FRAMING CONSTRUCTION NOTES

REVISED AUGUST 21, 2003

1. CRAWL GIRDERS AND BEAMS WITH 4" CURTAIN WALL AND PIER CONSTRUCTION SHALL BE 2-2x10 SOUTHERN YELLOW PINE #2 UNLESS NOTED OVERSIZE, MAXIMUM CLEAR SPAN TO BE 4'-8" (6'-0" O.C. SPACING OF PIERS).

   TO AVOID OBJECTIONABLE CRACKING IN FINISHED HARDWOOD FLOORS OVER ANY GIRDERS, USE THE FOLLOWING PROCEDURE:

   A. NAILING
      i. ALL FLOOR JOISTS MUST BE TOENAILED TO THEIR SUPPORT GIRDERS WITH A MINIMUM OF 3-8d NAILS AT EACH END. LARGER NAILS WILL SPLIT AND RENDER THE TOENAIL INEFFECTIVE. NO END NAILING THROUGH THE GIRDER OR BAND IS PERMITTED.
      ii. IF DROPPED GIRDERS ARE USED, END LAP ALL JOISTS AND SIDE NAIL EACH USE A MINIMUM OF 3-8d NAILS AT EACH END OF EACH JOIST. LEDGER STRIPS NAILED WITH 2-16d NAILS AT EACH JOIST END, SPACED 3" APART.
      iii. NAIL MULTIPLE PIECE BUILT UP GIRDERS WITH TWO ROWS OF 16d NAILS STAGGERED AT 32" O.C., 2" FROM THE TOP AND 2" UP FROM THE BOTTOM WITH 3-16d NAILS AT EACH END OF EACH PIECE IN THE JOIST THROUGH THE MEMBERS MAKING UP THE MULTIPLE GIRDER.
      iv. THIS NAILING PATTERN WILL INSURE A TIGHT FLOOR FROM OUTSIDE OF HOUSE TO OUTSIDE SO THAT WHEN THE FRAMING SHRINKS DURING THE FIRST HEATING SEASON, THE SHRINKAGE WILL BE UNIFORMLY DISTRIBUTED OVER THE ENTIRE FLOOR. IF THE GIRDER NAILING PATTERN IS OMITTED, THEN THE SHRINKAGE WILL ACCUMULATE OVER THE GIRDERS AND AN OBJECTIONABLE CRACK WILL DEVELOP IN THE FINISHED HARDWOOD FLOOR OVER THE GIRDER LINE.
   B. AT ALL GIRDERS WHERE THE JOISTS CHANGE DIRECTION, INSTALL BRIDGING AT 6' O.C. FOR A MINIMUM OF SIX JOIST SPACINGS BEYOND ANY JOIST DIRECTION CHANGE. THIS WILL ENSURE SHRINKAGE DISTRIBUTION OVER THE FLOOR AND NOT LET IT ACCUMULATE AT THE GIRDER.
   C. THERE MUST BE WOOD BLOCKING THRU BOLTED TO THE STEEL BEAM WITH JOISTS TOENAILED OR ATTACHED TO THE BEAM WITH METAL HANGERS UNDER ANY HARDWOOD FLOORS THAT RUNS OVER A STEEL BEAM SUPPORTING FLOOR JOISTS. THIS CONDITION OFTEN EXISTS BASEMENT AREAS.
2. ALL OTHER LUMBER MAY BE SPRUCE #1 UNLESS NOTED OTHERWISE.
3. STEEL BEAMS MUST HAVE 2-2x6 STUD JACKS UNDER EACH END SUPPORT UNLESS NOTED OTHERWISE.
4. LVL BEAMS MUST HAVE 3-2x6 STUD JACKS UNDER EACH END SUPPORT UNLESS NOTED OTHERWISE.

RELIGHT NOTES & DETAILS
MASONRY LINTELS:

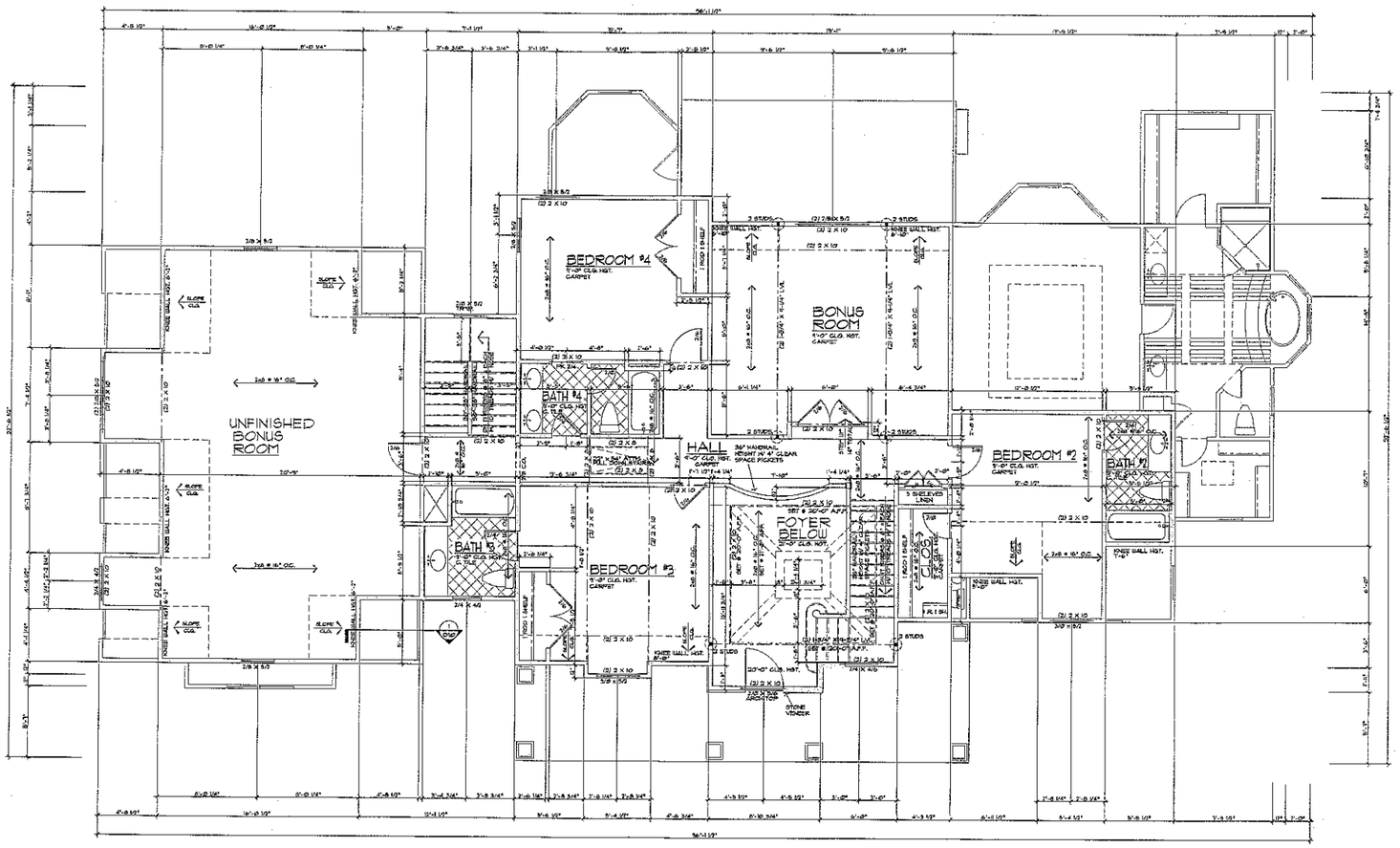
   A. FOR SPANS UP TO 6'- USE 3 1/2" X 3 1/2" X 1/4" STEEL ANGLES.
   B. FOR SPANS FROM 6' TO 10'- USE 8" X 6 1/2" X 5/16" STEEL ANGLES.
   C. FOR SPANS FROM 9' TO 20'- USE A PAIR OF 9 GAUGE SERRS IN EACH OF THE FIRST 3 COURSES OF BRICK ON A 8" X 3 1/2" X 5/16" STEEL ANGLE LAP ALL 9 GAUGE SERS SPLICED 12" MINIMUM AND EXTEND SERS 12" MINIMUM INTO JOISTS. TEMPORARILY SUPPORT STEEL ANGLE BEFORE LAYING MASONRY. SHORING MAY BE REMOVED FIVE DAYS FOLLOWING INSTALLATION OF MASONRY.
   D. WHEN STRUCTURAL STEEL BEAMS WITH BOTTOM PLATES ARE USED TO SUPPORT MASONRY, THE BOTTOM PLATE MUST EXTEND THE FULL LENGTH OF STEEL BEAM. THIS PROVIDES SUPPORT TO THE ENDS OF THE PLATE BY BEARING ON THE ADJACENT MASONRY JAMBS. THE BEAM SHOULD BE TEMPORARILY SHORED PRIOR TO LAYING THE MASONRY. THE SHORING MAY BE REMOVED FIVE DAYS AFTER LAYING THE MASONRY.
6. ALL BRICK VENEER OVER LOWER ROOFS (BRICK CLIPPED) MUST HAVE A STRUCTURAL ANGLE LAG SCREWED TO ADJACENT STUD WALL IN ACCORDANCE WITH DETAIL WITH STEEL BRICK SCOPE TO PREVENT SLIDING OF BRICK.
7. ALL RAFTER BRACES MUST HAVE 2 STUDS FROM PLATE THROUGH ALL FLOORS TO FOUNDATION OR SUPPORTING BEAM BELOW. NO BRACES SHALL BE ATTACHED TO TOP WALL PLATE WITHOUT STUDS DIRECTLY UNDER THEM.
8. WHERE PARTITIONS WALLS (BETWEEN FLOOR JOISTS OR TRUSSES) 2"x4" LADDERS @ 16" O.C. MUST BE PLACED PERPENDICULAR TO THE TRUSSES TO SUPPORT THE PLYWOOD DECKING.
9. ALL WOOD I-JOISTS AND OPEN JOISTS MUST BE BRACED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS PLUS DETAILS SHOWN ON PLANS. LOAD BEARING PARTITIONS, JACKS, BEAMS AND COLUMN SUPPORTS MUST BE SOLID BLOCKED THROUGH FLOOR TO JOISTS, TRUSSES AND ATTACHED DIRECTLY CARRY CONCENTRATED POINT LOADS. ALL POINT LOADS MUST BE CARRIED TO FOUNDATIONS WITH BLOCKING AND/OR BEAMS.
10. ALL STEEL COLUMNS SHALL BEAM ON CONCRETE, MASONRY, OR STEEL ONLY. AN ADEQUATELY-SIZED BASE PLATE SHALL BE USED TO SPREAD THE COLUMN LOAD ACROSS THE BEARING SURFACE AREAS SO AS NOT TO EXCEED ITS ALLOWABLE COMPRESSIVE STRESS. BEAMS THAT BEAM ON TOP OF STEEL COLUMNS SHALL BE WELDED TO THE COLUMN. BASE PLATE SHALL BE BOLTED WITH FOUR 1/2" DIAMETER ANCHOR BOLTS OR SIMILAR BOLTS TO CONCRETE OR MASONRY.
11. UNLESS NOTED OTHERWISE ON THE PLANS, ALL EXTERIOR FACING STUD WALLS TALLER THAN 10' SHALL BE CONSTRUCTED AS FOLLOWS:
   A. WALLS 10' TO 13' HIGH: BALLOON FRAME 2x4 STUDS @ 12" O.C. WITH 1/2" CDX SHEATHING AND 3 ROWS STUDS ON EACH SIDE OF EACH OPENING NAILED SECURELY TO THE HEADER.
   B. WALLS 13' TO 20' HIGH: BALLOON FRAME 2x6 STUDS @ 16" O.C. 1/2" CDX SHEATHING REQUIRED FOR WALL HEIGHTS ITS PROVIDE 1-1 3/4" X 9 1/4" LVL KING STUDS ON EACH SIDE OF OPENINGS 7'-10" WIDE AND 2-2x6 KING STUDS FOR OPENINGS LESS THAN 3' WIDE. FASTEN KING STUDS SECURELY TO ALL HEADERS WITH 4 MINIMUM OF 8-16d NAILS OR 4-3/8" DIAMETER LAG SCREWS EMBEDDED A MINIMUM OF 4" INTO THE HEADER.
   C. GABLE END WALLS OF ROOFS WITH VAULTED CEILING JOISTS: BALLOON FRAME WALL AND PROVIDE TRIPLE KING STUD ON EACH SIDE OF OPENING, NAILED SECURELY TO THE HEADER.
   D. TWO-STORY HIGH ROYER WALLS LESS THAN 9' WIDE: ENTIRE 2 1/2" X 5 1/4" PARALLAM PSL MEMBER WITH 2-2x4 FLAT PLATES ACROSS THE ENTIRE WALL. LOCATE THE BEAM NEAR MID-HEIGHT OF THE WALL AT OR NEAR FIRST FLOOR TOP PLATE.

NOTE: SEE SPECIAL DESIGN OR ENGINEER FOR WALLS TALLER THAN 20', WHEN OPENINGS IN HIGH WALLS EXCEED 6' IN WIDTH, OR IF THE WALL CANNOT BE CONSTRUCTED USING ANY OF THE METHODS MENTIONED.

12. CONTINUOUS 2x4 BRACING SHALL BE NAILED TO DIAGONAL OR VERTICAL WEB MEMBERS OF ALL OPEN WEB FLOOR TRUSSES OVER 16' LONG. THEY SHALL BE INSTALLED NEAR MID-SPAN AS A LOAD DISTRIBUTION PURPOSE. IF THE 2x4 BRACING IS NOT CONTINUOUS, LAP ENDS OF BRIDGING ONE TRUSS SPACE.
13. LOWER STUD WALLS FOR BUILDINGS OVER TWO STORIES, BUT NOT MORE THAN THREE STORIES:
   A. INTERIOR WALLS
      i. LOAD BEARING ——— 2x6 @ 12" O.C.
      ii. NON LOAD BEARING ——— 2x4 @ 16" O.C.
   B. EXTERIOR WALLS
      USE 2x6 @ 16" O.C. WITH 1/2" X 4' X 8' PLYWOOD SHEATHING AT ALL CORNERS AND EVERY 28'± OR USE 2x4 @ 12" O.C. WITH 1/2" PLYWOOD SHEARING BOLTS ON WALLS.
14. HEADERS SHALL BE AS SHOWN UNLESS NOTED DIFFERENTLY ON PLANS:
   A. INTERIOR
      i. SPANS UP TO 2'-6" ——— 2-2x6'S
      ii. SPANS 2'-6" TO 3'-6" ——— 2-2x8'S
      iii. SPANS 3'-6" TO 4'-6" ——— 2-2x10'S
      iv. SPANS 6'-6" OR MORE ——— SEE PLAN
   B. EXTERIOR
      i. SPANS UP TO 2'-6" ——— 2-2x8'S
      ii. SPANS 2'-6" TO 3'-6" ——— 2-2x10'S
      iii. SPANS 3'-6" TO 6'-0" ——— 2-2x12'S
      iv. SPANS 9'-0" OR MORE ——— SEE PLAN

   HEADERS WIDER THAN 6' SHALL HAVE A MINIMUM OF 3-2x4 KING STUDS ON EACH SIDE U.N.O.
15. WHEN CEILING JOISTS ARE PARALLEL TO AN EXTERIOR WALL AND RAFTERS BEAR ON THIS EXTERIOR STUD WALL TOP PLATE, TIE THE RAFTERS NEAR THE TOP PLATE TO CEILING JOISTS WITH 2x6 LOOS A MINIMUM OF 6' LONG AT 4' ON CENTER ACROSS THE TOP OF THE CEILING JOISTS.
16. AT ALL BAY WINDOWS, EACH PANEL SHALL BE NAILED TO EACH ADJACENT PANEL WITH 9-16d NAILS OR TIED TOGETHER WITH METAL STRAPPING NAILED AT FOUR LOCATIONS BETWEEN FLOORS WITH A MINIMUM OF 3-16d NAILS INTO EACH PANEL AT EACH STRAP. THIS WILL AVOID VERTICAL CRACKING IN PANEL JOINTS DUE TO HORIZONTAL CIRCULATING PANELS.
17. AT ALL STAIRS, EVERY STUD AT EACH STRINGER MUST BE NAILED TO EACH STRINGER WITH A MINIMUM OF 3-16d NAILS. THIS WILL AVOID CRACKING BETWEEN WALLBOARD AND TOP OF BASE HOLDING DUE TO VERTICAL OSCILLATION OF STAIR STRINGERS.
18. STEEL PIPE COLUMNS MUST BE IN CONTACT WITH THE SUPPORTED MEMBER AND CONFINED SOLID TO THE SUPPORTING MASONRY OR CONCRETE FOUNDATION. NO INTERMEDIATE SOLID BLOCKING SHALL BE USED AS IT WILL CRUSH.

Acknowledgement Of Plans Submittal ONLY!
Maria Kotsan Date 4/26/07
Marita Keaney Date 04/26/07



1/A5 SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"

ADDITIONAL NOTES

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⚠ MARCH 2, 2007

SECOND LEVEL FLOOR PLAN

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