



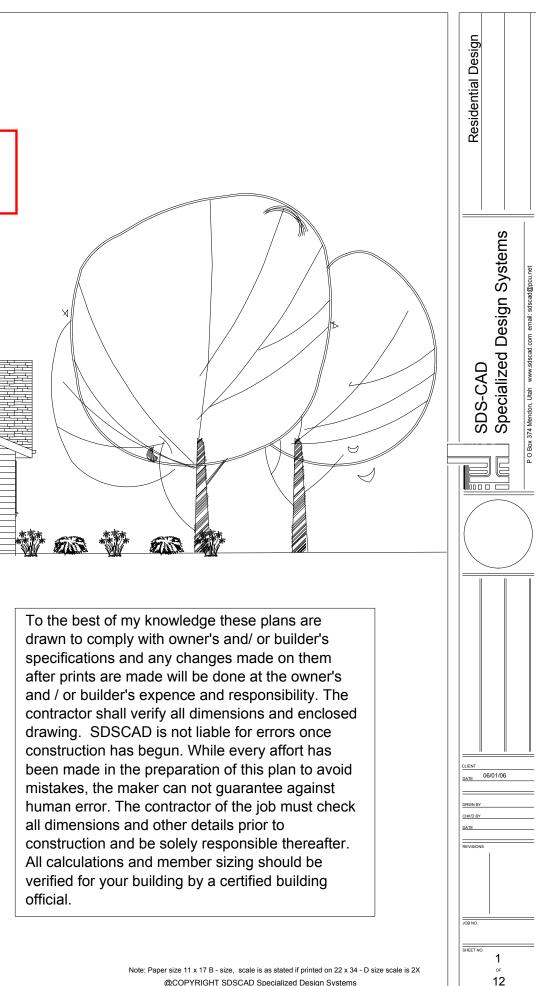
# **Custom Home Design** Plan #153 By SDS-CAD Specialized Design Systems

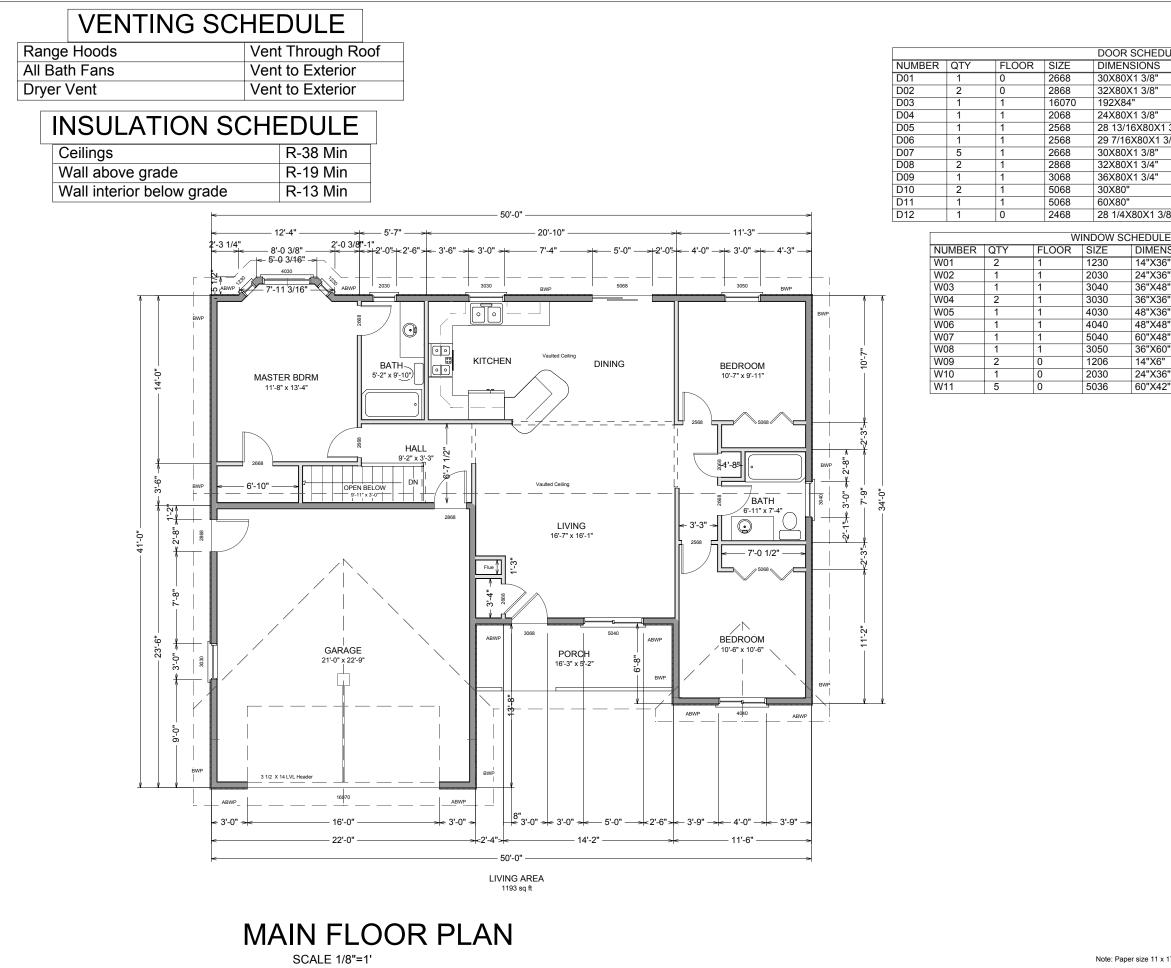
BUILDING CONTRACTOR/HOME OWNER TO REVIEW AND VERIFY ALL DIMENSIONS, SPECS, AND CONNECTIONS BEFORE CONSTRUCTION BEGINS.

ELECTRICAL SYSTEM CODE: SEC.2701 MECHANICAL SYSTEM CODE: SEC.2801 PLUMBING SYSTEM CODE: SEC.2901

Page 1 Cover Page Page 2 Main Floor Plan Page 3 Basement Plan Page 4 Elevation Plan Page 5 Typical Section Details Page 6 Floor and Roof Framing Plan Page 7 Whole House Section Page 8 Cabinet & Stair Details Page 9 Main Electrical Page 10 Basement Electrical Page 11 Misc Details Page 12 Beam & Joist Calculations

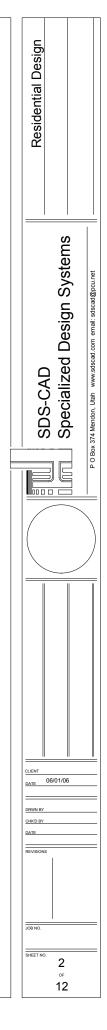
all dimensions and other details prior to official.



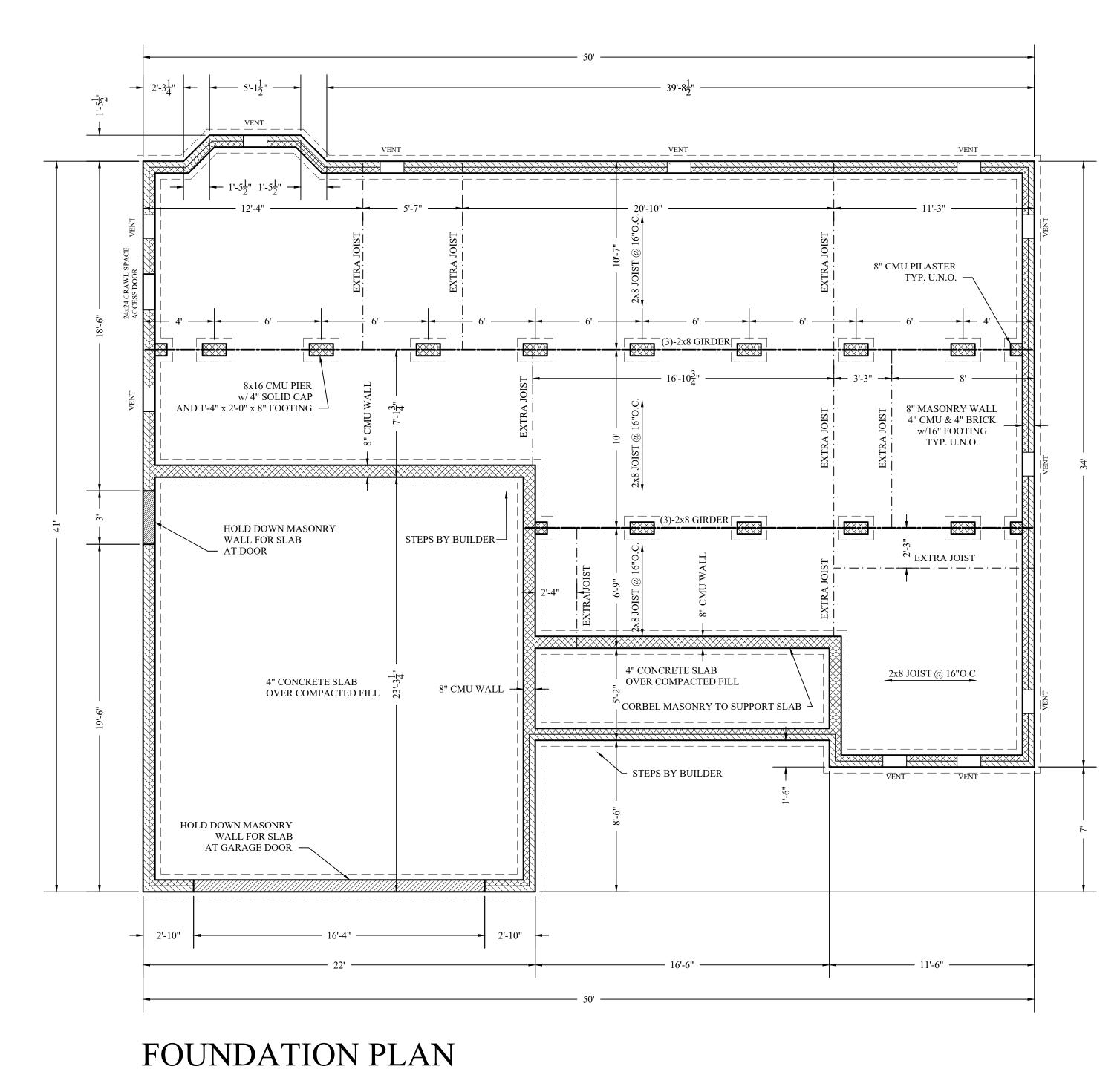


R SCHEDULE	
NSIONS	DESCRIPTION
)X1 3/8"	3 PANEL DOOR - COLOR BRITE WHITE
)X1 3/8"	3 PANEL DOOR - COLOR BRITE WHITE
34"	GARAGE 2-PANEL GARGE DOOR
)X1 3/8"	3 PANEL DOOR - COLOR BRITE WHITE
/16X80X1 3/8	"3 PANEL DOOR - COLOR BRITE WHITE
6X80X1 3/8"	3 PANEL DOOR - COLOR BRITE WHITE
)X1 3/8"	3 PANEL DOOR - COLOR BRITE WHITE
)X1 3/4"	EXT. 6-PANEL
)X1 3/4"	EXT. 6-PANEL
)"	BIFOLD
)"	EXT. SLIDER-GLASS
X80X1 3/8"	3 PANEL DOOR - COLOR BRITE WHITE

DIMENSIONS	DESCRIPTION
14"X36"	DOUBLE HUNG
24"X36"	DOUBLE HUNG
36"X48"	DOUBLE HUNG
36"X36"	DOUBLE HUNG
48"X36"	DOUBLE HUNG
48"X48"	RIGHT SLIDING
60"X48"	RIGHT SLIDING
36"X60"	DOUBLE HUNG
14"X6"	14X6 HORIZ
24"X36"	DOUBLE HUNG
60"X42"	RIGHT SLIDING



# 1/4"=1'-0"



## NOTES:

- 1. ONE FOUNDATION VENT SHALL BE WITHIN 3 FEET OF EACH CORNER OF THE BUILDING.
- 2. FOOTING SIZES BASED UPON 2000 PSF ALLOWABLE SOIL BEARING CAPACITY. BUILDER TO VERIFY. 3. THE BOTTOM OF WOOD JOISTS CLOSER THAN 18 INCHES OR BEAMS
- CLOSER THAN 12" TO THE EXPOSED GROUND IN THE CRAWLSPACE SHALL BE PRESSURE TREATED. 4. ALL LUMBER SPANS ARE BASED UPON #2 SOUTHERN YELLOW PINE
- 5. CONNECT JOIST TO GIRDERS WITH JOIST HANGERS.

CRAWL SPACE VENTILATION AREA= 1142 / 150 = 7.61 TOTAL NET CLEAR AREA= 7.61 / 0.87 (AREA IN SF OF 8x16 VENT)= 8.75 # OF VENTS REQUIRED= 9

If an approved vapor barrier were placed over the ground surface

- of the crawl space the total area of the openings to the exterior can be reduced to 10% of that required. AREA (with vapor barrier) 1142 / 150 TOTAL NET CLEAR AREA 7.61
- (10% OF THE ABOVE NET CLEAR AREA)/ 0.87 (S.F. AREA OF 8x16 VENT)= .76/0.87= 0.87 # OF VENTS REQUIRED 1



AS NOTED May EVISED: EVISED: CALE: A ZONING BUILDING CO 53 FOUNDATION ABLE BROU BE TH APPL SHALL GINS AN. PL

 $\boldsymbol{\mathcal{N}}$ PRIME ESTATE RENOVATION 1464 CYPRESS CHURCH ROAD CAMERON, NORTH CAROLINA

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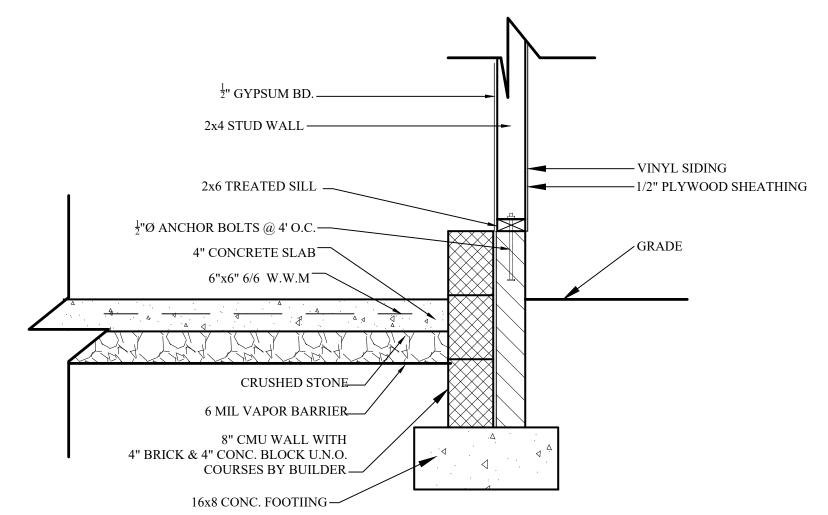
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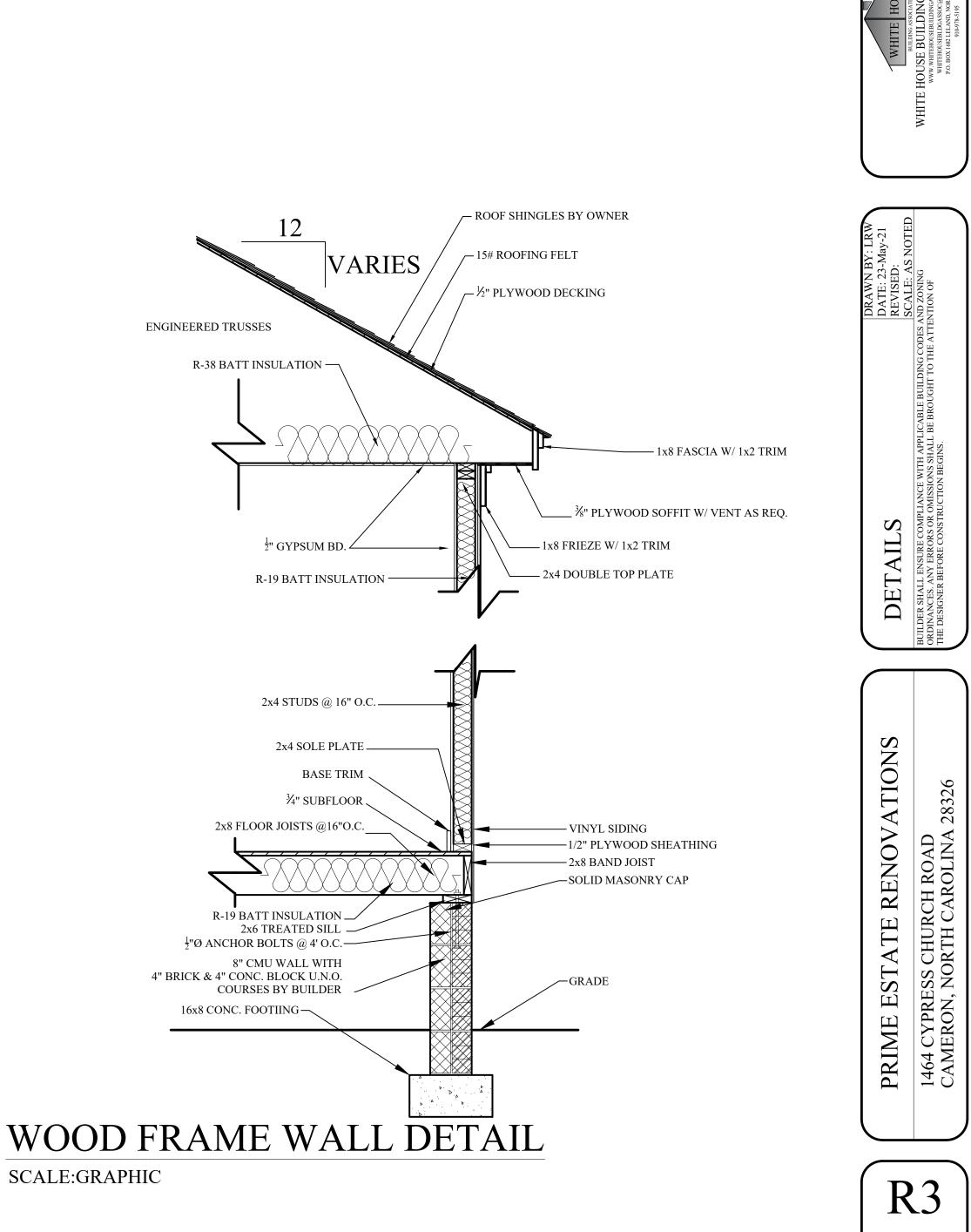
**R**1 1 OF 1



# SCALE:GRAPHIC

# GARAGE WALL DETAIL





**R3** 1 OF 1

ASSOCIATES LLC

BUILDING ASSOCIATES WHITTE HOUSE BUILDING WWW, WHITTEHOUSERIII INNYA &

DER SHALL ENSURE COMI NANCES. ANY ERRORS OR DESIGNER BEFORE CONST

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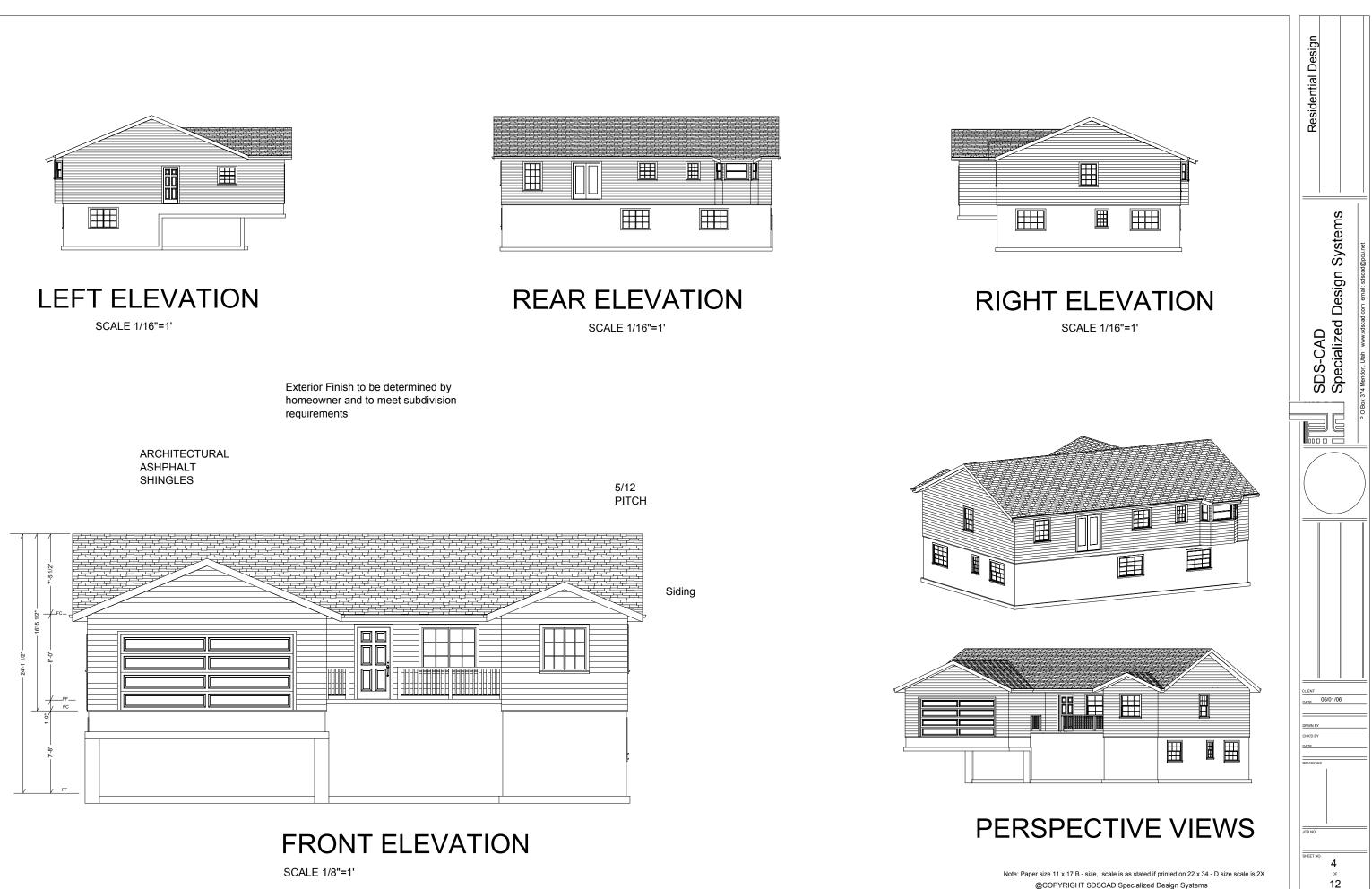
1464 CYPRESS CHURCH ROAD CAMERON, NORTH CAROLINA

DETAILS

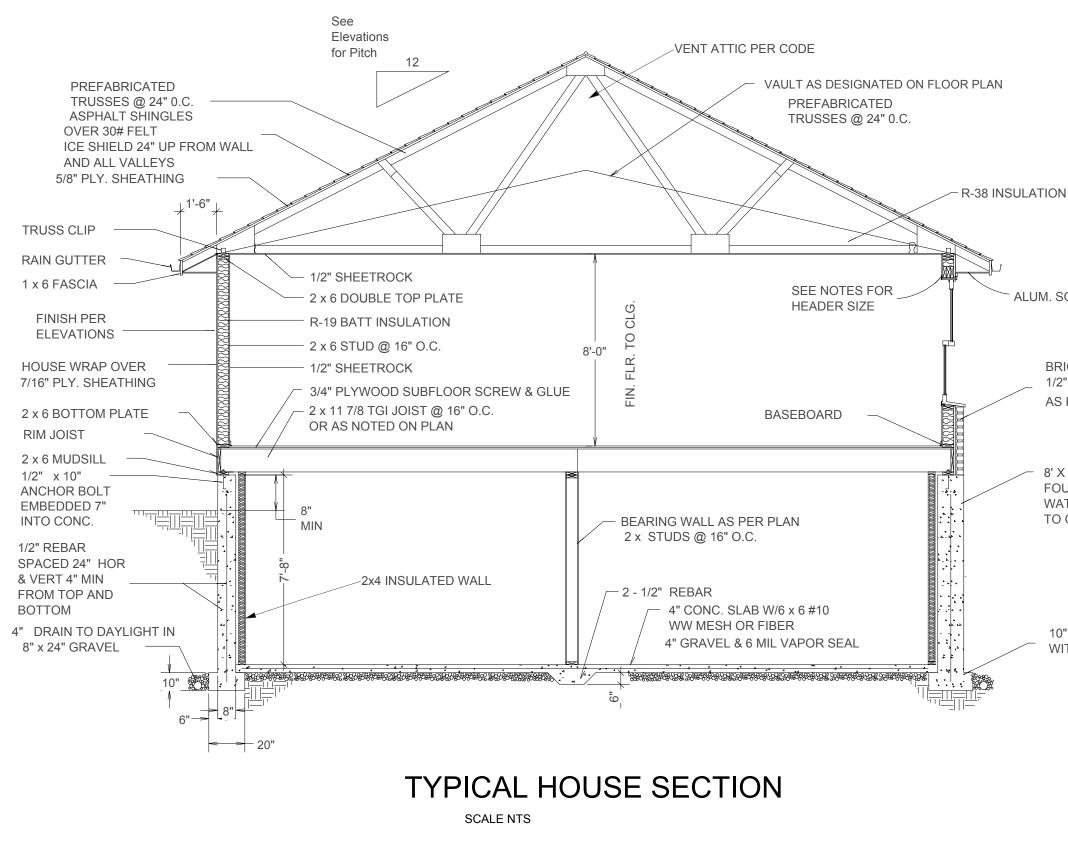
PRIME ESTATE RENOVATIONS

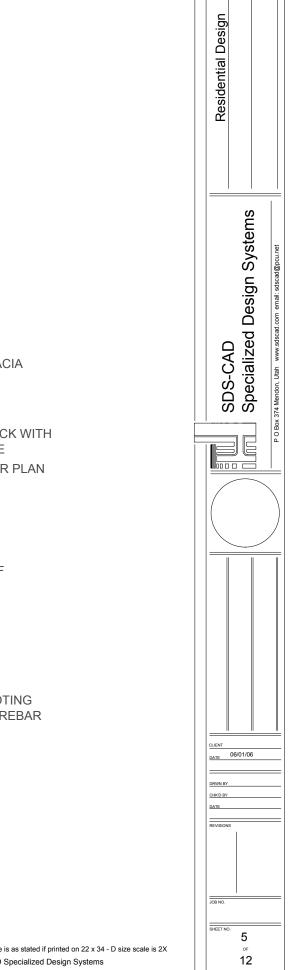
HOUSE

WHITE



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ALUM. SOFFIT & FACIA

BRICK OR ROCK WITH 1/2" AIRSPACE AS PER FLOOR PLAN

8' X 8" FOUNDATION WATERPROOF TO GRADE

10" X 20" FOOTING WITH 2 - 1/2" REBAR

### Roof Framing:

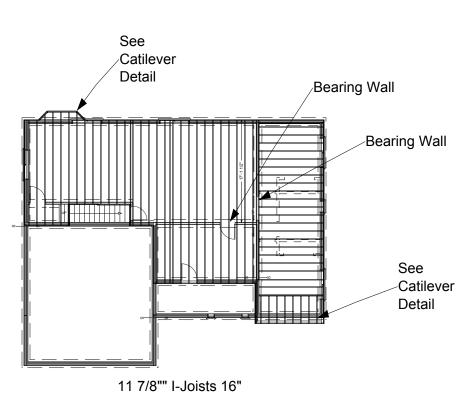
- 1. Fascia to be 2"x Douglas Fir.
- 2. For soffit size see details.
- 3. For spans and dimensions refer to floor plans.

SCALE 1/16"=1'

- Trusses are to be an approved truss design from the truss manufacture's engineer. 4. Install as per engineers specs
- Use Simpson H-1 hurricane anchors at each truss or rafter to wall connection. 5.
- Solid blocking required between joists, rafters, and trusses over all bearing walls. 6.

MAIN FLOOR FRAMING

- Such blocking shall be 1 <sup>1</sup>/<sub>2</sub>" minimum thickness and full depth of joists, rafters, or trusses.
- Minimum header sizes shall be according to the header size table unless otherwise noted. 7.
- Basis of design roof live/snow load of 37 psf, and roof dead load of 15 psf. 8.
- 9. Plywood roof decking to be Min 1/2" thick, 24/0, CDX or 5/8 wafer.



o.c Floor Joists.

SEE GENERAL SPECS AND NOTES FOR FRAMING DETAILS

PRE-ENGINEERED ENERGY TRUSSES AS SUPPLIED BY TRUSS MANUFACTURER

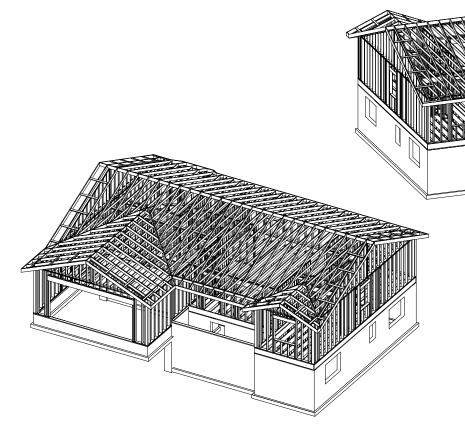
1. Trusses to be 24" O.C.

2. Attic access min 22 1/2" x 30" were most convenient. For all areas greater than 30"

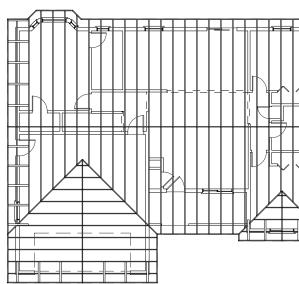
3.Place vaults where possible as indicated on the floor plan

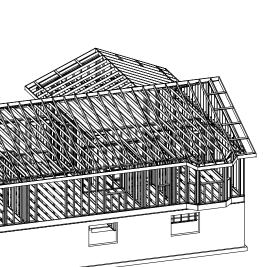
4. Install all trusses as per truss manufacturer installation guidelines.

5. 5/12 Pitch



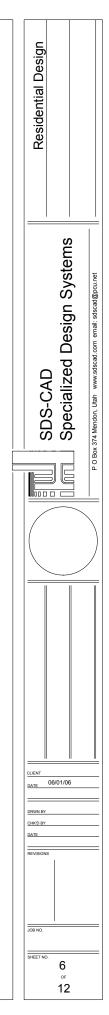
5/12 Pitch

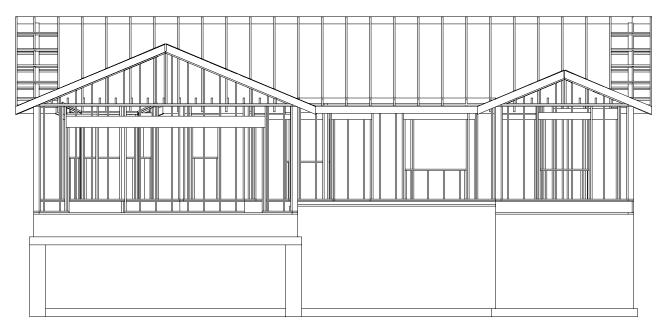




# **ROOF FRAMING** SCALE 1/16"=1'

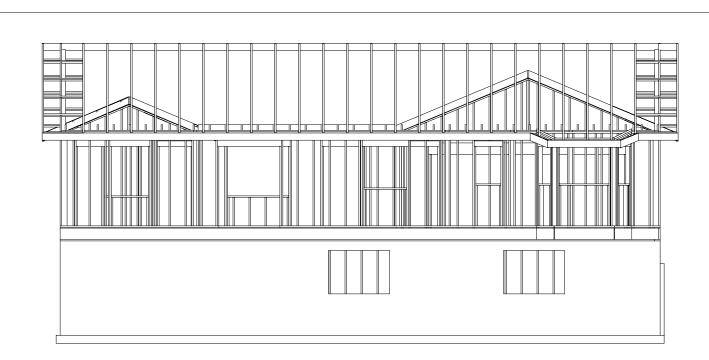






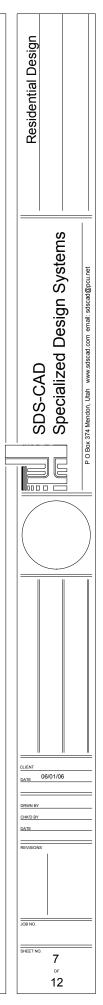
General framing: (Douglas Fir)

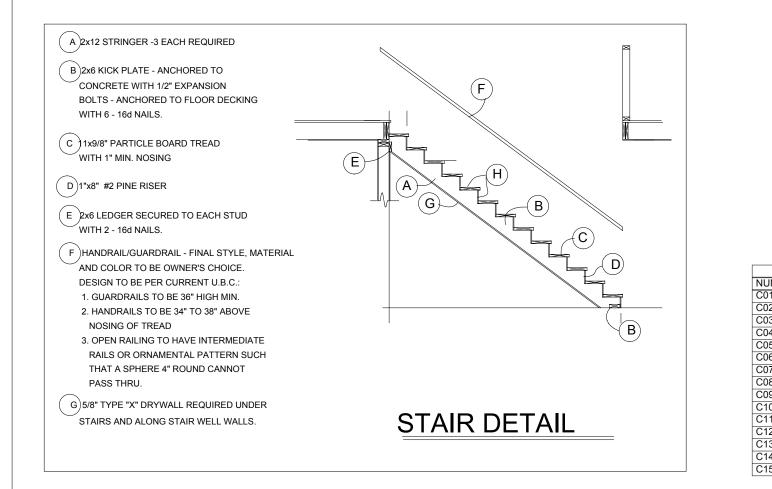
Conorarina	
1.	Minimum header sizes shall be according to the following table unless otherwise noted.
	Header sizes (single story construction)
	2'-0" to 4'-0" Span 2-2x4's
	4' + to 6'-0" Span 2-2x6's
	6' + to 8'-0" Span 2-2x8's
	8' + to 10'-0" Span 2-2x10's
	10' + to 12'-0" Span 2-2x12's
	Header sizes (two story construction)
	2'-0" to 3'-0" Span 2-2x4's
	3' + to 5'-0" Span 2-2x6's
	5' + to 7'-0" Span 2-2x8's
	7' + to 8'-0" Span 2-2x10's
2.	Brace all exterior walls and cross-stud partitions at each end of building and at least every
	25' of length by one of the following:
	a. Simpson WB 126 wall bracing with 3-16d nails at each end and 1-8d nails at each stud.
_	b. Plywood sheathing of a minimum thickness of 3/8 inch.
3.	Fire stopping:
	a. Fireblock stud spaces over 10' in height, furred spaces, soffits, drop ceilings, cove ceilings,
	stair stringers at top and bottom of run, bearing walls and ceiling joist lines, etc. Firestopping shall consist of 2" nominal lumber.
	b. Firestop openings around vents, pipes, ducts, chimneys, and fireplaces at ceiling
	and floor levels with approved noncombustible materials.
4.	CDX plywood is not approved where exposed to weather, i.e., roof overhangs.
5.	Exterior wall framing to be 2"x6" studs at 16" o.c. Interior wall, framing at non-bearing walls
	to be 2"x4" studs at 24" o.c. and at bearing walls 2"x4" studs at 16" o.c. with double top plate.
6.	Shear wall to be 3/8" CDX plywood applied horizontally.
7.	All stress grade lumber shall comply with WCLA specs and bear approval stamp on all pieces in place.
8.	Framing lumber shall be Douglas Fir construction grade Fb 1450 or better unless otherwise noted.
9.	Nailing to be per current U.B.C. unless otherwise noted.
10.	All bearing partitions shall have double top plates.
11.	Structural glued laminated timbers to be stamped by an approved agency.
12.	Use redwood or pressure treated sole plates at all exterior walls.
Floor Frami	ing.
	ing.
1.	All floor joist to be Douglas Fir #2 or T.J.I. @ 16" o.c. unless otherwise noted.
2.	For spans and dimensions refer to floor plans.
3.	Use Simpson H 2.5 hurricane anchors at each floor joist to bearing wall connection.
4.	Solid blocking between joists over all bearing walls, and midspans such blocking shall
	be 2" minimum thickness and full depth of joists.
5.	Minimum header sizes shall be according to the header size table unless otherwise noted.
6.	Basis of design: floor live load of 40 psf, and floor dead load of 15 psf.
7.	Floor decking to be <sup>3</sup> / <sub>4</sub> " thick T & G wafer board.
8.	Joist hangers to be Simpson U210 or equal unless otherwise noted.
9.	Double joists and or double blocking at all interior walls.



**FULL HOUSE** FRAMING SECTION SCALE 1/8"=1'







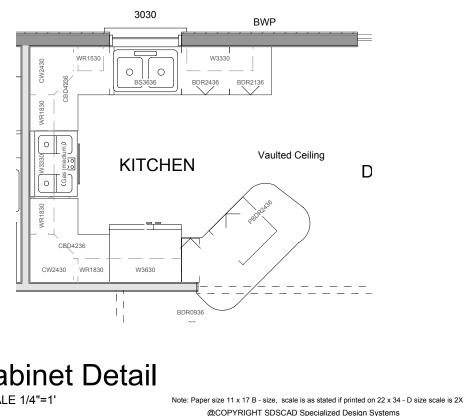
		CABIN	ET SCHEDULE		
JMBER	QTY	FLOOR	DIMENSIONS	DESCRIPTION	
)1	1	1	12X24X36 "	BATH BASE CAB	· · ·
)2	1	1	15X12X30 "	WALL CAB	
)3	2	1	15X24X36 "	BATH BASE CAB	
)4	3	1	18X12X30 "	WALL CAB	
)5	1	1	21X24X36 "	BASE CAB	
)6	2	1	24X24X30 "	CRNR WALL CAB	
)7	1	1	24X24X36 "	BASE CAB	
)8	1	1	24X24X36 "	PEN BASE CAB	
)9	1	0	36X24X36 "	BASE CAB	
10	2	1	33X12X30 "	WALL CAB	
11	1	1	36X12X30 "	WALL CAB	
12	1	1	36X24X36 "	BASE CAB	
13	2	1	42X42X36 "	CRNR BASE CAB	
14	1	1	9X22X36 "	BASE CAB	
15	2	1	27X24X36 "	BATH BASE CAB	

Kitchen layout and cabinets to be chosen by homeowner/Contractor basic layout for reference only. Measure after sheetrock is installed for correct sizing.

# STAIR DETAILS

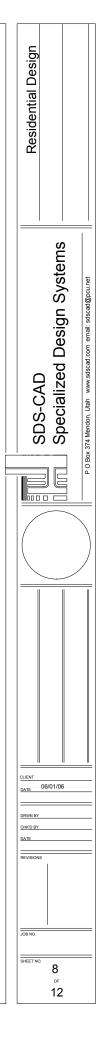
#### STAIR SPECIFICATIONS

- 1. Stairs to be constructed with the following materials: 2x6 kick plate anchor to concrete with expansion type anchor bolts, 2x12 treads nosing 1 1/8" minimum, 3-2x12 stringers required, 2x12 blocking,  $\frac{3}{4}$ " wafer board risers and 2x6 ledger.
- Handrail/Guardrails final style, material and color to be owner's choice. Design to be per code. 2.
- 3. Guardrails to be 42" high minimum from floor.
- Handrails to be 34"-38" above tread nosing. 4.
- 5. Open railing to have intermediate rails or ornamental pattern such that a sphere 4" round cannot pass through.
- Minimum stair requirements: maximum 8" rise, minimum 42" width, minimum 9" run, minimum head clearance 6'-8". 6.
- 7. Preferred stair requirements: rise 7" to 7 1/2", run 11" to 12", minimum head clearance 7'-0".
- 8. Garage entrance stairs may be concrete or wood as per contractor/homeowner





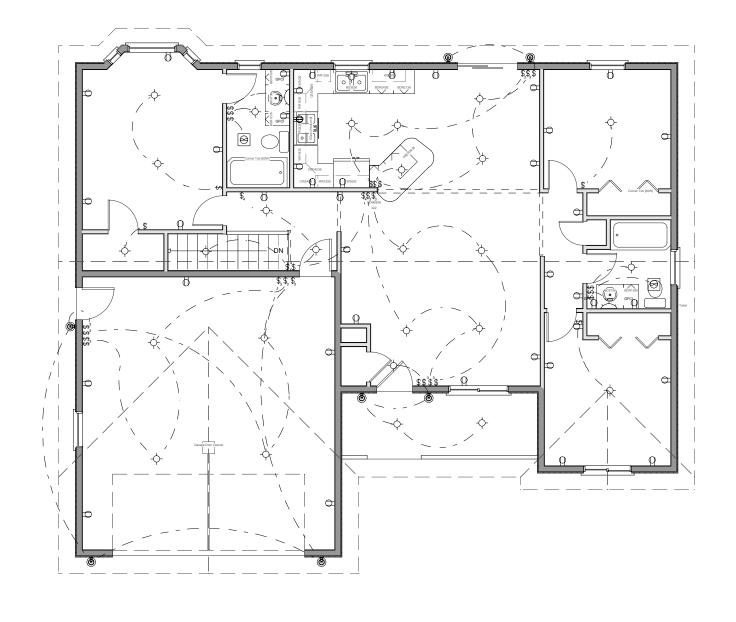




			ELECTRICA	AL SCHEDI	ULE
NUMBER	QTY	FLOOR	DIMENSIONS	WIDTH	DESCRIPTION
E01	2	1	12X12X1 "	12 "	EXHAUST
E02	27	1	16X16X4 "	16 "	HALF DOME LIGHT - LIGHTING GREY
E03	2	1	16X8X8 "	16 "	HALF CONE - LIGHTING GREY
E04	2	1	3X0X5 "	3 "	220V
E05	36	1	3X0X5 "	3 "	DUPLEX
E06	4	1	3X0X5 "	3 "	GFCI
E07	3	1	3X1X5 "	3 "	FOUR WAY
E08	18	1	3X1X5 "	3 "	SINGLE POLE
E09	12	1	3X1X5 "	3 "	THREE WAY
E10	7	1	9X9X18 "	9 "	CAGED LANTERN

# MAIN FLOOR ELECTRICAL PLAN



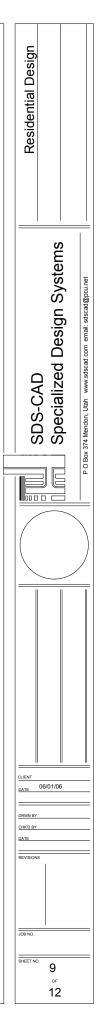


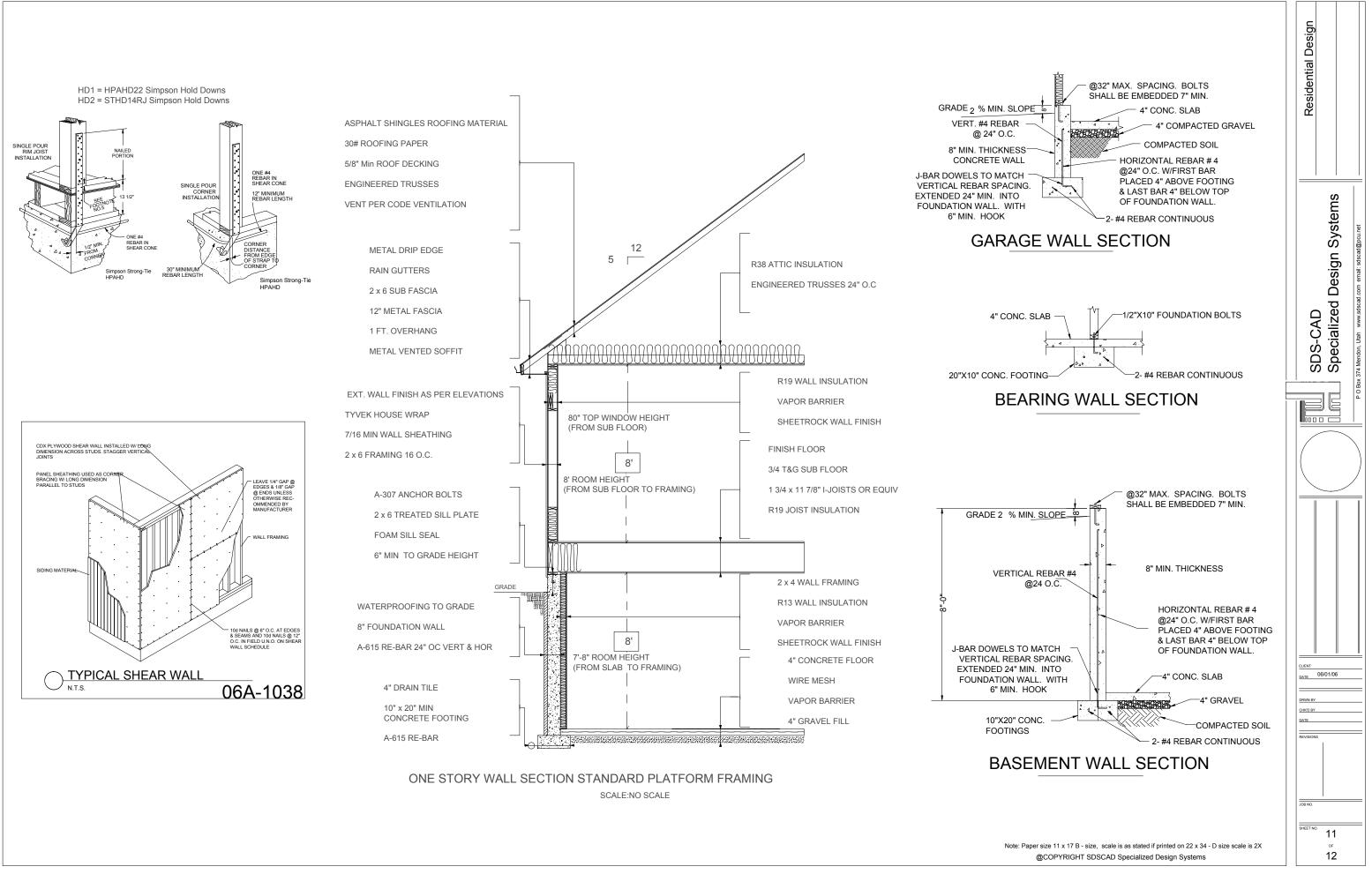
#### Electrical Systems:

- Inspection is required prior to backfill of lines. 1.
- 2. Provide 20 ft. of No. 4 copper wire as ground electrode in foundation footing.
- Bond interior piping system with #8 bare copper. 3.
- 4. Provide main jumping bond with #4 bare copper.
- 5. Electrical service is to be 200 amp service, 120/240 volt, 1 phase raintight, underground.
- 6. Provide separate 20 amp circuits to washer.
- 7. Provide 20 amp circuits to family and dining room, and a minimum of two 20 amp circuits to kitchen.
- Prewire for TV, telephone in kitchen, family room, living room, and in 8. every bedroom.
- Install ground fault current interrupter on exterior, garage, kitchen, and 9. bathroom convenience outlets.
- 10. Bottom half of outlet controlled by switch when shown.
- All outlets in kitchen are to be at +44" excluding those for the refrigerator, 11. range, disposal, and dishwasher.
- Maximum spacing of outlets shall not exceed 12 ft. along wall line 12. and at any wall over
- 24" wide in all rooms except kitchen, bath, utility, and garage.
- Install light in walk-in closet 18" minimum horizontal from any shelf. 13.
- 14. Provide a ventilation fan capable of producing a change of air every 12 minutes for bath or utility.
- 15. Provide smoke detector alarm conforming to Section 1210(A) U.B.C. and local building codes

in every bedroom and on each floor.

- CO2 Detector on each floor. 16.
- Ceiling fan hangers on all bedroom and living room lights. 17.
- Consult with contractor and homeowner for all final light fixture and light placement and details. 18.





#### Floor Joist Calculations

Floor Joist[ 2000 International Residential Code (97 NDS) ] Ver: 5.05 By: SDSCAD Specialized Design Systems , SDSCAD on: 06-06-2006 : 5:26:43 PM Project: - Location: Steve Brown North Logan Summary: SERIES 450 / 11.875 - Boise Cascade x 17.5 FT @ 16 O.C. Section Adequate By: 9.3% Controlling Factor: Allowable Deflection \* I-joists were designed for simple spans using the joist manufacturers published values. If the design does not match the actual joist loading or span conditions in any way, contact the joist manufacturer for design verification. Joist Span Deflections: Dead Load: DLD-Center= 0.16 IN LLD-Center= 0.37 IN = L/562 Live Load: Total Load: TLD-Center= 0.53 IN = L/394 Joist Span Left End Reactions (Support A): LL-Rxn-A= 408 LB Live Load: Dead Load: DL-Rxn-A= 175 LB TL-Rxn-A= 583 LB Total Load: Bearing Length Required (Beam only, Support capacity not checked):BL-A=1.75IN Joist Span Right End Reactions (Support B): LL-Rxn-B= 408 LB Live Load: DL-Rxn-B= 175 LB Dead Load: Total Load: TL-Rxn-B= 583 LB Bearing Length Required (Beam only, Support capacity not checked):BL-B=1.75IN Joist Data: Joist Span Length: L2= 17.5 FT Floor sheathing applied to top of joists-top of joists fully braced. Cd= 1.00 Live Load Duration Factor: Live Load Deflect. Criteria: L/ 480 Total Load Deflect. Criteria: L/ 360 Joist Span Loading: Uniform Floor Loading: LL-2= 35.0 PSF Live Load: Dead Load: DL-2= 15.0 PSF TL-2= 50.0 PSF Total Load: Total Load Adjusted for Joist Spacing: wT-2= 67 PLF Properties For: SERIES 450 / 11.875- Boise Cascade

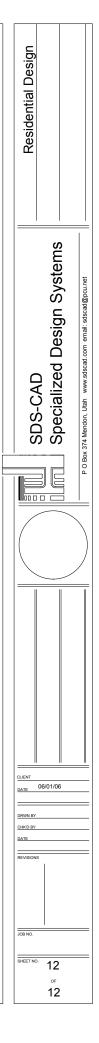
## Garage Door Header Calculations

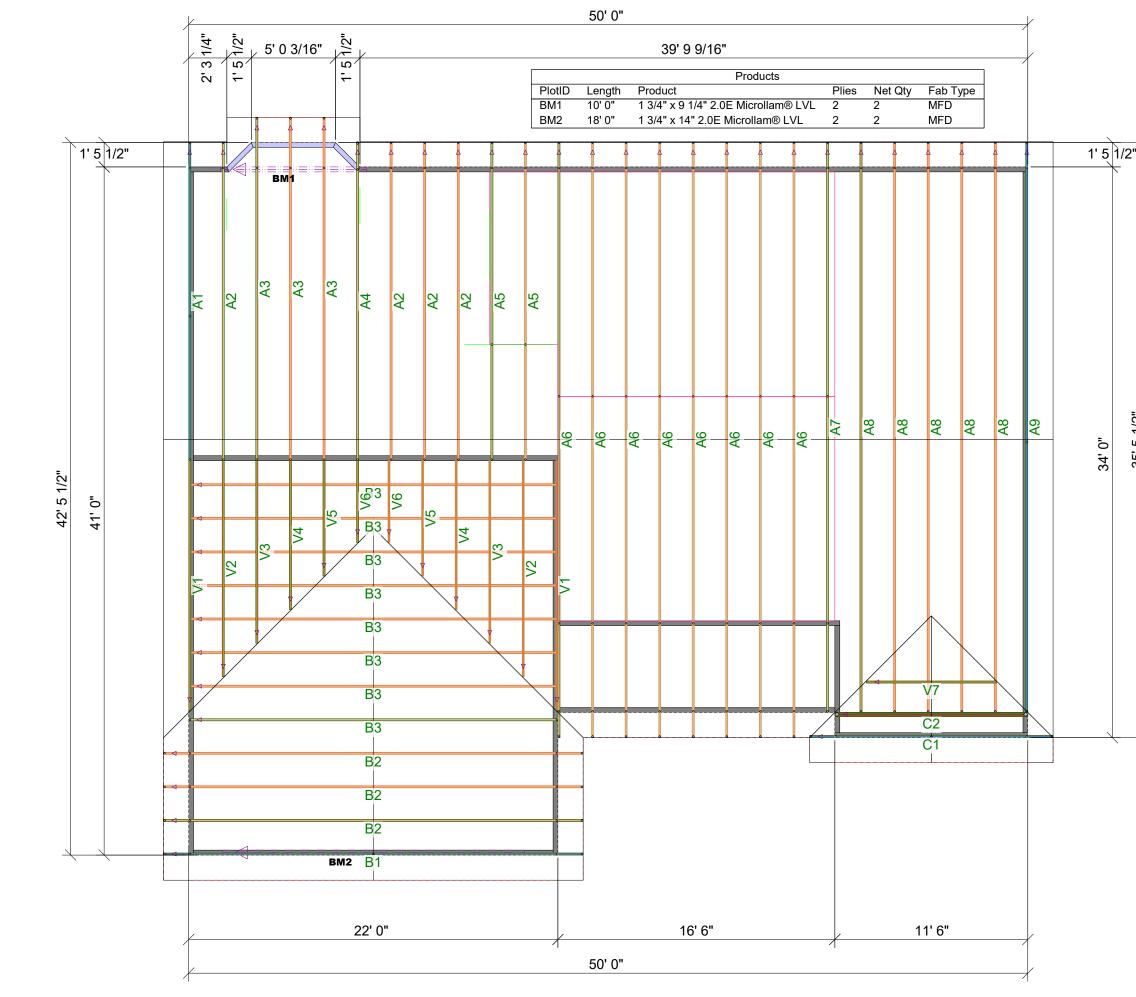
Roof Beam[ 2000 International Residential Code (97 NDS) ] Ver By: SDSCAD Specialized Design Systems, SDSCAD on: 06-06 Project: SteveB - Location: Garage Door Header
Summary:
(2) 1.75 IN x 14.0 IN x 16.0 FT / Versa-Lam 2800 Fb DF - E
Section Adequate By: 48.3% Controlling Factor: Section Mc
* Laminations are to be fully connected to provide uniform tra
Deflections:
Dead Load: DLD= 0.19 IN
Live Load: LLD= 0.39 IN = L/496
Total Load: TLD= 0.58 IN = L/331
Reactions (Each End):
Live Load: LL-Rxn= 3360 LB
Dead Load: DL-Rxn= 1683 LB
Total Load: TL-Rxn= 5043 LB
Bearing Length Required (Beam only, Support capacity not c
Beam Data:
Span: L= 16.0 FT
Maximum Unbraced Span: Lu= 2.0 FT
Pitch Of Roof: RP= : 12
Live Load Deflect. Criteria: L/ 240
Total Load Deflect. Criteria: L/ 180
Roof Loading:
Roof Live Load-Side One: LL1= 35.0 PSF
Roof Dead Load-Side One: DL1= 15.0 PSF
Tributary Width-Side One: TW1= 12.0 FT
Roof Live Load-Side Two: LL2= 35.0 PSF
Roof Dead Load-Side Two: DL2= 15.0 PSF
Tributary Width-Side Two: TW2= 0.0 FT
Roof Duration Factor: Cd= 1.15
Beam Self Weight: BSW= 15 PLF
Slope/Pitch Adjusted Lengths and Loads:
Adjusted Beam Length: Ladj= 16.0 FT
Beam Uniform Live Load: wL= 420 PLF
Beam Uniform Dead Load: wD adj= 210 PLF
Total Uniform Load: wT= 630 PLF
Properties For: Versa-Lam 2800 Fb DF- Boise Cascade
Bending Stress: Fb= 2800 PSI
Shear Stress: Fv= 285 PSI
Modulus of Elasticity: E= 2000000 PSI
Stress Perpendicular to Grain: Fc_perp= 900 PSI
Adjusted Properties
Fb' (Tension): Fb'= 3139 PSI
Adjustment Factors: Cd=1.15 CI=0.99 Cf=0.98

er: 5.05 6-2006 : 5:52:22 PM

Boise Cascade lodulus / Depth Required 11.5 In ansfer of loads to all members

checked):BL=1.60IN





TRUSS TO WALL CONNECTIONS, IF SHOWN, ARE FOR UPLIET ONLY AND DO NOT CONSIDER LATERAL LOADS. ALL CONNECTORS ON THIS PROJECT ARE TO BE INSTALLED PER THE CONNECTOR MANUFACTURER'S SPECIFICATIONS. ALL CONNECTORS SHOWN THAT ARE NOT "TRUSS TO TRUSS" ARE SUGGESTIONS ONLY AND ARE TO BE VERIFIED BY THE BUILDING DESIGNER OF RECORD FOR SUITABILITY TO THIS PARTICULAR PROJECT. UFP MID-ATLANTIC, LLC. ACCEPTS NO RESPONSIBILITY FOR THE SPECIFIC APPLICATION OR SUITIBILITY OF ANY CONNECTOR THAT IS NOT "TRUSS TO TRUSS" AS THEY APPLY TO THIS SPECIFIC STRUCTURE.

ROOF AREA: 2304.6 ft²_RIDGE LINE: 82.75 ft _ VALLEY	E: 82.75 ft _ VALLE	Y LINES: 58.24		1. TEMPORARY BRACING TO BE INSTALLED W/T.P.I. STANDARD BCSI-
		UFP MID-AILANIIC, LLC	PROPERTY OF UFP MID-ATLANTIC, LLC AND IS NOT TO BE USED FOR ANY PURPOSE DETRIMENTAL TO THE	1. EMPORARY BRACING TO DE INSTALLED WITP.I. STANDARD DCOF 11
Job Name	BURLINGTON, NC CHESAPEAKE VA	PHONE (800) 476-9356 PHONE (800) 476-3190	INTEREST OF UFP MID-ATLANTIC, LLC. THIS DRAWING MUST BE USED IN	2. SEE ENGINEERED DRAWING FOR FERMANENT BRACING MINIMUM REQUIREMENTS.
Plan 153	CLINTION, NC		CONJUNCTION WITH ALL OTHER TECHNICAL DRAWINGS SUPPLIED BY	3. FRAMER TO VERIFY ALL DIMENSIONS, DROP, & RISE LOCATIONS
	CONWAY, SC	PHONE (800) 397-9572	UFP MID-ATLANTIC, LLC AND "BRACING	
	JEFFERSON, GA	PHONE (800) 648-4038	WOOD TRUSS: COMMENTARY AND RECOMMENDATIONS" AS PUBLISHED	4. BLDR/FRAMER RESPONSIBLE FOR ADJUSTMENT OF TRUSS
21	LOCUST, NC	PHONE (704) 888-0920	BY THE TRUSS PLATE INSTITUTE FOR	SPACING TO MISS PLUMBING DROPS, UNLESS NOTED OTHERWISE.
scale:NTS Quality Froducts for Quality Builders	TM LIBERTY, NC	PHONE (800) 648-4038	INDUSTRY STANDARDS IN ERECTING TRUESES (TRU) IS LOCATED AT 583	5. THIS LAYOUT IS NOT AN ENGINEERED DRAWING. THIS DRAWING
Revision Date1:	OOLTEWAH, TN	PHONE (844) 497-0056	D'ONOFRIO DR. SUITE 200 MADISION,	WAS CREATED TO ESTABLISH TRUSS PLACEMENT ONLY. IT IS THE RESPONSIBILITY OF THE BUILDER TO PROVIDE ADEOUATE
Kevision Date2:	PEARISBURG, VA	PHONE (800) 397-9571	WI 53719 (608) 833-5900	SUPPORT FOR ALL THE ELEMENTS SHOWN IN THIS DRAWING