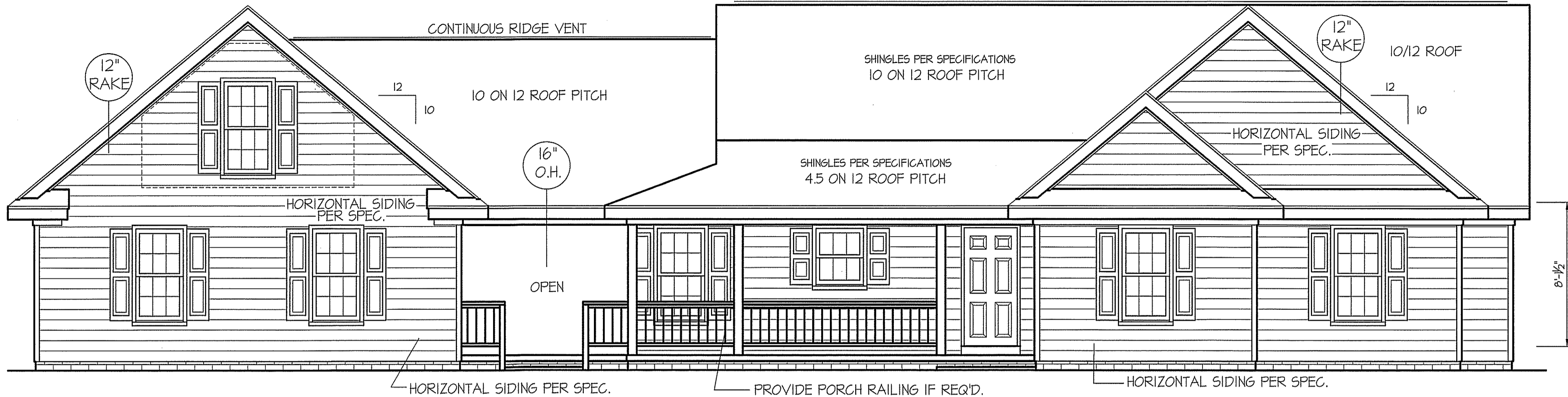


THIS PLAN IS DESIGNED TO MEET THE REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE 2018 EDITION

CONTINUOUS RIDGE VENT



FRONT ELEVATION

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

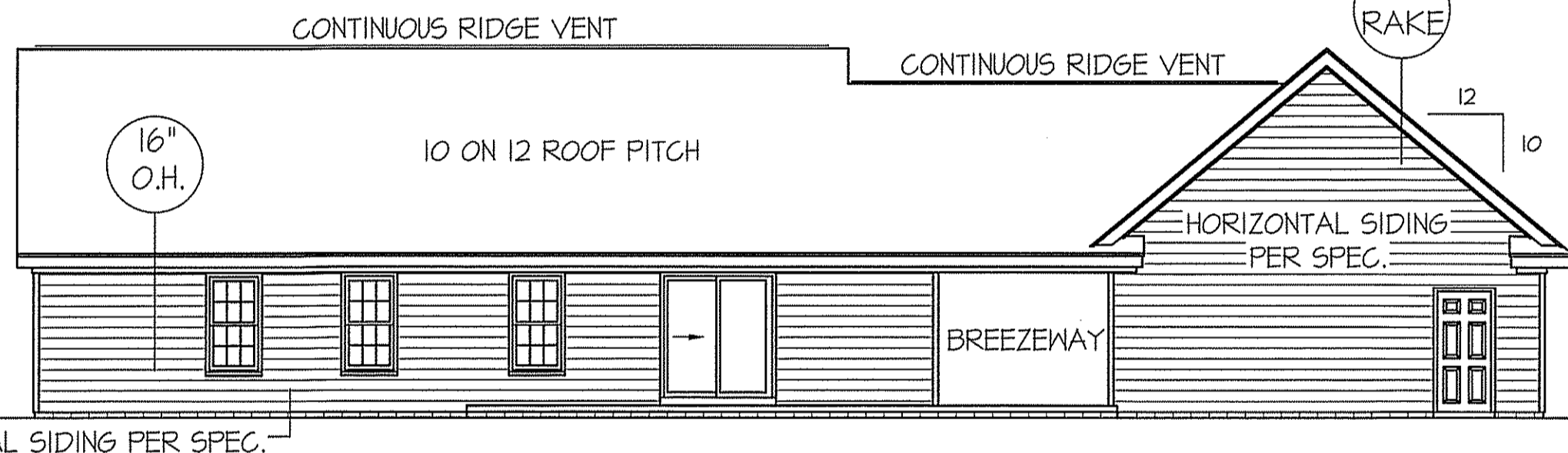
ALL EXTERIOR WALLS TO BE SHEATHED WITH CS-WSP (1/16" OSB) IN ACCORDANCE WITH SECTION R602.10.3 UNLESS OTHERWISE NOTED.

ROOF VENTILATION REQ'MTS.
2442 ATTIC SQ. FT. / 300 = 8.14
PROVIDED ON PLAN
121 L.F. RIDGE VENT = 22.68
164 L.F. SOFFIT VENT = 10.25
TOTAL = 32.93 S.F. FREE NET AREA

INSULATION and FENESTRATION REQUIREMENTS		
CLIMATE ZONE	ZONE-3	ZONE-4
FENESTRATION U-FACTOR	0.35	0.35
GLAZED FENESTRATION SHGC	0.30	0.30
MINIMUM CEILING R-VALUE	R-38	R-38
MINIMUM WALL R-VALUE	R-15, 13+2.5	R-15, 13+2.5
MINIMUM FLOOR R-VALUE	R-19	R-19
MIN. CRAWL SPACE WALL R-VALUE	5/13	10/15
MIN. SLAB R-VALUE	0	R-10

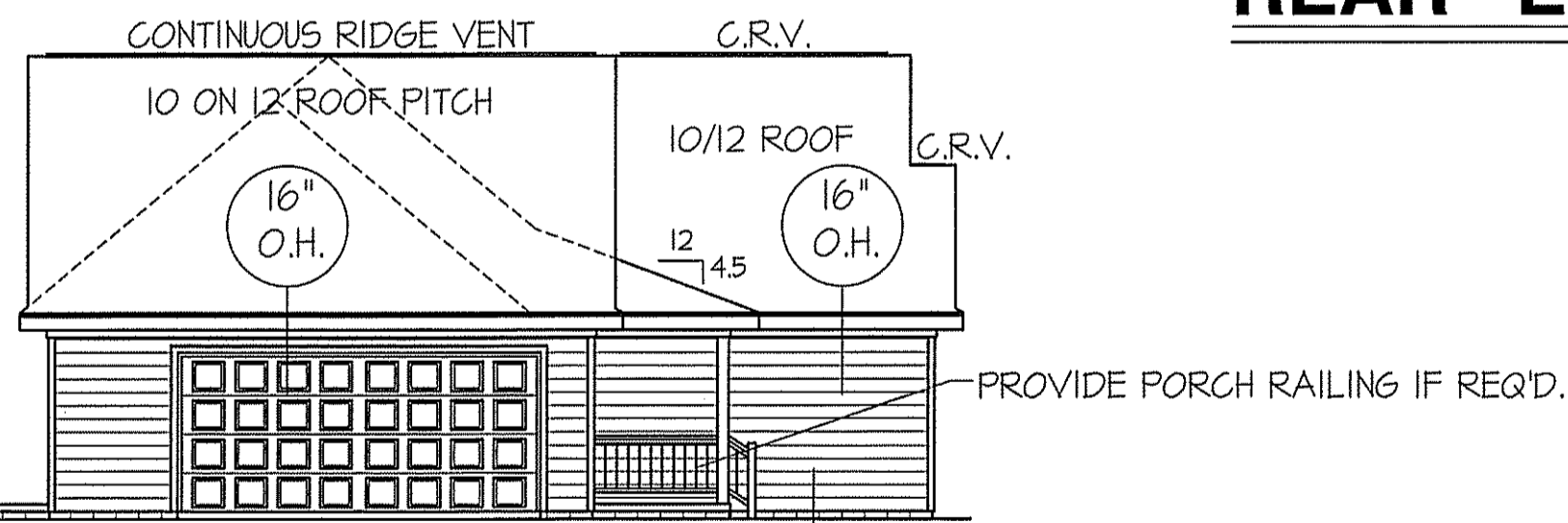
PROVIDE STEPS AS REQUIRED
GRADE MAY VARY - BUILDER TO VERIFY

WIND ZONES (PER TABLE R301.2(4))	
COUNTY	MPH
HARNETT	120
JOHNSTON	120
SAMPSON	130
WAKE	115



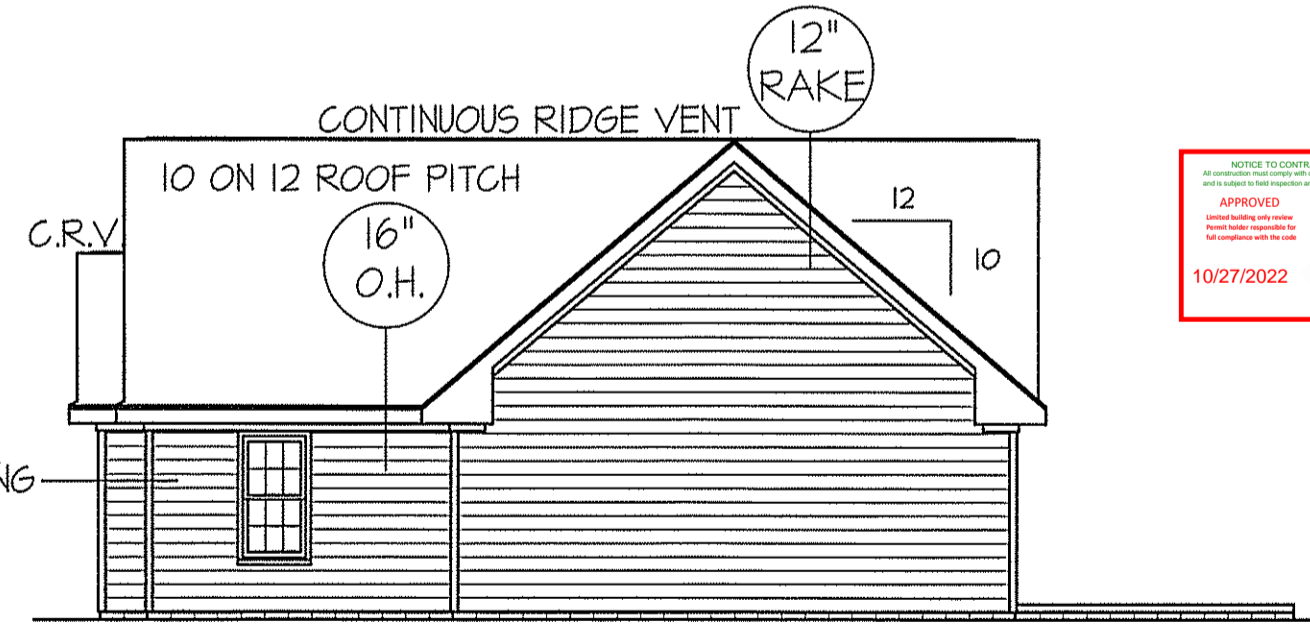
REAR ELEVATION

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



LEFT ELEVATION

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



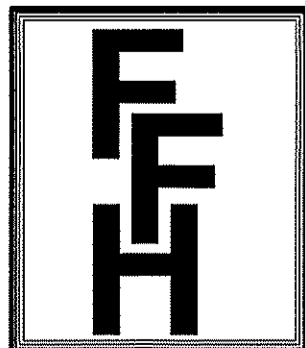
RIGHT ELEVATION

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

NOTICE TO CONTRACTOR
APPROVED
10/27/2022
Harnett County North Carolina

MAIN COMPUTER FILE: FFH - CHADWICK~YARBOROUGH -SETP-2022

DATE:
OCT. 3, 2022

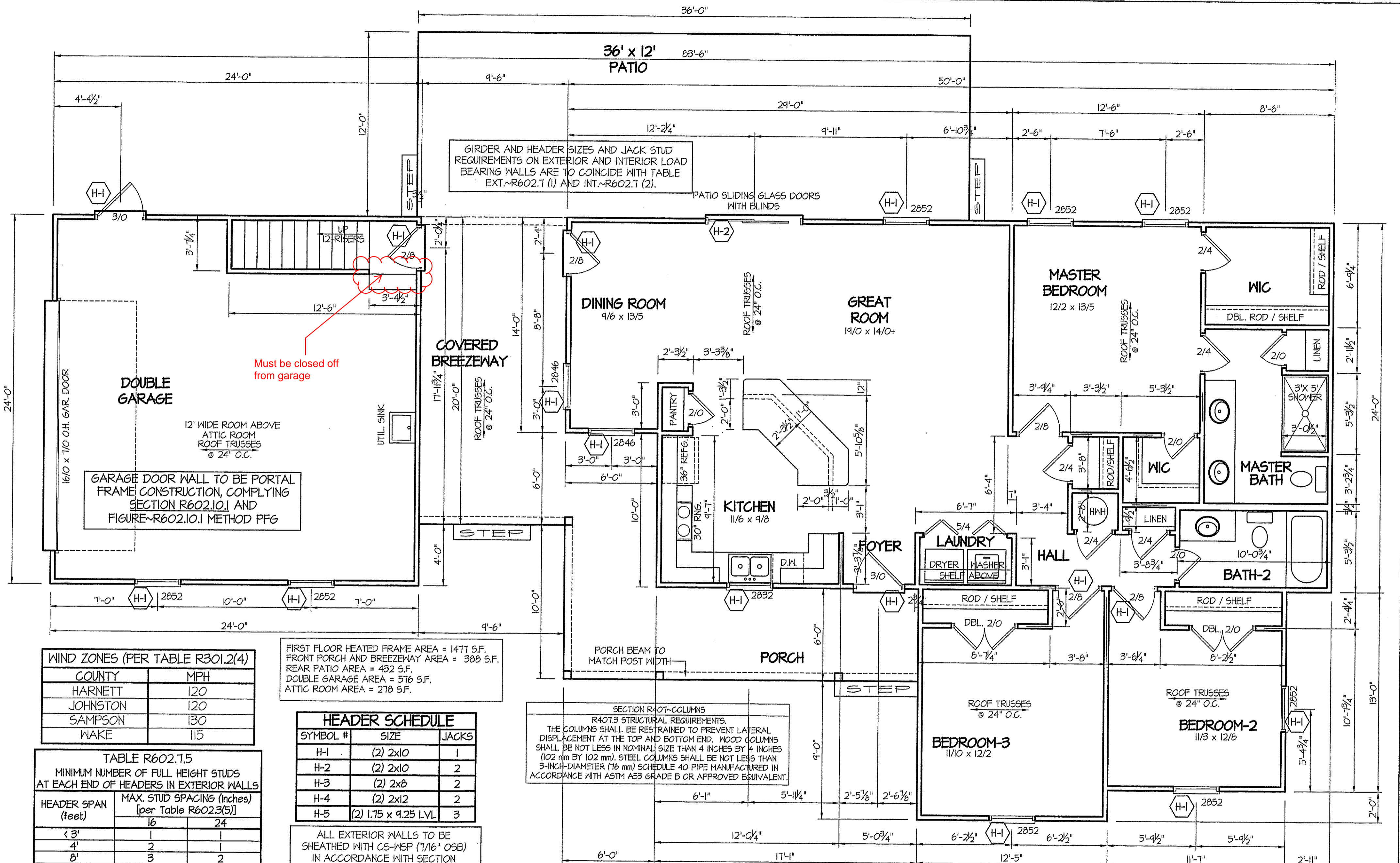


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PLAN: **EXCLUSIVE PLAN FOR
FREEDOM FAMILY HOMES
CHADWICK~YARBOROUGH**

SHEET NO.
1

MAIN COMPUTER FILE: FFH - CHADWICK-YARBOROUGH -SETP.-2022



WIND ZONES (PER TABLE R301.2(4))

COUNTY	MPH
HARNETT	120
JOHNSTON	120
SAMPSON	130
WAKE	115

FIRST FLOOR HEATED FRAME AREA = 1471 S.F.
 FRONT PORCH AND BREEZEWAY AREA = 388 S.F.
 REAR PATIO AREA = 432 S.F.
 DOUBLE GARAGE AREA = 576 S.F.
 ATTIC ROOM AREA = 278 S.F.

TABLE R602.7.5
 MINIMUM NUMBER OF FULL HEIGHT STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS

HEADER SPAN (feet)	MAX. STUD SPACING (Inches) [per Table R602.3(5)]	
	16	24
< 3'	1	1
4'	2	1
8'	3	2
12'	5	3
16'	6	4

HEADER SCHEDULE

SYMBOL #	SIZE	JACKS
H-1	(2) 2x10	1
H-2	(2) 2x10	2
H-3	(2) 2x8	2
H-4	(2) 2x12	2
H-5	(2) 1.75 x 9.25 LVL	3

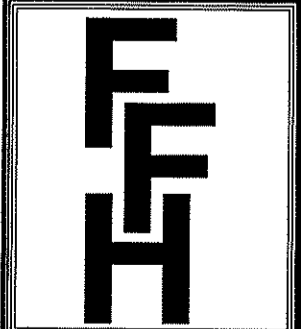
SECTION R407-COLUMNS
 R407.3 STRUCTURAL REQUIREMENTS.
 THE COLUMNS SHALL BE RESTRAINED TO PREVENT LATERAL DISPLACEMENT AT THE TOP AND BOTTOM ENDS. WOOD COLUMNS SHALL BE NOT LESS IN NOMINAL SIZE THAN 4 INCHES BY 4 INCHES (102 mm BY 102 mm). STEEL COLUMNS SHALL BE NOT LESS THAN 3-INCH-DIAMETER (76 mm) SCHEDULE 40 PIPE MANUFACTURED IN ACCORDANCE WITH ASTM A53 GRADE B OR APPROVED EQUIVALENT.

ALL EXTERIOR WALLS TO BE SHEATHED WITH C5-WSP (1/16" OSB) IN ACCORDANCE WITH SECTION R602.10.3 UNLESS OTHERWISE NOTED.

8" CEILINGS UNLESS OTHERWISE NOTED
FLOOR PLAN
 SCALE: 1/4" = 1'-0"

ALL INTERIOR AND EXTERIOR LOAD BEARING HEADERS WILL BE 2x10 #2 SPF UNLESS OTHERWISE NOTED.

DATE:
 OCT. 3, 2022

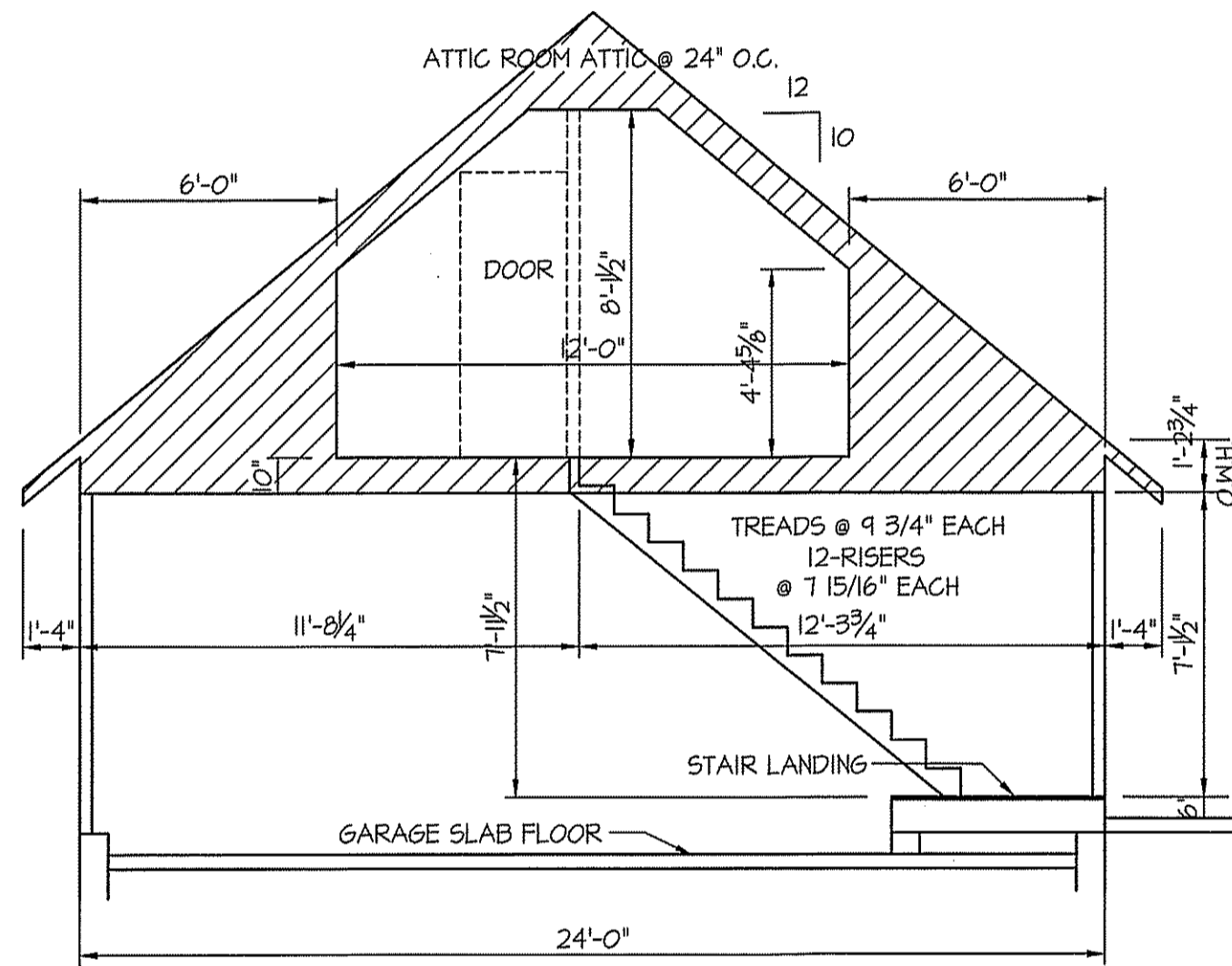


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PLAN: **EXCLUSIVE PLAN FOR FREEDOM FAMILY HOMES CHADWICK~YARBOROUGH**

SHEET NO.
2

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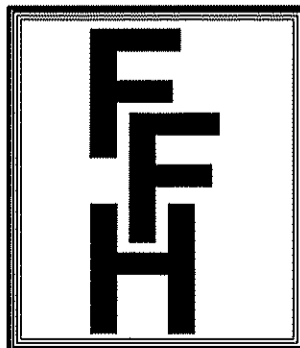


SECTION THRU GARAGE
SCALE: 1/4" = 1'-0"



ATTIC ROOM FLOOR PLAN
SCALE: 1/4" = 1'-0"
ATTIC ROOM AREA = 278 S.F.

DATE:
OCT. 3, 2022

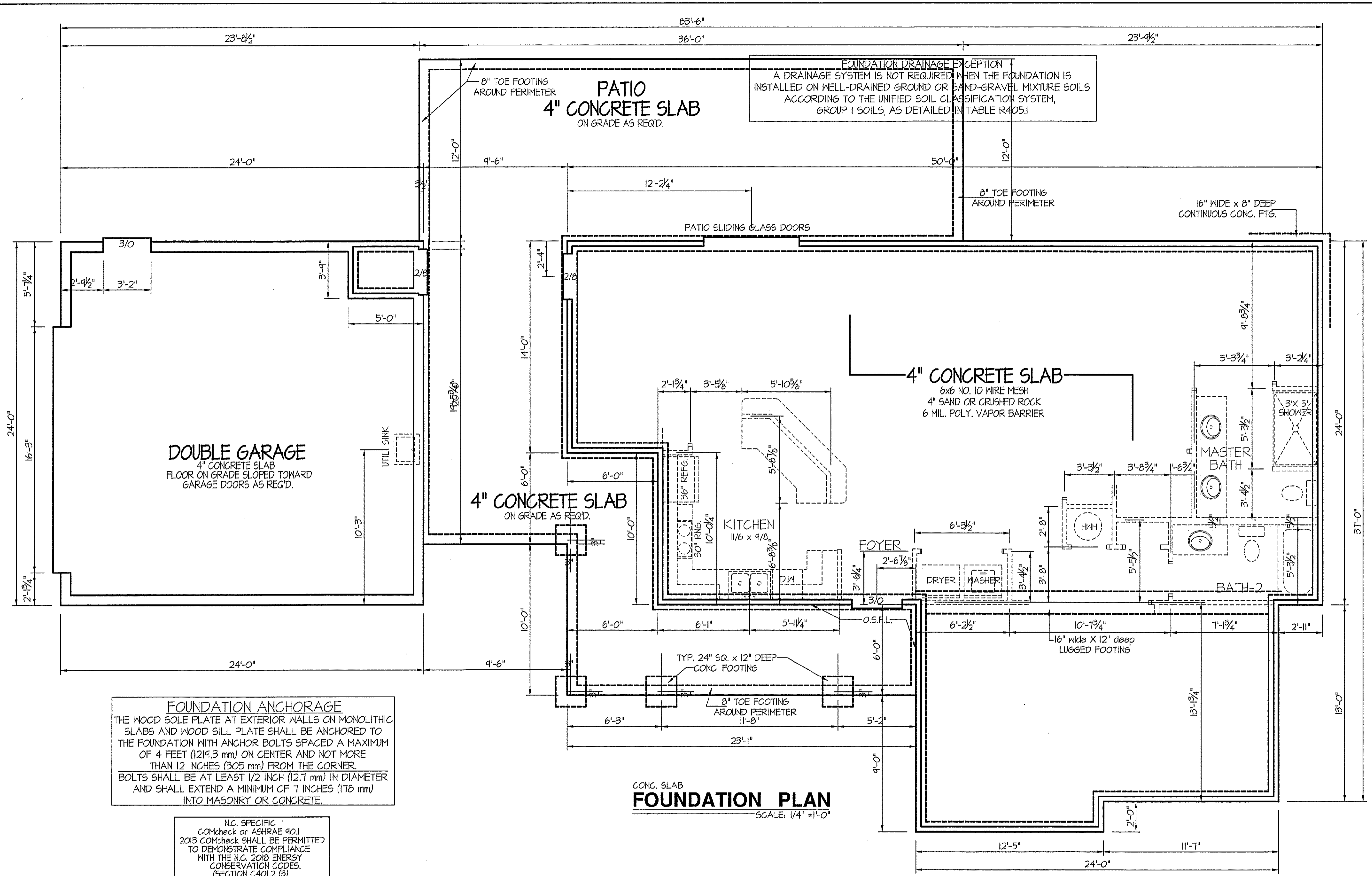


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PLAN: **EXCLUSIVE PLAN FOR
FREEDOM FAMILY HOMES
CHADWICK~YARBOROUGH**

SHEET NO.
3

MAIN COMPUTER FILE: FFH - CHADWICK-YARBOROUGH -SETP-2022

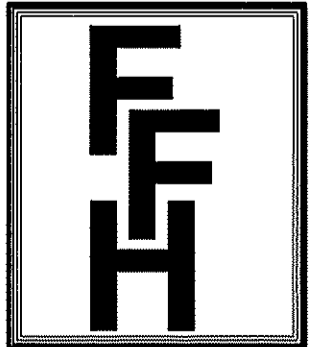


FOUNDATION ANCHORAGE
 THE WOOD SOLE PLATE AT EXTERIOR WALLS ON MONOLITHIC SLABS AND WOOD SILL PLATE SHALL BE ANCHORED TO THE FOUNDATION WITH ANCHOR BOLTS SPACED A MAXIMUM OF 4 FEET (1219.3 mm) ON CENTER AND NOT MORE THAN 12 INCHES (305 mm) FROM THE CORNER. BOLTS SHALL BE AT LEAST 1/2 INCH (12.7 mm) IN DIAMETER AND SHALL EXTEND A MINIMUM OF 7 INCHES (178 mm) INTO MASONRY OR CONCRETE.

N.C. SPECIFIC
 COMcheck or ASHRAE 90.1
 2013 COMcheck SHALL BE PERMITTED TO DEMONSTRATE COMPLIANCE WITH THE N.C. 2018 ENERGY CONSERVATION CODES, (SECTION C401.2 (3))

CONC. SLAB
FOUNDATION PLAN
 SCALE: 1/4" = 1'-0"

DATE:
 OCT. 3, 2022



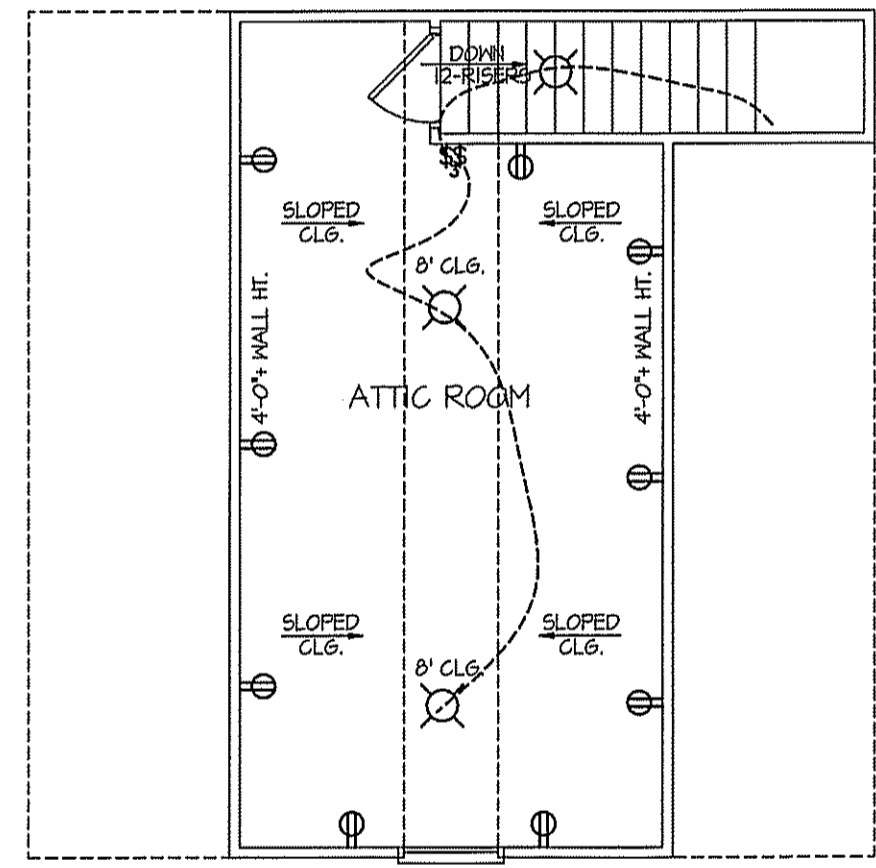
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PLAN: **EXCLUSIVE PLAN FOR
 FREEDOM FAMILY HOMES
 CHADWICK~YARBOROUGH**

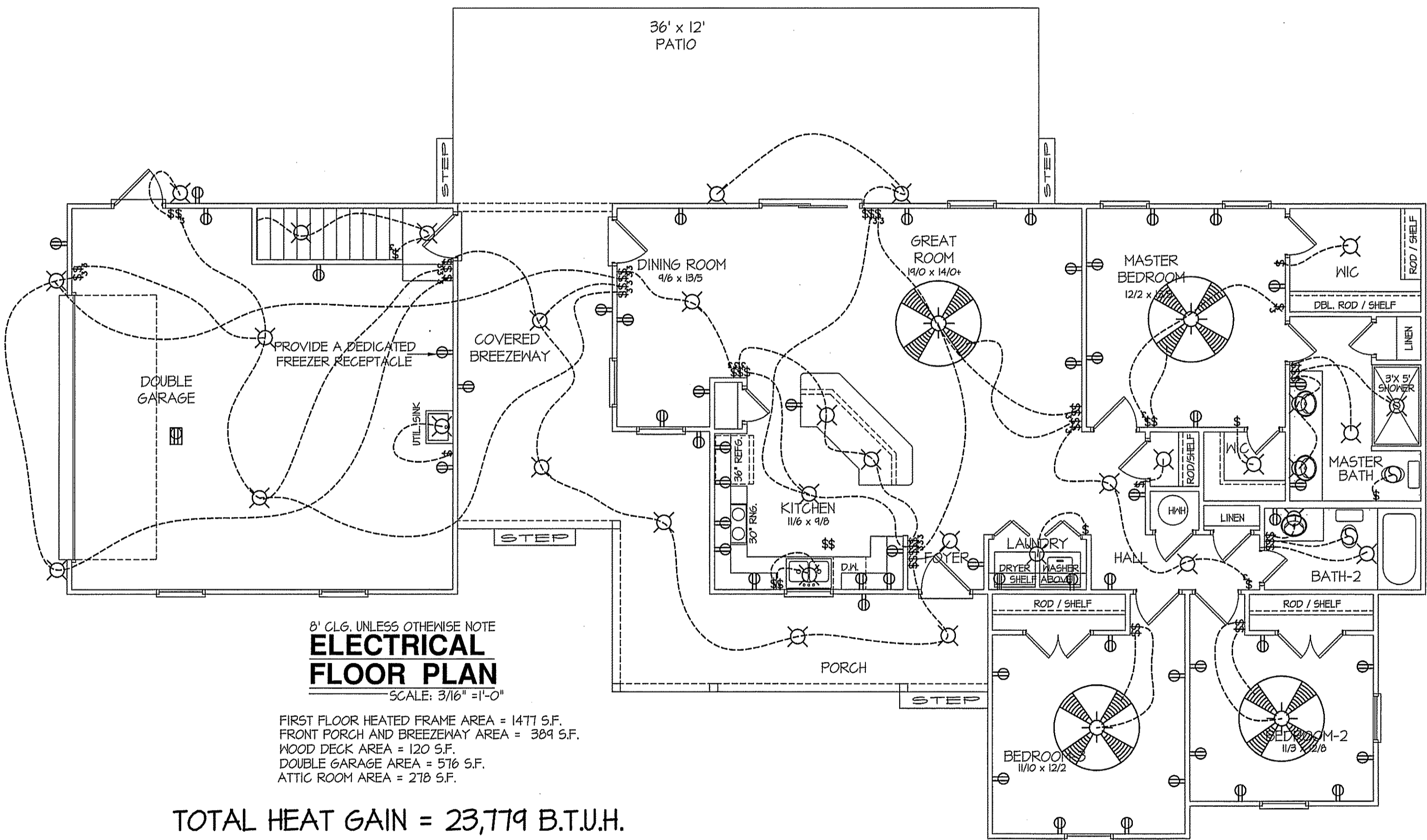
SHEET NO.
4

MAIN COMPUTER FILE: FFH - CHADWICK-YARBOROUGH -SETP-2022

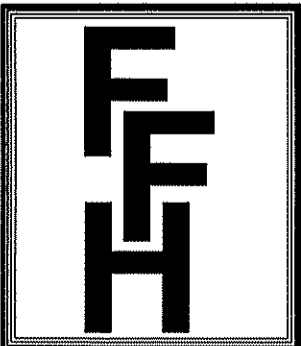
ELECTRICAL LEGEND		
<small>PROVIDE BURGLAR/SMOKE AND FIRE DETECTORS AS PER MANUFACTURER'S SPECIFICATIONS. PROVIDE CENTRAL VACUUM SYSTEM AS PER MANUFACTURER'S SPECIFICATIONS. ALL FANS ARE TO BE CONTROLLED BY VAR/SPEED AND DIRECTIONAL SWITCHES.</small>		
◇ SURF. MOUNTED LIGHT	⊕ TYPICAL WALL RECEP.	⚡ TYPICAL SWITCH
○ RECESSED LIGHT	⊕ TOP 1/2 HOT W/SWITCH	⚡ 3-WAY SWITCH
⊙ EYEBALL LIGHT	⊕ CEILING RECEPTACLE	⚡ 4-WAY SWITCH
⚡ FAN/LIGHT COMB.	⊕ FLOOR RECEPTACLE	⚡ DIMMER SWITCH
— FLUORESCENT TUBE	⊕ WATERPROOF RECEP.	⊕ ELEC. PANEL BOX
□ FLUOR. LIGHT FIXTURE	⊕ GROUND FAULT	⊕ T.V. CABLE RECEP.
⊙ EXHAUST FAN	⊕ DISPOSAL UNIT	⊕ TELEPHONE JACK
⊙ CL'G. FAN	⊕ 220 VOLT RECEPTACLE	⊕ COMPUTER JACK
◇ FLOOD LIGHT		



ATTIC ROOM FLOOR PLAN
 SCALE: 3/16" = 1'-0"
 ATTIC ROOM AREA = 278 S.F.
 TOTAL HEAT GAIN = 4,726 B.T.U.H.
 TOTAL HEAT LOSS = 7,228 B.T.U.H.



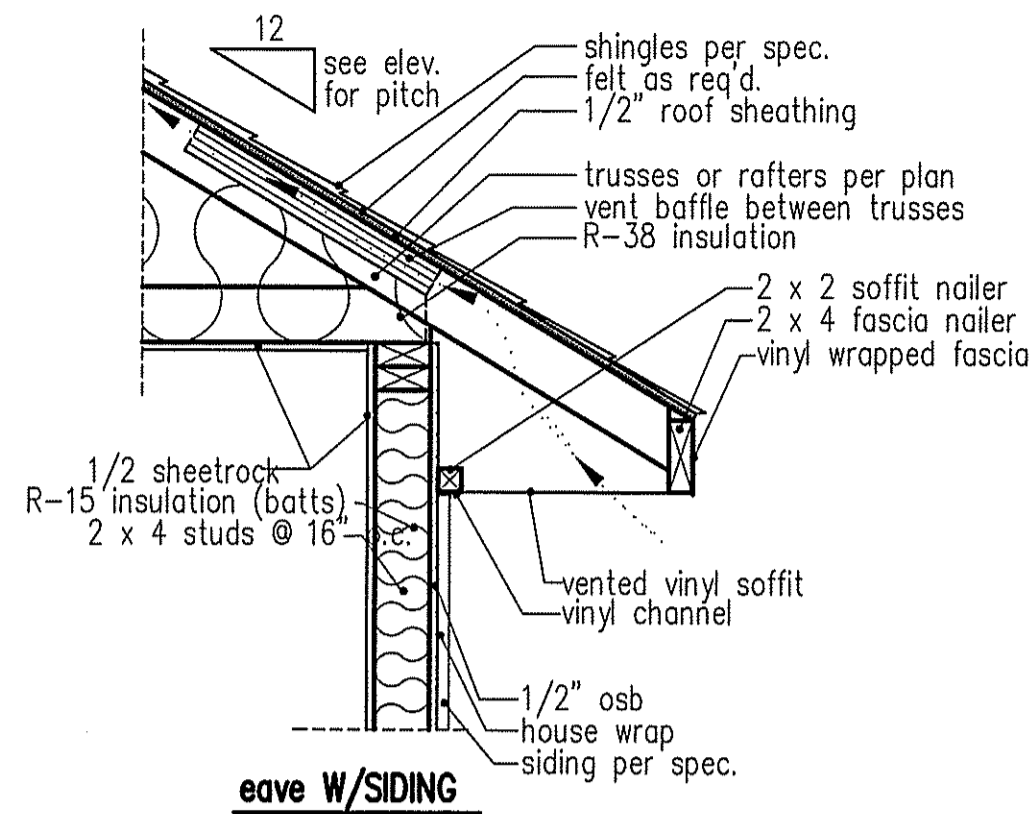
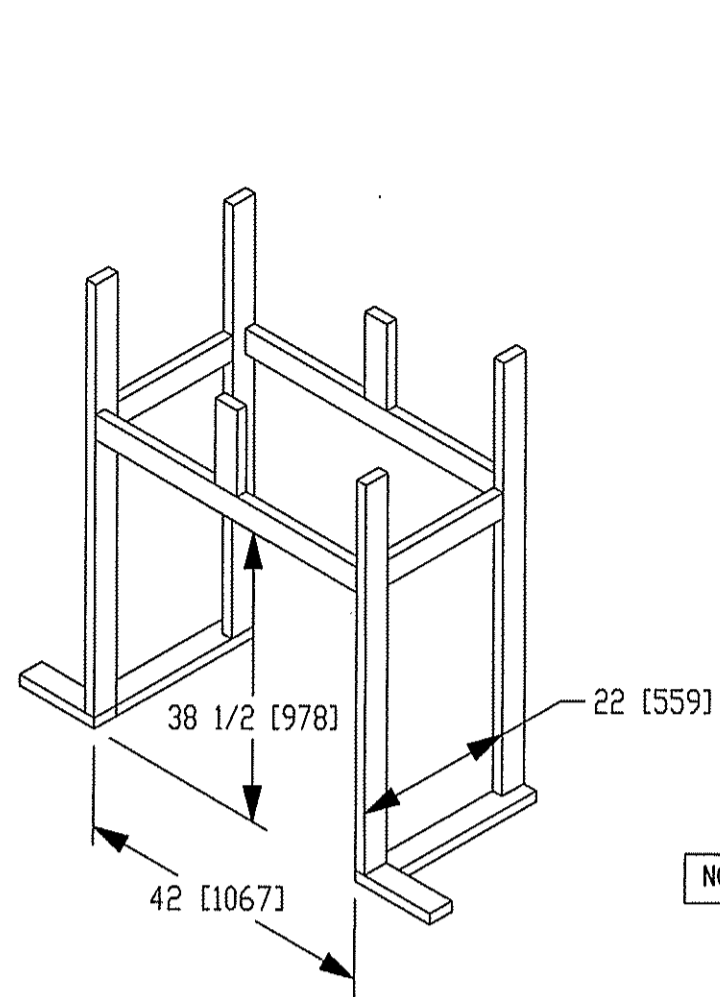
DATE:
 OCT. 5, 2022



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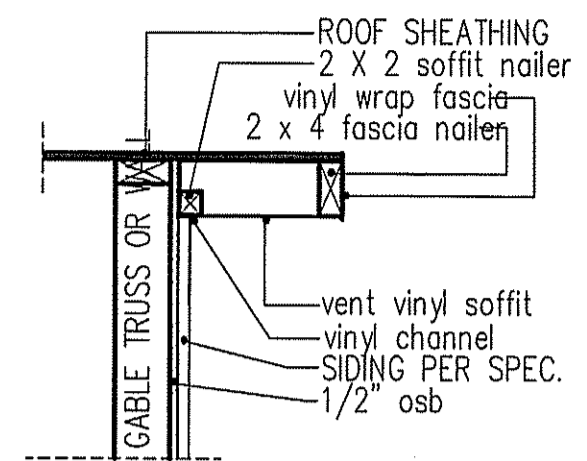
PLAN: **EXCLUSIVE PLAN FOR
 FREEDOM FAMILY HOMES
 CHADWICK~YARBOROUGH**

SHEET NO.
5



NOTE: OVERHANG DISTANCE NOTED ON ELEVATION SHEET IS ALWAYS MEASURED FROM FRAME LINE

standard eave details



RAKE w/SIDING

NOTE: OVERHANG DISTANCE NOTED ON ELEVATION SHEET IS ALWAYS MEASURED FROM FRAME LINE

DIMENSIONS IN [] ARE MM

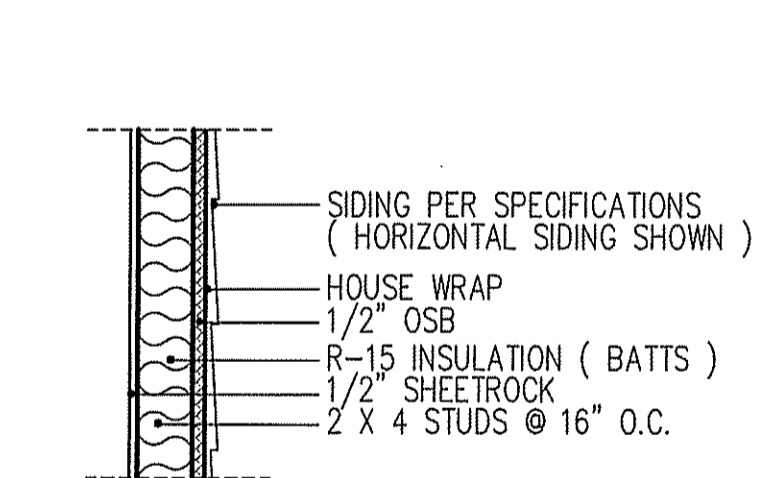
SPECIFICATIONS

Model 6000-TR	Height		Front Width		Back Width		Depth		Glass Size	BTU Input
	Actual	Framing	Actual	Framing	Actual	Framing	Actual	Framing		
Inches	38	38-1/2	41	42	28-1/2	42	21-1/2	22		

Reference dimensions only. We recommend measuring individual units at installation.

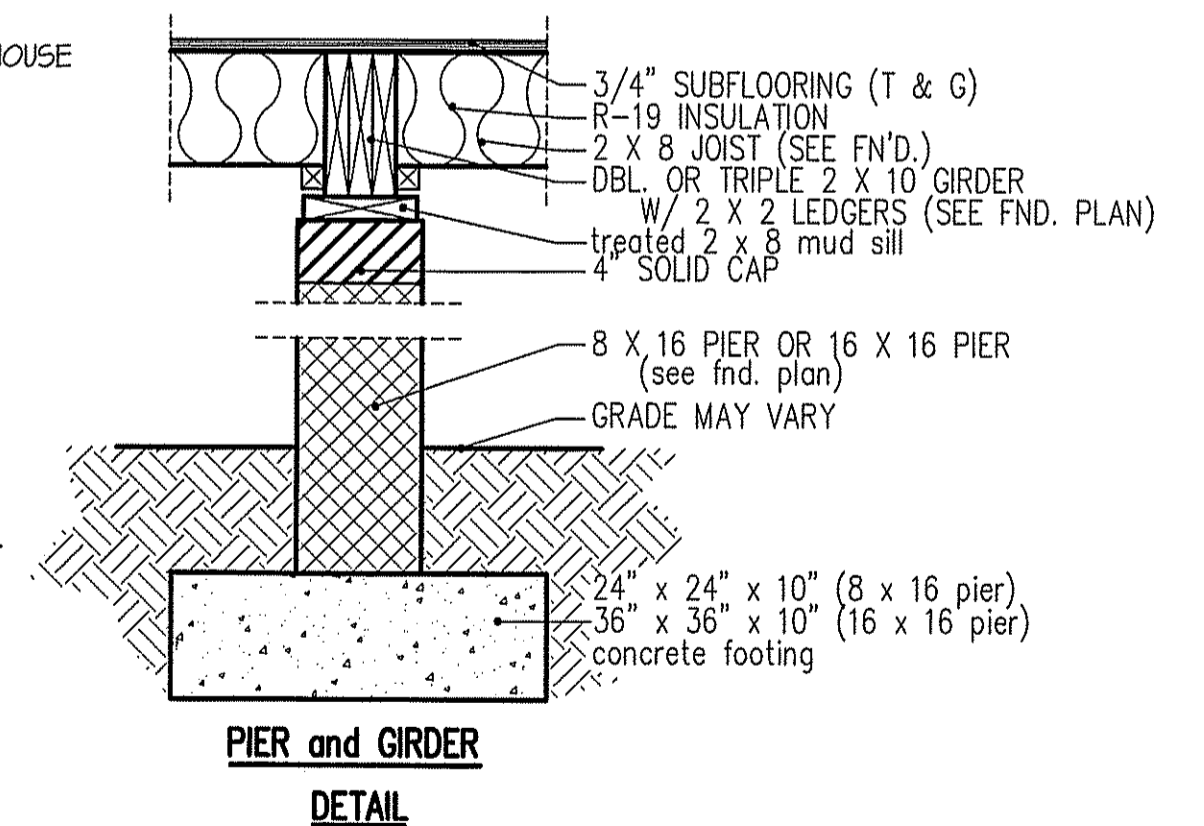
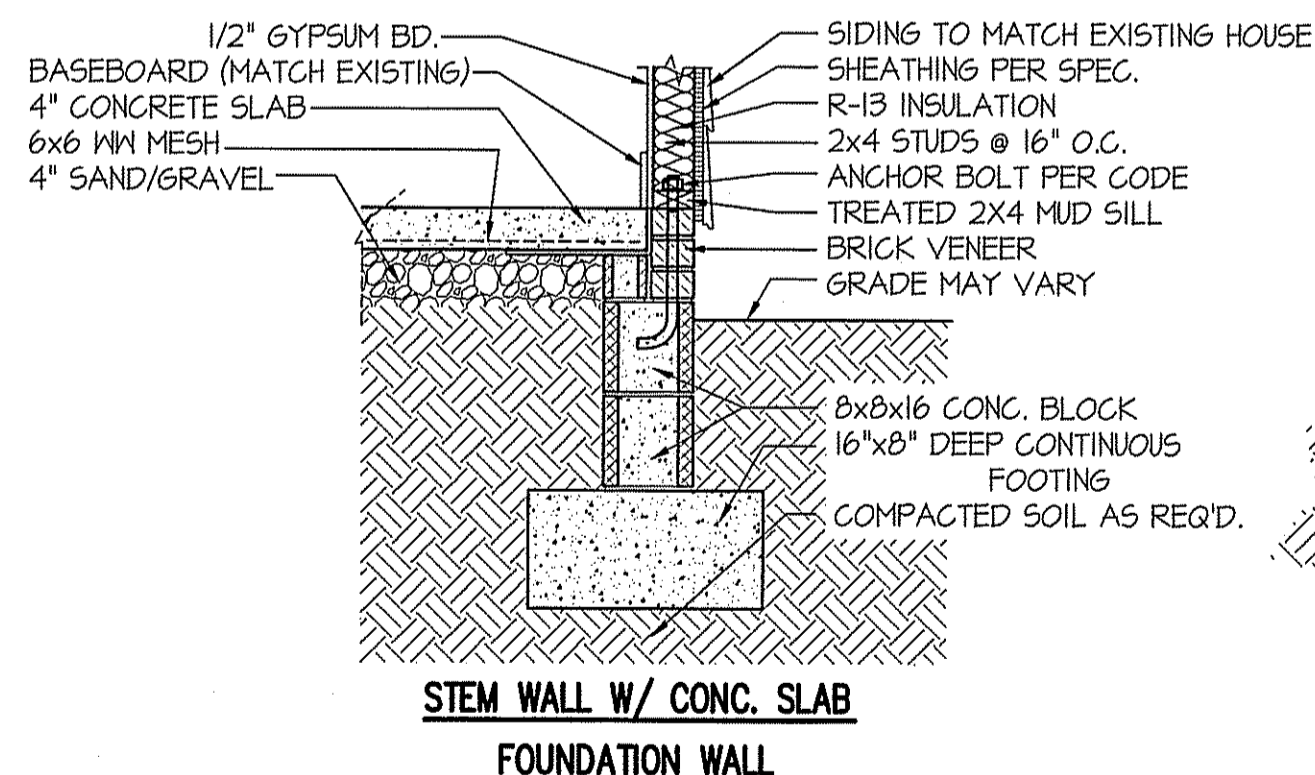
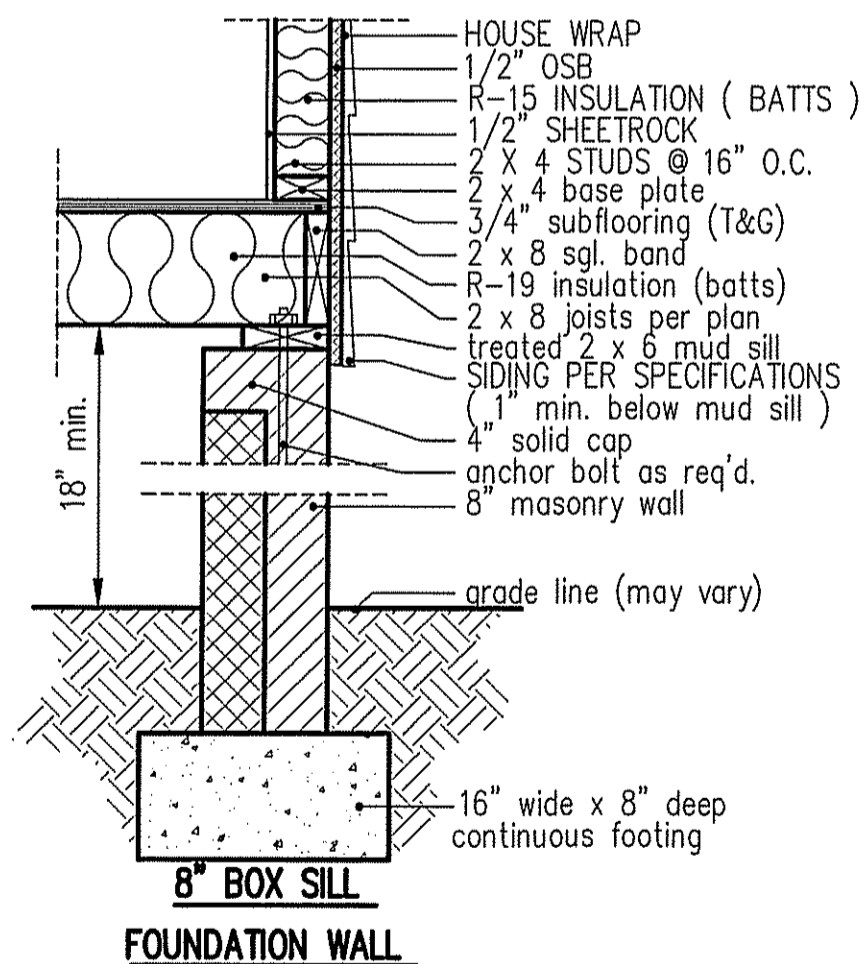
TABLE R602.7.5 MINIMUM NUMBER OF FULL HEIGHT STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS		
HEADER SPAN (feet)	MAX. STUD SPACING (Inches) [per Table R602.3(5)]	
	16	24
< 3'	1	1
4'	2	1
8'	3	2
12'	5	3
16'	6	4

GIRDER AND HEADER SIZES AND JACK STUD REQUIREMENTS ON EXTERIOR AND INTERIOR LOAD BEARING WALLS ARE TO COINCIDE WITH TABLE EXT.~R602.7 (1) AND INT.~R602.7 (2).



WALL w/siding

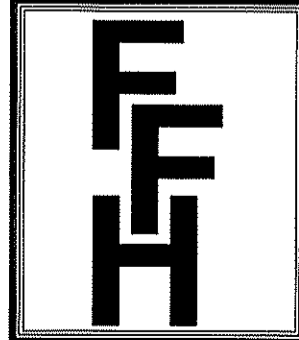
intermediate wall details



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DATE:

OCT. 3, 2022



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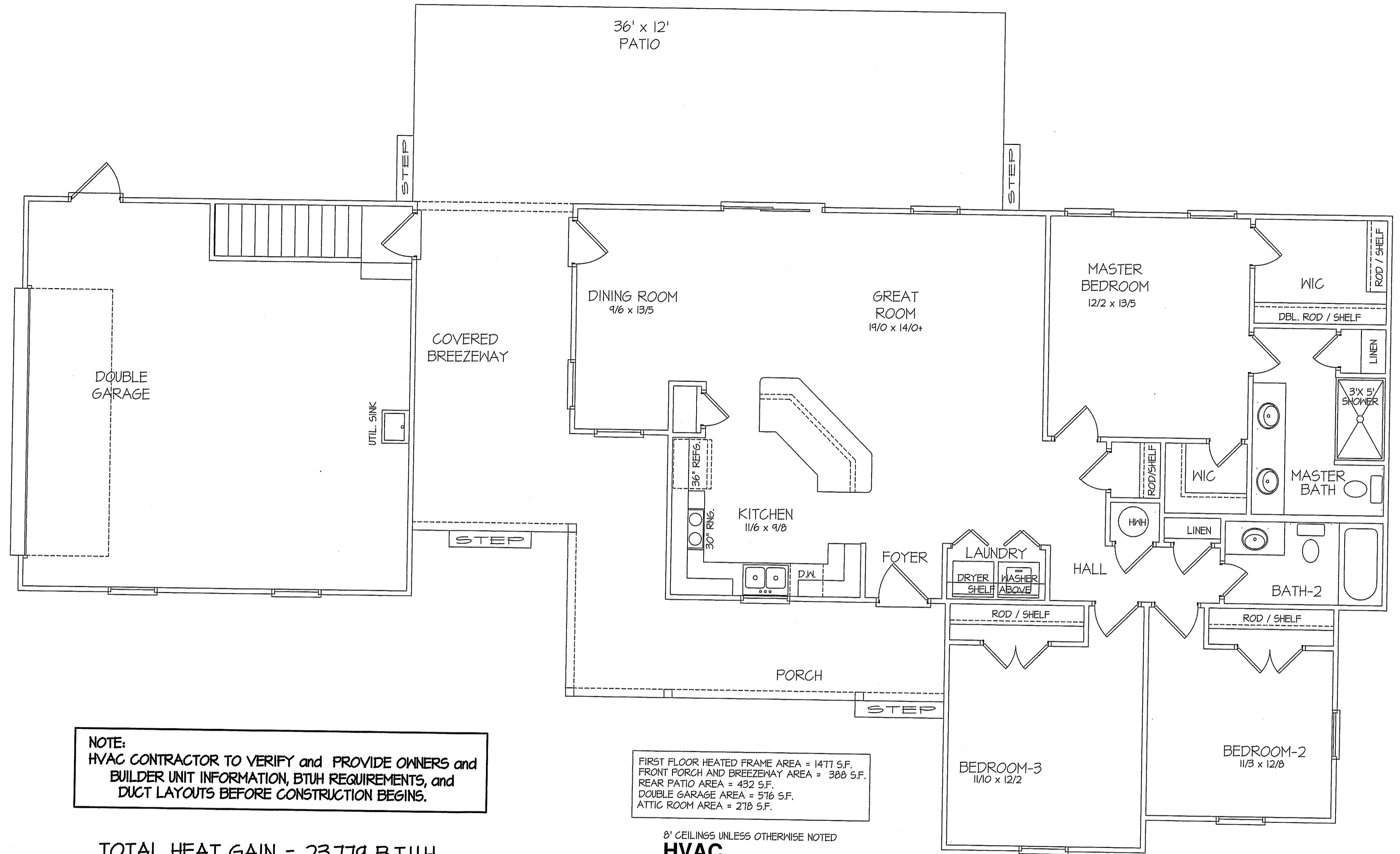
PLAN:

**EXCLUSIVE PLAN FOR
FREEDOM FAMILY HOMES
CHADWICK~YARBOROUGH**

SHEET NO.

6

MAIN COMPUTER FILE: FFH - CHADWICK~YARBOROUGH -SETP -2022



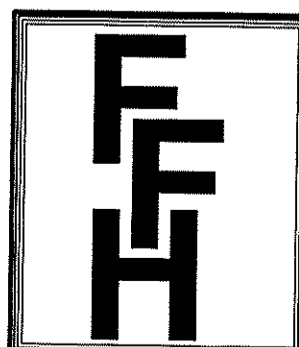
NOTE:
HVAC CONTRACTOR TO VERIFY and PROVIDE OWNERS and BUILDER UNIT INFORMATION, BTUH REQUIREMENTS, and DUCT LAYOUTS BEFORE CONSTRUCTION BEGINS.

FIRST FLOOR HEATED FRAME AREA = 1477 S.F.
FRONT PORCH AND BREEZEWAY AREA = 388 S.F.
REAR PATIO AREA = 432 S.F.
DOUBLE GARAGE AREA = 576 S.F.
ATTIC ROOM AREA = 278 S.F.

TOTAL HEAT GAIN = 23,779 B.T.U.H.
TOTAL HEAT LOSS = 37,589 B.T.U.H.

8' CEILINGS UNLESS OTHERWISE NOTED
HVAC FLOOR PLAN
SCALE: 1/4" = 1'-0"

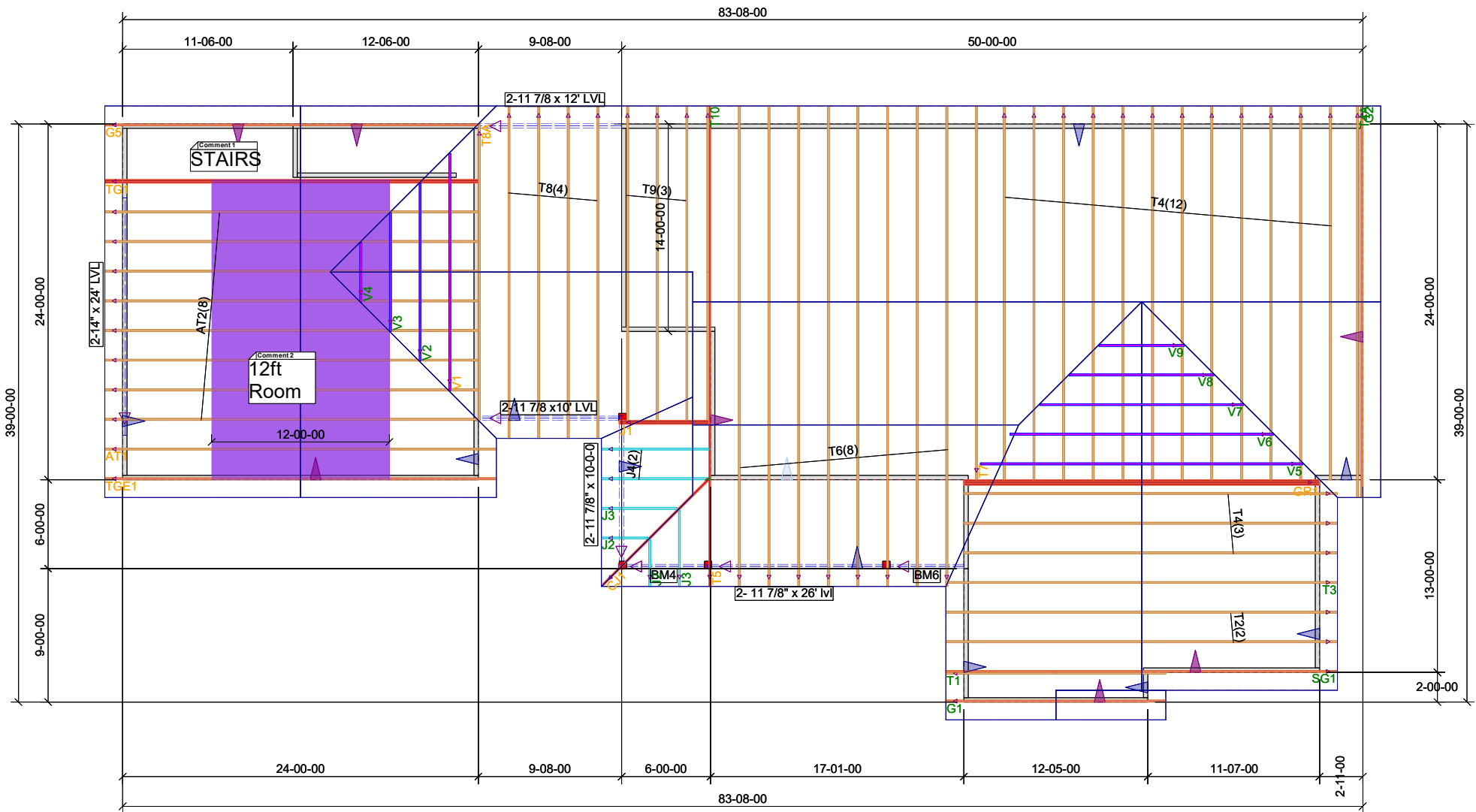
DATE:
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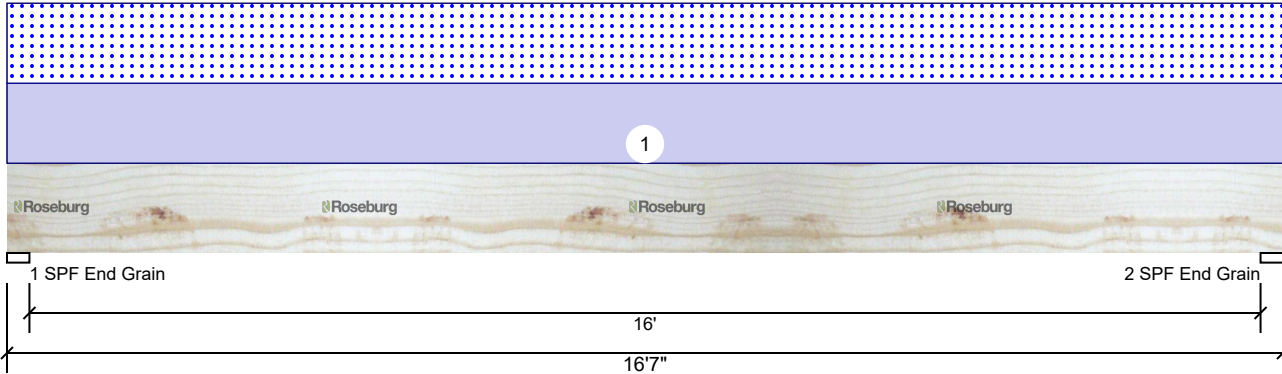
PLAN: **EXCLUSIVE PLAN FOR
FREEDOM FAMILY HOMES
CHADWICK~YARBOROUGH**

SHEET NO.
7



B1 2.0E Rigidlam LVL 1.750" X 14.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IRC 2018
Deflection LL:	360	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		
General Load			
Floor Live:	40 PSF		
Dead:	15 PSF		

Reactions PATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	2918	2811	0	0
2	Vertical	0	2918	2811	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	62%	2918 / 2811	5729	L	D+S
2 - SPF End Grain	3.500"	Vert	62%	2918 / 2811	5729	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	22457 ft-lb	8'3 1/2"	33318 ft-lb	0.674 (67%)	D+S	L
Unbraced	22457 ft-lb	8'3 1/2"	22556 ft-lb	0.996 (100%)	D+S	L
Shear	4736 lb	1'5 1/2"	10894 lb	0.435 (43%)	D+S	L
LL Defl inch	0.322 (L/601)	8'3 9/16"	0.538 (L/360)	0.599 (60%)	S	L
TL Defl inch	0.657 (L/295)	8'3 9/16"	0.806 (L/240)	0.814 (81%)	D+S	L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 4'3 3/4" o.c.
- 6 Bottom must be laterally braced at end bearings.
- 7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	339 PLF	0 PLF	339 PLF	0 PLF	0 PLF	AT2 LE
	Self Weight				13 PLF					

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive

chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Manufacturer Info

Roseburg Forest Products
 4500 Riddle By-pass Rd
 Riddle, OR 97469
 (541) 784-4005
 www.roseburg.com
 APA: PR-L289, PR-L270, ICC-ES:
 ESR-1210

Eastern Engineered Wood Products
 1245 Easton Road, PA
 18015

