

## GENERAL STRUCTURAL NOTES

- A. NOTES TO CONTRACTOR
- DRAWINGS REPRESENT THE DESIRED RESULT OF CONSTRUCTION, THE METHODS AND RISKS OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL MAINTAIN THE BUILDINGS (OR STRUCTURES) INTEGRITY AT ALL STAGES OF CONSTRUCTION.
  - CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS DURING CONSTRUCTION AND REPORT IMMEDIATE ANY DISCREPANCIES TO THE A/E.
  - ALL THE CONTRACTOR'S PROPOSED SUBSTITUTIONS SHALL BE APPROVED BY THE A/E PRIOR TO COMMENCING ANY PERTINENT WORK.
- B. DESIGN CRITERIA
- THIS STRUCTURE HAS BEEN DESIGNED ACCORDING TO THE KENTUCKY BUILDING CODE (2014) AND FOR THE SPECIFIC LOADS WHICH ARE LISTED BELOW.
- ROOF LOADS
    - DEAD LOAD = 20 PSF
    - LIVE LOAD = 25 PSF
      - PF = 10.5 PSF
      - C<sub>s</sub> = 1
      - I = 1
      - C<sub>e</sub> = 1
  - WIND LOAD
    - BASIC WIND SPEED (3 SEC. GUST) = 90 MPH
      - I = 1
      - C<sub>e</sub> = 1
      - INTERNAL PRESSURE COEFFICIENT: SIMPLIFIED METHOD USED
- C. SEISMIC DESIGN DATA
- OCCUPANCY CATEGORY - II (SEISMIC IMPORTANCE FACTOR I )
  - S(S) = 0.25 ; S(I) = 0.086
  - SITE CLASS D
  - S(DS) = 0.267 ; S(DI) = 0.130
  - SEISMIC DESIGN CATEGORY - C
  - BASIC SEISMIC-FORCE-RESISTING SYSTEM: LIGHT FRAMED WALLS SHEATHED WITH WOOD PANELS.
    - DESIGN BASE SHEAR: 2.56 KIPS (STRENGTH LEVEL LOAD)
    - SEISMIC RESPONSE COEFFICIENT, C<sub>s</sub> = 0.041
    - RESPONSE MODIFICATION FACTOR, R = 6.5
    - ANALYSIS PROCEDURE: ELFP
  - SOIL BEARING CAPACITY = 1500 PSF
- D. FOUNDATION, FILLING AND EXCAVATION NOTES
- SEE GEOTECHNICAL REPORT BY CONSULTING SERVICES INCORPORATED OF KENTUCKY DATED SEPT. 24, 2014.
  - CONCRETE NOTES
    - ALL CONCRETE FOR FOOTINGS SHALL HAVE A COMPRESSIVE STRENGTH OF F<sub>c</sub> = 3500 PSI, ALL OTHER CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF F<sub>c</sub> = 4000 PSI, UNLESS OTHERWISE NOTED
    - REINFORCING SHALL BE DEFORMED STEEL RODS, F<sub>y</sub> = 60 KSI AND MEETING ASTM A615. WELDED WIRE FABRIC SHALL MEET ASTM A185. SHOULD WELDING OF REINFORCING RODS BE REQUIRED, SUBSTITUTE ASTM A706 BARS FOR ASTM A615. DO NOT WELD ASTM A615 REINFORCING.
    - SPICES IN CONTINUOUS VERTICAL OR HORIZONTAL REINFORCING BARS SHALL BE 40 BAR DIAMETER LAP SPICE UNLESS NOTED AND SHALL BE EITHER CONTINUOUS OR SPLICED WITH CORNER BARS AT CORNERS.
    - CLEARANCES BETWEEN REINFORCING AND CONCRETE SURFACES SHALL BE THE MINIMUM ALLOWED BY ACI 318, CURRENT EDITION, UNLESS NOTED OTHERWISE.
    - PROVIDE CONTROL JOINTS IN SLAB ON GRADE WHERE INDICATED ON DRAWINGS. THESE SHALL BE 1" DEEP SAW CUT. SAW CUT JOINTS SHALL BE CUT AS EARLY AS POSSIBLE WITHOUT DAMAGING SLAB.
  - STRUCTURAL STEEL
    - ANCHOR BOLTS SHALL MEET A36. PROVIDE BOTTOM THREADING SUFFICIENT FOR ENGAGING A HEX NUT AT THE EMBEDDED END, AND TACK WELD NUT TO ROD.
    - ANCHOR BOLTS FOR SHEAR WALL HOLD-DOWNS MAY BE POST-INSTALLED ALL-THREAD RODS EPOXIED IN PLACE.
  - MASONRY
    - ALL BLOCK SHALL BE 2-CELL TYPE (REGULAR OR LIGHT WEIGHT) AND SHALL BE OF LOAD BEARING TYPE. UNITS SHALL MEET THE CURRENT SPECIFICATION OF ATM C-90, TYPE I.
    - ALL MORTAR FOR UNIT MASONRY SHALL MEET ASTM C270, TYPE S.
  - WOOD
    - EXTERIOR WALL AND ROOF SHEATHING SHALL BE PER "SHEATHING TYPE AND NAILING SCHEDULE" NAILING OF EXTERIOR WALL AND ROOF SHEATHING SHALL BE PER "SHEATHING TYPE AND NAILING SCHEDULE."
    - WALL SHEATHING SHALL HAVE HORIZONTAL BLOCKING AT ALL HORIZONTAL JOINTS (IT IS RECOMMENDED TO PLACE SHEATHING VERTICALLY TO MINIMIZE THE NUMBER OF HORIZONTAL JOINTS IN THE SHEAR WALLS) WITH EDGE NAILING ALONG BOTH EDGES. THE HORIZONTAL WALL SHEATHING JOINT SHALL BE CENTERED OVER THE HORIZONTAL BLOCKING, SEE DETAIL. VERTICAL JOINTS SHALL BE CENTERED OVER A STUD WITH EDGE NAILING ALONG BOTH EDGES. NOTE THAT ALL EXTERIOR WALLS ARE CONSIDERED SHEAR WALLS. NAIL TO BOTH BOTTOM PLATE AND TOP WOOD PLATE USING REQUIRED EDGE NAILING.
    - EXTERIOR ROOF SHEATHING SHALL BE FASTENED TO EAVE BLOCKING USING REQUIRED EDGE NAILING. SEE DRAWINGS FOR REQUIRED BLOCKING AROUND THE BUILDING'S PERIMETER EAVES. ROOF DIAPHRAGM BLOCKING OF JOINTS IS NOT REQUIRED, EXCEPT AT HIPS AND WHERE BLOCKING IS SHOWN.
    - USE ONLY STAINLESS STEEL OR GALVANIZED (OR OTHER APPROVED COATING) NAILS OR SCREWS INTO PRESSURE TREATED LUMBER USING BORIC ACID. OTHER PRESSURE TREATED WOOD SHALL USE ONLY STAINLESS STEEL OR #10S GALVANIZED (OR OTHER APPROVED COATING) NAILS OR SCREWS.
    - USE SIMPSON HURRICANE ANCHORS AT ALL SUPPORTS OF ALL TRUSSES. AT EXTERIOR STUD WALLS, LOCATE ANCHORS PREFERABLY AT THE EXTERIOR FACE OF WALL, BUT THESE MAY BE PLACED IN ALTERNATING FASHION, WITH ONE ON THE INSIDE FACE, AND THE NEXT ON THE EXTERIOR FACE, AND SO ON.
    - LOAD BEARING STUD WALL TOP PLATES SHALL BE #2 SOUTHERN PINE. LOAD BEARING STUD WALLS SHALL BE #2 SOUTHERN PINE, OR EQUIVALENT. SEE DETAIL FOR EXTERIOR WALL DOUBLE WOOD TOP PLATE SPLICE DETAIL. THESE CONTINUOUS DOUBLE WOOD PLATES SHALL RUN THE FULL LENGTH OF THE EXTERIOR WALL, UNLESS NOTED ON THE DRAWING, AND SHALL NOT BE INTERRUPTED BY THE INTERIOR PERPENDICULAR WALLS.
    - DIMENSIONAL LUMBER FOR HEADERS, BEAMS AND SIMILAR SHALL BE NO. 2 SOUTHERN PINE OR BETTER.
    - ALL NAILS SHALL BE "COMMON" TYPE UNLESS NOTED. WHERE POWER NAILING IS USED, SEE THE TABLE FOR EQUIVALENT FASTENERS WHICH GIVES A SPACING FOR THE PARTICULAR FASTENER THAT IS EQUIVALENT TO THE COMMON NAIL SPACING FOR LATERAL LOADS.

## STATEMENT OF SPECIAL INSPECTIONS

THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE: MARTY FRIEDMAN, ARCHITECT.

THE SPECIAL INSPECTIONS ENCOMPASS THE FOLLOWING DISCIPLINES:

### 1. STRUCTURAL

THE SEISMIC-FORCE-RESISTING SYSTEM(S) CONSISTS OF THE FOLLOWING: LIGHT FRAMES WALLS SHEATHED IN WOOD SHEAR PANELS.

IMPORTANT NOTES REGARDING SPECIAL INSPECTIONS:

- THE SPECIAL INSPECTOR SHALL BE RETAINED BY THE OWNER OR THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.
- THE SPECIAL INSPECTOR SHALL KEEP RECORDS OF ALL INSPECTIONS AND FURNISH INSPECTION REPORTS TO THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.
- DISCOVERED DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF SUCH DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE AND THE BUILDING OFFICIAL.
- A FINAL REPORT OF SPECIAL INSPECTIONS IS REQUIRED BY KBC TO BE SUBMITTED BY THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE TO THE BUILDING OFFICIAL PRIOR TO ISSUANCE OF A CERTIFICATE OF USE AND OCCUPANCY.

THE FOLLOWING MATERIALS, SYSTEMS, COMPONENTS AND WORK ARE REQUIRED TO HAVE SPECIAL INSPECTION OR TESTING:

A. INSPECTION OF WOOD TRUSS FABRICATOR. SEE KBC I704.2.5 SPECIAL INSPECTION OF FABRICATOR IS NOT REQUIRED WHERE THE FABRICATOR IS REGISTERED AND APPROVED TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTIONS.

1. INSPECTION OF WOOD TRUSSES ATTACHMENT, PERIODIC SEE KBC. I705.10.1

B. STEEL CONSTRUCTION. SEE KBC I704.2 AND TABLE I704.3.

NOT REQUIRED.

C. CONCRETE CONSTRUCTION. SEE KBC I704.4 AND TABLE I704.4.

1. INSPECTION OF REINFORCING STEEL AND PLACEMENT IN FOOTINGS - PERIODIC.

2. VERIFYING USE OF REQUIRED DESIGN MIX - PERIODIC.

3. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TEST, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE - CONTINUOUS.

4. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES - PERIODIC.

D. SOILS. SEE KBC I704.7 AND TABLE I704.7.

1. VERIFY MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY - PERIODIC.

2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL - PERIODIC.

3. PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS - PERIODIC. NOTE THAT TOTAL DEPTH OF CONTROLLED FILL 12 INCHES OR LESS, SPECIAL INSPECTION NOT REQUIRED. (NOTE THAT THE USE OF CONTROLLED FILL MAY NOT BE REQUIRED. SEE FINAL SITE AND/OR CIVIL DRAWINGS TO CONFIRM)

4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES - CONTINUOUS

5. PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY - PERIODIC.

THE FOLLOWING ELEMENTS ARE REQUIRED TO HAVE SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE. SEE KBC I707.

NOT REQUIRED

STRUCTURAL TESTING FOR SEISMIC RESISTANCE. TESTING AND VERIFICATION OF THE FOLLOWING MATERIALS AND ASSEMBLIES ARE REQUIRED. SEE KBC I708.

NOT REQUIRED

### IMPORTANT NOTE ON FASTENERS IN PRESSURE TREATED WOOD:

--USE ONLY STAINLESS STEEL OR HOT DIPPED GALVANIZED WITH #10S COATING FOR CONTACT WITH NON-BORIC ACID P.T. WOOD. REGULAR GALVANIZED COATING MAY BE USED FOR BORIC ACID P.T. WOOD.

--JOIST/BREAM HANGERS MUST HAVE #10S GALVANIZED COATING.

## SHEATHING TYPE AND NAILING SCHEDULE

LOCATION	SHEATHING	PANEL EDGE NAILING (E.N.) <sup>2</sup>	PANEL FIELD NAILING (F.N.) <sup>2</sup>	NAILING AT ROOF DIAPHRAGM BOUNDARIES <sup>2,3</sup>	2x6 BLOCKING AT PANEL EDGES
ROOF	3/4" 32/16 SPAN RATING	10d AT 6" O.C.	10d AT 12" O.C.	10d AT 6" O.C.	NO
EXTERIOR WALL	7/8" 24/0 SPAN RATING	8d AT 6" O.C.	8d AT 12" O.C.	8d AT 6" O.C.	YES

### NOTES:

1.) PANEL EDGES ARE ALONG THE PERIMETER OF AN INDIVIDUAL PHYSICAL SHEET. BLOCKED PANEL EDGES ARE THOSE EDGES RUNNING PERPENDICULAR TO THE MAIN SUPPORTING MEMBERS.

2.) POWER DRIVEN NAILS SHALL BE .148" DIAMETER AND A MINIMUM OF 2 1/4" LONG FOR 10d NAILS, AND 0.118" DIAMETER AND A MINIMUM OF 2" LONG FOR 8d NAILS.

3.) ROOF DIAPHRAGM BOUNDARIES ARE ALONG ALL EXTERIOR WALLS (OR BLOCKING ABOVE THOSE WALLS).

4.) ALONG DOUBLE STUDS AT HOLD DOWNS, NAIL WALL SHEATHING TO BOTH STUDS WITH 8d NAILS AT SPACING PER SHEAR WALL SCHEDULE.

5.) ALL NAILS ARE COMMON TYPE, U.N.O.

## TABLES OF EQUIVALENT FASTENERS, STAPLES, NAILS, AND T-NAILS. (VALID FOR LATERAL LOAD ONLY)

COMMON NAIL SPACING	GAUGE	EQUIVALENT SPACING OF APPROVED FASTER				
		STAPLES		NAILS T-NAILS		
		16	15	14	113	131
6d AT	4"	3 1/2"	4"	5"	4"	5"
	6"	5"	6"	7"	6"	7 1/2"
	8"	6 1/2"	8"	9 1/2"	8"	10"
	10"	8 1/2"	10"	12"	10"	12"
	12"	10"	12"	14 1/2"	12"	14 1/2"
8d AT	4"	2 1/2"	3 1/2"	4"	3 1/2"	4"
	6"	4"	5"	6"	5"	6"
	8"	5 1/2"	6 1/2"	8"	6 1/2"	8"
	10"	6 1/2"	8"	10"	8"	10"
	12"	8"	10"	12"	9 1/2"	12"
10d AT	4"	2"	2 1/2"	3"	2 1/2"	3 1/2"
	6"	3 1/2"	4"	5"	4"	5"
	8"	4 1/2"	5 1/2"	6 1/2"	5 1/2"	7"
	10"	5 1/2"	7"	8"	6 1/2"	8 1/2"
	12"	6 1/2"	8"	9 1/2"	8"	10"

### NOTE:

PENETRATION IS THE DEPTH OF EMBEDMENT OF THE STAPLE OR NAIL INTO THE MAIN MEMBER REQUIRED TO ATTAIN ITS FULL CAPACITY (SHEAR VALUE) FOR LATERAL LOADINGS.

## WINDOW & DOOR HEADER TABLE

WALL CLEAR OPENING SIZE	HEADER	COMMENTS
ALL WINDOW AND DOOR OPENINGS	(3)-2x10's WITH (2) LAYERS OF 1/2" PLYWOOD	-

NOTES:

- USE (1) 2x6 TRIMMER STUD DIRECTLY UNDER END OF HEADER AT BOTH ENDS.
- USE (2) 2x6 KING STUDS AGAINST TRIMMER STUD AT BOTH ENDS. SECURELY NAIL TRIMMER STUD TO KING STUDS.

CITY OF STANTON  
CITY HALL + POLICE STATION  
STANTON, KENTUCKY

PROJECT NO.	DATE	REVISION	BY
4065-04			
DESIGNED BY	GR		
DRAWN BY	MSF		
CHECKED BY	GR		
REVIEWED BY	GR		
DATE	JUNE 2015		
SCALE	AS NOTED		

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DRAWING NO.

S-1

SHEET OF