FRONT RIGHT VIEW

FRONT LEFT VIEW

PROJECT SYNOPSIS

LOT COVERAGE:
PROPOSED: 3669 SF

FLOOR AREA SUMMARY:

MAIN FLOOR AREA	2420 SF
GARAGE	862 SF
	3282 SF
UPPER FLOOR AREA	1026 SF
	1026 SF
TOTAL FSR AREA:	4309 SF

PROPOSED HEIGHT: 33.25'

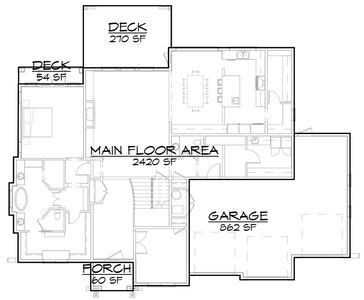
PRINCIPLE HEAT SOURCE:
FORCED AIR HEATING

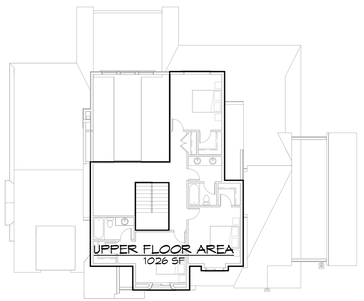
GEODETIC HEIGHTS

ROOF PEAK	132.48'
ROOF MEAN	126.33'
T.O. UPPER FLR.	111.11'
T.O. MAIN FLR.	100.00'
T.O. GARAGE SLAB @ ENTRY	99.33'

GENERAL NOTES

- CONTRACTOR TO ASSURE ALL WORK TO BE DONE IN ACCORDANCE WITH THE LOCAL BUILDING CODE. BEAM SIZING, SPANS AND BEARING POINTS TO BE VERIFIED AND REVIEWED
- ANY DISCREPANCIES ON PLANS TO BE REPORTED TO THE DESIGNER PRIOR TO COMMENCING WORK
- ALL WINDOWS TO BE VINYL FRAME, DOUBLE GLAZED
- PROVIDE RAINSCREEN BEHIND ALL EXTERIOR CLADDING AS REQUIRED ACCORDING TO THE LOCAL BUILDING CODE.
- ALL EXTERIOR FOUNDATION WALLS MUST BE DAMPROOFED
- ALL FOUNDATION WALLS & FOOTINGS TO BE IN COMPLIANCE WITH THE LOCAL BUILDING CODE.
- ASSURE ALL PAD FOOTING SIZES ARE OF ADEQUATE SIZE ACCORDING TO THE LOCAL BUILDING CODE.
- ALL BEARING POINTS IN BEARING WALLS TO BE SOLID STUDDING
- PROVIDE BEAM POCKETS IN FOUNDATION WHERE REQUIRED
- ALL OPENINGS IN STRUCTURAL WALLS (OVER WINDOWS/ DOORS) TO HAVE STRUCTURAL HEADER ABOVE
- ALL WOOD USED IS TO BE S.P.F. KD. NO. 1&2 OR BETTER
- ALL FLOOR JOISTS TO BE NAILED AND GLUED TO SUBFLOOR W/ BRIDGING WHERE NECESSARY ACCORDING TO THE LOCAL BUILDING CODE.
- ALL EXTERIOR DOORS - METAL INSULATED, PAINTED (U.N.O.)





NOTICE TO CONTRACTOR
All construction must comply with current NC Building Codes and is subject to field inspection and verification.

APPROVED
Limited building only review
Permit holder responsible for full compliance with the code

10/18/2024

Harnett COUNTY NORTH CAROLINA

DRAWING INDEX

SHEET	DRAWING TITLE
A1.0	TITLE SHEET
A2.0	FND./CRAWLSPACE PLAN
A2.1	MAIN FLOOR PLAN
A2.2	UPPER FLOOR PLAN
A2.3	ROOF PLAN
A3.0	EXTERIOR ELEVATIONS
A3.1	EXTERIOR ELEVATIONS
A4.0	SECTIONS
A4.1	SECTIONS
A4.2	SECTIONS
A5.0	DETAILS
A5.1	DETAILS

REVISIONS

COPPER CANYON

SU CASA DESIGN
ADDRESS: 2543 MONTROSE AVE. ABBOTSFORD, B.C. TEL: (604) 854-4303 EMAIL: INFO@SUCASADESIGN.CA

PROJECT

TITLE
TITLE SHEET

SCALE
As indicated

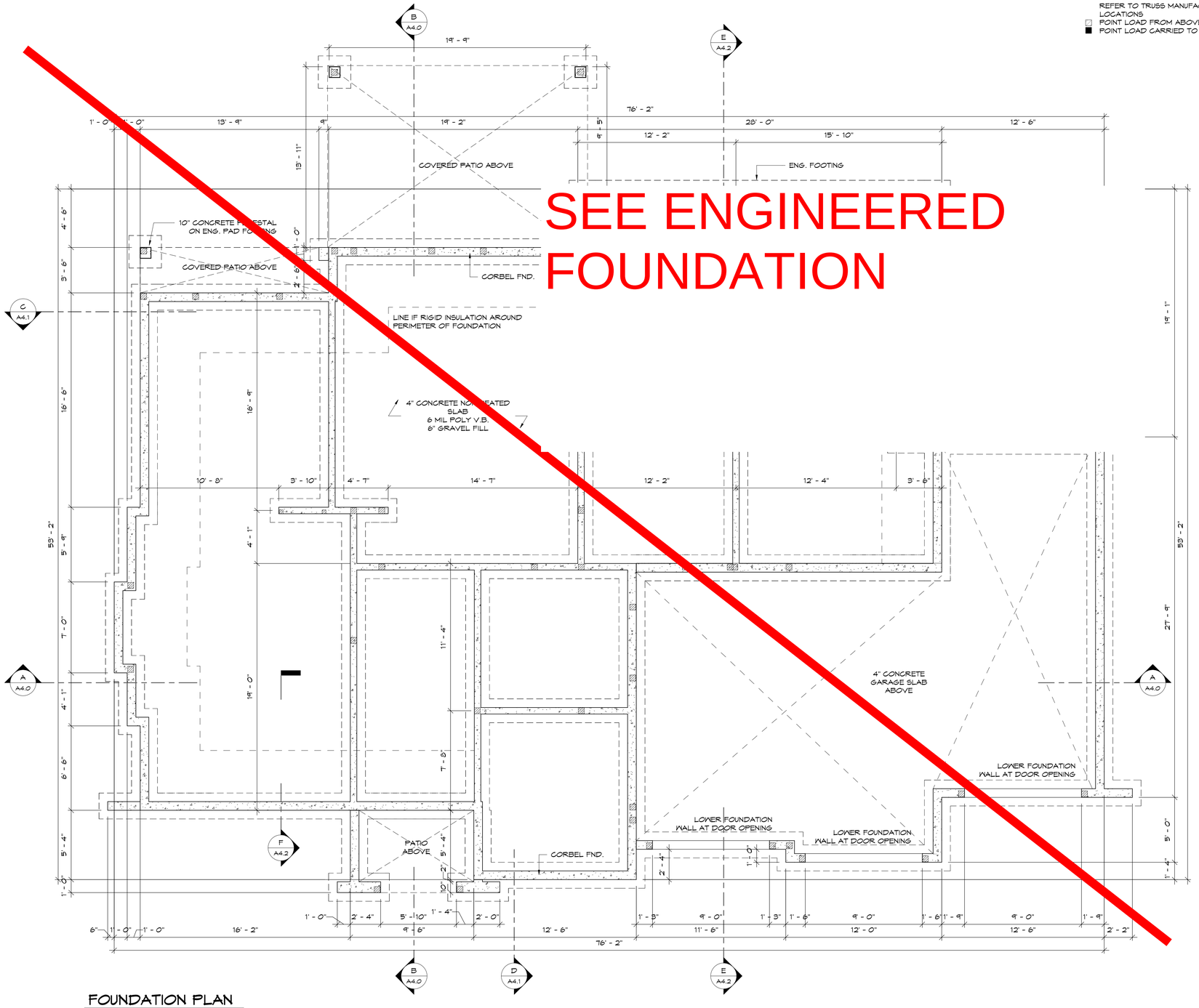
DATE
2/4/2024 3:45:52 PM

SHEET NUMBER
A1.0

TYPICAL FLOOR PLAN NOTES

- ALL INTERIOR DOOR ARE 4" FROM WALL (UNO)
- PROPOSED STRUCTURE SHOWN FOR REFERENCE ONLY. REFER TO STRUCTURAL DRAWINGS FOR BEAM LOCATION/SIZE & JOIST DIRECTION
- PROPOSED TRUSSES SHOWN FOR REFERENCE ONLY. REFER TO TRUSS MANUFACTURER DRAWINGS FOR TRUSS LOCATIONS

□ POINT LOAD FROM ABOVE
■ POINT LOAD CARRIED TO FLOOR BELOW



FOUNDATION PLAN
1/4" = 1'-0"

REVISIONS

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PROJECT

TITLE
FND./CRAWLSPACE PLAN

SCALE
1/4" = 1'-0"

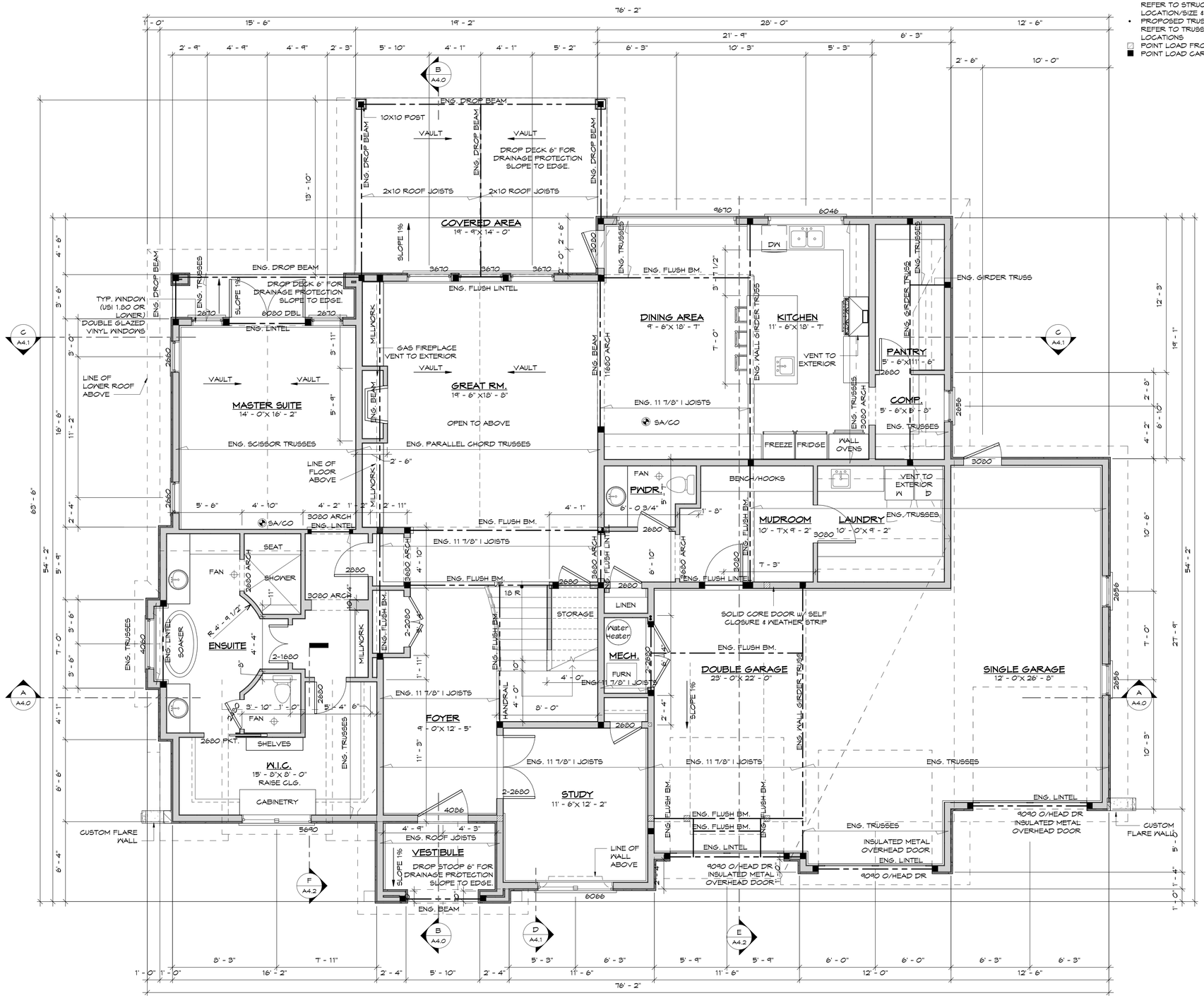
DATE
2/4/2024 3:45:52 PM

SHEET NUMBER
A2.0

TYPICAL FLOOR PLAN NOTES

- ALL INTERIOR DOOR ARE 4" FROM WALL (UNO)
- PROPOSED STRUCTURE SHOWN FOR REFERENCE ONLY. REFER TO STRUCTURAL DRAWINGS FOR BEAM LOCATION/SIZE & JOIST DIRECTION
- PROPOSED TRUSSES SHOWN FOR REFERENCE ONLY. REFER TO TRUSS MANUFACTURER DRAWINGS FOR TRUSS LOCATIONS

□ POINT LOAD FROM ABOVE
■ POINT LOAD CARRIED TO FLOOR BELOW



MAIN FLOOR PLAN

1/4" = 1'-0"

MAIN FLOOR AREA	2420 SF
GARAGE	862 SF
TOTAL MAIN FLOOR AREA	3282 SF

REVISIONS

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PROJECT

TITLE: MAIN FLOOR PLAN

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

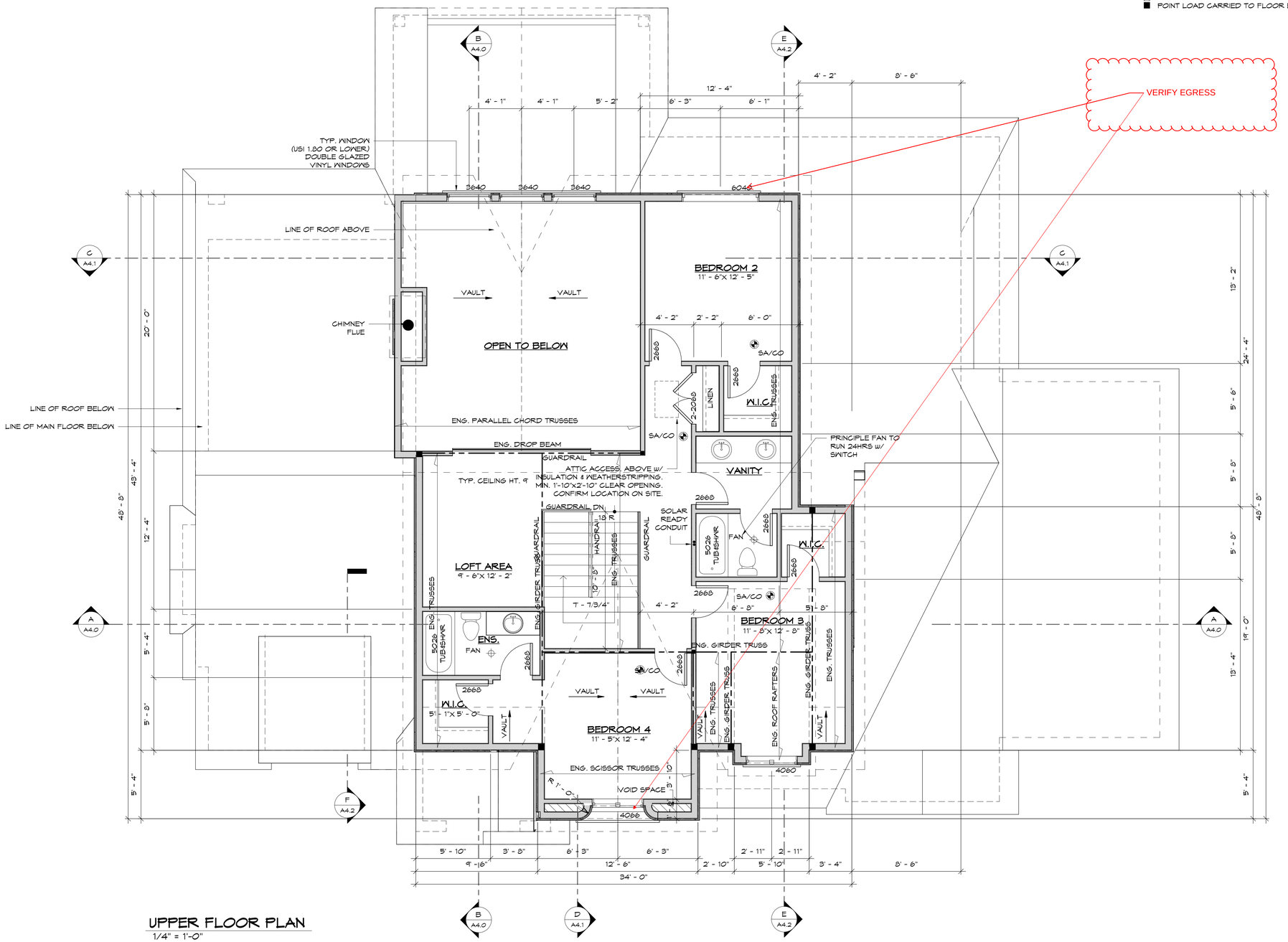
DATE: 2/4/2024 3:45:53 PM

SHEET NUMBER: **A2.1**

TYPICAL FLOOR PLAN NOTES

- ALL INTERIOR DOOR ARE 4" FROM WALL (UNO)
- PROPOSED STRUCTURE SHOWN FOR REFERENCE ONLY. REFER TO STRUCTURAL DRAWINGS FOR BEAM LOCATION/SIZE & JOIST DIRECTION
- PROPOSED TRUSSES SHOWN FOR REFERENCE ONLY. REFER TO TRUSS MANUFACTURER DRAWINGS FOR TRUSS LOCATIONS

☑ POINT LOAD FROM ABOVE
■ POINT LOAD CARRIED TO FLOOR BELOW



UPPER FLOOR PLAN

1/4" = 1'-0"

UPPER FLOOR AREA 1026 SF

REVISIONS

COPPER CANYON

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ADDRESS: 2543 MONTROSE AVE. ABBOTSFORD, B.C. TEL: (604) 854-4303 EMAIL: INFO@SUCASADESIGN.CA

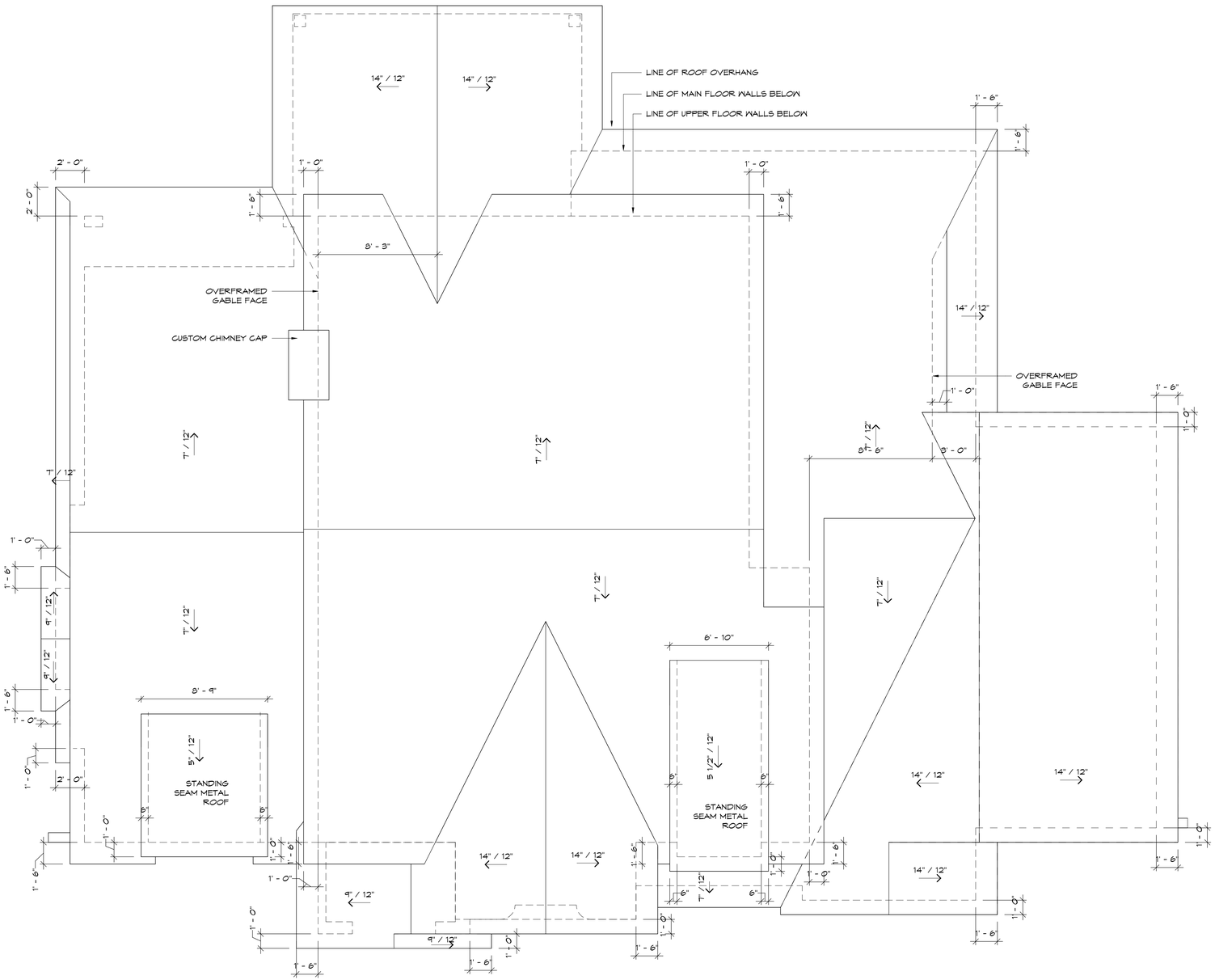
PROJECT

TITLE: UPPER FLOOR PLAN

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

DATE: 2/4/2024 3:45:54 PM

SHEET NUMBER: **A2.2**



ROOF PLAN

1/4" = 1'-0"

REVISIONS

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PROJECT

TITLE
ROOF PLAN

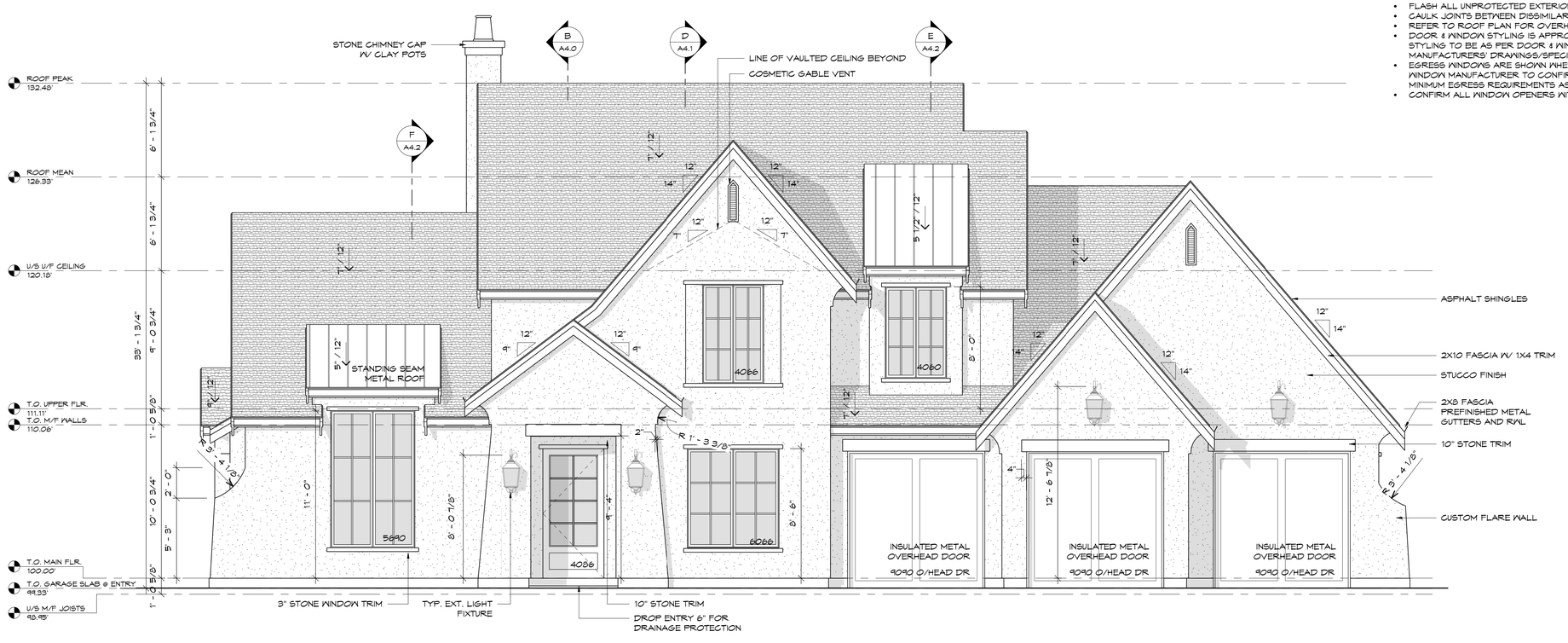
SCALE
1/4" = 1'-0"

DATE
2/4/2024 3:45:54 PM

SHEET NUMBER
A2.3

EXTERIOR NOTES

- FLASH ALL UNPROTECTED EXTERIOR OPENINGS
- CAULK JOINTS BETWEEN DISSIMILAR MATERIALS
- REFER TO ROOF PLAN FOR OVERHANG DIMENSIONS
- DOOR & WINDOW STYLING IS APPROXIMATE. FINAL STYLING TO BE AS PER DOOR & WINDOW MANUFACTURERS' DRAWINGS/SPECIFICATIONS.
- EGRESS WINDOWS ARE SHOWN WHERE REQUIRED. WINDOW MANUFACTURER TO CONFIRM OPENINGS MEET MINIMUM EGRESS REQUIREMENTS AS PER LOCAL CODE
- CONFIRM ALL WINDOW OPENERS WITH OWNER.



FRONT ELEVATION

1/4" = 1'-0"

RIGHT ELEVATION

1/4" = 1'-0"

REVISIONS

COPPER CANYON

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ADDRESS: 2543 MONTROSE AVE. ABBOTSFORD, B.C. TEL: (604) 854-4303 EMAIL: INFO@SUCASADESIGN.CA

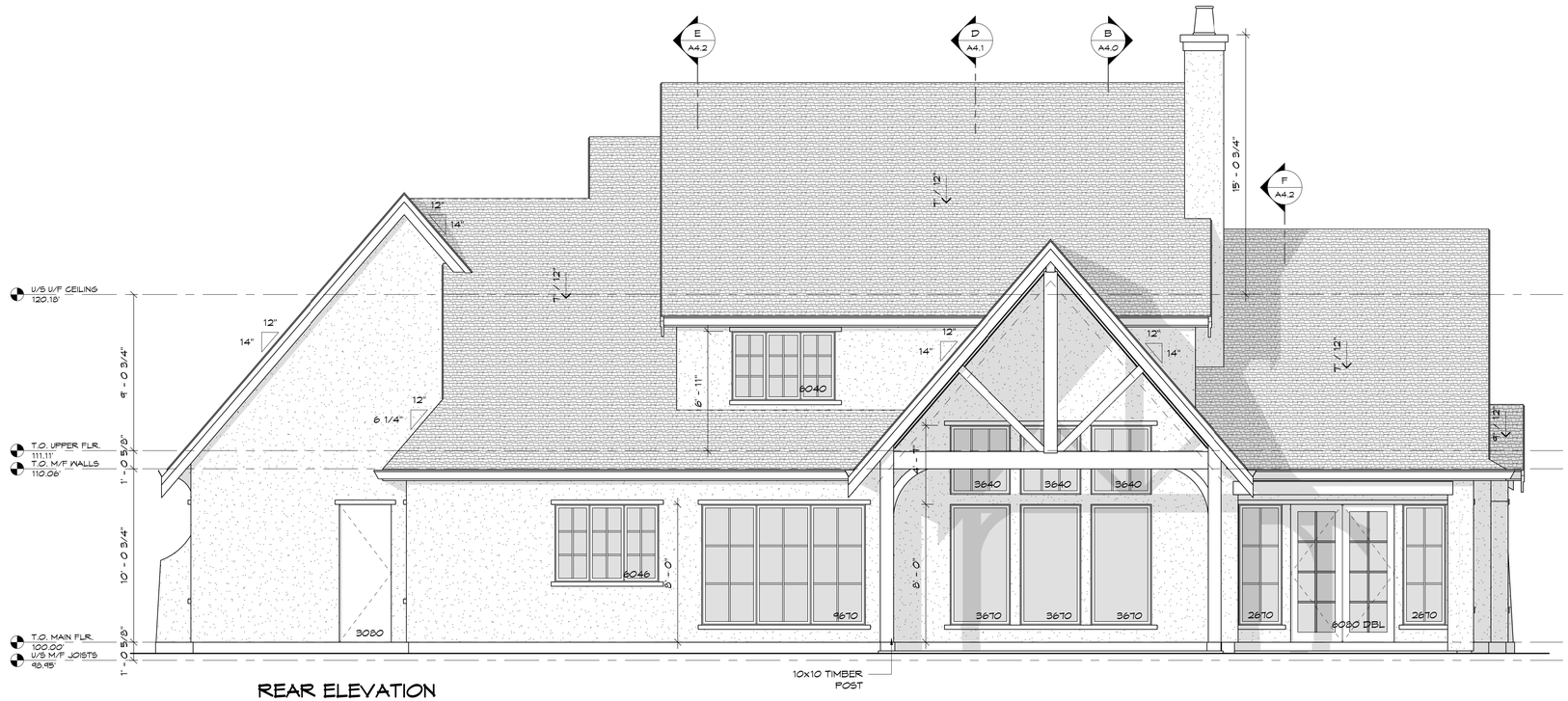
PROJECT

TITLE: EXTERIOR ELEVATIONS

SCALE: As indicated

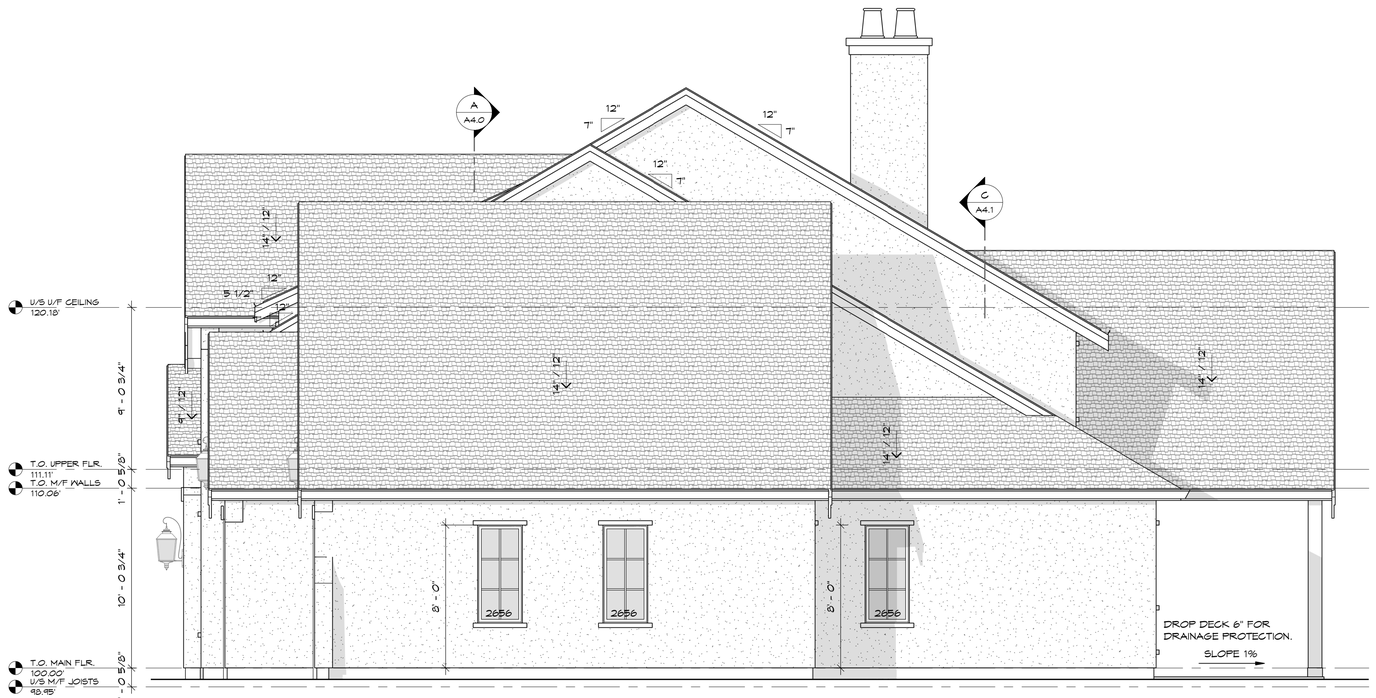
DATE: 2/4/2024 3:45:58 PM

SHEET NUMBER: **A3.0**



REAR ELEVATION

1/4" = 1'-0"



LEFT ELEVATION

1/4" = 1'-0"

EXTERIOR NOTES

- FLASH ALL UNPROTECTED EXTERIOR OPENINGS
- CAULK JOINTS BETWEEN DISSIMILAR MATERIALS
- REFER TO ROOF PLAN FOR OVERHANG DIMENSIONS
- DOOR & WINDOW STYLING IS APPROXIMATE. FINAL STYLING TO BE AS PER DOOR & WINDOW MANUFACTURERS' DRAWINGS/SPECIFICATIONS.
- EGRESS WINDOWS ARE SHOWN WHERE REQUIRED. WINDOW MANUFACTURER TO CONFIRM OPENINGS MEET MINIMUM EGRESS REQUIREMENTS AS PER LOCAL CODE
- CONFIRM ALL WINDOW OPENERS WITH OWNER.

REVISIONS

COPPER CANYON

SU CASA DESIGN
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PROJECT

TITLE
EXTERIOR ELEVATIONS

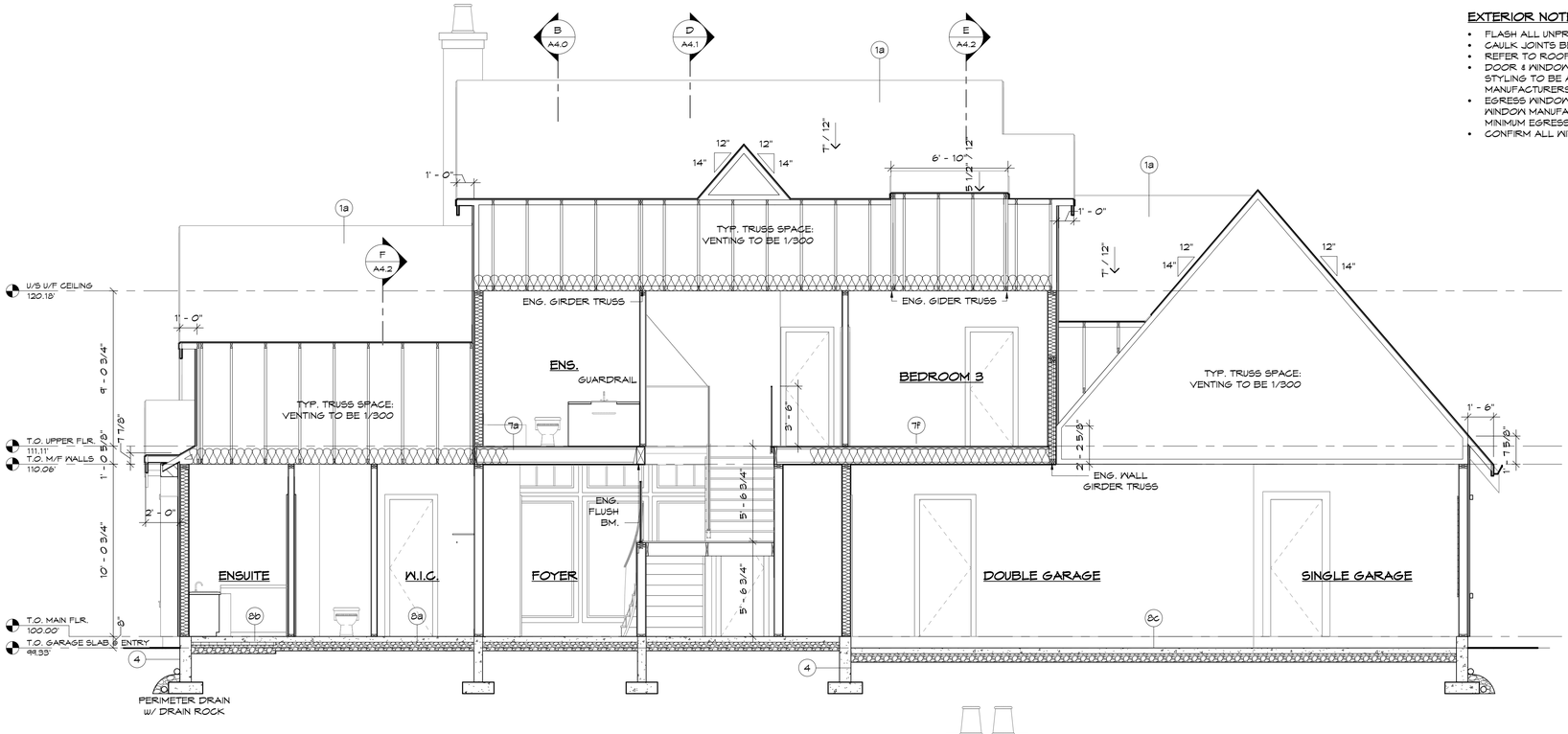
SCALE
As indicated

DATE
2/4/2024 3:46:03 PM

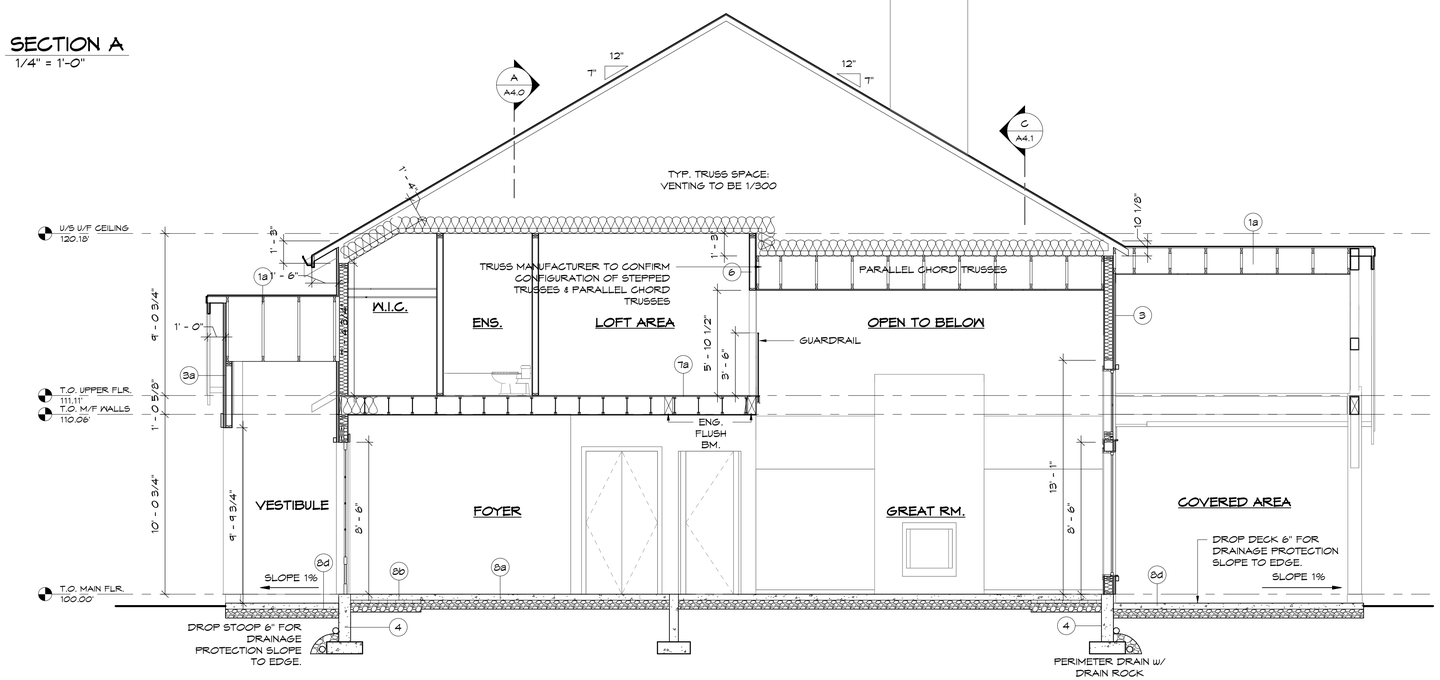
SHEET NUMBER
A3.1

EXTERIOR NOTES

- FLASH ALL UNPROTECTED EXTERIOR OPENINGS
- CAULK JOINTS BETWEEN DISSIMILAR MATERIALS
- REFER TO ROOF PLAN FOR OVERHANG DIMENSIONS
- DOOR & WINDOW STYLING IS APPROXIMATE. FINAL STYLING TO BE AS PER DOOR & WINDOW MANUFACTURERS' DRAWINGS/SPECIFICATIONS.
- EGRESS WINDOWS ARE SHOWN WHERE REQUIRED. WINDOW MANUFACTURER TO CONFIRM OPENINGS MEET MINIMUM EGRESS REQUIREMENTS AS PER LOCAL CODE
- CONFIRM ALL WINDOW OPENERS WITH OWNER.



SECTION A
1/4" = 1'-0"



SECTION B
1/4" = 1'-0"

REVISIONS

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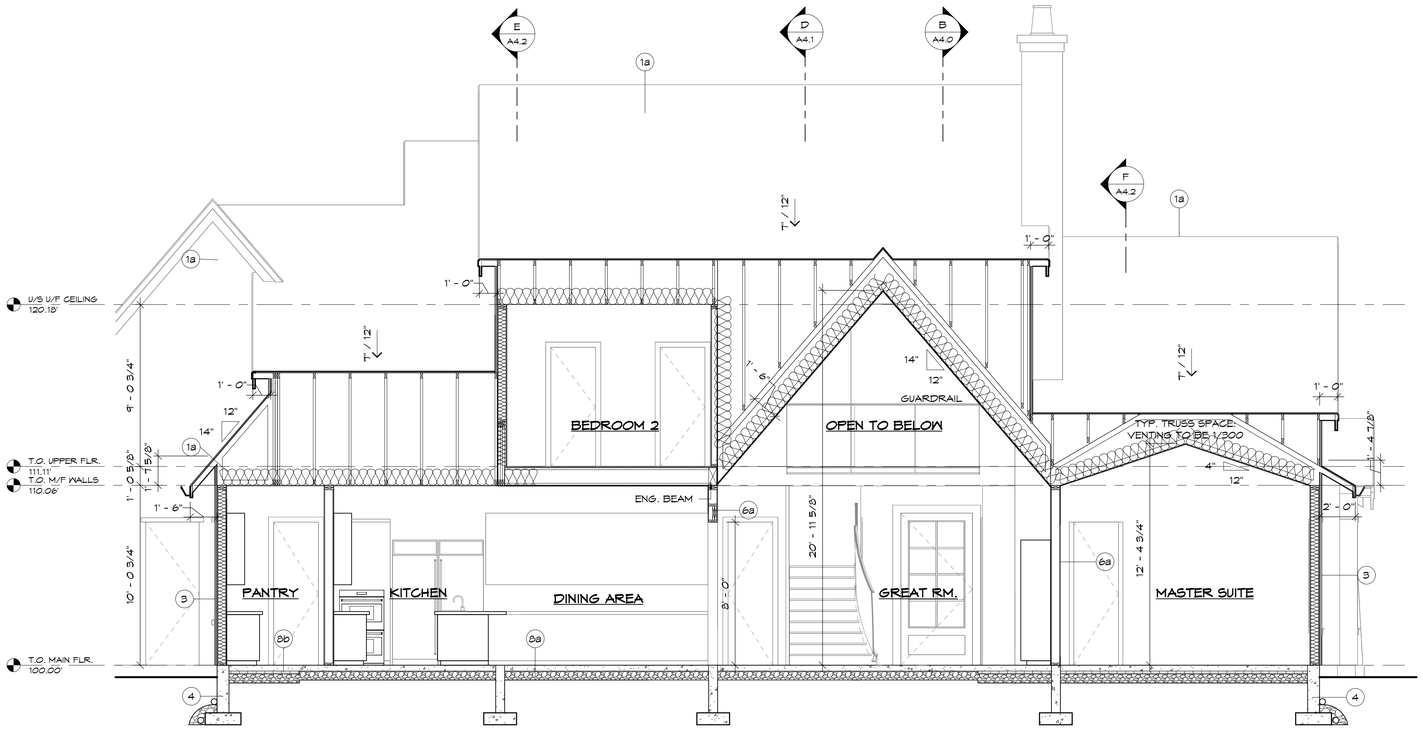
PROJECT

TITLE
SECTIONS

SCALE
As indicated

DATE
2/4/2024 3:46:04 PM

SHEET NUMBER
A4.0



SECTION C
1/4" = 1'-0"

SECTION D
1/4" = 1'-0"

REVISIONS

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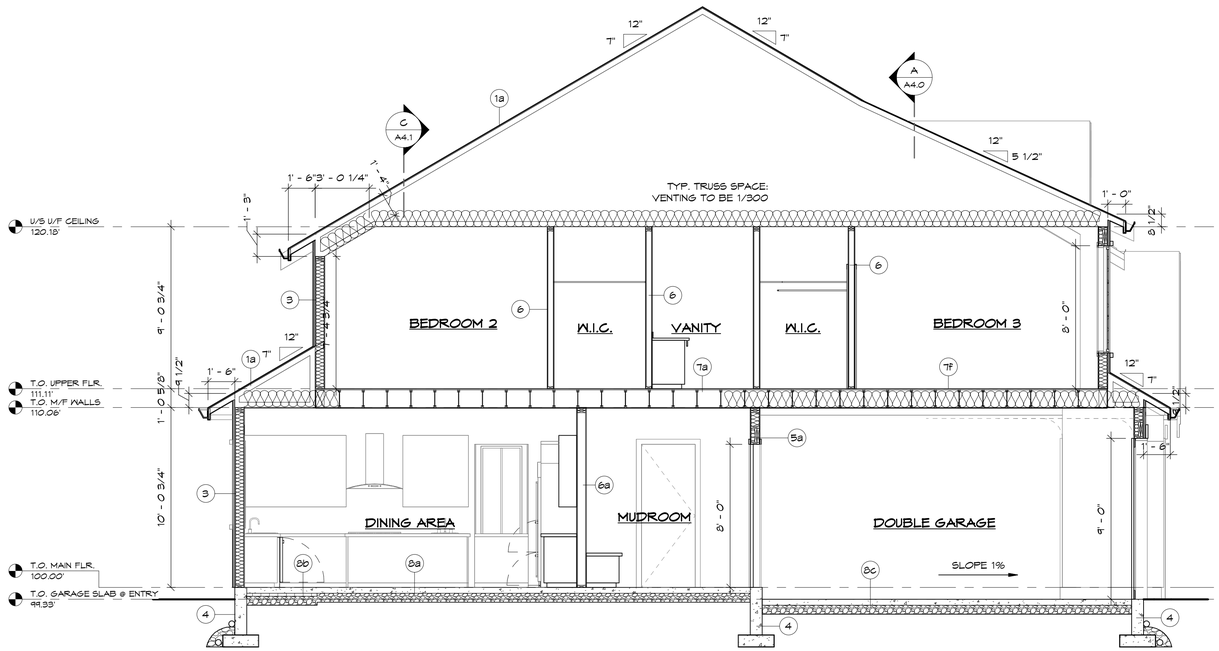
PROJECT

TITLE
SECTIONS

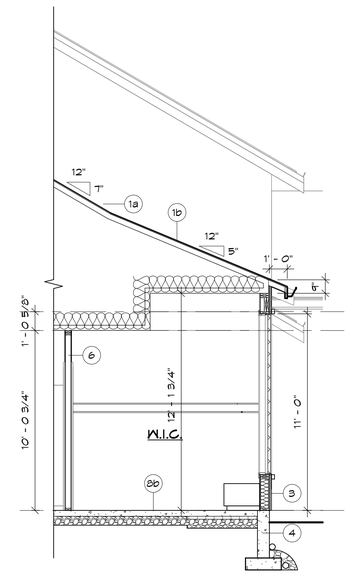
SCALE
1/4" = 1'-0"

DATE
2/4/2024 3:46:04 PM

SHEET NUMBER
A4.1



SECTION E
1/4" = 1'-0"



SECTION F
1/4" = 1'-0"

BUILDING SPECIFICATIONS

SEE DETAILS FOR REQUIRED BATT INSULATION VALUES.

1a
TYPICAL TRUSS ROOF
MIN RSI 6.91 FOR ASSEMBLY

ASPHALT SHINGLE ROOF
15# BREATHER TYPE ROOFING FELT
1/2" PLYWOOD ROOF SHEATHING
PROVIDE EAVE PROTECTION TO CODE
ENG. TRUSSES
BATT INSULATION
6 MIL POLY V.B.
GYPSUM CEILING BOARD

1b
TYPICAL TRUSS ROOF
MIN RSI 6.91 FOR ASSEMBLY

STANDING SEAM METAL ROOFING
15# BREATHER TYPE ROOFING FELT
1/2" PLYWOOD ROOF SHEATHING
PROVIDE EAVE PROTECTION TO CODE
ENG. TRUSSES
BATT INSULATION
6 MIL POLY V.B.
GYPSUM WALL BOARD

3
TYPICAL EXTERIOR WALLS
MIN RSI 2.78 FOR ASSEMBLY

EXTERIOR FINISH
REQUIRED RAINSCREEN
BUILDING PAPER
1/2" PLYWOOD SHEATHING
2x6 STUDS @ 16" O.C.
BATT INSULATION
6 MIL. POLY V.B.
GYPSUM WALL BOARD

3a
TYPICAL 2X4 EXTERIOR WALLS

EXTERIOR FINISH
REQUIRED RAINSCREEN
BUILDING PAPER
1/2" PLYWOOD SHEATHING
2x4 STUDS @ 16" O.C.
R-14 BATT INSULATION
6 MIL. POLY V.B.
GYPSUM WALL BOARD

4
TYPICAL FOUNDATION WALLS
MIN RSI 1.99 FOR ASSEMBLY INCL. FURRING

ASPHALT EMULSION (DAMPPROOFING)
ENG. CONCRETE FOUNDATION WALL
ENG. CONCRETE STRIP FOOTING W/
REBAR
(SEE STRUCTURAL FOR SPECS.)
6" MIN. DRAIN ROCK
4" PERIMETER DRAIN

4c
FOUNDATION CURB WALL - 6"

ENG. CONCRETE CURB WALL
ENG. CONCRETE STRIP FOOTING W/
REBAR
(SEE STRUCTURAL FOR SPECS.)

5a
TYPICAL GARAGE WALL
MIN RSI 2.62 FOR ASSEMBLY

1/2" GYPSUM WALL BOARD
2X6 STUDS @ 16" O.C.
BATT INSULATION
6 MIL UV POLY VAPOUR BARRIER
1/2" GYPSUM WALL BOARD

6
TYPICAL INTERIOR WALLS

1/2" GYPSUM WALL BOARD
2x4 STUDS @ 16" O.C.
1/2" GYPSUM WALL BOARD

6a
TYPICAL INTERIOR WALLS

1/2" GYPSUM WALL BOARD
2X6 STUDS @ 16" O.C.
1/2" GYPSUM WALL BOARD

6e
INTERIOR WALL, STUDS ONLY

2x4 STUDS @ 16" O.C.

7a
TYPICAL FLOOR (11 7/8")

FINISH FLOORING
3/4" T&G PLYWOOD SHEATHING
(NAILED & GLUED)
11 7/8" ENG. FLOOR JOISTS
TO ENGR'S SPECS.
GYPSUM CEILING BOARD

7f
TYPICAL FLOOR (11 7/8")
OVER UNCONDITIONED SPACE
MIN RSI 4.67 FOR ASSEMBLY

FINISH FLOORING
3/4" T&G PLYWOOD SHEATHING
(NAILED & GLUED)
6 MIL UV POLY VAPOUR BARRIER
11 7/8" ENG. FLOOR JOISTS
TO ENGR'S SPECS.
BATT INSULATION
GYPSUM CEILING BOARD

8a
TYPICAL SLAB FLOOR
(UNHEATED, UNINSULATED)

4" CONC. SLAB
6 MIL POLY V.B.
6" MIN. COMPACT GRANULAR FILL

8b
SLAB FLOOR
(PERIMETER ABOVE FROST)
MIN RSI 1.96 FOR ASSEMBLY

4" CONC. SLAB
MIN. 2" XPS RIGID INSULATION
MIN. 1.2m WIDTH INSIDE OF FDN.
6 MIL POLY V.B.
6" MIN. COMPACT GRANULAR FILL

8c
TYPICAL GARAGE SLAB

4" CONCRETE SLAB
(SEE STRUCTURAL FOR SPECS.)
6" MIN. COMPACT GRANULAR FILL
1% MIN. SLOPE TO ENTRY

8d
TYPICAL EXTERIOR SLAB

FINISH AS PER OWNER
4" CONCRETE SLAB
6" MIN. COMPACT GRANULAR FILL
1% MIN. SLOPE AWAY FROM HOUSE

10a
TYP. INTERIOR STAIR

11" TREAD
10" RUN
3-2x12 STRINGER
32"-36" HANDRAIL @ STAIRS w/
3 OR MORE RISERS
PROVIDE 6'-8" MIN. FINISHED HEADROOM

REVISIONS

COPPER CANYON

SU CASA DESIGN
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PROJECT

TITLE
SECTIONS

SCALE
1/4" = 1'-0"

DATE
2/4/2024 3:46:05 PM

SHEET NUMBER
A4.2

WALL ASSEMBLY COMPONENTS		RSI
1	EXTERIOR AIR FILM	0.03
2	1" (25.4MM) AIR SPACE W/WEEP HOLES	0.18
3	ASPHALT IMPREGNATED PAPER	0.00
4	1/2" (12.7MM) OSB SHEATHING	0.11
5	2X6 FRAMING FILLED W/ R20 BATT @ 16" O.C.	2.41
6	POLYETHYLENE	0.00
7	1/2" (12.7MM) GYPSUM BOARD	0.08
8	FINISH: 1 COAT PRIMER/PAINT	0.00
9	INTERIOR AIR FILM	0.12
EFFECTIVE RSI/R VALUE OF ENTIRE ASSEMBLY		2.93

- MIN. RSI 2.78

THIS ASSEMBLY MEETS THE MINIMUM REQUIRED RSI VALUE REGARDLESS OF APPLIED EXTERIOR FINISH

WALL ASSEMBLY COMPONENTS		RSI
1	EXTERIOR AIR FILM	0.03
2	ASPHALT IMPREGNATED PAPER	0.00
3	1/2" (12.7MM) OSB SHEATHING	0.11
4	2X6 FRAMING FILLED W/ R20 BATT @ 16" O.C.	2.41
5	POLYETHYLENE	0.00
6	1/2" (12.7MM) GYPSUM BOARD	0.08
7	FINISH: 1 COAT PRIMER/PAINT	0.00
8	INTERIOR AIR FILM	0.12
EFFECTIVE RSI/R VALUE OF ENTIRE ASSEMBLY		2.93

- MIN. RSI 2.78

THIS ASSEMBLY MEETS THE MINIMUM REQUIRED RSI VALUE REGARDLESS OF APPLIED EXTERIOR FINISH

WALL ASSEMBLY COMPONENTS		RSI
1	EXTERIOR AIR FILM	0.03
2	1/2" (12.7MM) GYPSUM BOARD	0.08
3	2X6 FRAMING FILLED W/ R20 BATT @ 16" O.C.	2.41
4	1/2" (12.7MM) GYPSUM BOARD	0.08
5	POLYETHYLENE	0.00
6	FINISH: 1 COAT PRIMER/PAINT	0.00
7	INTERIOR AIR FILM	0.12
EFFECTIVE RSI/R VALUE OF ENTIRE ASSEMBLY		2.72

- MIN. RSI 2.62

THIS ASSEMBLY MEETS THE MINIMUM REQUIRED RSI VALUE REGARDLESS OF APPLIED EXTERIOR FINISH

WALL ASSEMBLY COMPONENTS		RSI
1	EXTERIOR AIR FILM	0.03
2	1" (25.4MM) AIR SPACE W/WEEP HOLES	0.18
3	ASPHALT IMPREGNATED PAPER	0.00
4	1/2" (12.7MM) OSB SHEATHING	0.11
5	2X4 FRAMING FILLED W/ R14 BATT @ 16" O.C.	1.62
6	2" RIGID INSULATION	1.68
8	POLYETHYLENE	0.00
9	1/2" (12.7MM) GYPSUM BOARD	0.08
10	FINISH: 1 COAT PRIMER/PAINT	0.00
11	INTERIOR AIR FILM	0.12
EFFECTIVE RSI/R VALUE OF ENTIRE ASSEMBLY		3.82

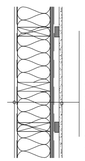
- MIN. RSI 2.78

THIS ASSEMBLY MEETS THE MINIMUM REQUIRED RSI VALUE REGARDLESS OF APPLIED EXTERIOR FINISH

WALL ASSEMBLY COMPONENTS		RSI
1	EXTERIOR AIR FILM	0.03
2	1/2" (12.7MM) GYPSUM BOARD	0.08
3	2X4 FRAMING FILLED W/ R14 BATT @ 16" O.C.	1.62
4	2" RIGID INSULATION	1.68
5	1/2" (12.7MM) GYPSUM BOARD	0.08
6	POLYETHYLENE	0.00
7	FINISH: 1 COAT PRIMER/PAINT	0.00
8	INTERIOR AIR FILM	0.12
EFFECTIVE RSI/R VALUE OF ENTIRE ASSEMBLY		3.98

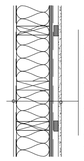
- MIN. RSI 2.62

THIS ASSEMBLY MEETS THE MINIMUM REQUIRED RSI VALUE REGARDLESS OF APPLIED EXTERIOR FINISH



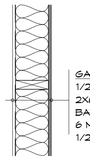
RAINSCREEN WALL SYSTEM
EXTERIOR CLADDING
3/4"X2" TREATED EXTERIOR GRADE
PLYWOOD STRAPPING @ 8" OR 16" O.C.
2 LAYERS 30MIN. RATED BUILDING PAPER
1/2" PLYWOOD SHEATHING
2X6 WOOD STUDS
BATT INSULATION
6 MIL. POLY V.B.
1/2" G.W.B.

TYP. EXTERIOR WALL
1" = 1'-0"



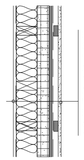
RAINSCREEN WALL SYSTEM
EXTERIOR CLADDING
3/4"X2" TREATED EXTERIOR GRADE
PLYWOOD STRAPPING @ 8" OR 16" O.C.
2 LAYERS 30MIN. RATED BUILDING PAPER
1/2" PLYWOOD SHEATHING
2X6 WOOD STUDS
BATT INSULATION
6 MIL. POLY V.B.
1/2" G.W.B.

TYP. ATTIC WALL
1" = 1'-0"



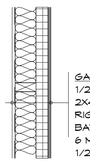
GARAGE WALL SYSTEM
1/2" G.W.B.
2X6 WOOD STUDS
BATT INSULATION
6 MIL. POLY V.B.
1/2" G.W.B.

TYP. GARAGE WALL
1" = 1'-0"



EXTERIOR CLADDING
3/4"X2" TREATED EXTERIOR GRADE
PLYWOOD STRAPPING @ 8" OR 16" O.C.
2 LAYERS 30MIN. RATED BUILDING PAPER
1/2" PLYWOOD SHEATHING
2X4 WOOD STUDS
RIGID INSULATION
BATT INSULATION
6 MIL. POLY V.B.
1/2" G.W.B.

TYP. WALL W/ WATERLINES
1" = 1'-0"



GARAGE WALL SYSTEM
1/2" G.W.B.
2X4 WOOD STUDS
RIGID INSULATION
BATT INSULATION
6 MIL. POLY V.B.
1/2" G.W.B.

GARAGE WALL W/ WATERLINES
1" = 1'-0"

MINIMUM REQUIRED EFFECTIVE THERMAL RESISTANCE = RSI 2.78 (R-15.8) ENG. FLR JSTS. @ 16" O.C. W/R20 BATT INSULATION		
CONTINUOUS ELEMENTS	RSI	R
- ENG. JOIST RIM BOARD	0.325	1.85
- 1/2" PLYWOOD SHEATHING	0.11	0.62
- AIR BARRIER/SHEATHING MEMBRANE	0.00	0.00
- 3/8" CAPILLARY BREAK SPACE	0.15	0.85
- 1/4" FIBRE-CEMENT CLADDING	0.023	0.13
- EXTERIOR AIR FILM	0.03	0.17
	0.638	3.62
CAVITY RSI (PARALLEL)		
100 / 12.5, 87.5 / 1.19, 3.52 = 2.82 RSI	RSI 2.82 (R.15.99)	
TOTAL EFFECTIVE INSULATION VALUE	RSI 3.458 (R.19.61)	

TYP. RIM JOIST @ 11.7/8" ENG. FLOOR
1" = 1'-0"

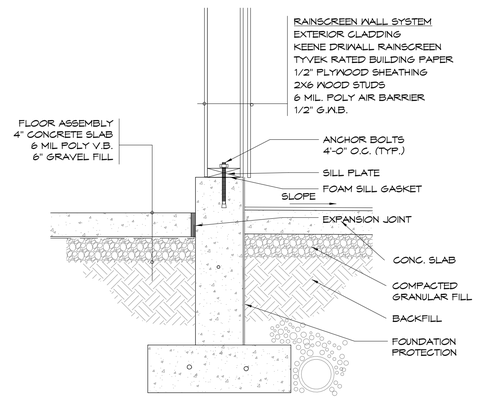
CONCRETE WALL

WALL ASSEMBLY COMPONENTS		RSI	R
1	GRADE	0.00	0.00
2	2 LAYERS MOPPED SEAL	0.21	1.19
3	CAST IN PLACE CONCRETE WALL	0.08	0.45
3	2" EXTRUDED POLYSTYRENE (R.10)	1.76	9.99
EFFECTIVE RSI/R VALUE OF ENTIRE ASSEMBLY		2.05	11.64

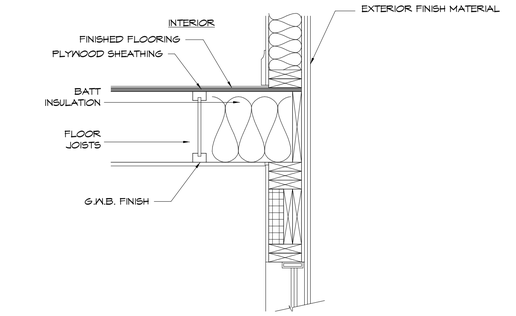
CONCRETE SLAB

FLOOR ASSEMBLY COMPONENTS		RSI	R
1	INTERIOR AIR FILM	0.12	0.68
2	HARDWOOD FLOORING	0.12	0.68
3	CAST IN PLACE CONCRETE FLOOR	0.04	0.23
4	2" EXTRUDED POLYSTYRENE	1.96	11.13
5	6" CRUSHED GRAVEL FILL	0.67	3.80
REQ'D EFFECTIVE RSI/R VALUE		1.96	11.13
EFFECTIVE RSI/R VALUE OF ENTIRE ASSEMBLY		2.91	16.52

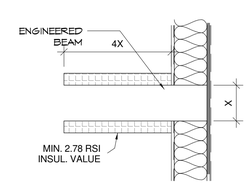
TYP. SLAB ON GRADE ENTRY
1" = 1'-0"



TYP. GARAGE SLAB @ EXTERIOR WALL
1" = 1'-0"

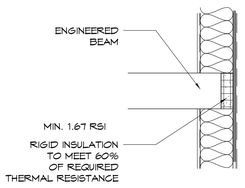


TYP. ENG. FLOOR @ EXTERIOR WALL
1" = 1'-0"



INSULATION TO BE 4X BEAM WIDTH
WHEN BEAM CONTACTS EXTERIOR SHEATHING

BEAM / WALL - PLAN DETAIL 1
1" = 1'-0"



STRUCTURAL ENGINEER MUST REVIEW AND COMMENT
ON THIS SCENARIO DUE TO THE REDUCED BEARING
ON THE EXTERIOR WALL

BEAM / WALL- PLAN DETAIL 2
1" = 1'-0"

REVISIONS

COPPER CANYON

SUCASA DESIGN
ADDRESS: 2543 MONTROSE AVE. ABBOTSFORD, B.C. TEL: (604) 854-4303 EMAIL: INFO@SUCASADESIGN.CA

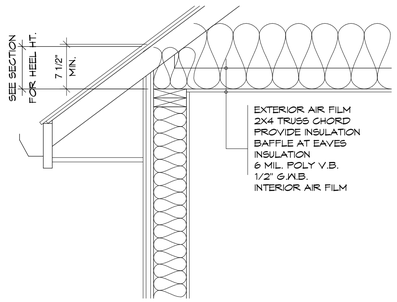
PROJECT

TITLE
DETAILS

SCALE
1" = 1'-0"

DATE
2/4/2024 4:00:07 PM

SHEET NUMBER
A5.0



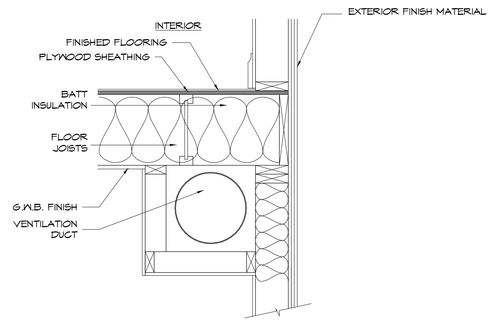
CEILING DETAIL

CEILING ASSEMBLY COMPONENTS		RSI	
1	EXTERIOR AIR FILM	0.03	
2	2X4 FRAMING FILLED W/ R50 BLOWN GLASS INSULATION @ 24" O.C.	7.19	5.71 INSULATION + 1.48 CAVITY
3	POLYETHYLENE	0.00	
4	1/2" (12.7MM) GYPSUM BOARD	0.06	
5	FINISH: 1 COAT PRIMER/PAINT	0.00	
6	INTERIOR AIR FILM	0.11	
EFFECTIVE RSI VALUE OF ENTIRE ASSEMBLY		7.39	

MIN. RSI 6.91

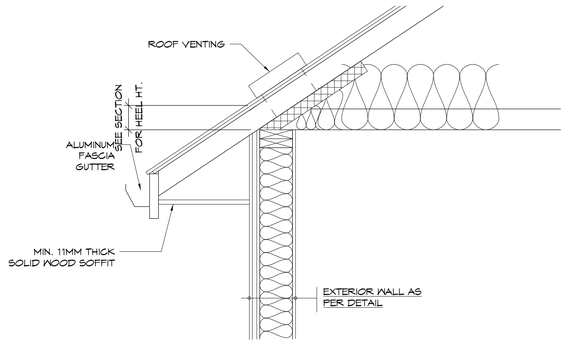
TYP. CEILING/ROOF EAVE

1" = 1'-0"



TYP. DUCTING DROP DETAIL

1" = 1'-0"

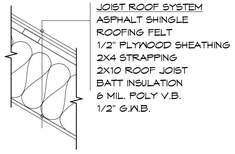


TYP. SOFFIT PROTECTION

1" = 1'-0"

ROOF ASSEMBLY COMPONENTS		RSI	R
1	EXTERIOR AIR FILM	0.03	0.17
2	ASPHALT SHINGLES	0.00	0.00
3	ROOFING FELT	0.00	0.00
4	1/2" (12.5MM) PLY. SHEATHING W/ STRAPPING	0.11	0.62
5	2X10 ROOF JOIST @ 16" O.C	2.00	13.81
6	INSULATION R33 BATT IN CAVITY	5.80	33.00
7	POLYETHYLENE	0.00	0.00
8	1/2" (12.7MM) GYPSUM BOARD	0.06	0.45
9	FINISH: 1 COAT PRIMER/PAINT	0.00	0.00
10	INTERIOR AIR FILM	0.12	0.68
EFFECTIVE RSI/R VALUE OF ENTIRE ASSEMBLY		5.05	28.69
INSTALLED INSULATION RSI/R VALUE (NOMINAL)		5.80	33.00

MIN. RSI 4.67

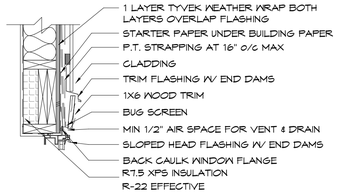


TYP. 2X10 CATHEDRAL ROOF

1" = 1'-0"

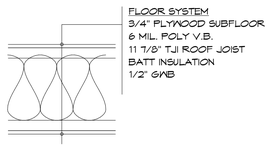
WALL ASSEMBLY COMPONENTS		RSI
1	INTERIOR AIR FILM	0.12
2	FINISHED FLOORING	0.00
3	UNDERLAY	0.14
4	3/4" (19MM) SUB FLOOR	0.17
5	11 7/8 FRAMING FILLED @ 12" O.C. (R31 BATT)	4.8
6	POLYETHYLENE	0.00
7	1/2" (12.7MM) GYPSUM BOARD	0.06
8	FINISH: 1 COAT PRIMER/PAINT	0.00
9	EXTERIOR AIR FILM	0.03
EFFECTIVE RSI/R VALUE OF ENTIRE ASSEMBLY		5.32

- MIN. RSI 4.67



TYP. WINDOW HEAD

1" = 1'-0"



TYP. ENG. FLOOR UNCONDITIONED SPACE

1" = 1'-0"

AS PER LOCAL BUILDING CODE - NOTES PERTAINING TO LEAKAGE PATHS IN PROBLEMATIC AREAS

- FOUNDATION TO SILL PLATE AND RIM JOISTS
ALL JOISTS AT THE TRANSITION BETWEEN THE FOUNDATION WALL AND THE ABOVE GRADE WALL MUST BE MADE AIR-TIGHT BY SEALING ALL JOINTS AND JUNCTIONS BETWEEN THE STRUCTURAL COMPONENTS, OR COVERING THE STRUCTURAL COMPONENTS WITH AN AIR BARRIER MATERIAL

- INTERIOR WALL INTERFACE
INTERIOR WALLS THAT MEET EXTERIOR WALLS OR CEILINGS WITH AN INTERIOR PLANE OF AIR TIGHTNESS MUST BE MADE AIRTIGHT BY EITHER SEALING ALL JUNCTIONS BETWEEN THE STRUCTURAL COMPONENTS, COVERING THE STRUCTURAL COMPONENTS WITH AN AIR BARRIER MATERIAL OR MAINTAINING THE CONTINUITY OF THE AIR BARRIER SYSTEM THROUGH THE INTERIOR WALL

- RIM JOIST
ALL JOINTS AT THE RIM JOIST ASSEMBLY MUST BE MADE AIRTIGHT BY SEALING ALL JOINTS AND JUNCTIONS BETWEEN THE STRUCTURAL COMPONENTS, OR COVERING THE STRUCTURAL COMPONENTS WITH AN AIR BARRIER MATERIAL

- CANTILEVERED FLOOR
CANTILEVERED FLOORS AND FLOORS OVER UNHEATED SPACES/EXTERIOR SPACE MUST BE MADE AIRTIGHT BY SEALING ALL JOINTS AND JUNCTIONS BETWEEN THE STRUCTURAL COMPONENTS AND/OR COVERING THE STRUCTURAL COMPONENTS WITH AN AIR BARRIER MATERIAL AND SEALING IT TO THE ADJACENT AIR BARRIER MATERIAL

- WINDOW HEAD
THE INTERFACE BETWEEN THE HEAD/JAMS AND WALL ASSEMBLY MUST BE MADE AIRTIGHT BE SEALING ALL JOINTS AND JUNCTIONS BETWEEN THE AIR BARRIER IN THE WALL AND WINDOW. THE REQUIREMENT ALSO APPLIES TO DOORS AND SKYLIGHTS

- WINDOW SILL
THE INTERFACE BETWEEN WINDOW SILL AND WALL ASSEMBLY MUST BE MADE AIRTIGHT BY SEALING ALL JOINTS AND JUNCTIONS BETWEEN THE AIR BARRIER IN THE WALL AND WINDOW. THE REQUIREMENT ALSO APPLIES TO DOORS AND SKYLIGHTS

- MECHANICAL FLUES AND CHIMNEYS
STEEL-LINED CHIMNEYS THAT PENETRATE THE BUILDING ENVELOPE MUST BE MADE AIRTIGHT BY BLOCKING THE VOID BETWEEN REQUIRED CLEARANCES FOR METAL CHIMNEYS AND SURROUNDING CONSTRUCTION WITH SHEET METAL SEALAND CAPABLE OF WITHSTANDING HIGH TEMPERATURES

-PLUMBING STACKS
PLUMBING VENT STACK PIPES THAT PENETRATE THE BUILDING ENVELOPE MUST BE MADE AIRTIGHT BY EITHER SEALING THE AIR BARRIER MATERIAL TO THE VENT PIPE WITH A COMPATIBLE MATERIAL OR SHEATHING TAPE OR INSTALLING A RUBBER GASKET OR PREFABRICATED ROOF FLASHING AT THE PENETRATION OF THE PLANE OF AIRTIGHTNESS AND SEALING IT TO THE TOP PLATE

-SKYLIGHTS
THE INTERFACE BETWEEN THE SKYLIGHT AND THE WALL ASSEMBLY MUST BE MADE AIRTIGHT BY SEALING ALL JOINTS AND JUNCTIONS BETWEEN THE AIR BARRIER MATERIAL IN THE WALL AND THE SKYLIGHT

- WALL TO CEILING
ALL JOINTS AT THE TRANSITION BETWEEN THE ABOVE GRADE WALL AND CEILING MUST BE MADE AIRTIGHT BY SEALING ALL JOINTS AND JUNCTIONS BETWEEN THE STRUCTURAL COMPONENTS AND/OR COVERING THE STRUCTURAL COMPONENTS WITH AN AIR BARRIER MATERIAL

- WALL VENTED DUCTS
DUCT PENETRATIONS THROUGH THE BUILDING ENVELOPE MUST HAVE AN AIRTIGHT SEAL

- ELECTRICAL PENETRATION IN WALL
ELECTRICAL PENETRATIONS IN WALLS, INCLUDING ELECTRICAL OUTLETS, WIRING, SWITCHES, AND RECESSED FIXTURES THROUGH THE PLANE OF AIRTIGHTNESS MUST BE AIRTIGHT. OPTIONS INCLUDE USING A COMPONENT THAT IS DESIGNED TO BE AIRTIGHT AND SEALING IT TO THE ADJACENT AIR BARRIER MATERIAL OR BY COVERING THE COMPONENT WITH AN AIR BARRIER MATERIAL AND SEALING IT TO THE ADJACENT AIR BARRIER MATERIAL

REVISIONS

COPPER CANYON

SU CASA DESIGN
ADDRESS: 2543 MONTROSE AVE. ABBOTSFORD, B.C. TEL: (604) 854-4303 EMAIL: INFO@SUCASADESIGN.CA

PROJECT

TITLE
DETAILS

SCALE
As indicated

DATE
2/4/2024 4:00:07 PM

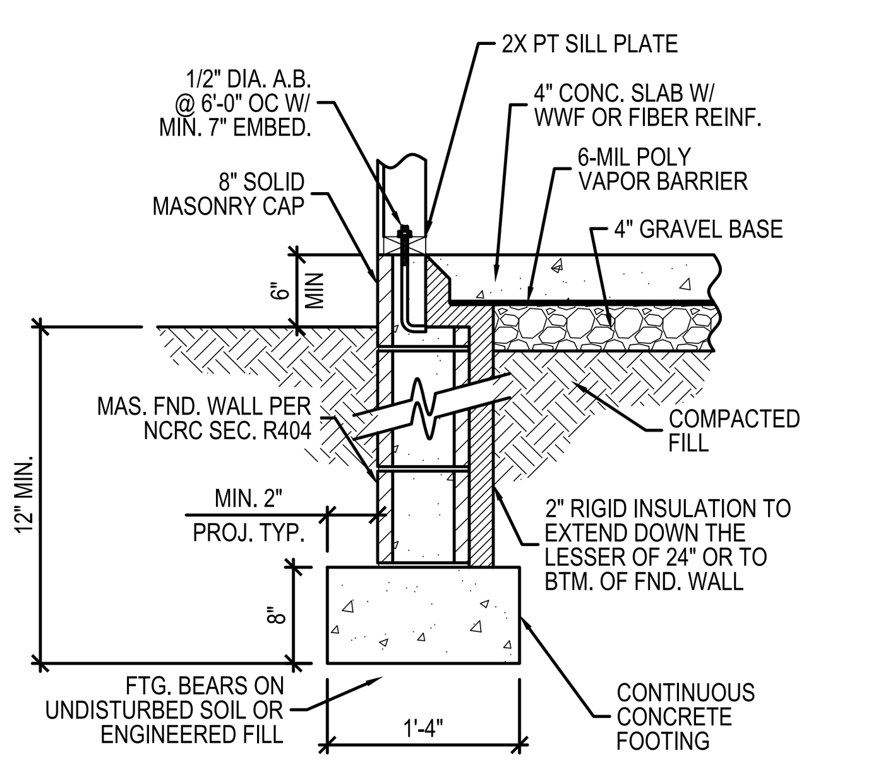
SHEET NUMBER
A5.1

DESIGN LOADS

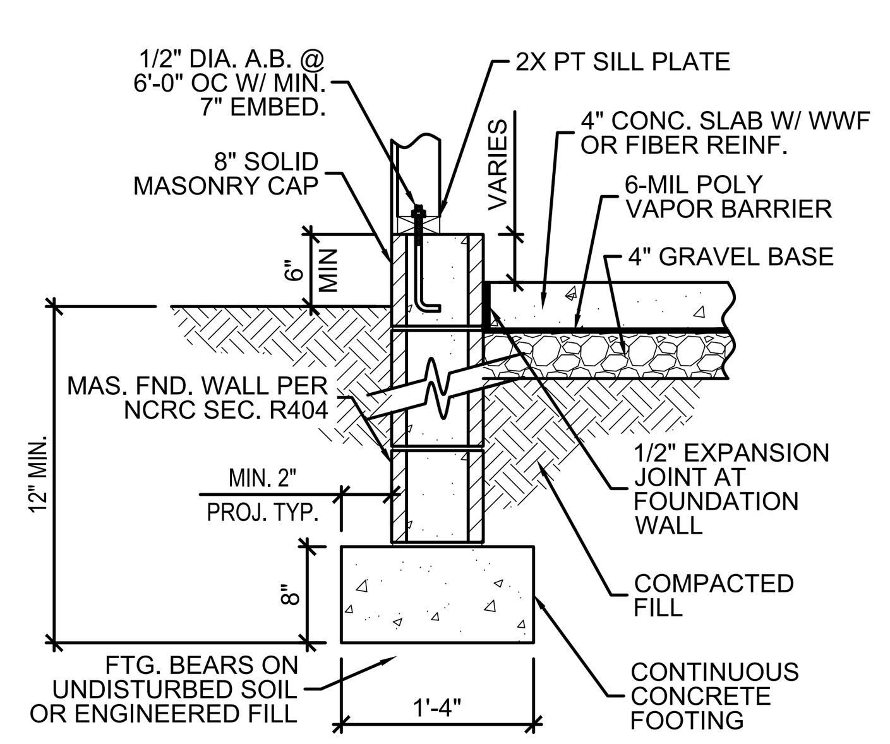
	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION LL	DEFLECTION TL
FLOOR (primary)	40	10	L/360	L/240
FLOOR (secondary)	40	10	L/360	L/240
ATTIC (w/ storage)	20	10	L/240	L/180
ATTIC (no access)	10	5	L/240	L/180
EXTERNAL BALCONY	40	10	L/360	L/240
ROOF	20	10	L/240	L/180
ROOF TRUSS	20	20	L/240	L/180
WIND LOAD	BASED ON 120 MPH (EXPOSURE B)			
SEISMIC	BASED ON SEISMIC ZONES A, B & C			

STRUCTURAL NOTES:

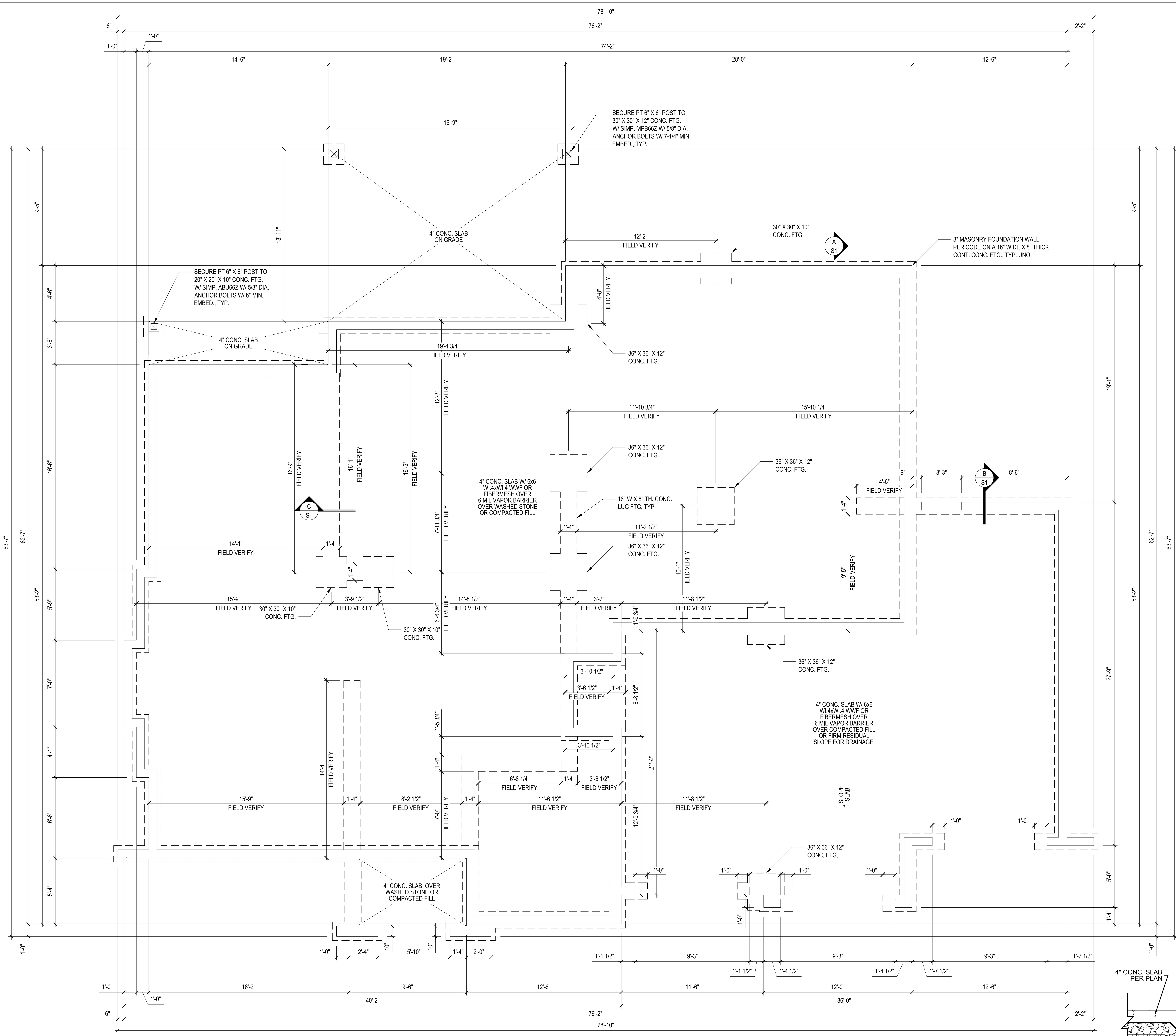
1) ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF "NORTH CAROLINA STATE 2018 RESIDENTIAL BUILDING CODE", IN ADDITION TO ALL LOCAL CODES AND REGULATIONS.
2) IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION. TYNDALL ENGINEERING & DESIGN, PA IS NOT RESPONSIBLE FOR DIMENSIONS AND SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS.
3) ALL LUMBER SHALL BE SYP #2 (UNO)
ALL LVL LUMBER TO BE 1.75" WIDE (ACTUAL) EACH SINGLE MEMBER AND Fb = 2600 PSI, E = 1.9M PSI (OR GREATER)
(I.E. iLEVEL MICROLAM)
ALL LSL LUMBER IS TO BE 1.55E (Fb = 2325 PSI) (OR GREATER)
ALL PSL LUMBER IS TO BE 1.8E (Fb = 2,400 PSI) (OR GREATER)
4) ALL LOAD BEARING EXTERIOR WINDOW HEADERS ARE TO BE (2) 2x10 w/ (1) 2x4 JACK STUD (U.N.O.) AND KING STUDS PER TABLE R602.7.5, AND TOGETHER w/ (2) 10d NAILS @ 8" O.C., PROVIDED THAT THE TOP OF THE WINDOW HEIGHT IS 6'-8", MINIMUM BOTTOM OF THE WINDOW HEIGHT IS 1'-6". OTHERWISE REFER TO TABLES R602.7(1) AND R602.7(2).
5) ALL INTERIOR LOAD BEARING HEADERS TO BE (2) 2x10 (U.N.O.) REFER TO TABLES R602.7(1) AND R602.7(2) FOR JACK STUD REQUIREMENTS FOR HEADER SPANS FOR INTERIOR AND EXTERIOR LOAD CONDITIONS (UNO)
6) REFER TO 2018 NC BUILDING CODE SECTION R602 FOR CONSTRUCTION OF ALL WALLS OVER 10'-0" IN HEIGHT.
7) ALL STRUCTURAL STEEL SHALL BE ASTM A992 GRADE 50
Fy = 50 KSI MIN. (UNO)
8) ALL EXTERIOR LUMBER TO BE #2 SYP PT
9) ALL CONCRETE, fc = 3000 PSI MIN.
10) PRESUMPTIVE BEARING CAPACITY = 2000 PSF
11) 1/2"Ø ANCHOR BOLTS SPACED AT MAXIMUM OF 6'-0" O.C. AND NOT MORE THAN 12" FROM THE CORNER. THERE SHALL BE A MINIMUM OF (2) BOLTS PER PLATE SECTION. ANCHOR BOLTS SHALL BE SPACED AT 3'-0" O.C. FOR BASEMENTS. ANCHOR BOLT SHALL EXTEND 7" INTO CONCRETE OR MASONRY.
12) PSL COLUMNS DESIGNED WITH MAX. HEIGHT OF 9'-0" (UNO)
13) PROVIDE A MINIMUM OF 500# UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM OF PORCH COLUMNS. (U.N.O.)
14) PROVIDE CONTINUOUS SHEATHING PER SECTION 602.10.3 OF THE 2018 NCRC.
15) MAXIMUM MASONRY PIER HEIGHT SHALL NOT EXCEED FOUR TIMES ITS LEAST HORIZONTAL DIMENSION.
16) UPLIFT LOADS GREATER THAN 500# SHALL BE CONTINUOUSLY ANCHORED TO THE FOUNDATION.
17) METAL HANGERS SHALL BE SIMPSON OR APPROVED EQUAL.



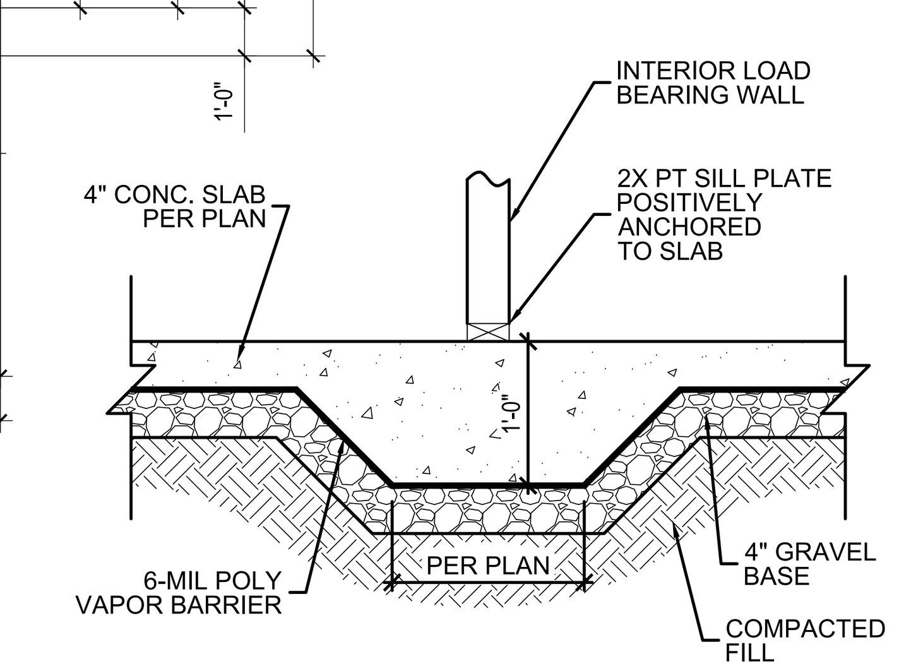
A TYP. STEMWALL FOUNDATION
SCALE: 3/4" = 1'-0"



B TYP. STEMWALL FOUNDATION AT GARAGE
SCALE: 3/4" = 1'-0"



FOUNDATION PLAN
1/4" = 1'-0"



C TYP. THICKENED SLAB FOOTING
SCALE: 3/4" = 1'-0"

*Engineers seal does not include construction means, methods, techniques, sequences, procedures or safety precaution.
*Any deviations or discrepancies on plans are to be brought to the immediate attention of Tyndall Engineering & Design, P.A. Failure to do so will void Tyndall Engineering & Design, P.A. liability.
*Please review these documents carefully. Tyndall Engineering & Design, P.A. will interpret that all dimensions, recommendations, etc. presented in these documents were deemed acceptable once construction begins.

NORTH CAROLINA PROFESSIONAL SEAL 024899 ENGINEER PRENTICE A. TYNDALL JR

TYNDALL ENGINEERING & DESIGN, P.A.
T 919 773-1200 • F 919 773-9658
250 Shipwash Drive • Garner • North Carolina • 27529
www.tyndallengineering.com

NORTH CAROLINA PROFESSIONAL SEAL C-2303 CORPORATION TYNDALL ENGINEERING AND DESIGN, P.A.

Client: ANGIE LYON
1718 PONDEROSA ROAD
CAMERON, NC 28326

Plan: LYON RESIDENCE
1710 PONDEROSA ROAD
CAMERON, NC 28326

FOUNDATION PLAN

Project #:	2401-010260
Date:	10/11/2024
Engineered By:	JA
DWG. Checked By:	PAT
Scale:	SEE PLAN

REVISIONS

No.	Date:	Remarks
1		
2		
3		
4		

Sheet Number
S1
1 of 2

FILENAME: Z:\RALEIGH OFFICE\RESIDENTIAL ENGINEERING\2024 STRUCTURAL PROJECTS\2401-010260 - ANGIE LYNN - 1710 PONDEROSA ROAD CAMERON NC\2401-010260\CAD_FILES\2401-010260.DWG SAVED BY: JAY LAST PLOT DATE:10/11/2024 3:50 PM

STRUCTURAL NOTES

1) ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF "NORTH CAROLINA STATE 2018 RESIDENTIAL BUILDING CODE", IN ADDITION TO ALL LOCAL CODES AND REGULATIONS.

2) DESIGN LOADS:

	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION	
			LL	TL
ALL FLOORS	40	10	L/360	L/240
ATTIC (w/ walk up stairs)	30	10	L/360	L/240
ATTIC (pull down access)	20	10	L/240	L/180
ATTIC (no access)	10	5	L/240	L/180
EXTERNAL BALCONY	40	10	L/360	L/240
ROOF	20	10	L/240	L/180
ROOF TRUSS	20	20	L/240	L/180
WIND LOAD	BASED ON 120 MPH (EXPOSURE B)			
SEISMIC	SEISMIC ZONES A, B & C			

3) MINIMUM ALLOWABLE SOIL BEARING PRESSURE = 2000 PSF

4) CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF FIVE INCHES UNLESS NOTED OTHERWISE. (U.N.O.)

5) MAXIMUM DEPTH OF UNBALANCED FILL AGAINST FOUNDATION WALLS TO BE LESS THAN 4'-0" WITHOUT USING SUFFICIENT WALL BRACING. REFER TO SECTION R404 OF 2018 NC BUILDING CODE FOR BACKFILL LIMITATIONS BASED ON WALL HEIGHT, WALL THICKNESS, SOIL TYPE, AND UNBALANCED BACKFILL HEIGHT.

6) ALL FRAMING LUMBER SHALL BE SYP #2 (Fb = 800 PSI, BASED ON 2x10) UNO.
ALL FRAMING LUMBER EXPOSED TO THE ELEMENTS SHALL BE TREATED MATERIAL.
ALL LVL LUMBER TO BE 1.75" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2600 PSI, E = 1.9M PSI (U.N.O.)
ALL LSL LUMBER TO BE 3.5" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2325 PSI, E = 1.6M PSI (U.N.O.)
ALL PSL LUMBER TO BE 3.5" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2400 PSI, E = 1.8M PSI (U.N.O.)

7) ALL LOAD BEARING EXTERIOR HEADERS SHALL BE AT (2) 2x10. (U.N.O.) REFER TO TABLE R602.7(1) & (2) FOR JACK STUD REQUIREMENTS FOR HEADER SPANS FOR INTERIOR AND EXTERIOR LOAD CONDITIONS UNLESS SPECIFICALLY NOTED ON PLANS.

8) ALL STRUCTURAL STEEL W-SHAPES (I-BEAMS) SHALL BE ASTM A992 GRADE 50.
ALL STEEL ANGLES, PLATES, AND C-CHANNELS SHALL BE ASTM A36.
ALL STEEL PIPE SHALL BE ASTM A53 GRADE B.

9) STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3-1/2" AND FULL FLANGE WIDTH. PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED TO EACH SUPPORT WITH TWO (2) LAG SCREWS (1/2"Ø x 4" LONG). LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDED THE JOISTS ARE TOE NAILED TO THE SOLE PLATES, AND THE SOLE PLATES ARE NAILED OR BOLTED TO THE BEAM FLANGES @ 48" O.C.

10) PROVIDE ANCHOR BOLT PLACEMENT PER SECTION 403.1.6: 1/2"Ø ANCHOR BOLTS SPACED AT 6'-0" O.C. AND PLACED 12" FROM THE END OF EACH PLATE SECTION. ANCHOR BOLTS SHALL BE SPACED AT 3'-0" O.C. FOR BASEMENTS. ANCHOR BOLT SHALL EXTEND 7" INTO CONCRETE OR MASONRY. THE BOLTS SHALL BE LOCATED IN THE MIDDLE THIRD OF THE WIDTH OF THE PLATE. THERE SHALL BE A MINIMUM TWO ANCHOR BOLTS PER PLATE SECTION.

11) FOUNDATION DRAINAGE-DAMP PROOFING OR WATERPROOFING PER SECTION 405 AND 406 OF NC BUILDING CODE.

12) WALL AND ROOF CLADDING VALUES:
WALL CLADDING SHALL BE DESIGNED FOR 28.0 POUNDS PER SQUARE FOOT (LBS/SQFT) OR GREATER POSITIVE AND NEGATIVE PRESSURE.
ROOF VALUES BOTH POSITIVE AND NEGATIVE SHALL BE AS FOLLOWS:
39.0 LBS/SQFT FOR ROOF PITCHES 0/12 TO 1.5/12
36.0 LBS/SQFT FOR ROOF PITCHES 1.5/12 TO 6/12
18.0 LBS/SQFT FOR ROOF PITCHES 6/12 TO 12/12
**MEAN ROOF HEIGHT 30'-0" OR LESS

13) FOR ROOF SLOPES FROM 2/12 THROUGH 4/12, BUILDER TO INSTALL 2 LAYERS OF 15# FELT PAPER.

14) REFER TO SECTION R602.3 FOR FRAMING OF ALL WALLS OVER 10'-0" IN HEIGHT.

15) PROVIDE CONTINUOUS SHEATHING PER SECTION 602.10.3 OF THE 2018 NCRC.

16) UPLIFT LOADS GREATER THAN 500# SHALL BE CONTINUOUSLY ANCHORED TO THE FOUNDATION.

17) REFER TO TABLE N1102.1 FOR PRESCRIPTIVE BUILDING ENVELOPE THERMAL COMPONENT CRITERIA.

18) PSL COLUMNS DESIGNED WITH MAXIMUM HEIGHT OF 9'-0" (U.N.O.)

19) PROVIDE A MINIMUM OF 500# UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM OF PORCH COLUMNS. (U.N.O.)

20) MAXIMUM MASONRY PEIR HEIGHT SHALL NOT EXCEED FOUR TIMES ITS LEAST HORIZONTAL DIMENSION.

21) IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION. TYNDALL ENGINEERING & DESIGN, PA IS NOT RESPONSIBLE FOR DIMENSION OR SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS.

DEFINITIONS FOR COMMON ABBREVIATIONS

ALT	=	ALTERNATE	MANUF	=	MANUFACTURER
CANT	=	CANTILEVER	MAX	=	MAXIMUM
CJ	=	CEILING JOIST	MIN	=	MINIMUM
CMU	=	CONCRETE MASONRY UNIT	NOM	=	NOMINAL
COL	=	COLUMN	O.C.	=	ON CENTER
CONC	=	CONCRETE	PL	=	POINT LOAD
CONT	=	CONTINUOUS	PT	=	PRESSURE TREATED
CT	=	COLLAR TIE	REINF	=	REINFORCED
DBL	=	DOUBLE	REQ'D	=	REQUIRED
DIA	=	DIAMETER	RJ	=	ROOF JOIST
DJ	=	DOUBLE JOIST	RS	=	ROOF SUPPORT
DR	=	DOUBLE RAFTER	SC	=	STUD COLUMN
DSP	=	DOUBLE STUD POCKET	SCH	=	SCHEDULE
EA	=	EACH	SPEC	=	SPECIFIED
EE	=	EACH END	TH	=	THICK
FJ	=	FLOOR JOIST	TJ	=	TRIPLE JOIST
FND	=	FOUNDATION	TRTD	=	TREATED
FTG	=	FOOTING	TSP	=	TRIPLE STUD POCKET
GALV	=	GALVANIZED	TYP	=	TYPICAL
HORIZ	=	HORIZONTAL	UNO	=	UNLESS NOTED OTHERWISE
HT	=	HEIGHT	W	=	WIDE FLANGE BEAM
JSC	=	JACK STUD	WWF	=	WELDED WIRE FABRIC
KS	=	KING STUD	XJ	=	EXTRA JOIST

1) MAXIMUM HEIGHT OF DECK SUPPORT POSTS AS FOLLOWS:

POST SIZE	MAX. POST HEIGHT**
4 x 4	8'-0"
6 x 6	20'-0"
***	OVER 20'-0"

* THIS TABLE IS BASED ON NO. 2 TREATED SOUTHERN PINE POSTS. MAXIMUM TRIBUTARY AREA IS BASED ON 128 TOTAL SQUARE FEET WHICH MAY BE LOCATED AT DIFFERENT LEVELS.
** FROM TOP OF FOOTING TO BOTTOM OF GIRDER
*** DECKS WITH POST HEIGHTS OVER 20'-0" SHALL BE DESIGNED AND SEALED BY A PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT.

2) DECKS SHALL BE BRACED TO PROVIDE LATERAL STABILITY BY ONE OF THESE METHODS:

A. THE DECK FLOOR HEIGHT IS LESS THAN 4'-0" AND THE DECK IS ATTACHED TO THE STRUCTURE IN ACCORDANCE WITH SECTION (4) ABOVE, LATERAL BRACING IS NOT REQUIRED.

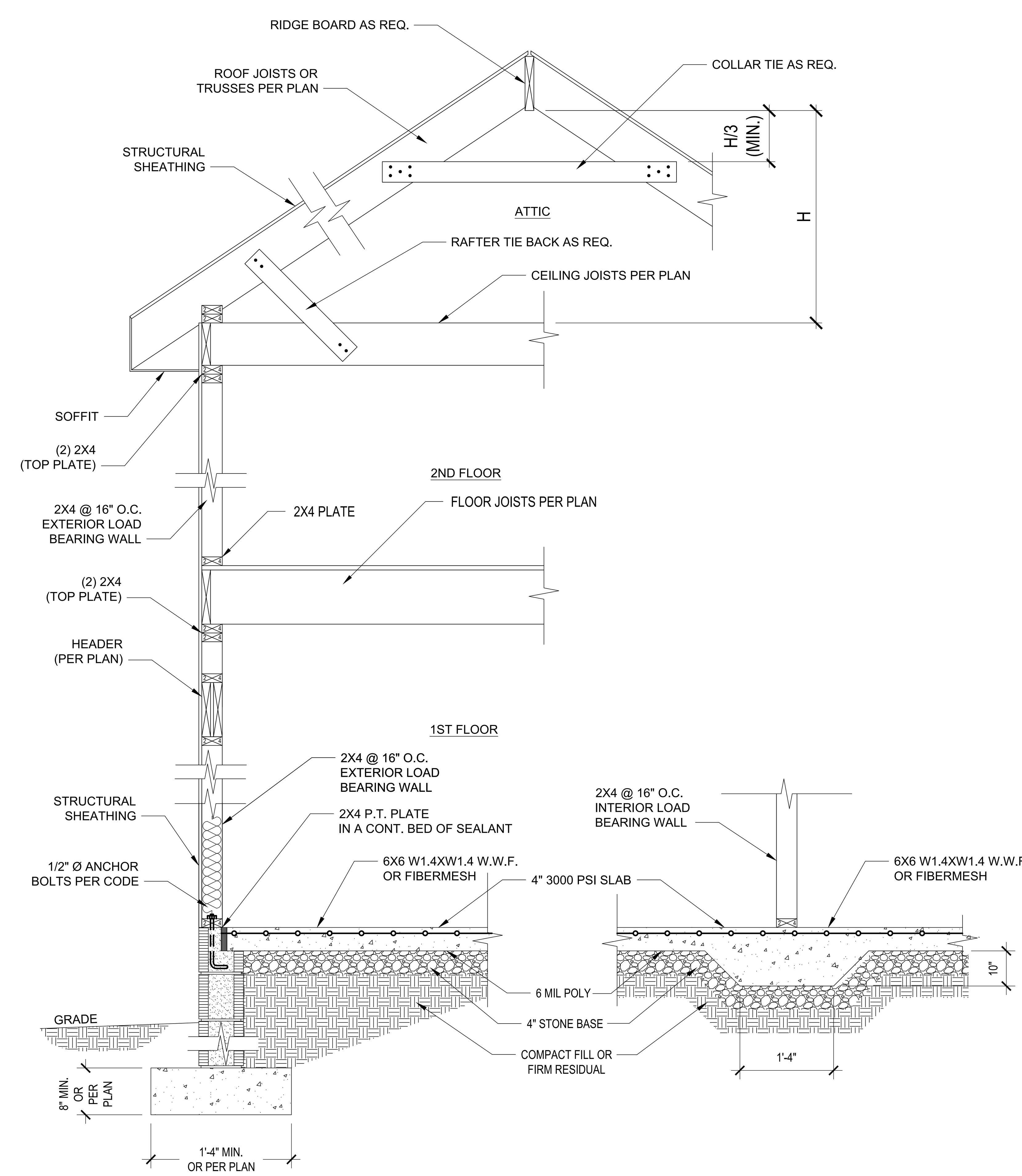
B. 4 x 4 WOOD KNEE BRACES MAY BE PROVIDED ON EACH COLUMN IN BOTH DIRECTIONS. THE KNEE BRACES SHALL ATTACH TO EACH POST AT A POINT NOT LESS THAN 1/3 OF THE POST LENGTH FROM THE TOP OF THE POST, AND THE BRACES SHALL BE ANGLED BETWEEN 45° AND 60° FROM THE HORIZONTAL. KNEE BRACES SHALL BE BOLTED TO THE POST AND GIRDER WITH ONE 5/8"Ø HOT DIPPED GALVANIZED BOLT AT EACH END OF THE BRACE.

C. FOR FREESTANDING DECKS WITHOUT KNEE BRACES OR DIAGONAL BRACING, LATERAL STABILITY MAY BE PROVIDED BY EMBEDDING THE POSTS IN ACCORDANCE WITH THE FOLLOWING:

POST SIZE	MAX. TRIBUTARY AREA	MAX. POST HEIGHT	EMBEDMENT DEPTH	CONCRETE DIAMETER
4 x 4	48 SQ. FT.	4'-0"	2'-6"	1'-0"
6 x 6	120 SQ. FT.	6'-0"	3'-6"	1'-8"

D. 2 x 6 DIAGONAL VERTICAL CROSS BRACING MAY BE PROVIDED IN TWO (2) PERPENDICULAR DIRECTIONS FOR FREESTANDING DECKS OR PARALLEL TO THE STRUCTURE AT THE EXTERIOR COLUMN LINE FOR ATTACHED DECKS. THE 2 x 6s SHALL BE ATTACHED TO THE POSTS WITH ONE 5/8"Ø HOT DIPPED GALVANIZED BOLT AT EACH END OF EACH BRACING MEMBER.

E. FOR EMBEDMENT OF PILES IN COASTAL REGIONS, SEE CHAPTER 46.



TWO-STORY ON STEM
NO SCALE
TYPICAL WALL DETAIL

CLIMATE ZONES	FENESTRATION U-FACTOR b,j	SKYLIGHT U-FACTOR b	GLAZED FENESTRATION SHGC b,k	CEILING R-VALUE m	WOOD FRAMED WALL R-VALUE	MASS WALL R-VALUE i	FLOOR R-VALUE	BASEMENT WALL R-VALUE c,o	SLAB R-VALUE AND DEPTH d	CRAWL SPACE WALL R-VALUE c
3	0.35	0.55	0.30	38 or 30 cont	15 or 13 + 2.5 h	5/13 or 5/10 cont	19	5/13 f	0	5/13
4	0.35	0.55	0.30	38 or 30 cont j	15 or 13 + 2.5 h	5/13 or 5/10 cont	19	10/15	10	10/15
5	0.35	0.55	NR	38 or 30 cont j	n 19, or 13 + 5 or 15 + 3 h	13/17 or 13/12.5 cont	30 g	10/15	10	10/19

TABLE N1102.1 CLIMATE ZONES 3-5
NO SCALE

a. R-VALUES ARE MINIMUMS. U-FACTORS AND SHGC ARE MAXIMUMS. WHEN INSULATION IS INSTALLED IN A CAVITY WHICH IS LESS THAN THE LABEL OR DESIGN THICKNESS OF THE INSULATION, THE INSTALLED R-VALUE OF THE INSULATION SHALL NOT BE LESS THAN THE R-VALUE SPECIFIED IN THE TABLE.
b. THE FENESTRATION U-FACTOR COLUMN EXCLUDED SKYLIGHTS. THE SOLAR HEAT GAIN COEFFICIENT (SHGC) COLUMN APPLIES TO ALL GLAZED FENESTRATION.
c. "10/15" MEANS R-10 CONTINUOUS INSULATED SHEATHING ON THE INTERIOR OR EXTERIOR OF THE HOME OR R-15 CAVITY INSULATION AT THE INTERIOR OF THE BASEMENT WALL OR CRAWL SPACE WALL.
d. FOR MONOLITHIC SLABS, INSULATION SHALL BE APPLIED FROM THE INSPECTION GAP DOWNWARD TO THE BOTTOM OF THE FOOTING OR A MAXIMUM OF 24" BELOW GRADE WHICHEVER IS LESS. FOR FLOATING SLABS, INSULATION SHALL EXTEND TO THE BOTTOM OF THE FOUNDATION WALL OR 24", WHICHEVER IS LESS. R-5 SHALL BE ADDED TO THE REQUIRED SLAB EDGE R-VALUES FOR HEATED SLABS.
e. DELETED
f. BASEMENT WALL INSULATION IS NOT REQUIRED IN WARM-HUMID LOCATIONS AS DEFINED BY FIGURE N1101.7 AND TABLE N1101.7.
g. OR INSULATION SUFFICIENT TO FILL THE FRAMING CAVITY. R-19 MINIMUM.
h. THE FIRST VALUE IS CAVITY INSULATION, THE SECOND VALUE IS CONTINUOUS INSULATION, SO "13+5" MEANS R-13 CAVITY INSULATION PLUS R-5 INSULATED SHEATHING. "15+3" MEANS R-15 CAVITY INSULATION. PLUS R-3 INSULATED SHEATHING. IF STRUCTURAL SHEATHING COVERS 25% OR LESS OF THE EXTERIOR, INSULATING SHEATHING IS NOT REQUIRED WHERE THE STRUCTURAL SHEATHING IS USED. IF STRUCTURAL SHEATHING COVERS MORE THAN 25 PERCENT OF THE EXTERIOR, SHALL BE SUPPLEMENTED WITH INSULATED SHEATHING OF AT LEAST R-2. "13 + 2.5" MEANS R-13 CAVITY INSULATION PLUS R-2.5 SHEATHING.
i. FOR MASS WALLS, THE SECOND R-VALUE APPLIES WHEN MORE THAN HALF THE INSULATION IS ON THE INTERIOR MASS WALL.
j. IN ADDITION TO THE EXEMPTION IN SECTION N1102.3.3, A MAXIMUM OF TWO GLAZED FENESTRATION PRODUCT ASSEMBLIES HAVING A U-FACTOR NO GREATER THAN 0.55 SHALL BE PERMITTED TO BE SUBSTITUTED FOR MINIMUM CODE COMPLIANT FENESTRATION PRODUCT ASSEMBLIES WITHOUT PENALTY.
k. IN ADDITION TO THE EXEMPTION IN SECTION N1102.3.3, A MAXIMUM OF TWO GLAZED FENESTRATION PRODUCT ASSEMBLIES HAVING A SHGC NO GREATER THAN 0.70 SHALL BE PERMITTED TO BE SUBSTITUTED FOR MINIMUM CODE COMPLIANT FENESTRATION PRODUCT ASSEMBLIES WITHOUT PENALTY.
l. R-30 SHALL BE DEEMED TO SATISFY THE CEILING INSULATION REQUIREMENT WHEREVER THE FULL HEIGHT OF UNCOMPRESSED R-30 INSULATION EXTENDS OVER THE WALL TOP PLATE AT THE EAVES. OTHERWISE R-38 INSULATION IS REQUIRED WHERE ADEQUATE CLEARANCE EXISTS OR INSULATION MUST EXTEND TO EITHER THE INSULATION BAFFLE OR WITHIN 1 INCH OF THE ATTIC ROOF DECK.
m. TABLE VALUE REQUIRED EXCEPT FOR ROOF EDGE WHERE THE SPACE IS LIMITED BY THE PITCH OF THE ROOF; THERE THE INSULATION MUST FILL THE SPACE UP TO THE AIR BAFFLE.
n. R -19 FIBERGLASS BATTS COMPRESSED AND INSTALLED IN A NOMINAL 2 × 6 FRAMING CAVITY IS DEEMED TO COMPLY. FIBERGLASS BATTS RATED R-19 OR HIGHER COMPRESSED AND INSTALLED IN A 2X4 WALL IS NOT DEEMED TO COMPLY.
o. BASEMENT WALL MEETING THE MINIMUM MASS WALL SPECIFIC HEAT CONTENT REQUIREMENT MAY USE THE MASS WALL R-VALUE AS THE MINIMUM REQUIREMENT.

NORTH CAROLINA PROFESSIONAL SEAL 024899 ENGINEER PRENTICE A TYNDALL JR
10/11/24

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NORTH CAROLINA PROFESSIONAL SEAL C-2303 CORPORATION TYNDALL ENGINEERING AND DESIGN, P.A.

Client: ANGIE LYON
1718 PONDEROSA ROAD
CAMERON, NC 28326

Plan: LYON RESIDENCE
1710 PONDEROSA ROAD
CAMERON, NC 28326

STANDARD DETAILS

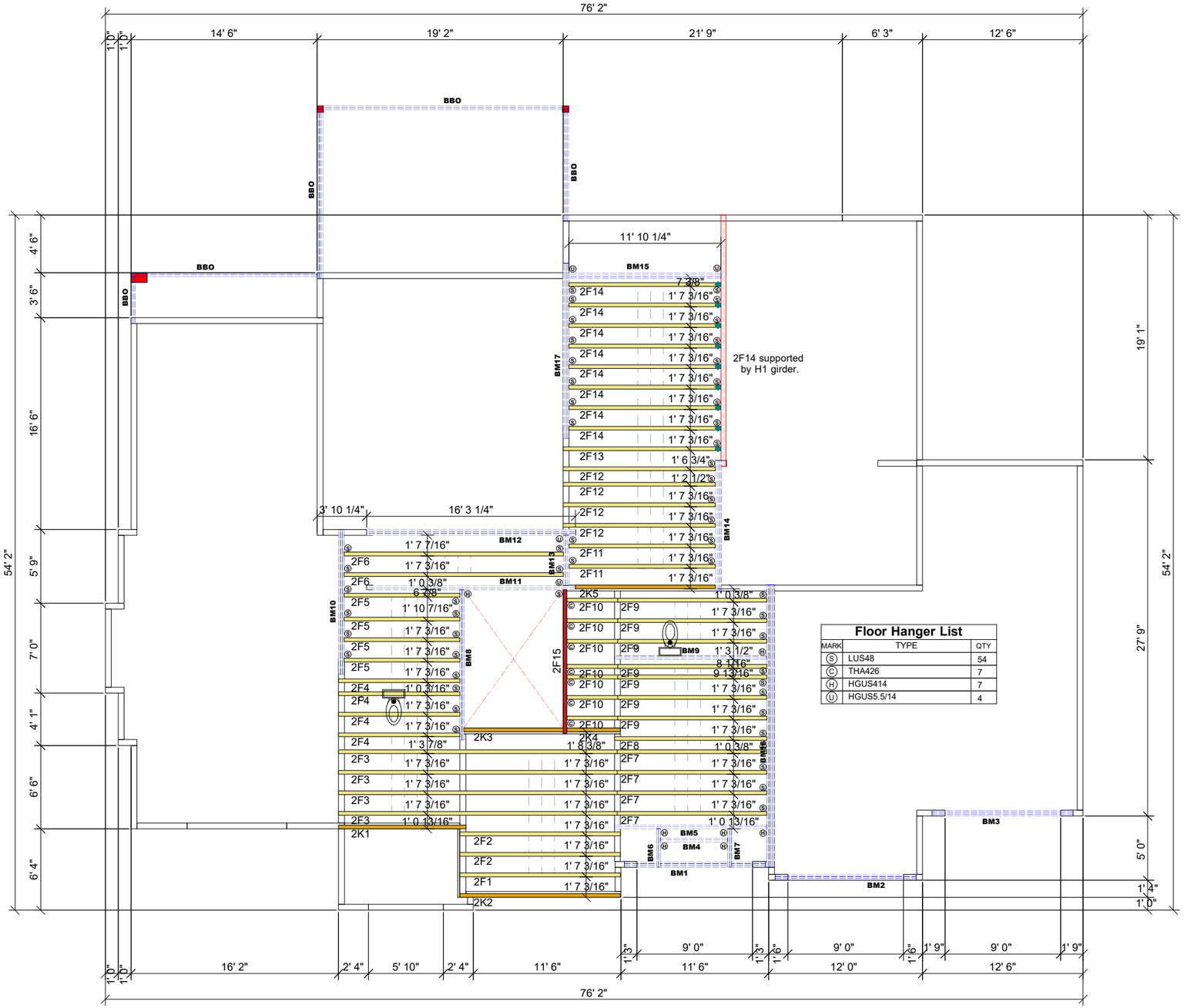
Project #: 2401-010260
Date: 10/11/2024
Engineered By: JA
DWG. Checked By: PAT
Scale: SEE PLAN

REVISIONS

No.	Date:	Remarks
1		
2		
3		
4		

Sheet Number
D1
2 of 2

THIS IS A TRUSS PLACEMENT DIAGRAM (TPD) ONLY: NOT AN ENGINEERED DOCUMENT. Trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual truss design drawings (TDD's) for each truss design identified on the TPD. The Contractor is responsible for the temporary bracing of the roof and floor system, and requirements for the permanent restraint/bracing of truss systems may be met by following the methods outlined in ANSI-TPI 1-2014 - 2,3,3. The design of the support structure including but not limited to headers, beams, walls, and columns is also the responsibility of the building designer. For general guidance regarding installation and bracing, consult "Building Component Safety Information" (BCSI) available from the SBC Association (www.sbcacomponents.com). It is the responsibility of the General Contractor to verify that the provided component layout matches the final intended construction plans, loading conditions, and use. If they do not, it is the responsibility of the General Contractor to notify, UFP and provide plans containing the latest specifications and designs. UFP will not be responsible for plan changes by others after final approval of shop drawings, or for errors or modifications made on-site during construction. DO NOT CUT, NOTCH, DRILL, OR OTHERWISE "PREPAIR" MANUFACTURED TRUSSES IN ANY WAY WITHOUT PRIOR WRITTEN AUTHORIZATION BY A LICENSED PROFESSIONAL DESIGNATED BY UFP. The Framer is responsible to verify all dimensions, including adjusting member spacing within tolerances to allow for the drop and rise of plumbing/HVAC. 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 or Engineer of Record for suitability to this particular project. UFP accepts no responsibility for the specific application or suitability of any connector that is not truss-to-truss as they apply to this specific structure.



Floor Hanger List

MARK	TYPE	QTY
(S)	LUS48	54
(C)	THA426	7
(H)	HGUS414	7
(U)	HGUS5.5/14	4

Products					
PlotID	Length	Product	Plies	Net Qty	Fab Type
BM11	18' 0"	1 3/4" x 11 7/8" 2.0E Microllam® LVL	2	2	MFD
BM12	18' 0"	1 3/4" x 11 7/8" 2.0E Microllam® LVL	3	3	MFD
BM17	14' 0"	1 3/4" x 11 7/8" 2.0E Microllam® LVL	3	3	MFD
BM5	12' 0"	1 3/4" x 11 7/8" 2.0E Microllam® LVL	2	2	MFD
BM8	12' 0"	1 3/4" x 11 7/8" 2.0E Microllam® LVL	2	2	MFD
BM9	12' 0"	1 3/4" x 11 7/8" 2.0E Microllam® LVL	2	2	MFD
BM1	12' 0"	1 3/4" x 11 7/8" 2.0E Microllam® LVL	3	3	MFD
BM10	12' 0"	1 3/4" x 11 7/8" 2.0E Microllam® LVL	3	3	MFD
BM14	12' 0"	1 3/4" x 11 7/8" 2.0E Microllam® LVL	3	3	MFD
BM2	12' 0"	1 3/4" x 11 7/8" 2.0E Microllam® LVL	3	3	MFD
BM3	12' 0"	1 3/4" x 11 7/8" 2.0E Microllam® LVL	3	3	MFD
BM4	6' 0"	1 3/4" x 11 7/8" 2.0E Microllam® LVL	2	2	MFD
BM6	4' 0"	1 3/4" x 11 7/8" 2.0E Microllam® LVL	2	2	MFD
BM7	4' 0"	1 3/4" x 11 7/8" 2.0E Microllam® LVL	2	2	MFD
BM13	4' 0"	1 3/4" x 11 7/8" 2.0E Microllam® LVL	3	3	MFD
BM15	12' 0"	1 3/4" x 14" 2.0E Microllam® LVL	3	3	MFD
BM16	22' 0"	1 3/4" x 20" 2.0E Microllam® LVL	4	4	MFD

Scar cuf BM6, BM7 and BM16 to avoid the roof plane intersection.

Proposed **BM16** instead of **wall girder truss** due to truss design load and max. deflection exceeded. Please verify.

PLACEMENT PLAN

△ INDICATES LEFT END OF TRUSS SCALE: N.T.S

ROOF AREA: 5406.77 sqft | RIDGE LINE: 119.7 ft | HIP LINES: 14.41 ft | VALLEY LINES: 145.84 ft

THESE VALUES ARE APPROXIMATE ONLY

UFP SITE BUILT
A UFP INDUSTRIES COMPANY

Burlington, NC Locust, NC
Chesapeake, VA Liberty, NC
Clinton, NC Ooltewah, TN
Conway, SC Pearisburg, VA
Jefferson, GA Stanfield, NC

Customer Service (800) 476-9356

TRUSSTRAX UFP CONSTRUCTION
TrussTrax.ufpi.com

PARKS BUILDING SUPPLY

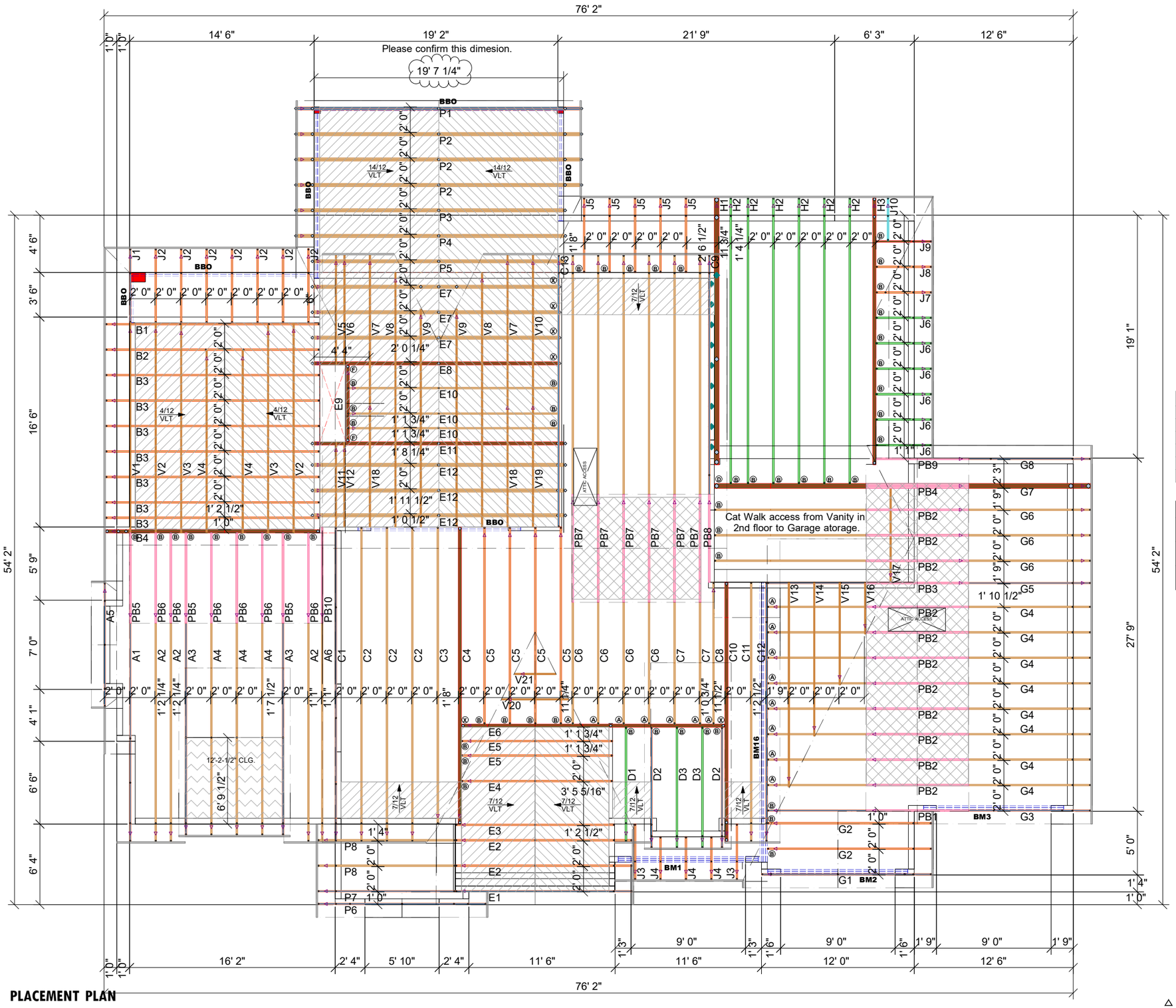
LYON RESIDENCE

CAMERON NC

REVISIONS		
DATE	DESCRIPTION	DSN
-	-	-

DESIGNER MM9
LAYOUT DATE 08/08/24
ARCH DATE 02/04/24
STRUC DATE 02/04/24

JOB #: 24071715F2



PLACEMENT PLAN

Roof Hanger List

MARK	TYPE	QTY
B	LUS26	53
F	HUC26-2	2
A	HUS26	15
X	HHUS26-2	6
D	HHUS210-3	1

Hatch Legend

- flat clg. 2' 1" above std.
- Slope clg.
- HVAC / storage

2x4 ledger by builder on P7 & P8 trusses.

△ INDICATES LEFT END OF TRUSS SCALE: N.T.S

ROOF AREA: 5406.77 ft² sqft
VALLEY LINES: 119.7 ft
HIP LINES: 14.41 ft
RIDGE LINE: 145.84 ft

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PARKS BUILDING SUPPLY

LYON RESIDENCE

- CAMERON NC

REVISIONS	DESCRIPTION	DSN
DATE	.	.

DESIGNER MM9
LAYOUT DATE 08/08/24
ARCH DATE 02/04/24
STRUC DATE 02/04/24

JOB #: 24071715