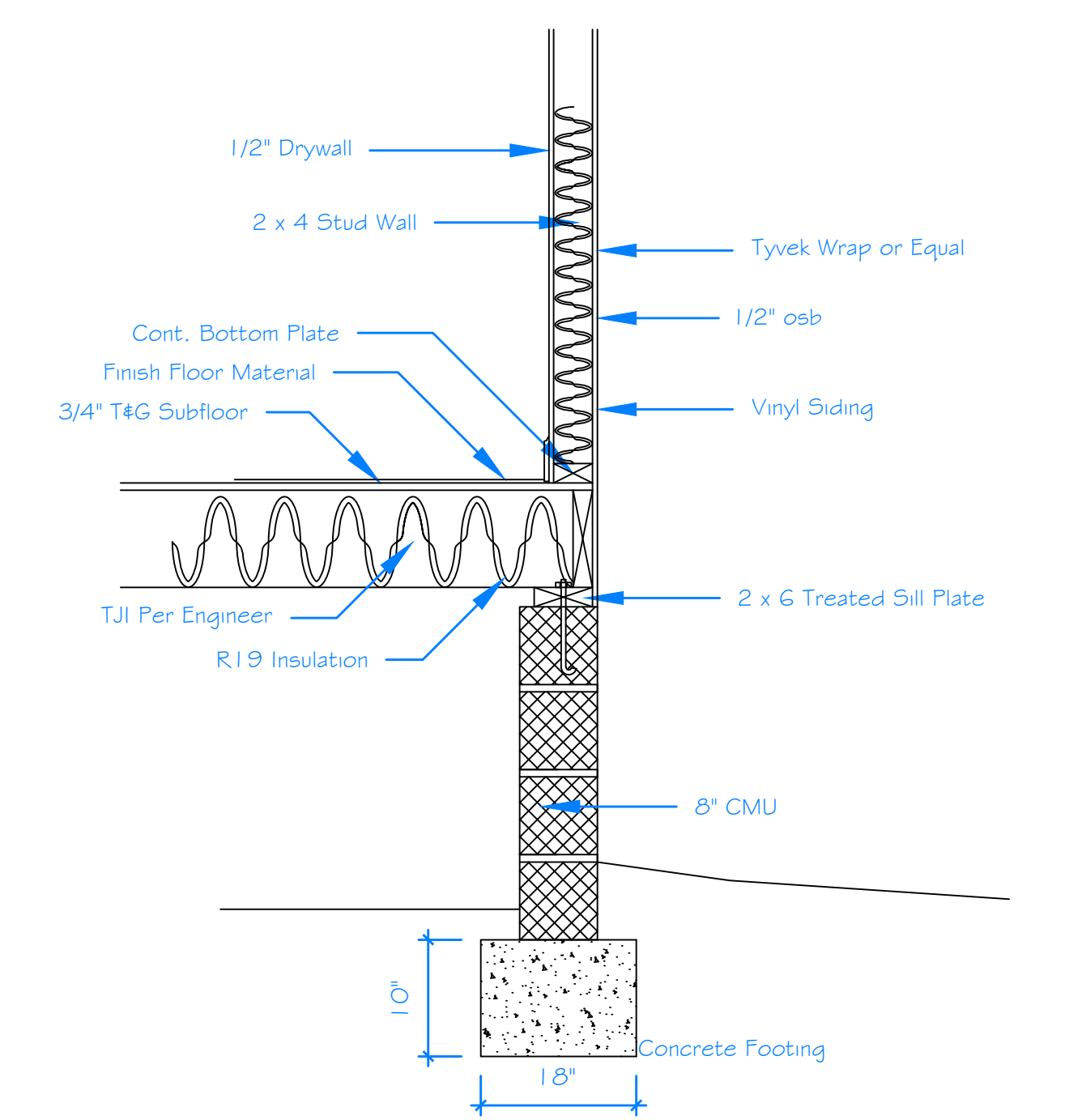


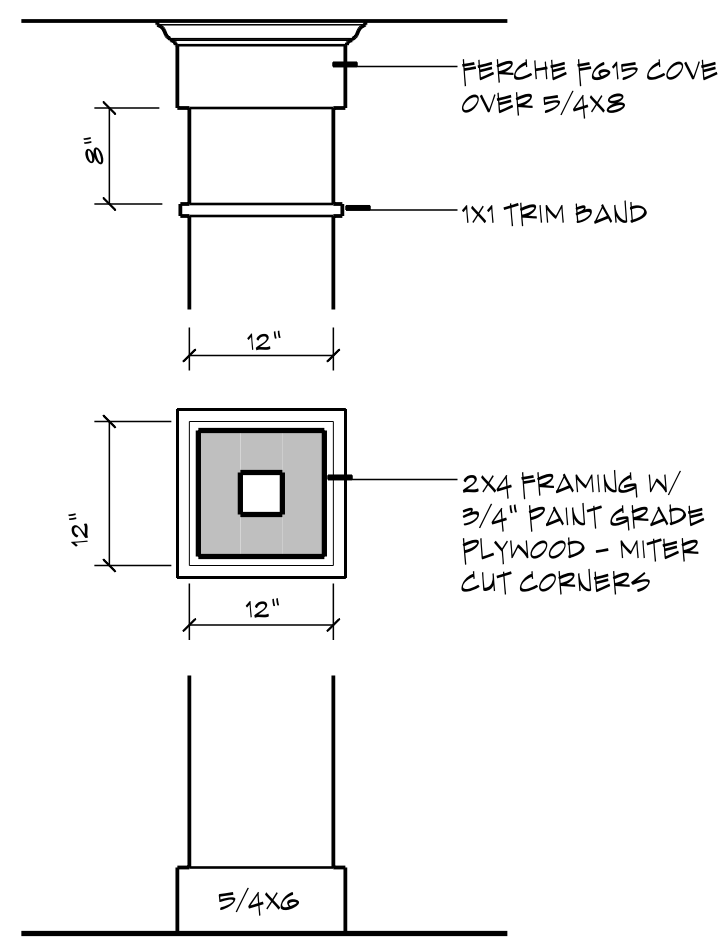
Span Table for Joist and Rafters.

- Floors shall be constructed in accordance with the provisions of Chapter 5 of the NC State Building Code, Sect. R502.2 and Sects R319 and R320.
- Spans for floor joist shall be in accordance with Tables R502.3.1(1) and R502.3.1(2). For other grades and species and for other loading conditions, refer to the AF#PA
- The allowable span of girders fabricated of dimension lumber shall not exceed the values set forth in Tables R502.5(1) and R502.5(2).
- Local soil conditions and/or local practice may necessitate a more stringent footing and foundation wall design. Consult with local building inspector. Soil design bearing pressure is assumed 2000 psf.
- Carry all footings to firm undisturbed bearing:
 - 24" x 10" footing for 8" foundation wall.
 - 24" x 10" footing for 12" foundation wall.
- Pier Footings (Typical Unless Otherwise Notes)
 - Provide 1'-8" x 2'-4" x 1'-0" deep concrete footing under 8" x 16" masonry piers.
 - Provide 2'-0" square x 1'-0" deep concrete footing with under 16" square masonry piers.
 - Grout piers solid with 2500psi concrete (typ).



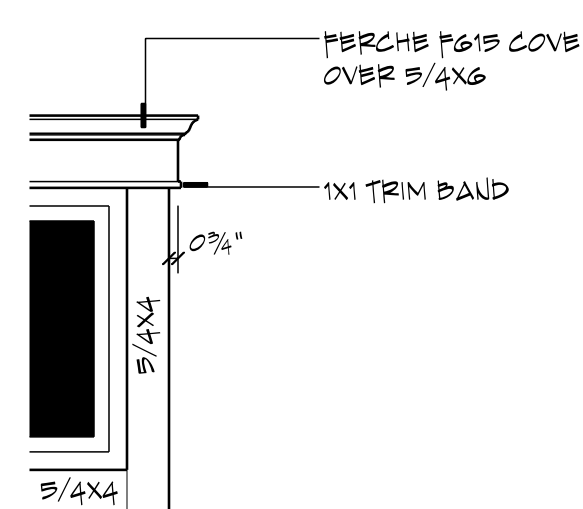
Foundation Section

Foundation Plan



3 COLUMN
A1.1

SCALE: 3/4" = 1' 0"

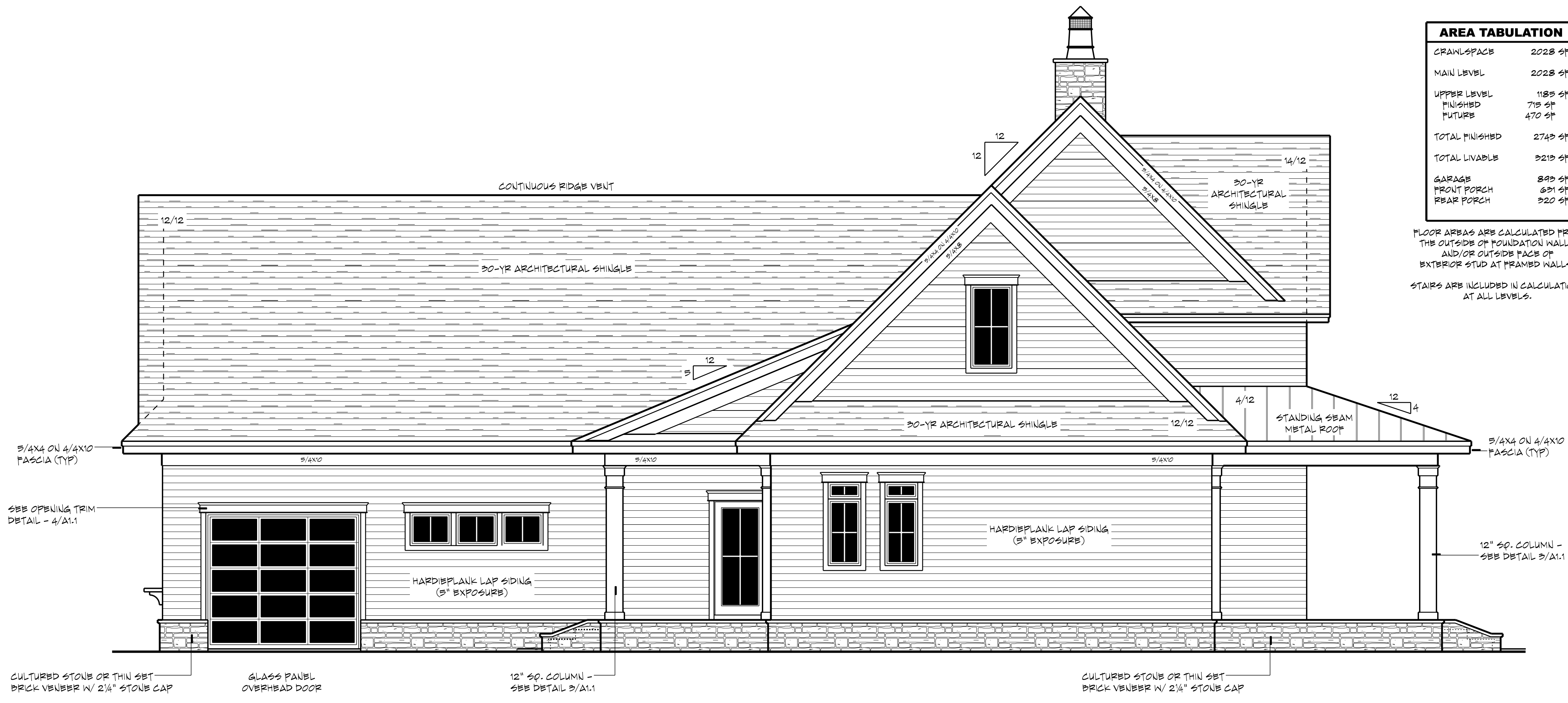


4 OPENING TRIM
A1.1

SCALE: 3/4" = 1' 0"

AREA TABULATION	
CRAWLSPACE	2028 SF
MAIN LEVEL	2028 SF
UPPER LEVEL FINISHED	1189 SF
FUTURE	719 SF
TOTAL FINISHED	2740 SF
TOTAL LIVABLE	3219 SF
GARAGE	899 SF
FRONT PORCH	691 SF
REAR PORCH	320 SF

FLOOR AREAS ARE CALCULATED FROM THE OUTSIDE OF FOUNDATION WALLS AND/OR OUTSIDE FACE OF EXTERIOR STUD AT FRAMED WALLS.
STAIRS ARE INCLUDED IN CALCULATIONS AT ALL LEVELS.



2 LEFT ELEVATION
A1.2

SCALE: 1/4" = 1' 0"



1 FRONT ELEVATION
A1.1

SCALE: 1/4" = 1' 0"

GENERAL NOTES

- ALL WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALING OF DRAWINGS
- KICKOUT FLASHING TO BE INSTALLED AS NEEDED
- EXTERIOR WALL FINISHER TO VERIFY KICKOUT FLASHING IS INSTALLED PRIOR TO FINISHING
- CARPENTER TO FLASH ALL EXTERIOR WINDOWS
- 4 DOORS PER MIN. AND IRC CODE REQUIREMENTS
- WHILE EVERY EFFORT HAS BEEN MADE TO INSURE THESE PLANS ARE ACCURATE AND COMPLETE, THE OWNER/BUILDER MUST VERIFY ALL DIMENSIONS, CONSTRUCTION METHODS, SITE CONDITIONS AND SPECIFICATIONS AND BE RESPONSIBLE FOR SAME.
- ANY NOTATIONS OF SIZES OF STRUCTURAL MEMBERS SUCH AS FOOTINGS, FOUNDATION SIZING, POSTS, BEAMS, JOISTS, RAFTERS, TRUSSES ETC. THAT APPEAR ON THESE PLANS ARE FOR DESIGN REVIEW AND BIDDING PURPOSES ONLY. IT IS RECOMMENDED A PROFESSIONAL ENGINEER BE ENGAGED TO CALCULATE AND DESIGN ALL STRUCTURAL COMPONENTS INVOLVED IN THIS STRUCTURE.

WINDOWS

- INTEGRITY ALL ULTREX SERIES
- TYPE AND SIZE PER PLAN
- WINDOWS DESIGNATED WITH 'T' TO HAVE TEMPERED GLASS
- WINDOWS DESIGNATED WITH 'E' MEET EGRESS CODES
- BUILDER TO VERIFY ALL ROUGH OPENING DIMENSIONS AND HEADER HEIGHTS.

EXTERIOR FINISHES

- SIDING (AS NOTED)
- HARDIEPLANK LAP SIDING
- 5" EXPOSURE
- THIN SET BRICK VENEER OR CULTURED STONE W/ 2 1/4" ROCK FACE STONE CAP
- HARDIE TRIM BOARDS
- THICKNESS AND WIDTH AS NOTED

+++ STRUCTURAL NOTICE +++
ALL STRUCTURAL BEAM AND HEADER SIZES, BEARING CONDITIONS AND ANCHORING REQUIREMENTS MUST BE REVIEWED BY A STRUCTURAL ENGINEER BASED ON EXISTING SITE CONDITIONS. OWNER/BUILDER TO ASSUME ALL RESPONSIBILITY FOR ENTIRE STRUCTURE.

ROYAL OAKS DESIGN
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Lake Elmo, MN
651-964-2726
www.royaloaksdesign.com
CERTIFIED PROFESSIONAL BUILDING DESIGNER
NATIONAL COUNCIL OF BUILDING DESIGNERS
Kieran J. Liebl 24-106

CL-19-004
CRAWLSPACE
REVERSE 2x4

1 12/27/19 2x4 EXTERIOR-DML

EXTERIOR ELEVATIONS
COLUMN DETAIL
OPENING TRIM DETAIL

AREA TABULATION	
CRAWLSPACE	2028 SF
MAIN LEVEL	2028 SF
UPPER LEVEL	1189 SF
FINISHED FUTURE	470 SF
TOTAL FINISHED	2745 SF
TOTAL LIVABLE	3215 SF
GARAGE	895 SF
FRONT PORCH	691 SF
REAR PORCH	320 SF

FLOOR AREAS ARE CALCULATED FROM THE OUTSIDE OF FOUNDATION WALLS AND/OR OUTSIDE FACE OF EXTERIOR STUD AT FRAMED WALLS.
STAIRS ARE INCLUDED IN CALCULATIONS AT ALL LEVELS.

GENERAL NOTES

- ALL WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALING OF DRAWINGS
- KICKOUT FLASHING TO BE INSTALLED AS NEEDED
- EXTERIOR WALL FINISHER TO VERIFY KICKOUT FLASHING IS INSTALLED PRIOR TO FINISHING
- CARPENTER TO FLASH ALL EXTERIOR WINDOWS & DOORS PER MIN. AND IRC CODE REQUIREMENTS
- WHILE EVERY EFFORT HAS BEEN MADE TO INSURE THESE PLANS ARE ACCURATE AND COMPLETE, THE OWNER/BUILDER MUST VERIFY ALL DIMENSIONS, CONSTRUCTION METHODS, SITE CONDITIONS AND SPECIFICATIONS AND BE RESPONSIBLE FOR SAME.
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WINDOWS

- INTEGRITY ALL ULTREX SERIES
- TYPE AND SIZE PER PLAN
- WINDOWS DESIGNATED WITH 'T' TO HAVE TEMPERED GLASS
- WINDOWS DESIGNATED WITH 'B' MEET EGRESS CODES
- BUILDER TO VERIFY ALL ROUGH OPENING DIMENSIONS AND HEADER HEIGHTS.

EXTERIOR FINISHES

- SIDING (AS NOTED)
- HARDIBLANK LAP SIDING
- 5" EXPOSURE
- THIN SET BRICK VENEER OR CULTURED STONE W/ 2 1/4" ROCK FACE STONE CAP
- HARDIBLANK BOARDS
- THICKNESS AND WIDTH AS NOTED

TRUSS SUPPLIER TO VERIFY ALL SPANS, PITCHES, HEBL HEIGHTS AND OTHER CONDITIONS CRITICAL TO PROPER TRUSS FABRICATION.
ANY STRUCTURAL COMPONENTS THAT MAY NOTED ON THESE PLANS ARE INTENDED FOR DESIGN/BID PURPOSES ONLY. IT IS RECOMMENDED THAT ALL STRUCTURAL DESIGN ELEMENTS BE REVIEWED BY A LOCAL LICENSED PROFESSIONAL STRUCTURAL ENGINEER. FINAL ROOF AND FLOOR TRUSS DESIGN AND LAYOUT TO BE PROVIDED BY YOUR LOCAL TRUSS SUPPLIER.

+++ STRUCTURAL NOTICE +++

ALL STRUCTURAL BEAM AND HEADER SIZES, BEARING CONDITIONS AND ANCHORING REQUIREMENTS MUST BE REVIEWED BY A STRUCTURAL ENGINEER BASED ON EXISTING SITE CONDITIONS. OWNER/BUILDER TO ASSUME ALL RESPONSIBILITY FOR ENTIRE STRUCTURE.

++ FOUNDATION ENGINEERING ++

ALL BUILDING FOUNDATION, FOOTING SIZES AND REINFORCING, INCLUDING POST FOOTINGS, TO BE DESIGNED ON SITE BY LOCAL ENGINEER OR FOUNDATION CONTRACTOR BASED ON EXISTING SITE CONDITIONS.

++ FOOTING FROST DEPTH: ++

OWNER/CONTRACTOR TO ADJUST DEPTH OF ALL HOUSE, GARAGE, SLAB AND DECK POST FOOTINGS TO MEET LOCAL CODES.



2 RIGHT ELEVATION

SCALE: 1/4" = 1' 0"



1 REAR ELEVATION

SCALE: 1/4" = 1' 0"

CL-19-004
CRAWLSPACE
REVERSE 2x4

2 ENTRY ELEVATION
SCALE: 1/4" = 1' 0"

- GENERAL NOTES**
- ALL WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALING OF DRAWINGS
 - DIMENSIONS ARE FROM EXTERIOR FACE OF EXTERIOR STUD WALLS AND CENTERLINE OF INTERIOR PARTITIONS
 - WHILE EVERY EFFORT HAS BEEN MADE TO INSURE THESE PLANS ARE ACCURATE AND COMPLETE, THE OWNER/BUILDER MUST VERIFY ALL DIMENSIONS, CONSTRUCTION METHODS, SITE CONDITIONS AND SPECIFICATIONS AND BE RESPONSIBLE FOR SAME.
 - ANY NOTATIONS OF SIZES OF STRUCTURAL MEMBERS SUCH AS POSTS, FOUNDATION WALLS, POSTS, BEAMS, JOISTS, RAFTERS, TRUSSES ETC. THAT APPEAR ON THESE PLANS ARE FOR DESIGN REVIEW AND BIDDING PURPOSES ONLY. IT IS RECOMMENDED A PROFESSIONAL ENGINEER BE ENGAGED TO CALCULATE AND DESIGN ALL STRUCTURAL COMPONENTS INVOLVED IN THIS STRUCTURE.

- WINDOWS**
- MAINTAIN INTEGRITY ALL ULTRIX SERIES
 - STYLE AND SIZE AS NOTED
 - WINDOWS DESIGNATED WITH 'T' TO HAVE TEMPERED GLASS
 - WINDOWS DESIGNATED WITH 'B' MEET EGRESS CODES
 - WINDOW HEADER HEIGHTS SET TO 8' 11-3/8" (U.L.O.)
 - BUILDER TO VERIFY WINDOW AND DOOR ROUGH OPENINGS AND HEADER HEIGHTS

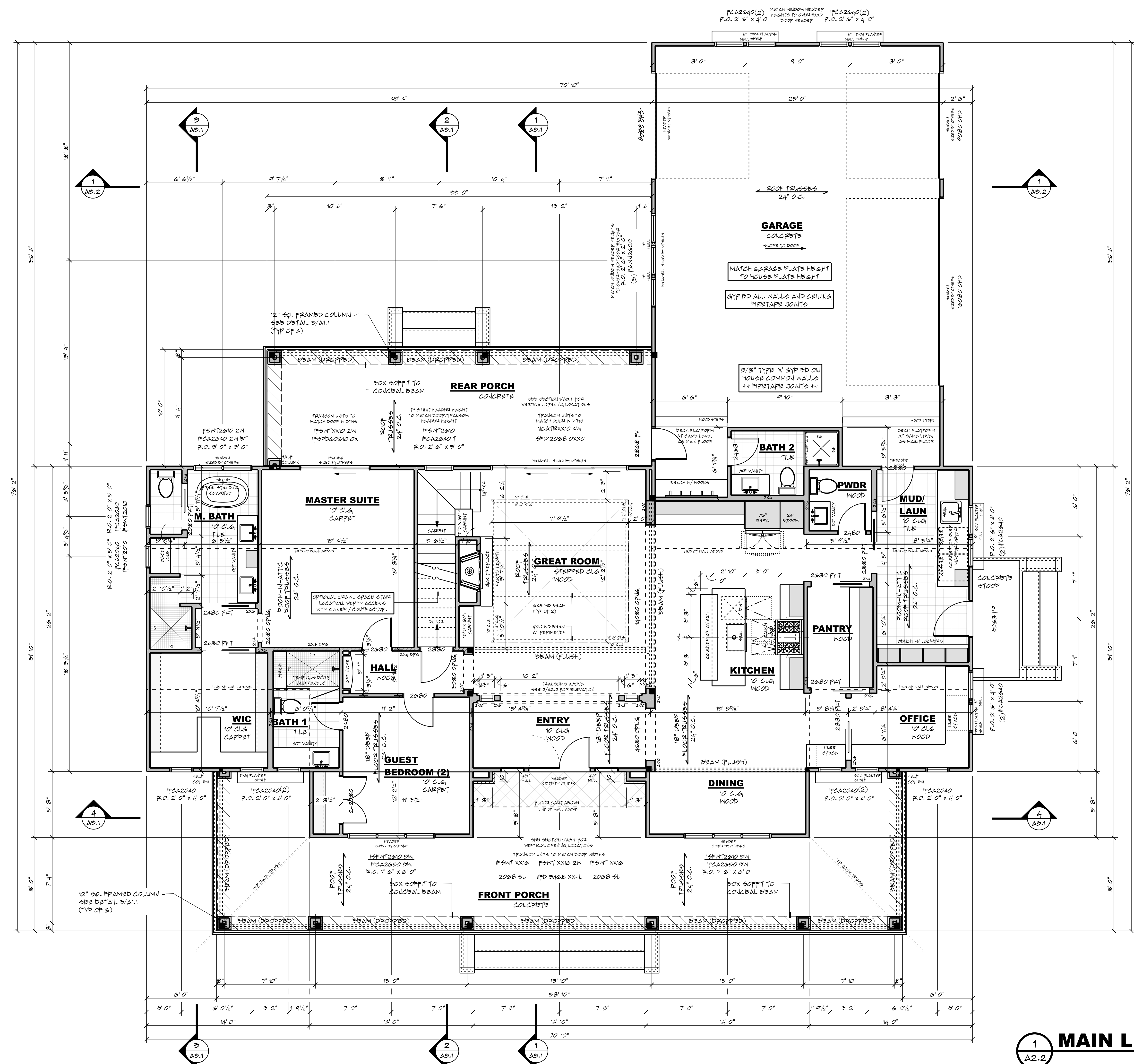
- FLOOR SYSTEM**
- ENGINEERED WOOD FLOOR TRUSSES
 - DESIGNED TO MEET L/480 DEFLECTION OR LESS
 - TRUSS MANUFACTURER TO PROVIDE CHASERS FOR ALL SUPPLY AND RETURN DUCTWORK
 - TRUSS MANUFACTURER TO VERIFY FRAMING AT CANTILEVERS FOR POINT LOADS FROM ABOVE
 - TRUSS MANUFACTURER TO VERIFY LOCATIONS OF ANY CONCENTRATED LOADS, SUCH AS GRANITE COUNTERTOPS, AND PROVIDE PROPER FRAMING AS NEEDED

- FRAMING**
- 2X4 EXTERIOR WALL CONSTRUCTION
 - 10' 1/8" PLATE HEIGHT (U.L.O.)
 - 2X6 WALLS AT ALL POCKET DOORS AND PLUMBING WALLS
 - DOUBLE STUDS AT WINDOWS AND DOOR HEADERS
 - PROVIDE SOLID BLOCKING AT ALL POINT LOADS
 - INDICATES BEARING POINT LOAD
 - PROVIDE CONTINUOUS SOLID BLOCKING TO FOUNDATION BELOW - VERIFY LOADS W/ LOCAL STRUCTURAL ENGINEER

DOOR SCHEDULE SYMBOL
2488 REPRESENTS A 2'-4" WIDE X 6'-8" HIGH DOOR

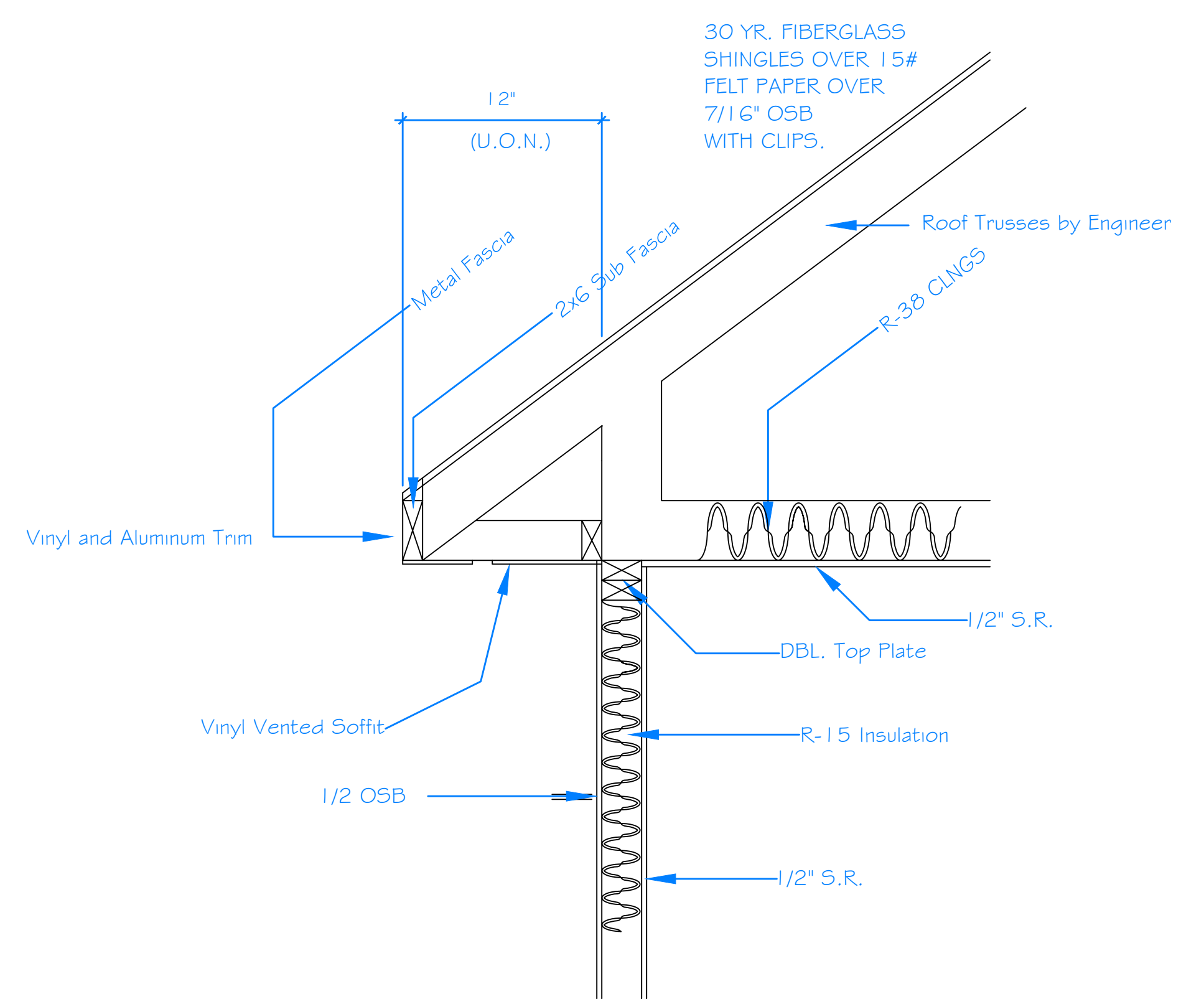
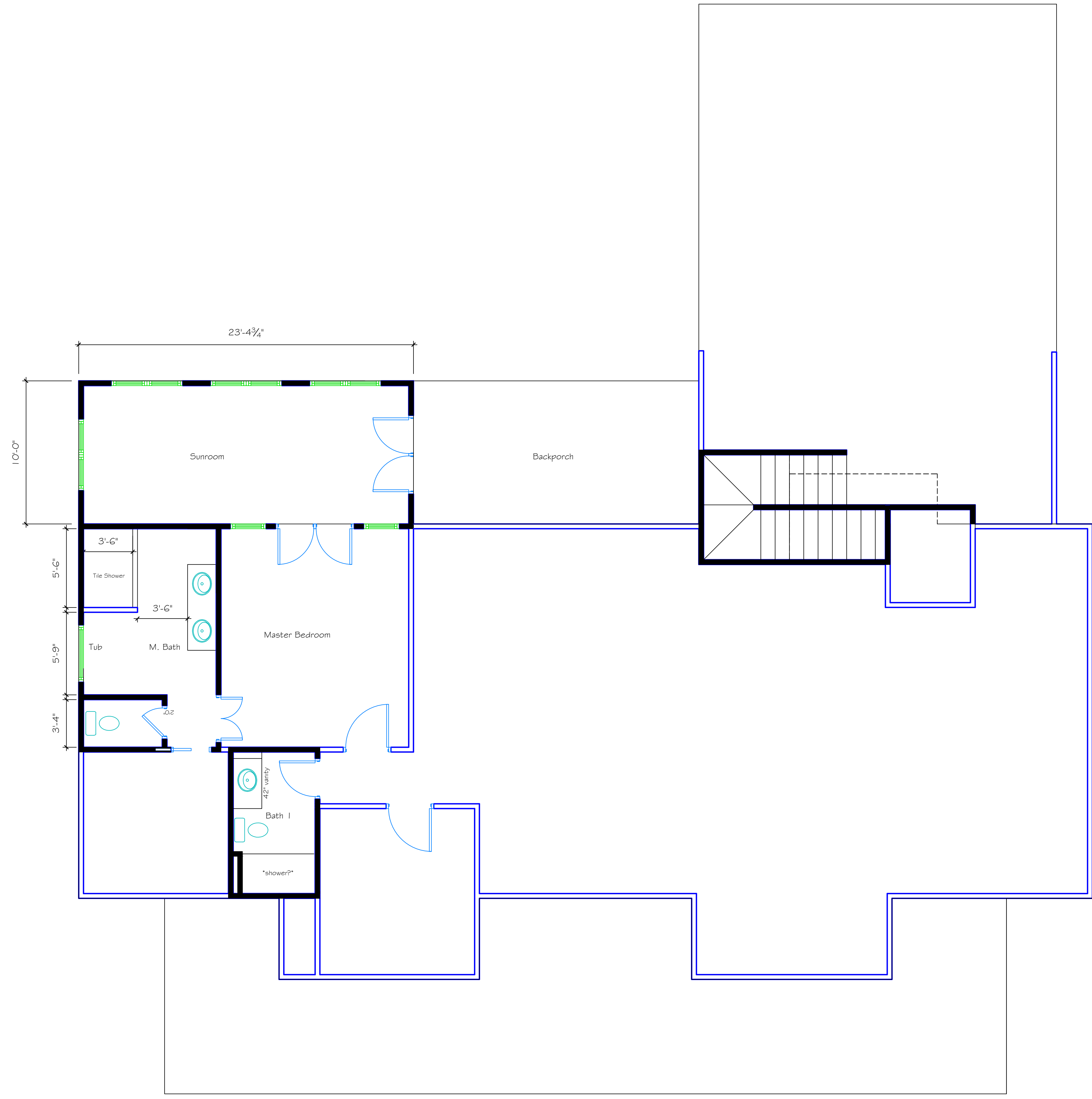
+++ STRUCTURAL NOTICE +++
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++ FOUNDATION ENGINEERING ++
ALL BUILDING FOUNDATION, FOOTING SIZES AND REINFORCING, INCLUDING POST FOOTINGS, TO BE DESIGNED ON SITE BY LOCAL ENGINEER OR FOUNDATION CONTRACTOR BASED ON EXISTING SITE CONDITIONS.



1 MAIN LEVEL FLOOR PLAN
SCALE: 1/4" = 1' 0"

CL-19-004 CRAWLSPACE REVERSE 2x4



Roof Section

- Truss design drawings, prepared in conformance with section R802.10.1, shall be provided to the building official and approved prior to installation.
- Wood trusses shall be designed in accordance with accepted engineering practice. The truss design drawings shall be prepared by a registered professional where required by the statutes of the jurisdiction in which the project is to be constructed in accordance with Section R106.1.
- Trusses shall be braced to prevent rotation and provide lateral stability in accordance with the requirements specified in the construction documents for the building and on the individual truss design drawing.
- Truss members shall not be cut, notched, drilled, spliced or otherwise altered in any way without the approval of a registered design professional.

Main Level Changes

AREA TABULATION	
CRAWLSPACE	2028 SF
MAIN LEVEL	2028 SF
UPPER LEVEL	1189 SF
FINISHED	719 SF
FUTURE	470 SF
TOTAL FINISHED	2749 SF
TOTAL LIVABLE	3219 SF
GARAGE	899 SF
FRONT PORCH	691 SF
REAR PORCH	320 SF

FLOOR AREAS ARE CALCULATED FROM THE OUTSIDE OF FOUNDATION WALLS AND/OR OUTSIDE FACE OF EXTERIOR STUD AT FRAMED WALLS.

STAIRS ARE INCLUDED IN CALCULATIONS AT ALL LEVELS.

GENERAL NOTES

- ALL WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALING OF DRAWINGS
- DIMENSIONS ARE FROM EXTERIOR FACE OF EXTERIOR STUD WALLS AND CENTERLINE OF INTERIOR PARTITIONS
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WINDOWS

- MARNI INTEGRITY ALL ULTRIX SERIES
- STYLES AND SIZES AS NOTED
- WINDOWS DESIGNATED WITH 'T' TO HAVE TEMPERED GLASS
- WINDOWS DESIGNATED WITH 'B' MEET BARRETT CODES
- WINDOW HEADER HEIGHTS SET TO 7' 11-5/8" (U.L.O.)
- BUILDER TO VERIFY WINDOW AND DOOR ROUGH OPENINGS AND HEADER HEIGHTS

FLOOR SYSTEM

- ENGINEERED WOOD FLOOR TRUSSES
- DESIGNED TO MIN. L/480 DEFLECTION OR LESS
- TRUSS MANUFACTURER TO PROVIDE CHASSES FOR ALL SUPPLY AND RETURN DUCTWORK
- TRUSS MANUFACTURER TO VERIFY FRAMING AT CANTILEVERS FOR POINT LOADS FROM ABOVE
- TRUSS MANUFACTURER TO VERIFY LOCATIONS OF ANY CONCENTRATED LOADS, SUCH AS GRANITE COUNTERTOPS, AND PROVIDE PROPER FRAMING AS NEEDED

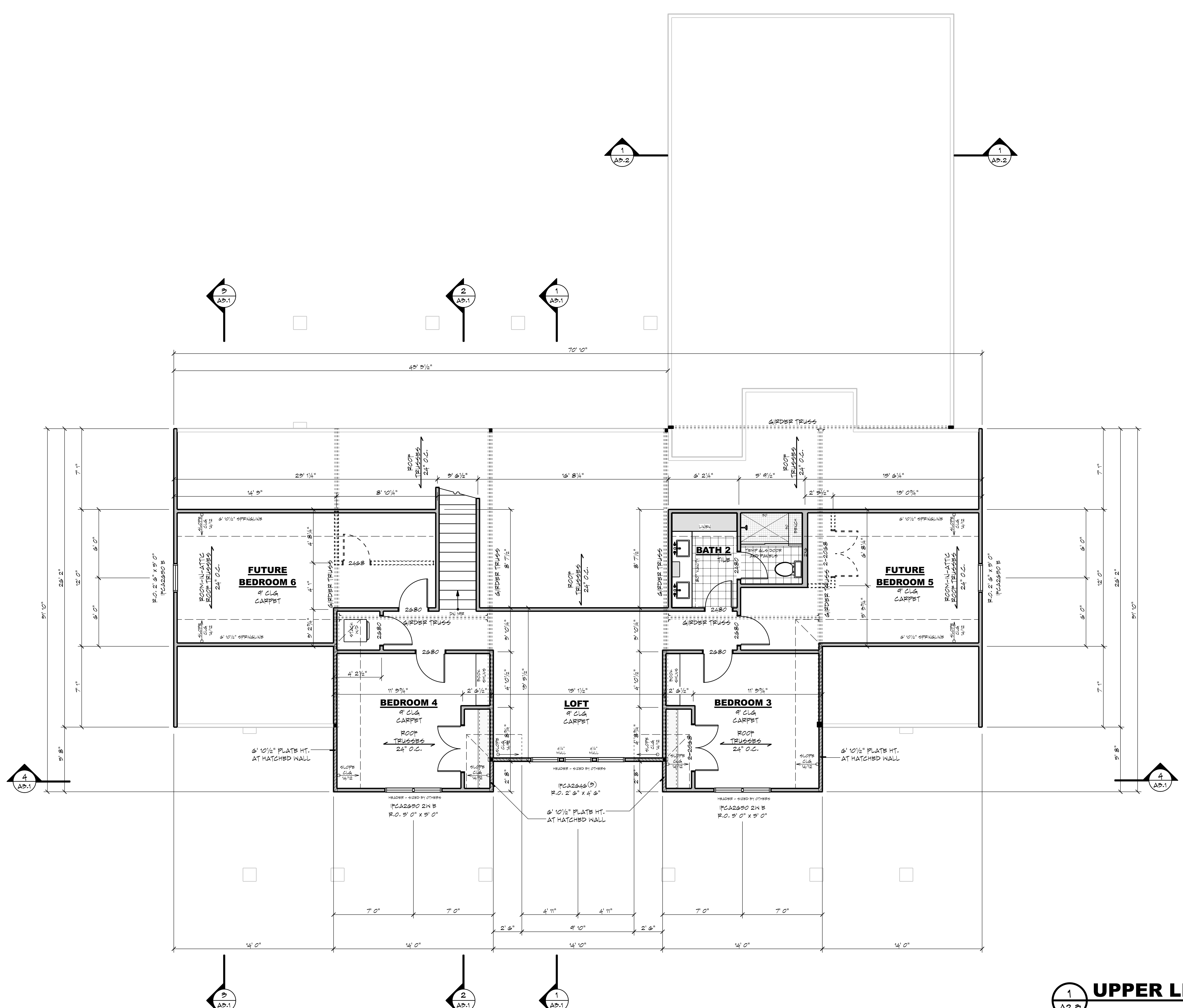
FRAMING

- 2X4 EXTERIOR STUDS
- 9' 1-1/8" PLATE HEIGHT (U.L.O.)
- 2X6 WALLS AT ALL POCKET DOORS AND PLUMBING WALLS
- DOUBLE STUDS AT WINDOWS AND DOOR HEADERS
- PROVIDE SOLID BLOCKING AT ALL POINT LOADS
- ■ INDICATES BEARING POINT LOAD
- PROVIDE CONTINUOUS SOLID BLOCKING TO FOUNDATION BELOW - VERIFY LOADS W/ LOCAL STRUCTURAL ENGINEER

DOOR SCHEDULE SYMBOL
2408 REPRESENTS A 2'-4" WIDE X 6'-8" HIGH DOOR

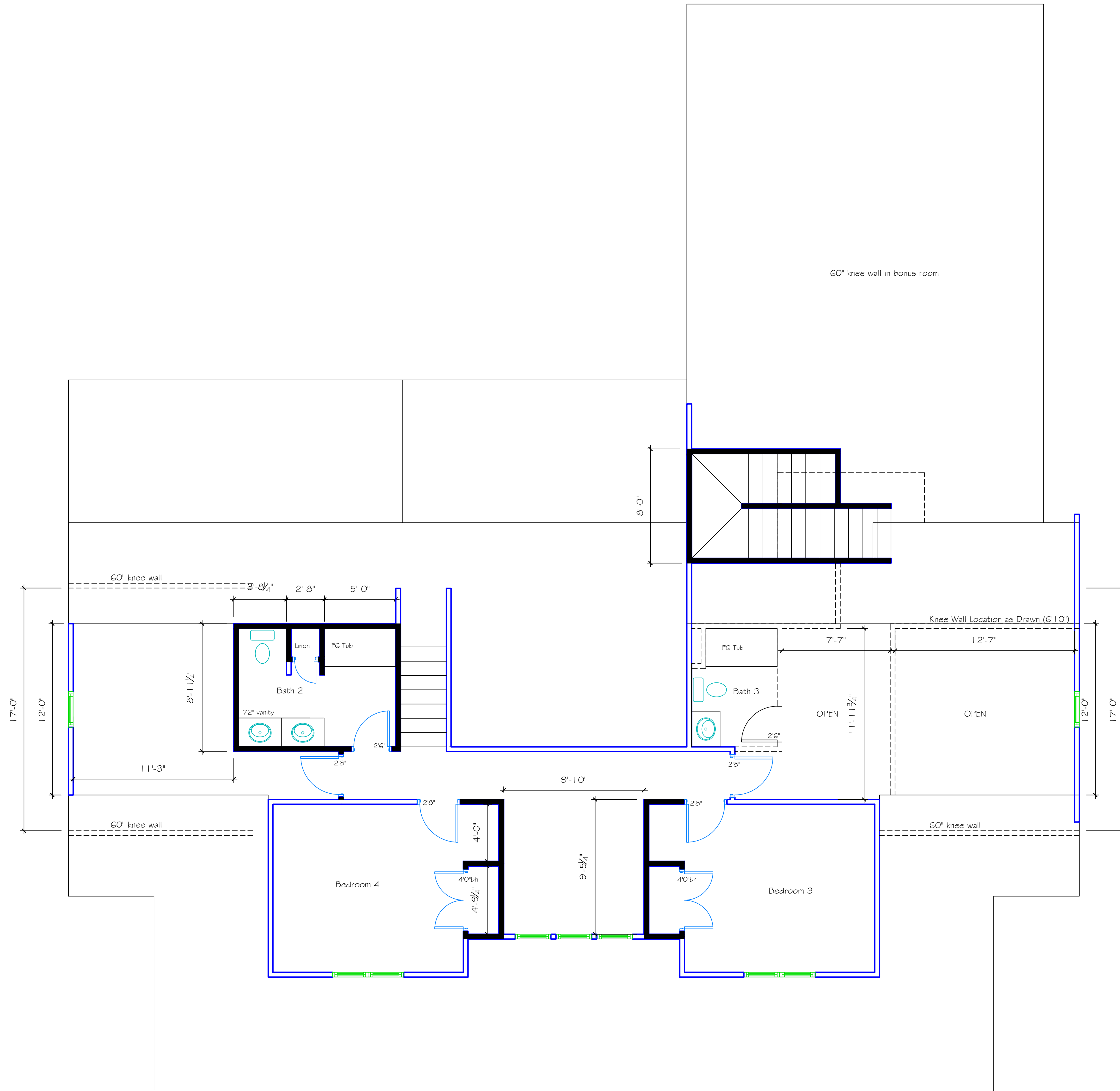
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+++ STRUCTURAL NOTICE +++
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1 UPPER LEVEL FLOOR PLAN

SCALE: 1/4" = 1' 0"



Upper Level Changes