-29°C) AS DETERMINED BY THE APPROPRIATE AWS CLASSIFICATION TEST METHOD OR MANUFACTURER CERTIFICATION, AND 40 FT-LB (54 J) AT 10°F (12°C) AS DETERMINED BY APPENDIX X OR OTHER APPROVED METHOD, WHEN THE STEEL FRAME IS NORMALLY ENCLOSED AND MAINTAINED AT A TEMPERATURE OF 50°F (10°C) OR HIGHER. FOR STRUCTURES WITH SERVICE TEMPERATURES LOWER THAN 50°F (10°C), THE QUALIFICATION TEMPERATURE FOR APPENDIX X SHALL BE 20°F (11°C) ABOVE THE LOWEST ANTICIPATED SERVICE TEMPERATURE, OR AT A LOWER TEMPERATURE.

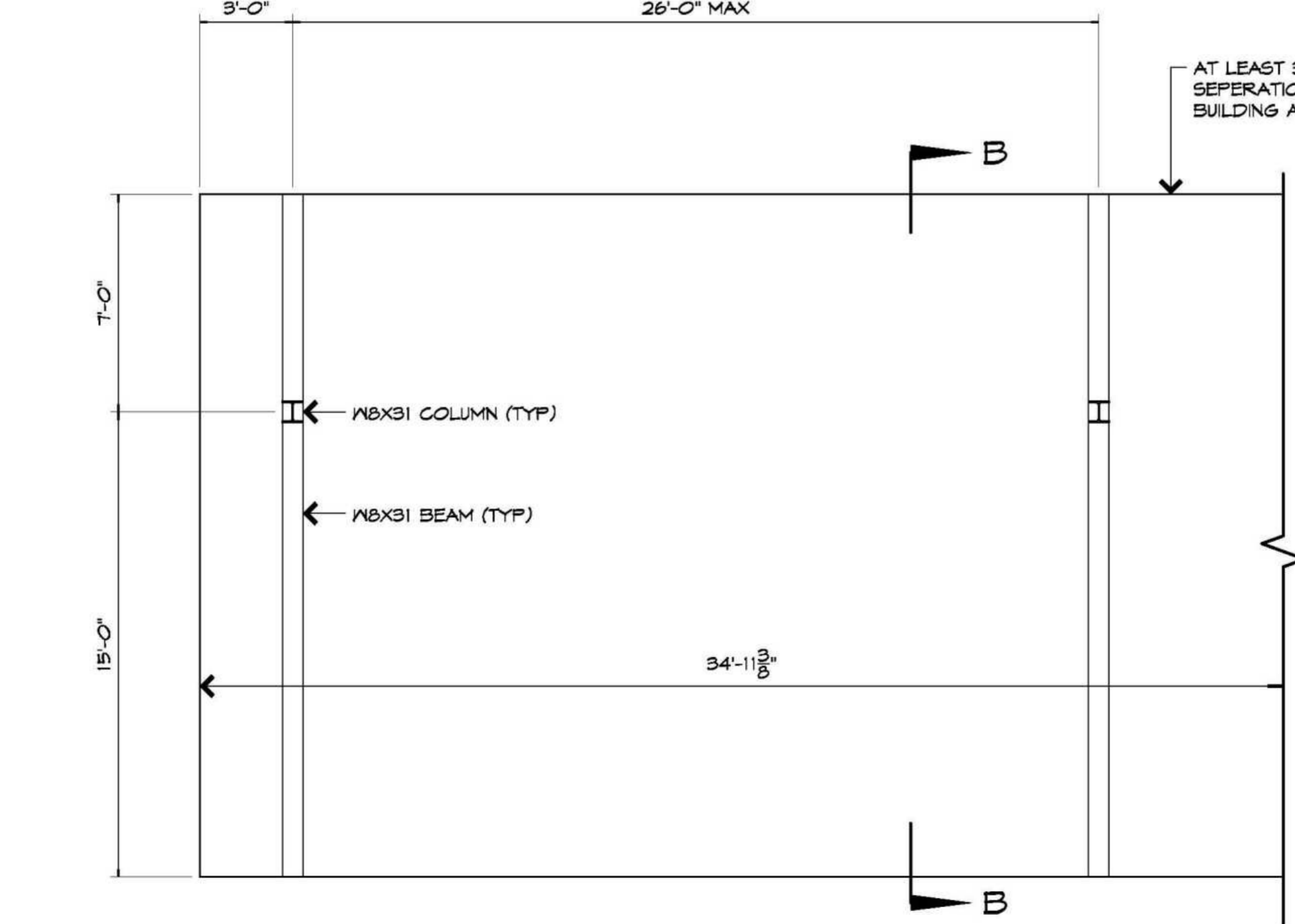
PROJECT COMPLIES WITH 2007 CBC



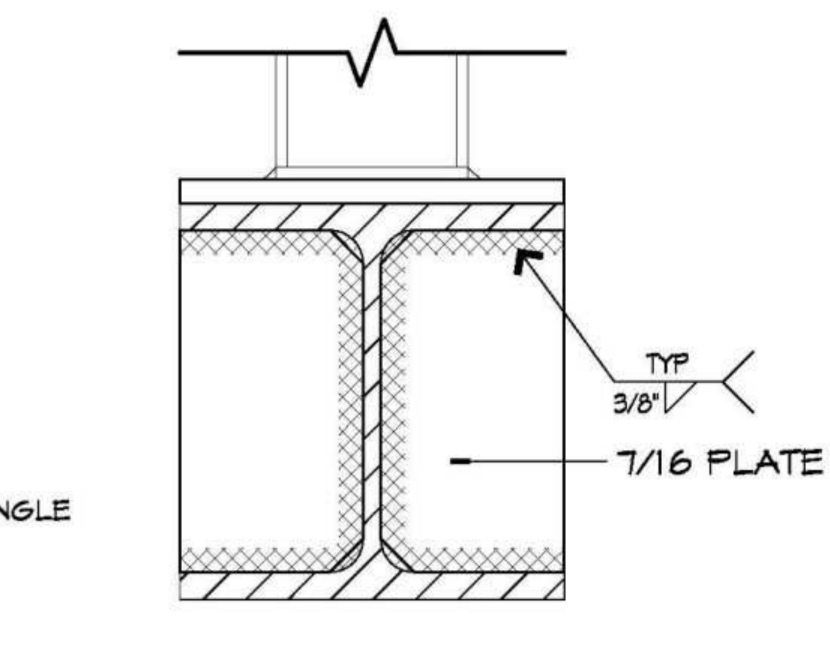
SECTION B-B  
3/4" = 1'-0"



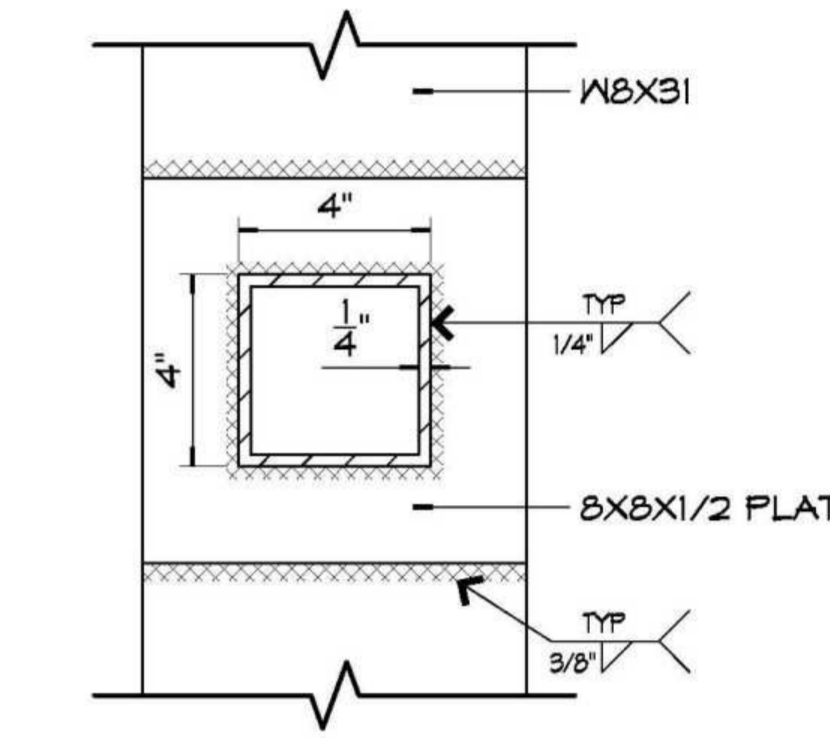
SECTION A-A  
WELDING DETAIL  
3/4" = 1'-0"



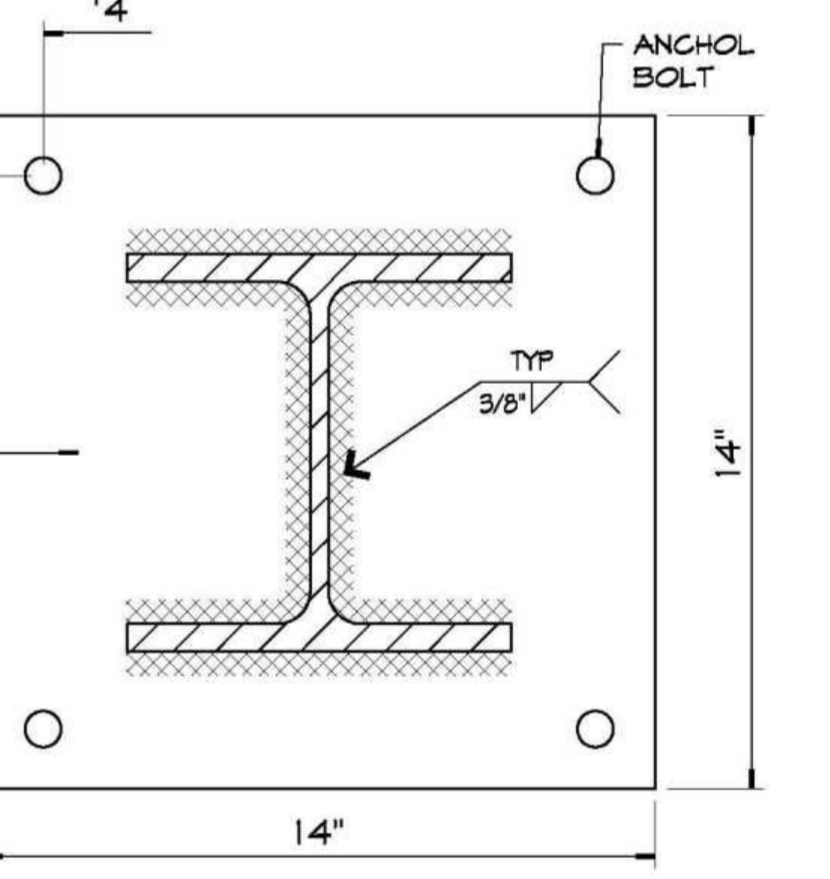
DETAIL "A"  
1/4" = 1'-0"



SECTION C-C  
WELDING DETAIL  
3/4" = 1'-0"



SECTION D-D  
WELDING DETAIL  
3/4" = 1'-0"



SECTION E-E  
BASE PLATE / WELDING DETAIL  
3/4" = 1'-0"



SITE PLAN  
N.T.S.



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