



THE MINIMUM NATURAL VENTILATION AREA REQUIRED FOR GARAGES SHALL BE 4 PERCENT OF THE FLOOR AREA BEING

THE MINIMUM NATURAL VENTILATION AREA REQUIRED FOR

VENTILATED. THE MINIMUM MECHANICAL VENTILATION

APPLIANCES LOCATED IN PRIVATE GARAGES SHALL

ABOVE THE FLOOR EXCEPT WHERE THE APPLIANCE

BE INSTALLED WITH A MINIMUM CLEARANCE OF 6 FEET

IS PROTECTED FROM MOTOR VEHICLE IMPACT. EQUIPMENT

ELEVATED SUCH THAT THE SOURCE OF IGNITION IS NOT LESS

AND APPLIANCES HAVING AN IGNITION SOURCE SHALL BE

GARAGES SHALL BE 4 PERCENT OF THE FLOOR AREA BEING

VENTILATED. THE MINIMUM MECHANICAL VENTILATION

CONDENSATE WASTE AND DRAIN LINE SIZE SHALL

BE NOT LESS THAN 3/4" INTERNAL DIAMETER AND SHALL NOT DECREASE IN SIZE FROM THE DRAIN PAN CONNECTION TO THE PLACE OF CONDENSATE DISPOSAL.

FOR GARAGES SHALL BE 100 CFM PER CAR.

FOR GARAGES SHALL BE 100 CFM PER CAR.

THAN 18" ABOVE THE FLOOR.

Freeman
Design Group

DATE DRAWN BY 11/09/07 W.H.F. REVISIONS

A-1

PROJECT NO. 07.R055

PRODUCT CODE SIZE COUNT 3'-0" x 6'-8" 60x80 Therma Tru Steel Door w/ Sidelites 1'-0" x 6'-8" 70" x 80" Better Bilt 2-Panel Patio Doors Series 470 16' x 7" Amaar Steel Garage Door 16'-0" X 7'-0" 2668 BiFold Masonite Door 2'-6" X 6'-8" 5068-2 BiFold Masonite Doors 5'-0" X 6'-8" 1868 Masonite Door 1'-8" X 6'-8" 2'-0" X 6'-8" 2068 Masonite Door 2468 Masonite Door 2'-4" X 6'-8" 2668 Masonite Door 2'-6" X 6'-8" 2868 Masonite Door 2'-8" X 6'-8" 5010 Transom 5'-0" x 1'-0" 2'-0" x 3'-0" SH 2030 5'-0" x 6'-0" 5060 Archtop (2) 30506'-0" x 5'-0" SH 3050 3'-0" x 5'-0" 4'-0" x 6'-0" SH 4060 SH 4050 4'-0" x 5'-0"

EXTERIOR WINDOWS AND GLASS DOORS SHALL BE TESTED BY AN AAMA OR WOMA OR OTHER APPROVED LABEL IDENTIFYING THE MANUFACTURER, PERFORMANCE CHARACTERISTICS AND APPROVED PRODUCT EVALUATION ENTITY TO INDICATE COMPLIANCE WITH THE REQUIREMENTS OF THE FOLLOWING SPECIFICATION:

ANSI/AAMA/NWWDA 101/IS2 2/97

THE CONSTRUCTION SHALL BE TESTED IN ACCORDANCE WITH ASTM E 330, STANDARD TEST METHODS FOR STRUCTURAL PERFORMANCE OF EXTERIOR WINDOWS, CURTAIN WALLS, AND DOORS BY UNIFORM STATIC AIR PRESSURE.

FOR EMERGENCY RESCUE THAT COMPLIES WITH THE FOLLOWING: 1. SUCH WINDOWS SHALL BE OPENABLE FROM THE INSIDE WITHOUT BEING OPERATED FROM NOT MORE THAN 54 INCHES ABOVE THE FINISHED FLOOR. 3. THE CLEAR OPENING SHALL ALLOW A RECTANGULAR SOLID, WITH

A WIDTH AND HEIGHT THAT PROVIDES NOT LESS THAN THE REQUIRED

DUCT PENETRATION:

ducts in the garage and ducts penetrating the walls or ceilings separating the dwelling from the garage shall be constructed of a minimum No. 26 gage sheet steel or other approved material and shall have no openings into the garage.

openings from a private garage directly into a room used for sleeping purposes shall not be permitted. other openings between the garage and residence shall be equipped with solid wood doors not less than 1 3/8" in thickness, solid or honeycomb steel doors not less

SEPARATION REQUIRED:

the garage shall be separated from the residence and its attic area by not less than 1/2" gypsum board applied to the garage side. garages beneath habitable rooms shall be separated from all habitable rooms above by not less than 5/8" Type X gypsum board

'11'-0"

21'-0"

5'-0"

DUCTS THAT EXHAUST CLOTHES DRYERS SHALL NOT PENETRATE OR BE LOCATED WITHIN ANY FIREBLOCKING OR FIRE RATED WALL OR CEILING ASSEMBLY.

EMERGENCY EGRESS: EVERY BEDROOM SHALL HAVE NOT LESS THAN ONE OUTSIDE WINDOW THE USE OF TOOLS AND SHALL PROVIDE A CLEAR OPENING OF NOT LESS THAN 20 INCHES IN WIDTH, 24 INCHES IN HEIGHT, AND 5.7 SQFT IN AREA. 2. THE BOTTOM OF THE OPENING SHALL BE NOT MORE THAN 44 INCHES ABOVE THE FLOOR, AND ANY LATCHING DEVICE SHALL BE CAPABLE OF

5.7 SQFT OPENING AND A DEPTH NOT LESS THAN 20 INCHES, TO PASS FULLY THROUGH THE OPENING. 4. SUCH WINDOWS SHALL BE ACCESSIBLE BY THE FIRE DEPARTMENT AND SHALL OPEN INTO AN AREA HAVING ACCESS TO A PUBLIC WAY.

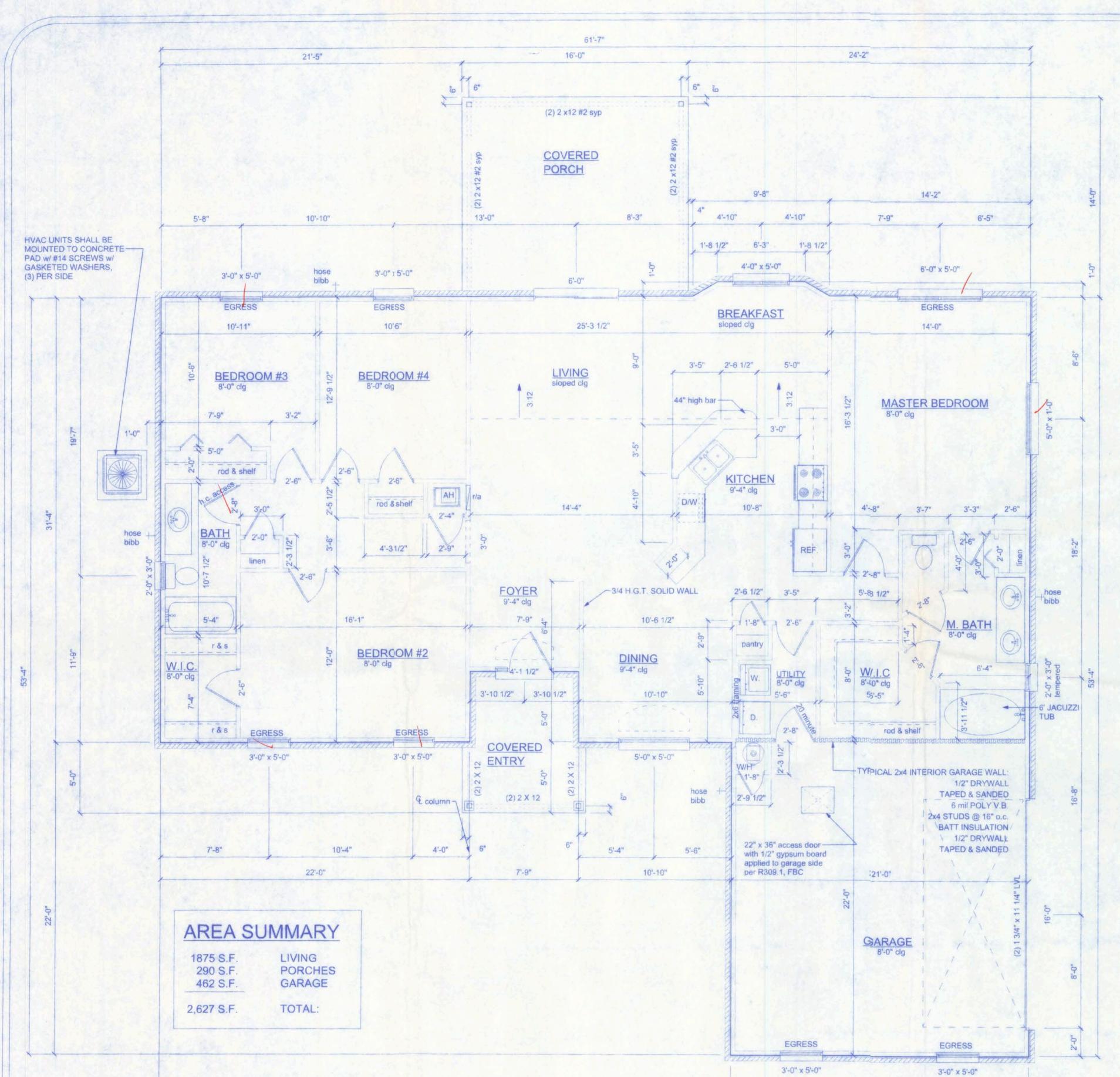
OPENING PROTECTION:

than 1 3/8" thick, or a 20-minute fire rated doors.

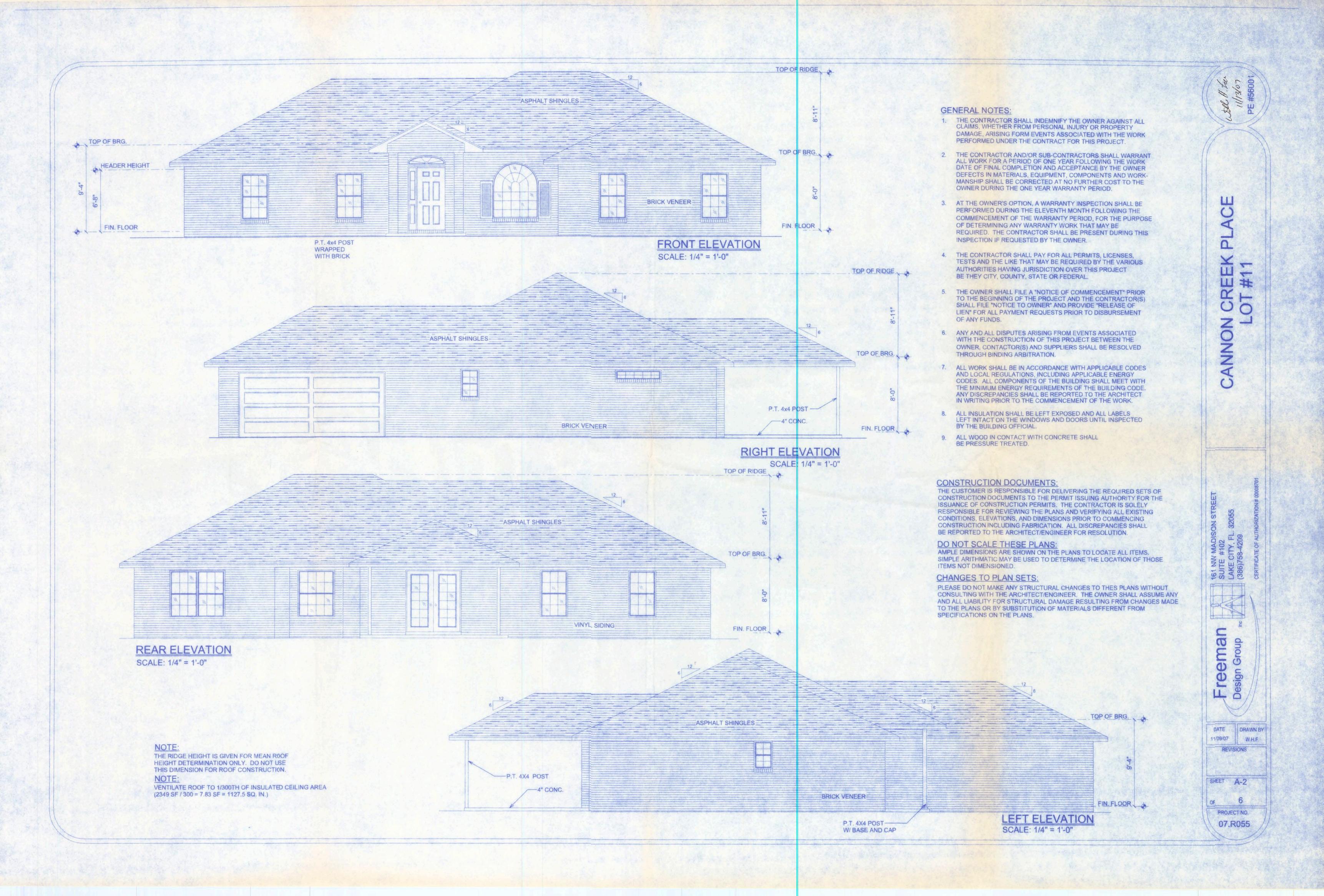
or equivalent. where the separation is a floor-ceiling assembly, the structure supporting the separation shall also be protected by not less than 1/2" gypsum board or equivalent.

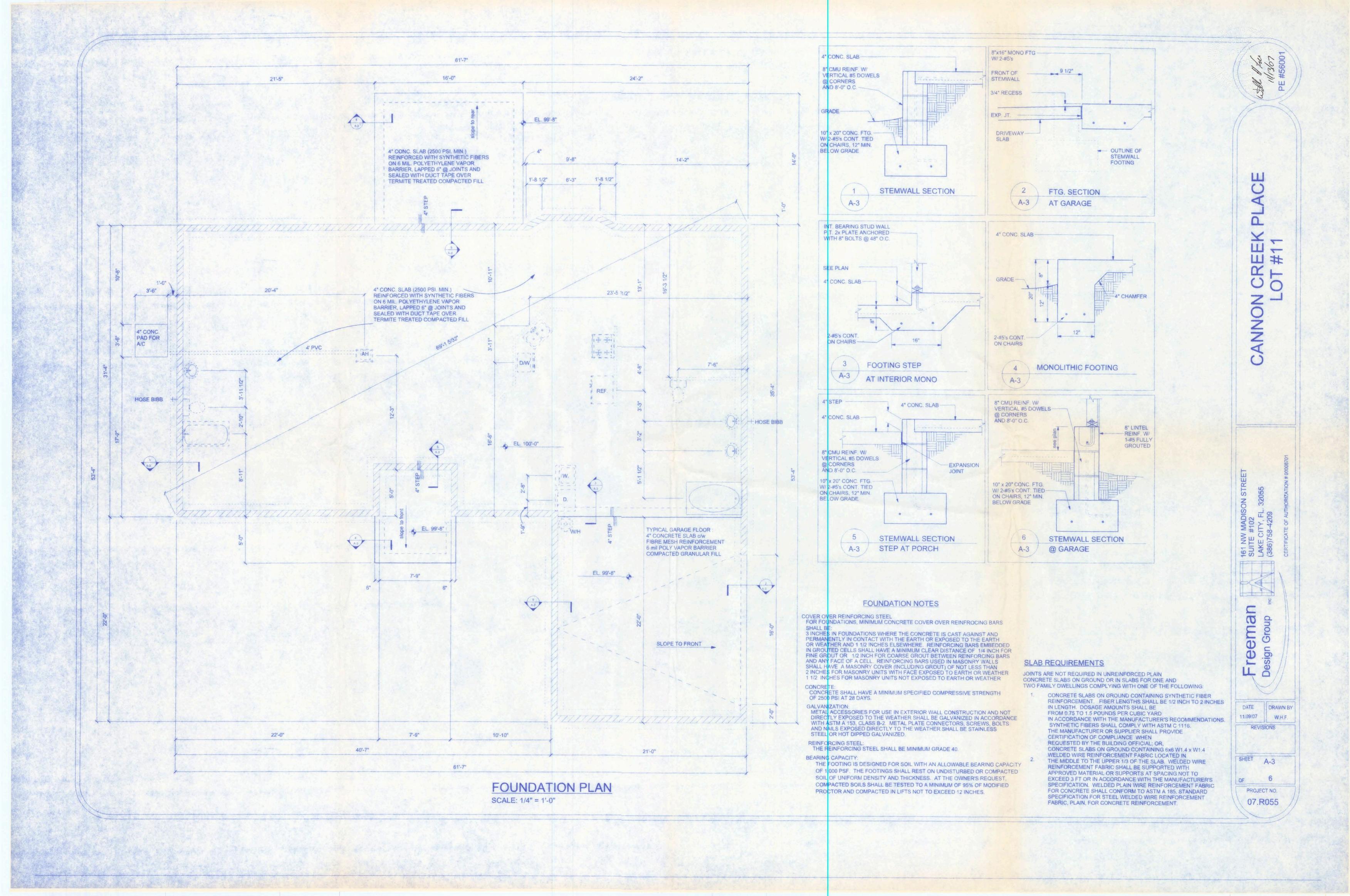
FLOOR PLAN SCALE: 1/4" = 1'-0"

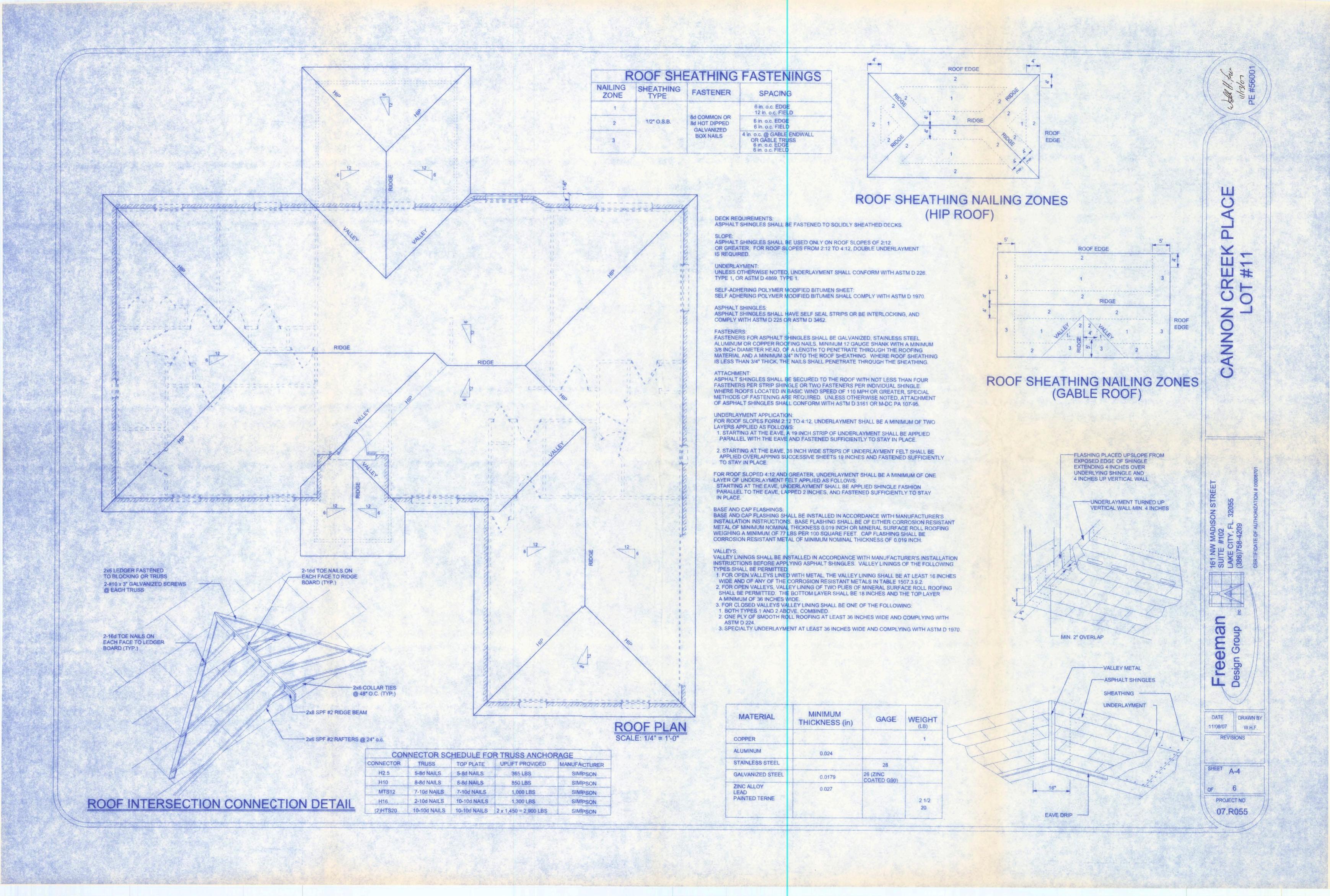
40'-7"



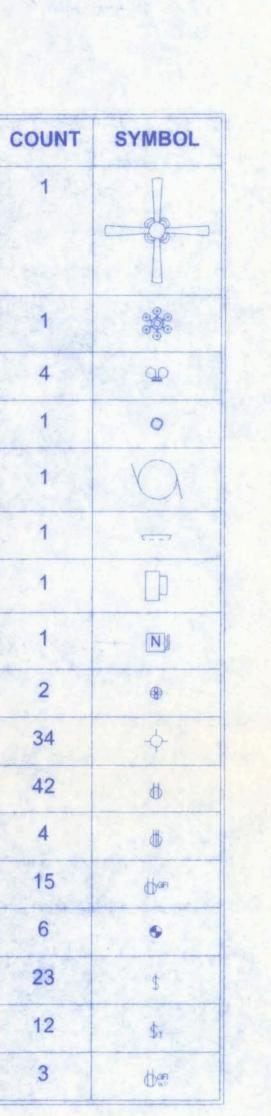
61'-7"







PROJECT NO. 07.R055



34

42

15

23

12

ELECTRICAL

ceiling fan spotlights

chandelier

pot light

double spotlight

electric motor

electrical panel

non-fused disconnect

50 cfm exhaust fan

meter can

outlet

outlet 220v

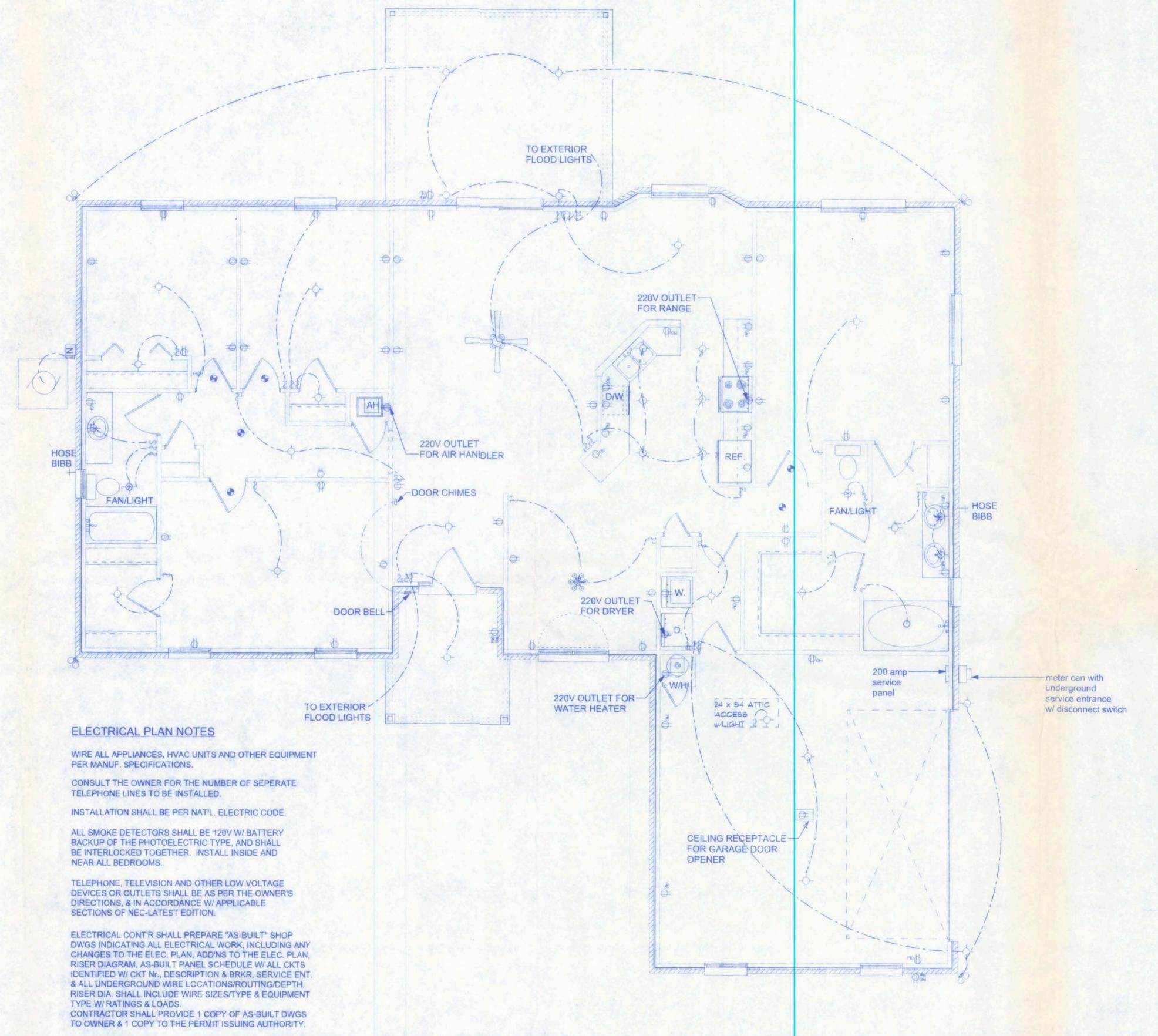
outlet gfi

switch

smoke detector

switch 3 way

weather proof gfi



ELECTRICAL PLAN

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

## NOTE:

ALL BRANCH CIRCUITS THAT SUPPLY 125-VOLT, SINGLE PHASE, 15 AND 20 AMP OUTLETS INSTALLED IN DWELLING UNIT BEDROOMS SHALL BE PROTECTED BY AN ARC FAULT CIRCUIT INTERRUPTER LISTED TO PROVIDE PROTECTION OF THE ENTIRE BRANCH CIRCUIT.

ANNON

Freemar Design Group

> DATE DRAWN BY 11/09/07 W.H.F. REVISIONS

SHEET A-6

PROJECT NO. 07.R055

ASPHALT SHINGLES INSTALLED PER MFGR. RECOMMENDATIONS OVER #15 FELT 1/2" O.S.B. ROOF SHEATHING INSTALLED PERPENDICULAR TO ROOF TRUSSES WITH STAGGERED END JOINTS. NAILED WITH 8d COMMON NAILS @ 6" O.C. EDGES AND 8d COMMON NAILS @ 12" O.C. IN FIELD OVER ENG. WOOD TRUSSES @ 24" O.C. SIMPSON MTS 12 @ EACH TRUSS 7-10d NAILS TO TRUSS R-30 BATT OR BLOWN INSULATION-7-10d NAILS TO TOP PLATE (2) REQUIRED ON GIRDER TRUSS SEE PLAN 1/2" GYP. BD. CEILING TAPED AND SPRAYED -2x6 SUBFASCIA ALUM DRIP EDGE ALUM FASCIA 1'-6" (TYP) ALUM VENTED SOFFIT

> 1/2" GYP. BD. TAPED AND PAINTED COMMON BRICK R-13 BATT WI GALV WALL TIES 7/16" OSB WALL SHEATHING INSULATION FASTEN W/ 8d COMMON @ 6" O.C. EDGES / 12" O.C. INT TO NO. 15 FELT 2 x 4 #2 SPF GRADE OR BTR. STUDS @ 16" O.C. PROVIDE WEEP HOLES @ 48" O.C.

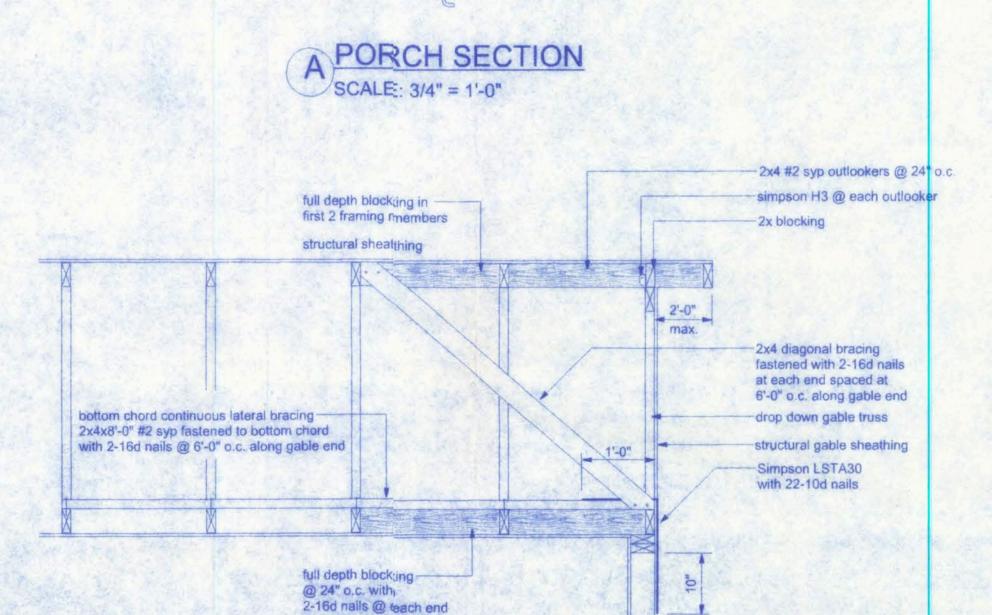
4" CONC, SLAB (2500 PSI, MIN.)
REINFORCED WITH SYNTHETIC FIBERS
ON 6 MIL. POLYETHYLENE VAPOR BARRIER, LAPPED 6" @ JOINTS AND SEALED WITH DUCT TAPE OVER TERMITE TREATED COMPACTED FILL -P.T. PLATE ANCHORED WITH 1/2" x 10" ANCHOR BOLTS @ 48" O.C.

> #5 DOWELS IN FULLY GROUTED CELLS @ CORNERS AND 8'-0" O.C. -20" x 10" FOOTING REINF. WITH 20" 2-#5's CONT. 12" MIN DISTANCE BELOW GRADE

GRADE

-8" CMU STEMWALL REINF. WITH

TYPICAL WALL SECTION SCALE: 3/4" = 1'-0"



SIMPSON H2.5

-dbl 2x10 header

coil stock

P.T. 4x4 POST

-SIMPSON ABU44

5/8" DIAMETER ANCHOR

BOLT TO CONCRETE

12-16d NAILS TO POST

unless otherwise noted simpson LSTA24 18-10d nails (2) required

wrap header with aluminum

5-8d NAILS TO TRUSS

5-8d NAILS TO HEADER

## END WALL BRACING FOR CEILING DIAPHRAGM

NOTE: ALL WOOD TO BE NUMBER 2 GIRADE SOUTHERN YELLOW PINE

1st 2 framing members

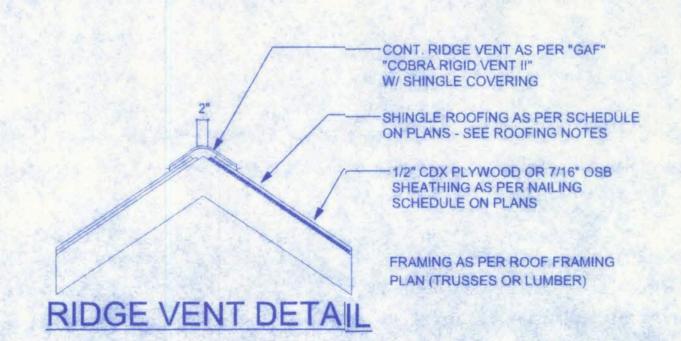
1x furring @ 16" o.c. -

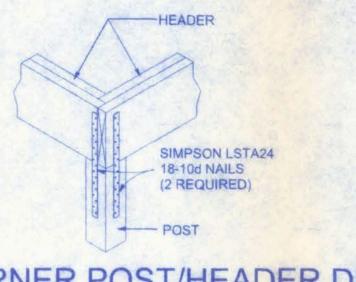
2500 PSI CONC. ----

vinyl soffit ---

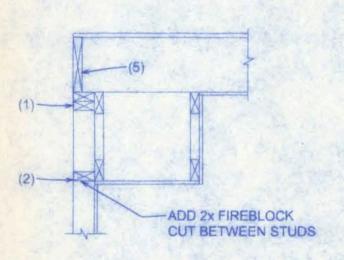
# VENTILATION REQUIREMENTS

Total Attic	Recommended Length	
Square	of Cobra Rigid Vent II	
Footage	(Feet)	Area in Sq. In.)
1600	21	384
1900	25	456
2200	29	528
2500	33	600
2800	41	744
3100	41	820
3400	45	816

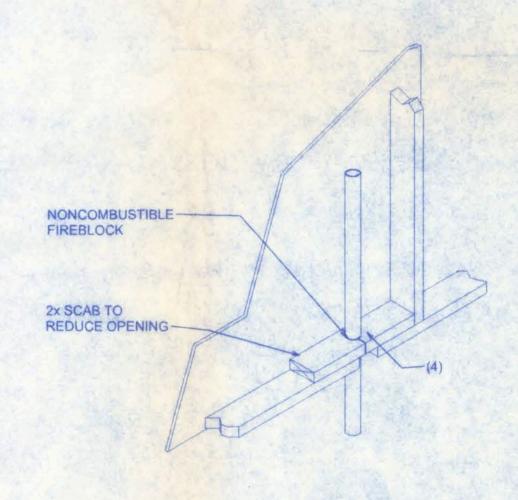




CORNER POST/HEADER DETAIL



SOFFIT/DROPPED CLG.



## FIREBLOCKING NOTES:

- FIREBLOCKING SHALL BE INSTALLED IN WOOD FRAME CONSTRUCTION IN THE FOLLOWING LOCATIONS:
- 1. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS INCLUDING FURRED SPACES AT CEILING AND FLOOR LEVELS.
- 2. AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS, COVE CEILINGS, ETC.

PENETRATIONS

- 3. IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF
- 4. AT OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS AND FIREPLACES AT CEILING AND FLOOR LEVELS WITH PYROPANEL MULTIFLEX SEALANT
- 5. AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL STUD WALL OR PARTITION SPACES AND CONCEALED SPACES CREATED BY AN ASSEMBLY OF FLOOR JOISTS, FIREBLOCKING SHALL BE PROVIDED FOR THE FULL DEPTH OF THE JOISTS AT THE ENDS AND OVER THE SUPPORTS.

HILL

Freeman
Design Group

DATE 11/09/07 W.H.F. REVISIONS

PROJECT NO.

07.R055

OPENING CONNECTION REQUIREMENTS HEADER SIZE CONNECTOR AT ANCHORAGE TO #2 GRADE OR EACH END OF FOUNDATION @ EACH OPENING. END OF OPENING END BEARING 1.5" N/A 1/2" ALL THREAD ROD 1/2" ALL THREAD ROD

BASIC WIND SPEED

IMPORTANCE FACTOR

BUILDING CATEGORY

INTERNAL PRESSURE

EXPOSURE

COEFFICIENT

COMPONENT AND

CLADDING PRESSURE

TYPE OF STRUCTURE

ROOF DEAD LOAD

ROOF LIVE LOAD

FLOOR DEAD LOAD

FLOOR LIVE LOAD

ALL THREAD LOCATIONS

110 MPH

+/- 0.18

+21.8/-29.1 PSF

+12.5/-29.1 PSF

-71.6 PSF

ENCLOSED

10 PSF

20 PSF

20 PSF

40 PSF

SHEARWALL LAYOUT

SCALE: 1/8" = 1'-0"

WALLS

ROOF

OVERHANGS

1.0

NOTE: ALL WIND LOADS ARE IN ACCORDANCE WITH SECTION

STRUCTURAL MEMBER	ALLOWABLE DEFLECTION
rafter's having slopes greater than 2/12 with no finished ceiling attached to rafters	L/180
interior walls and partitions	H/180
floors and plastered ceilings	L/360
all other structural members	L/240
exterior walls with plaster or stucco finish	H/360
exterior walls - wind loads with brittle finishes	L/240
exterior walls - wind loads with flexible finishes	L/120

CLEAR

			_	simpson HUC412	
		X	/ /-	-1/2" ATR 6" - 12" OF PORCH BEAM	
	1 F				
	1				
porch beam	/				
ouble 2x or solid 4x post		6"-12"			

# ALL THREAD @ PORCH BEAM

	N			
	0			
1"_	4	1"		
	0		-	
	0			
1			Ön	
1	118		1	

GIRDER COLUMN DETAIL SCALE: 1/2" = 1'-0"

OPENING WIDTH BETTER 0' - 3' (2) 2x8 >3' - 6' (2) 2x10 >6' - 9' (2) 2x12 (2) 1 3/4" x 11 1/4" LVL - 2.0E >9' - 12' 1/2" ALL THREAD ROD >12' - 15' (2) 1 3/4" x 11 1/4" LVL - 2.0E 1/2" ALL THREAD ROD >15' - 18' (2) 1 3/4" x 11 1/4" LVL - 2.0E 4.5" 1/2" ALL THREAD ROD 1/2" ALL THREAD ROD

	ALL WIND LOADS ARE IN ACCORDANCE WITH SECTION
ALLOWABLE DEFLECTION OF STRUCTURAL MEMBERS	1609, FLORIDA BUILDING CODE, 2004 EDITION W/ 2006
	REVISIONS.

STRUCTURAL MEMBER	DEFLECT
rafter's having slopes greater than 2/12 with no finished ceiling attached to rafters	L/180
interior walls and partitions	H/180
floors and plastered ceilings	L/360
all other structural members	L/240
exterior walls with plaster or stucco finish	H/360
exterior walls - wind loads with brittle finishes	L/240
exterior walls - wind loads with flexible finishes	L/120

### ie. FOR 8'-0" WALLS - (2'-3"). 16d TOE NAILS OPENING WIDTH PLATES EACH END UP TO 6'-0" (1) 2x4 OR (1) 2x6

(3) 2x4 OR (1) 2x6 (5) 2x4 OR (2) 2x6

- NUT & WASHER - 1/2" nut must be zinc

ROD - 1/2" all-thread rod must be zinc

ASTM A36 and A307

COUPLER (optional) - 1/2" x 1-1/2" zinc plated, must conform to ASTM A36

and A307 standards

and conform to ASTM A36

and A307 standards, 2"X2"

washer must be zinc plated

to depth OF 5" @ a mininium of 1-3/4" from side and 5" from

end of footing. Fill with epoxy

- NUT & WASHER - 1/2" nut must be zinc plated

- Simpson ET22 - drill 5/8" hole in foundation

plated and conform to ASTM A36 and A307

standards, 3"X3"

washer must be zinc plated

1. ALL SHEARWALLS SHALL BE TYPE 2 SHEARWALLS

NAIL SPACING SHALL BE 6" O.C. EDGES AND

THE WALL SHALL BE ENTIRELY SHEATHED WITH 7/16" O.S.B. INCLUDING AREAS ABOVE AND BELOW

ALL SHEATHING SHALL BE ATTACHED TO FRAMING ALONG ALL FOUR EDGES WITH JOINTS FOR ADJACENT

PANELS OCCURING OVER COMMON FRAMING MEMBERS

TYPE 2 SHEARWALLS ARE DESIGNED FOR THE OPENING

IT CONTAINS. MAXIMUM HEIGHT OF OPENING SHALL BE

5/6 TIMES THE WALL HEIGHT. THE MINIMUM DISTANCE

BETWEEN OPENINGS SHALL BE THE WALL HEIGHT/3.5

AS DEFINED BY STD 10-99 305.4.3.

GIRDER TRUSS, UPLIFT &-REACTION (DOWN) LOADS PER MANUFACTURER

GIRDER CONNECTOR -

6" -12"

ONE STUD FOR

GIRDER TRUSS

EACH PLY OF

(2 MINIMUM)

HEADER

JACK STUDS

MAX. CLEAR

OPENING WIDTH

ANCHORAGE TO FOUNDATION -@ EACH END OF OPENING

LARGER THAN 3'-0"

SCALE: 1/2" = 1'-0"

1/2" x 10" ANCHOR BOLT

@ 48" O.C. WITH 2" x 2" x 1/8"-

SHEARWALL DETAILS

SHEARWALL NOTES:

OR ALONG BLOCKING.

12" O.C. IN THE FIELD.

> 6' TO 9'-0"

> 9' TO 12'-0"

STEEL WASHER (TYPICAL)

ONE KING STUD PER

3'-0" OPENING WIDTH

MINIMUM TWO REQ'D

SHEARWALL

SEGMENT

WINDSTORM 7/16" O.S.B.

**FULL HEIGHT SHEATHING** 

## Placement at slab level:

Foundation / Spruce-Pine-Fir Top Plate

Lintel or Bond Beam / S.Y.P. Top Plate

Lintel or Bond Beam / Spruce-Pine-Fir Top Plate

ROOF TRUSSES, SEE PLAN-

END OF SHEARWALL ->

SEGMENT OF BUILDING

2x #2 SPF STUDS-

1/2" THREADED ROD @ END OF SHEARWALL

6" TO 12" FROM END

P.T. BOTTOM PLATE -

FOUNDATION-

ROOF TRUSS

ANCHORAGE

DOUBLE

CORNER

@ 16" O.C.

NAIL PANEL

TO OUTSIDE

2 STUDS

TOP PLATE

load transfer.

When presetting the all-thread rod at a building corner, the rod should be placed 8 to 12 inches away from the corner so it does not set under the corner framing members. When a all-thread rod is specified at a building corner, it may be placed on either side of the corner.

Header ends When presetting the all-thread rod at a header end, the rod should be placed 8 to 12 inches away from the header end so it does not fall under the stud pack framing members.

DOUBLE NAIL EDGE SPACING

TOP AND BOTTOM PLATE

3. One all-thread rod at each end of opening headers greater than 3'-0"

ALLOWABLE VALUES

4. Check sub-sheathing to top plate connection for horizontal transfer capability

5. If necessary, add all-thread rods to girders individually to exclude the rom average uplift plf.

6. Check sole plate to slab connection, additional anchors may be required for lateral and shear

Allowable Value

3840 lbs.

3840 lbs.

3840 lbs.

3840 lbs.

UPLIFT CAPACITY = 474 plf (TABLE 305S1 SSTD10-99)

1. One all-thread rod at each corner.

Connection Type

Foundation / S.Y.P. Top Plate

Top Connections Top connections made at corners and header ends shall be made withn 2 inches of the framing pack. A nut and 3X3 washer shall be applied to the top plates and tightened securely.

Intermediate Coupler Connections When using the rod coupler, care should be taken to ensure full and equal thread engagement. This is easily achieved by threading the coupler all the way onto the rod, then standing the two rods end to end then threading the coupler back over the rod joint so each rod is halfway into the coupler.

Retro-fits In the case of an all thread rod misplacement, the rod may be epoxied into the concrete.

Sole plate to slab connection: The slab level sole plate shall be connected to the slab with the connectors specified and at the spacing specified within the design documents. All-thread rods shall be placed as per the design specifications. All-thread rods with a nut and washer at the sole plate will qualify as a sole plate connection but may require other anchors intermediate of the all-hread rod locations to qualify the specified spacing requirements.

System Tightening:
On multiple story applications, the all-thread rod system shall be rechecked for proper tension just before the walls are veneered. This will allow the all-thread rod system to compensate for the buildings dead load compession.

A SOLID MEMBER OF EQUAL, OR GREATER SIZE THAN MULTIFILE MEMBERS MAY BE USED. IF RATED SHEATHING IS APPLIED TO NARROW EDGES, NAILED TO