GENERAL NOTES

1. WORK PERFORMED SHALL COMPLY WITH THE FOLLOWING:
   A. THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE (VUSBC); 2006 EDITION
   B. THE INTERNATIONAL BUILDING CODE (IBC); 2006 EDITION AS AMENDED BY THE VUSBC.
   C. ALL APPLICABLE STATE AND LOCAL CODES, ORDINANCES AND REGULATIONS.

2. DESIGN LOADS:

   A. BUILDING CLASSIFICATION CATEGORY_____I

   B. GROUND SNOW, Pg_____30 PSF*
   FLAT ROOF SNOW LOAD, Pf_____23 PSF*
   SNOW EXPOSURE FACTOR, Ce_____0.9
   SNOW THERMAL FACTOR, Ct_____1.2
   SNOW IMPORTANCE FACTOR, I_____0.8

   C. WIND SPEED_____110 MPH*
   EXPOSURE_____C*
   IMPORTANCE FACTOR, I_____0.87
   INTERNAL PRESSURE COEFFICIENT_____±0.18

   D. COMPONENTS AND CLADDING (A = 10 SQFT):
   ROOF WIND LOADING:
   ZONE 1_____+12.5, -21.8 PSF*
   ZONE 2_____+12.5, -36.5 PSF*
   ZONE 3_____+12.5, -55.0 PSF*

   F. LIVE LOADS:
   SLOPED ROOF_____100 PSF

   G. SEISMIC DESIGN:
   SEISMIC IMPORTANCE FACTOR, I_____1.0
   MAPPED SPECTRAL RESPONSE ACCELERATION Ss_0.42*
   MAPPED SPECTRAL RESPONSE ACCELERATION S1_0.115*
   SITE SOIL CLASS_____I
   SPECTRAL COEFFICIENT, Sds_____D*
   SPECTRAL COEFFICIENT, Sd1_____0.448*
   SEISMIC DESIGN CATEGORY_____0.184*
   BASIC STRUCTURAL SYSTEM_____A*
   SEISMIC FORCE RESISTING SYSTEM_____BEAR WALL SYSTEM,(TABLE 1617.6.2)
   DESIGN BASE SHEAR_____0.1 KIPS*
   SEISMIC RESPONSE COEFFICIENT Cs_____0.128*
   RESPONSE MODIFICATION FACTOR R_____3.5
   SEISMIC ANALYSIS_____EQUIV. LATERAL FORCE PROCEDURE

ABBREVIATIONS	
BOTT	BOTTOM
DIA.	DIAMETER
GALV.	GALVANIZED
INFO	INFORMATION
MAX	MAXIMUM
MIN.	MINIMUM
O.C.	ON CENTER
TYP.	TYPICAL
W/	WITH

* VERIFY WITH LOCAL JURISDICTION

3. THE CONTRACTOR SHALL VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION OF MEMBERS AND COMMENCING WORK.

4. PROVIDE TEMPORARY BRACING AS REQUIRED TO RESIST WIND AND OTHER LOADS DURING CONSTRUCTION.

5. THE CONTRACTOR SHALL PROTECT EXISTING STRUCTURES, EQUIPMENT, ADJACENT GROUNDS AND PLANTS DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL REPAIR AND/OR REPLACE, AT NO ADDITIONAL COSTS TO THE OWNER, ANY ITEMS DAMAGED DURING THE CONSTRUCTION.

6. WOOD PITCHED ROOF PROP AND VERTICAL VENTILATION SIMULATOR ARE DESIGNED AS A STAND ALONE PROP AND SHALL BE PLACED AWAY FROM THE BURN BUILDING IN ACCORDANCE WITH THE FOLLOWING:

NUMBER OF STORIES IN THE BURN BUILDING	MINIMUM DISTANCE AWAY FROM THE BURN BUILDING
1	15'
2	25'
3	35'

NOTE: ADD 10' FOR EACH ADDITIONAL STORY BEYOND 3 STORIES.

WOOD

7. WOOD FRAMING IS BASED ON DESIGN VALUES NOTED IN THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, 2005 EDITION.

8. ALL STRUCTURAL LUMBER, UNLESS OTHERWISE NOTED, SHALL BE NO. 2 SOUTHERN YELLOW PINE (KILN DRIED), SURFACED, WITH A MAXIMUM 19% MOISTURE CONTENT, WITH THE FOLLOWING MINIMUM NON-FACTORED ALLOWABLE STRESSES:

		2 X 8	2 X 10	2 X 12
A. EXTREME FIBER STRESS	Fb=	1,200 PSI	1,050 PSI	975 PSI
B. HORIZONTAL SHEAR STRESS	Fv=	175 PSI	175 PSI	175 PSI
C. COMPRESSION PERP. TO GRAIN	Fc⊥=	565 PSI	565 PSI	565 PSI
D. COMPRESSION PARALLEL TO GRAIN	Fc=	1,350 PSI	1,300 PSI	1,450 PSI
E. MODULES OF ELASTICITY	E=	1,600,000 PSI	1,600,000 PSI	1,600,000 PSI

9. EXTERIOR AND INTERIOR WALL STUDS SHALL BE CONSTRUCTED WITH No. 2 SPRUCE PINE FIR (SPF) WITH MINIMUM Fb = 875 PSI AND E = 1,400,000 PSI ALLOWABLE STRESSES.

10. ALL WOOD IN CONTACT WITH EXTERIOR ELEMENTS, CONCRETE, OR MASONRY SHALL BE TREATED WITH AN APPROVED PRESERVATIVE IN ACCORDANCE WITH AWPA STANDARDS.

11. FASTENERS FOR PRESERVATIVE-TREATED AND FIRE-RETARDANT-TREATED WOOD SHALL BE OF HOT-DIPPED ZINC COATED GALVANIZED STEEL WITH A G 185 COATING, STAINLESS STEEL, SILICON BRONZE, OR COPPER.

12. MULTIPLE MEMBERS, EXCEPT ROOF TRUSSES, SHALL BE FASTENED TOGETHER WITH A MINIMUM (2) ROWS OF 16D NAILS.

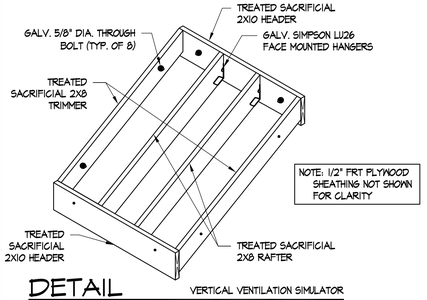
13. ALL PLYWOOD SHALL BE MANUFACTURED AND GRADED IN ACCORDANCE WITH U.S. DEPARTMENT OF COMMERCE (DOC) PRODUCT STANDARD PS 1-95 FOR PLYWOOD CONSTRUCTION FROM GROUP 1 SPECIES. EACH PLYWOOD SHEET SHALL BEAR THE "APA" GRADE TRADEMARK.

14. PLYWOOD ROOF SHEATHING SHALL CONFORM TO APA C-D RATED EXTERIOR 19/32" (5/8") MINIMUM THICKNESS PLYWOOD SHEATHING UNLESS NOTED OTHERWISE. PROVIDE APPROPRIATE SPACING BETWEEN BUTT JOINTS. USE OF "H" CLIPS REQUIRED ON ROOF SHEATHING.

15. THE FACE GRAIN OF THE PLYWOOD SHALL BE LAID AT RIGHT ANGLES TO THE JOISTS AND RAFTERS AND PARALLEL TO WALL STUDS.

16. ALL PLYWOOD END JOINTS SHALL BE STAGGERED AND SHALL BE LOCATED ALONG THE CENTER LINES OF THE FRAMING MEMBERS.

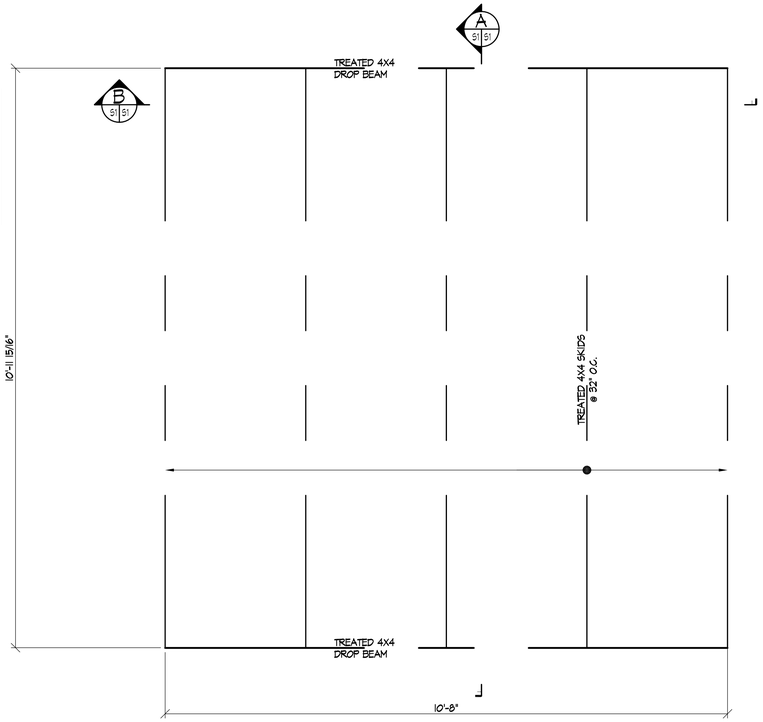
17. NAILS SHALL BE PLACED 3/8" MINIMUM FROM THE EDGE OF THE PLYWOOD SHEETS. THE MINIMUM NAIL PENETRATION INTO FRAMING MEMBERS SHALL BE 1 3/8" FOR 8D NAILS AND 1 1/2" FOR 10D NAILS.



DETAIL — VERTICAL VENTILATION SIMULATOR CHOP OUT INSERT

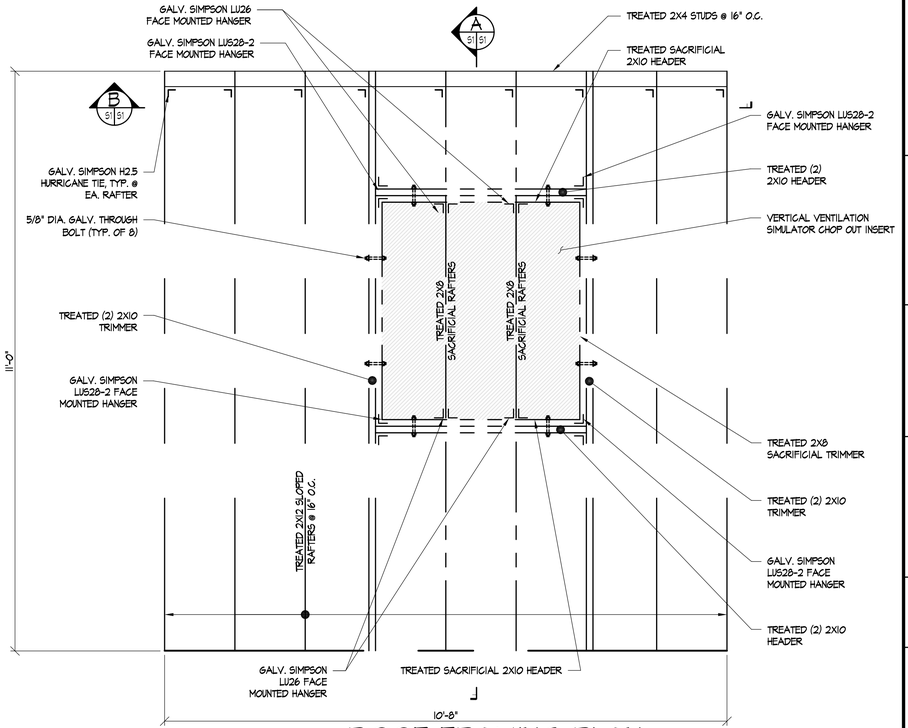
SCALE: NONE

NOTES:
1. CHOP OUT INSERT MAY BE REMOVED TO FACILITATE EASY REPLACEMENT OF DAMAGED HEADERS, TRIMMERS, AND PLYWOOD SHEATHING.
2. MULTIPLE CHOP OUT INSERTS MAY BE CONSTRUCTED. FOLLOWING A VERTICAL VENTILATION TEST, THE USED CHOP OUT INSERT MAY BE SWAPPED OUT WITH THE ADDITIONAL CHOP OUT INSERT TO REDUCE TIME BETWEEN VERTICAL VENTILATION TESTS.



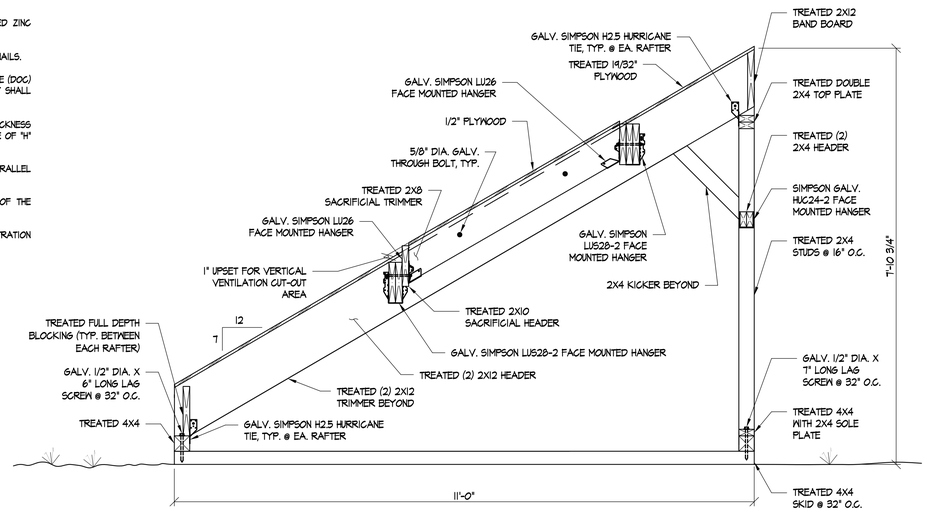
BASE FRAMING PLAN

SCALE: 3/4" = 1'-0"



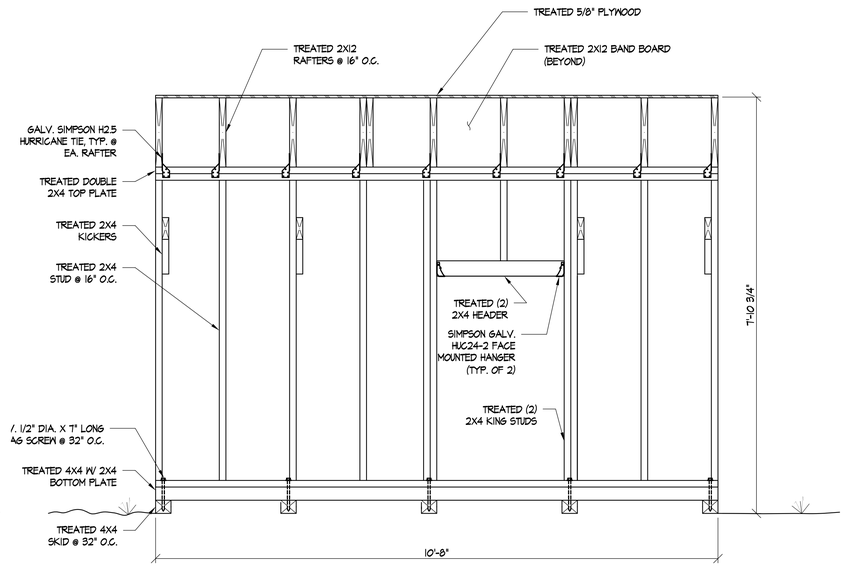
ROOF FRAMING PLAN

SCALE: 3/4" = 1'-0"



SECTION A S1 S1

SCALE: 3/4" = 1'-0"



SECTION B S1 S1

SCALE: 3/4" = 1'-0"

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Reviewed by: MAM
Drawn by: AJA
Date: 7/28/10
Project #: VA05256

COMMONWEALTH OF VIRGINIA — MICHAEL A. MATTHEWS — Lic. No. 019553 — 07/28/10 — PROFESSIONAL ENGINEER

No.	Revisions	Date

GENERAL NOTES, BASE & ROOF FRAMING PLAN, SECTIONS (WOOD)

PITCHED ROOF PROP & VERTICAL VENTILATION SIMULATOR
VA. DEPT. OF FIRE PROGRAMS
COMMONWEALTH OF VIRGINIA

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