

WOOD TRUSS SPECIFICATIONS

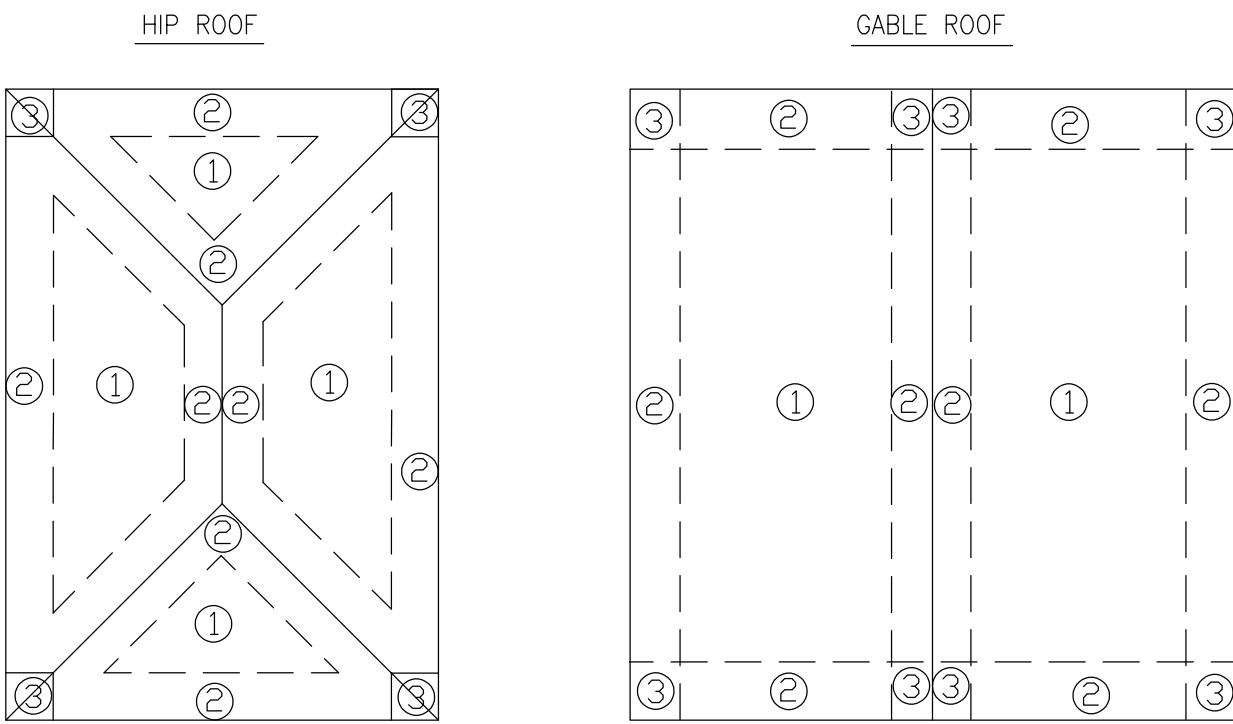
- Truss documents should include
 - Sealed layouts, profiles and calculations.
 - Procedures for installing , securing, bracing etc. of all trusses.
- SHOP DRAWINGS
 - The following should be included on submitted shop drawings
 - Stamp and signature of engineer responsible for preparation of all truss design and layout drawings: certifying that the design & layout is in accordance with the structural parameters & drawings.
 - Allowable loads for lumber and plates used as allowed by ICBO and current ICBO report number and by International Building Code, 2009 edition.
 - Stress reduction factors used for plates.
 - Top and bottom chord design loads in PLF.
 - Size, guage, and exact location by dimension of plates.
 - Lumber species and grades used.
 - Concentrated load requirements have been design for and shown on documents.
 - Truss to truss connection hardware requirements.
 - All truss shop drawings must be reviewed and written approval provided by general contractor prior to submittal of shop drawings to structural engineer.

of truss company engineer on all truss engineering sheets.

 - All trusses must be designed for uplift loads, uplift values at each truss bearing point must be shown on truss engineering sheet.
- METAL GUSSET PLATES:
 - Plate design and manufacture shall be as approved by "The Research Committee for the ICBO". Plates shall be galvanized or otherwise protected from corrosion.
 - Manufacturer's name or trademark shall be visible on plates.
- GENERAL:
 - Fabrication of trusses shall be as approved by ICBO except that this specification shall govern when it exceeds ICBO requirements.
 - Fabricate trusses from approved shop drawings.
 - Fabricated trusses in jigs with members accurately cut to provide full contact at joints.
 - Each chord section shall extend through two panel points before being sliced.
 - Truss fabricator shall have his plant inspected four times per year by an independent testing laboratory in accordance with TPI regulations and copies of inspections made available to owner upon request.
 - Truss fabricator shall specify hardware required at truss to truss connections.
 - All component web members requiring lateral bracing shall have 2x T-braces unless the component engineer provides other bracing design & details.
 - Moisture content of all lumber shall not exceed 19%
 - All chord material lumber shall have a minimum specific gravity "G"=0.5.
 - Bearing area of component cannot be larger than the framing member used for bracing.
 - Top chord shall be continuously braced with properly attached sheathing or bracing at 2' o.c. (max.). Bottom chord shall be continuously braced with properly attached ceiling gypsum sheathing or bracing at 10" o.c. (max.), unless noted otherwise be attached to each truss with 2-10d nails.

WOOD STRUCTURAL PANEL ROOF SHEATHING NAILING SCHEDULE			ROOF FASTENING ZONES (C)			
			①	②	③	
			FASTENING SCHEDULE (inches on center)			
THICKNESS	NAILS	LOCATION				
1/2" OR LESS	8d COMMON	PANEL EDGE (a)	6	6	4(b)	
		PANEL FIELD	6	6	6(b)	
19/32" OR GREATER	10d COMMON	PANEL EDGE (a)	6	6	4(b)	
		PANEL FIELD	6	6	6(b)	
(a) EDGE SPACING ALSO APPLIES OVER ROOF FRAMING AT GABLE END WALLS						
(b) USE RING-SHANK NAILS IN THIS ZONE IF MEAN ROOF HEIGHT IS GREATER THAN 25'						
(c) THE ROOF FASTENING ZONES ARE SHOWN BELOW						

ROOF FASTENING ZONES



GENERAL NOTES/ SPECIFICATIONS:

DESIGN CRITERIA

- The building code is the International Residential Code 2009 Edition.
- The lateral load design has been calculated for 90 Miles Per Hour basic wind speed as per IRC 2009.

DESIGN LOADS

	LIVE LOAD (PSF)	DEAD LOAD (PSF)
ROOF	20	20

WOOD FRAMING MATRIAL SPECIFICATIONS

- All structural lumber shall be Southern Yellow Pine (S.Y.P) of the following grade.

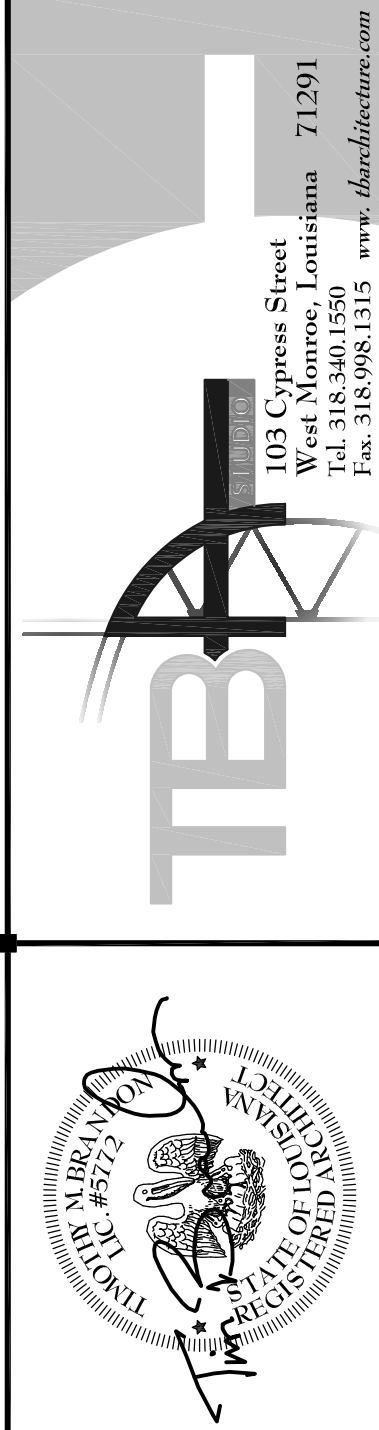
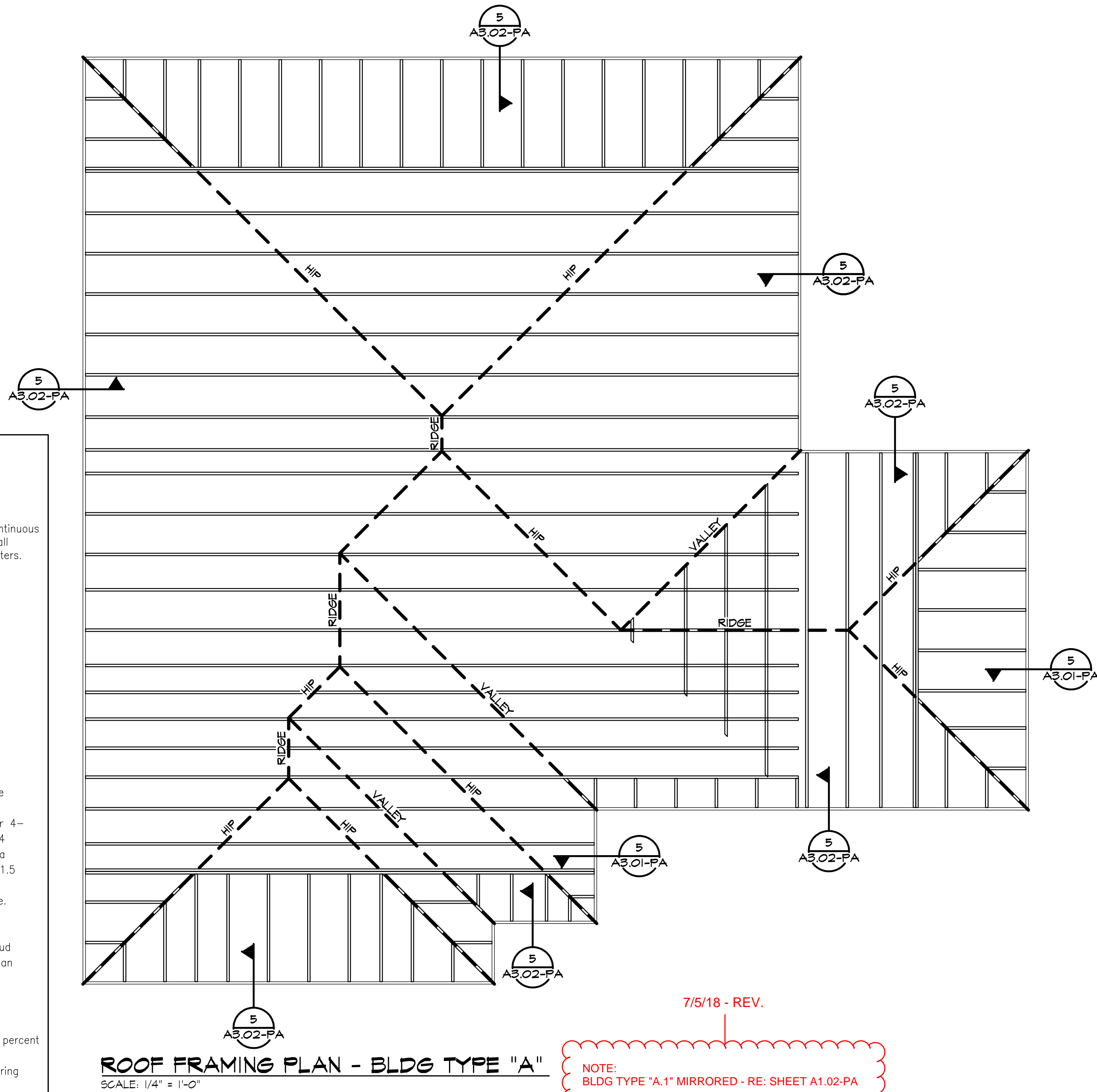
	STRUCTURAL GRADE
JOISTS	NO. 2
BEAMS	NO. 2
STUDS	NO. 2
POSTS	NO. 2
RAFTERS	NO. 2

- PSL beams shall be min. Fb = 2900 psi, min. Fv = 290 psi & min. E = 2,000,000 psi.
- Roof diaphragm shall be mi. of 1/2" thick structural grade plywood nailed to the supports with 10d nails at a max. of 6" o.c at all exterior edges.
- All shearwalls shall be 7/16" thick APA rated sheathing nailed as per shearwall schedule-1 or 1/2" gypsum board or gypsum sheathing or 5/8" gypsum sheathing nailed as per shearwall schedule-2 as shown on shearwall plan drawings.
- All steel hardware used shall be Simpson or equal.
- All wood exposed to weather or in contact with concrete shall be preservative-treated wood. All fastners attached to preservative-treated wood shall be hot-dipped zinc coated galvanized steel or stainless steel.

FRAMING NOTES:

ROOF AND CEILING

- General. The framing details given here apply to roofs having a minimum slope of 3:12 or greater. When the roof slope is less than 3:12, members supporting rafters and ceiling joists such as ridge boards, hips and valleys shall be designed as beams.
 - Spans. Allowable spans for ceiling joists shall be in accordance with the requirements of the code.
 - Framing. Rafters shall be framed directly opposite each other at the ridge and wherever possible on the hips and valleys. Ridges shall be at least 1-inch nominal thickness and not less in depth than the cut end of the rafter. At all valley and hips there shall be a single valley or hip rafter not less than 2-inch nominal thickness and not less in depth than the cut end of the rafter. Whenever the rafters do not align with each other on the ridge, hip or valley, the ridge, hip or valley must be designed as a beam.
 - Rafter ties. Rafters shall be nailed to adjacent ceiling joist to form a continuous tie between exterior walls when such joists are parallel to the rafters. Where not parallel, rafters shall be tied to 2-inch by 4-inch (nominal) minimum-sized cross ties. Rafter ties shall be spaced not more than 4 feet on center. The seat cut at the rafter bird's-mouth shall be no longer than it's bearing member.
 - Purlins. Purlins to support roof loads may be installed to reduce the span of rafters within allowable limits and shall be supported by struts to bearing walls or beam. The maximum span of 2-inch by 4-inch purlins shall be 4 feet. The maximum span of 2-inch by 6-inch purlin shall be 6 feet but in no case shall the purlin be smaller than the supported rafters. Struts shall be not smaller than 2-inch by 4-inch members. The unbraced length of struts shall not exceed 8 feet and the minimum slope of the struts shall be not less than 45 degrees from the horizontal.
 - Blocking. Roof rafters and ceiling joists shall be supported laterally to prevent rotation and lateral displacement. See FLOOR JOIST No. 6 on this document.
 - Roof sheathing. Plywood used for roof sheathing shall be bonded by intermediate or exterior glue. Plywood roof sheathing exposed on the underside shall be bonded with exterior glue. Plywood must be of minimum 1/2" thickness and meet all other requirements of the code. End joints in plywood shall occur over supports and end joints shall be staggered a minimum of one member on adjacent rows.
- ### WALL FRAMING
- Size, height and spacing. Two by four bearing walls with laterally unsupported studs 16 inches on center shall not exceed 10 in height. Non bearing walls may reach 14 feet in height. Two by six bearing walls with laterally unsupported studs 16 inches on center not to exceed 10 feet height shall be used to support more than 1 floor. Non bearing walls may reach 20 feet in height. Bridging not less than 2 inches in thickness and of the same width as the studs fitted snugly and nailed thereto to provide adequate lateral support may be used to increase height requirement but in no case shall two by four studs be used in load bearing walls of more than 14' in height. Studs shall be of a stud grade fir or syp and must all be 16" oc.



PROJECT: A NEW HOUSING DEVELOPMENT
BRIARWOOD ESTATES
A KWL PROPERTIES, LLC DEVELOPMENT
BASTROP, LOUISIANA

DRAWING REVISIONS	
DATE	DESCRIPTION
7/5/18	REV. - FINAL PLANS

Drawn By: CDW
Checked By: TB
SHEET

S1.01 PA

Date: JUNE 2016
Project No.: 16-0052
File No.:
DESCRIPTION:

ROOF FRAMING PLAN
BUILDING TYPE A