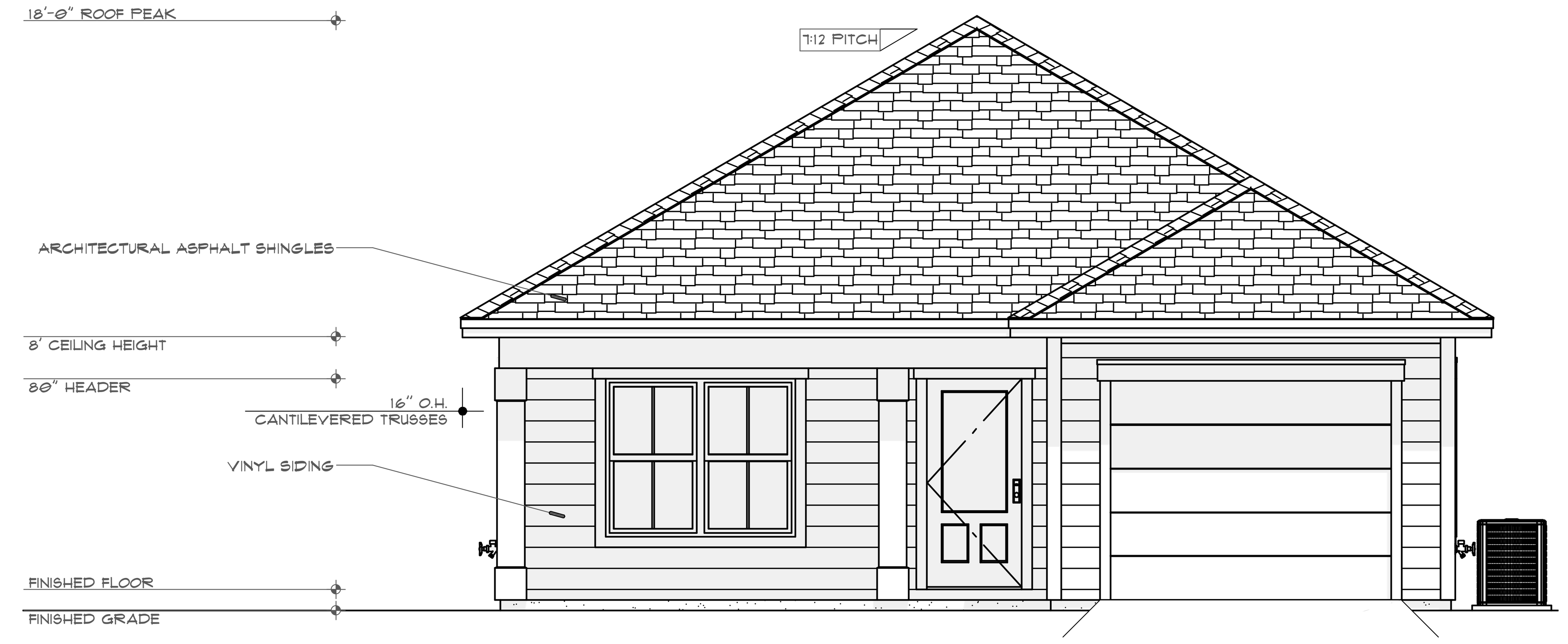
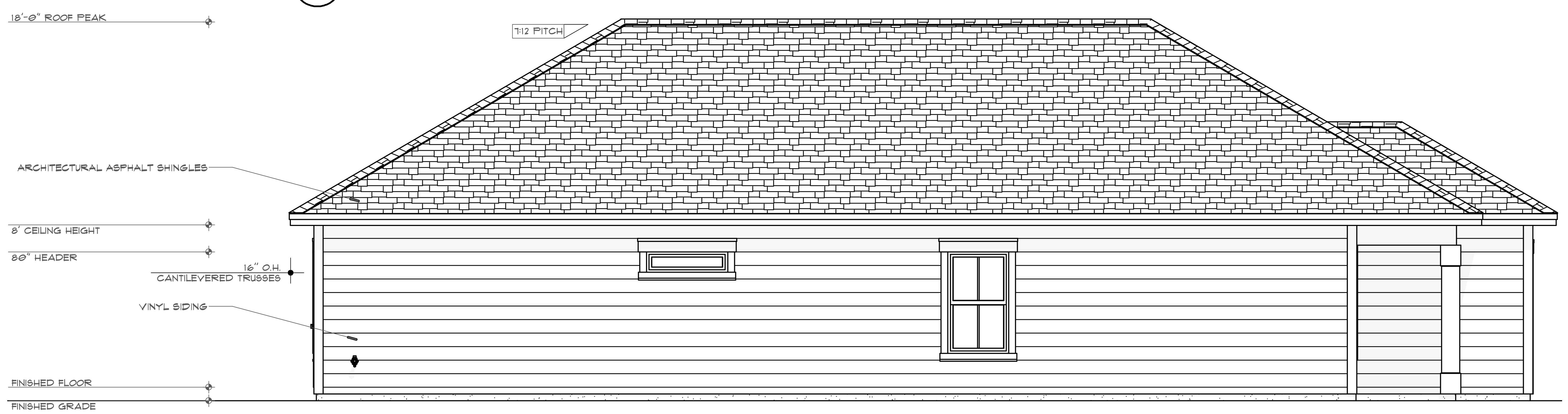
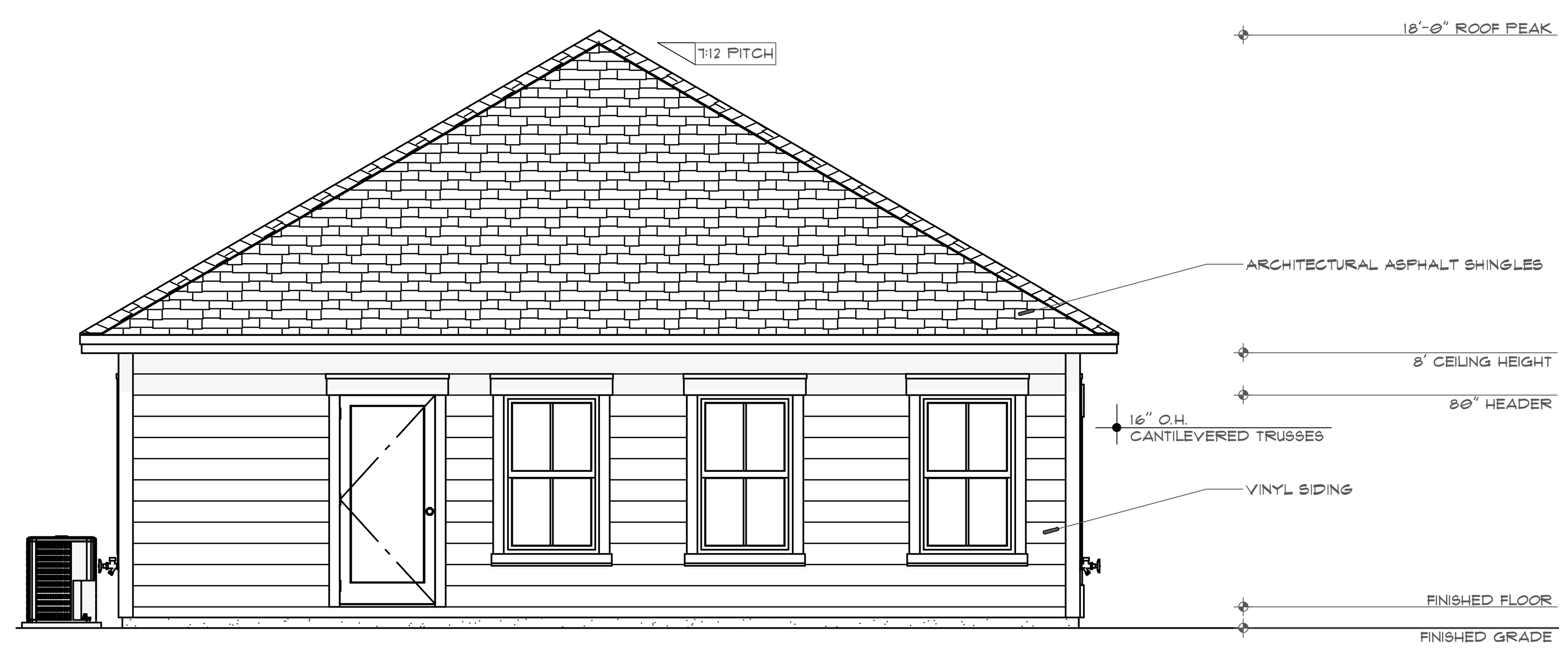


E-1 **FRONT ELEVATION**
SCALE: 1/4" = 1'-0"



E-2 **LEFT SIDE ELEVATION**
SCALE: 1/4" = 1'-0"

E-3 **RIGHT SIDE ELEVATION**
SCALE: 1/4" = 1'-0"



E-4 **REAR ELEVATION**
SCALE: 1/4" = 1'-0"

A-1_ELEVATIONS

SHEET INDEX

A-1	ELEVATIONS
A-2	FLOOR PLAN & FOUNDATION PLAN
A-3	ROOF FRAMING PLAN & ELECTRICAL PLAN
S-1	STRUCTURAL SHEET
S-2	STRUCTURAL SHEET
S-3	STRUCTURAL SHEET
S-4	STRUCTURAL SHEET

ABBREVIATIONS

@	AT	HVAC	HEATING, VENTILATING, AND AIR CONDITIONING
A/C	AIR CONDITIONING		
AHU	AIR HANDLING UNIT	HRZ	HORIZONTAL
AWG	AMERICAN WIRE GAUGE	HR	HOUR
CATV	CABLE TELEVISION	ILO	IN LIEU OF
CLG	CEILING	INT	INTERIOR
C.H.	CEILING HEIGHT	K	KIP (1,000 POUNDS)
CL	CENTER LINE	LAM	LAMINATED
C/B	CIRCUIT BREAKER	LTG	LIGHTING
CMU	CONCRETE MASONRY UNIT	MECH	MECHANICAL
DEMO	DEMOLISH OR DEMOLITION	MIN	MINIMUM
DIA	DIAMETER	MICRO	MICROWAVE
DIM	DIMENSION	NO	NUMBER
DS	DIMMER SWITCH	OC	ON CENTER
DBL	DOUBLE	OH	OVERHANG
DWG	DRAWING	PSF	POUNDS PER SQUARE FOOT
EA	EACH	PSI	POUNDS PER SQUARE INCH
ELEV	ELEVATION	PT	PRESSURE TREATED
ELEC	ELECTRICAL	QTY	QUANTITY
EXT	EXTERIOR	REF	REFRIGERATOR
FD	FLOOR DRAIN	SD	SMOKE DETECTOR
FF	FINISHED FLOOR	SPEC	SPECIFICATION
DWG	DRAWING	SYM	SYMMETRICAL
EA	EACH	TELE	TELEPHONE
ELEV	ELEVATION	TEMP	TEMPERED
ELEC	ELECTRICAL	TSTAT	THERMOSTAT
EXT	EXTERIOR	TME	TO MATCH EXISTING
FD	FLOOR DRAIN	T&B	TOP AND BOTTOM
FF	FINISHED FLOOR	T&G	TONGUE AND GROOVE
FFL	FINISHED FLOOR LEVEL	XFMR	TRANSFORMER
FX	FIXED	TYP	TYPICAL
GA	GAUGE	UNO	UNLESS NOTED OTHERWISE
GALV	GALVANIZED	VIF	VERIFY IN FIELD
GB	GRADE BEAM	WIC	WALK IN CLOSET
GFCI	GROUND FAULT CIRCUIT BREAKER	W/D	WASHER AND DRYER
		WH	WATER HEATER
GFI	GROUND FAULT INTERRUPTER	WP	WEATHER PROOF
HC	HANDICAPPED	W/	WITH

GENERAL NOTES:

THIS PLAN SET, COMBINED WITH THE BUILDING CONTRACT, PROVIDES BUILDING DETAILS FOR THE RESIDENTIAL PROJECT. THE CONTRACTOR SHALL VERIFY THAT SITE CONDITIONS ARE CONSISTENT WITH THESE PLANS BEFORE STARTING WORK. WORK NOT SPECIFICALLY DETAILED SHALL BE CONSTRUCTED TO THE SAME QUALITY AS SIMILAR WORK THAT IS DETAILED. ALL WORK SHALL BE DONE IN ACCORDANCE WITH FLORIDA BUILDING CODES AND LOCAL CODES. CONTRACTOR SHALL BE RESPONSIBLE AND BEAR ANY FINES OR PENALTIES FOR CODE, ORDINANCE, REGULATION OR BUILDING PROCESS VIOLATIONS. INSURANCES SHALL BE IN FORCE THROUGHOUT THE DURATION OF THE BUILDING PROJECT.

THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND SAVE HARMLESS THE OWNER, ENGINEER, & THEIR PERSPECTIVE MEMBERS, REPRESENTATIVES, AGENTS, & EMPLOYEES, IN BOTH INDIVIDUAL & OFFICIAL CAPACITIES AGAINST SUITS, CLAIMS, DAMAGES, LOSSES & THE EXPENSES, INCLUDING ATTORNEY'S FEES, CAUSED BY, GROWING OUT OF, OR INCIDENTAL TO THE PERFORMANCE OF THE WORK UNDER THE CONTRACT BY THE CONTRACTOR OR ITS SUBCONTRACTORS TO THE FULL EXTENT AS ALLOWED BY THE LAWS OF THE STATE OF FLORIDA & NOT BEYOND ANY EXTENT WHICH WOULD RENDER THESE PROVISIONS VOID OR UNENFORCEABLE, IN THE EVENT OF ANY SUCH INJURY (INCLUDING DEATH) OR LOSS OR DAMAGE, OR CLAIMS THEREFORE, THE CONTRACTOR SHALL GIVE PROMPT NOTICE TO OWNER.

WRITTEN DIMENSIONS AND SPECIFIC NOTES SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND GENERAL NOTES. THE ENGINEER/DESIGNER SHALL BE CONSULTED FOR CLARIFICATION IF SITE CONDITIONS ARE ENCOUNTERED THAT ARE DIFFERENT THAN SHOWN, IF DISCREPANCIES ARE FOUND IN THE PLANS OR NOTES, OR IF A QUESTION ARISES OVER THE INTENT OF THE PLANS OR NOTES. CONTRACTOR SHALL VERIFY AND IS RESPONSIBLE FOR ALL DIMENSIONS (INCLUDING ROUGH OPENINGS).

THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A COMPLETE SET OF DRAWINGS & SPECIFICATIONS TO EACH SUBCONTRACTOR & FOR INSURING THAT THE WORK OF EACH SUBCONTRACTOR IS COORDINATED WITH THE WORK OF ALL OTHER SUBCONTRACTORS.
ALL TRADES SHALL MAINTAIN A CLEAN WORK SITE AT THE END OF EACH WORK DAY.

PLEASE SEE ADDITIONAL NOTES CALLED OUT ON OTHER SHEETS.

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A NEW PLAN FOR:
S.H.S. CONTRACTING SERVICES, LLC
LOT 14 BLOCK 13 E. MARIGOLD AVE.
DEFUNIAK SPRINGS
ELEVATIONS
WALTON COUNTY, FLORIDA

SCALE: 1/4" = 1'-0"
DRAWN: MDC
CHECKED: JDB
PROJECT NO: 25590.19
CAD FILE: 25590.19.PLAN

DATE	REVISION

DATE: 7/24/2025

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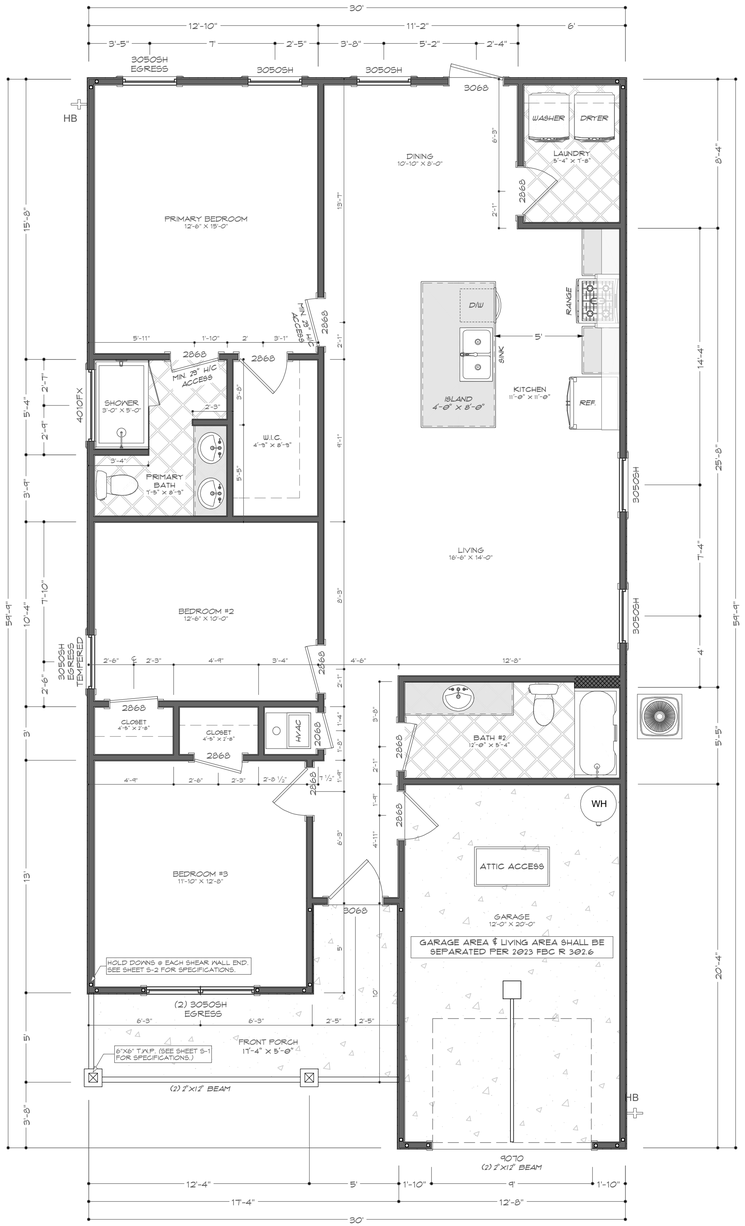
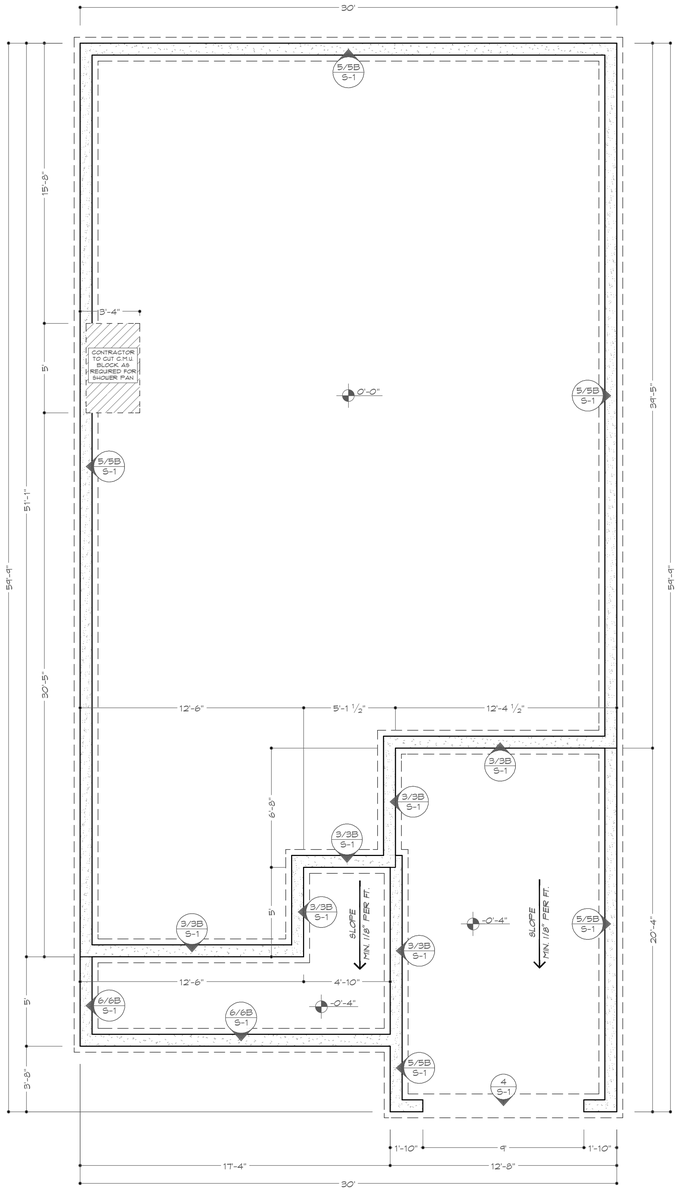
SHEET NUMBER
A-1



A-2

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



A-2

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

FLOOR PLAN NOTES:
1. CEILING HEIGHT SHALL BE 8', U.N.O.
2. 2"X4" WOOD FRAMING FOR EXTERIOR WALLS, U.N.O.
3. ALL DIMENSIONS ARE TO FRAMING. DIMENSIONS OF OPENINGS ARE TO CENTER OF ROUGH OPENING.
4. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND IS RESPONSIBLE FOR ALL DIMENSIONS (INCLUDING ROUGH OPENINGS).
5. ALTERNATIVE CONNECTORS MAY BE SUBSTITUTED FOR SIMPSON STRONGTIE IF THEIR LOAD CAPACITIES MEET OR EXCEED THOSE SPECIFIED. ALL CONNECTORS SHALL BE INSTALLED PURSUANT TO MANUFACTURER REQUIREMENTS FOR MAXIMUM CAPACITY.

FOUNDATION PLAN NOTES:
1. THE ROOF SYSTEM WILL BE CONSTRUCTED WITH PRE-ENGINEERED TRUSSES. BUILDER SHALL VERIFY WITH PE TRUSS DESIGNER LOCATION OF ANY ADDITIONAL INTERIOR LOAD BEARING FOOTINGS. ALL INTERIOR-BORNE TRUSS LOADS SHALL BEAR DIRECTLY ON INTERIOR GRADE BEAMS AS SHOWN ON SHEET S-1 VIA WALLS, COLUMNS, OR OTHER STRUCTURAL MEMBERS.
2. CONCRETE SPECIFICATIONS: 3,000 PSI @ 28 DAYS. 4" CONCRETE SLAB TO BE REINFORCED W/ WWF 6"X6" W1.4 X W1.4 (SYNTHETIC REINFORCING FIBERS MAY BE USED PER ENG. NOTES) ON A .006 MIL POLY VAPOR BARRIER OVER CLEAN, COMPACTED FILL (PER SHEET S-1).
3. THE TRUSS DESIGNER SHALL PROVIDE A TRUSS LAYOUT WITH ALL LOAD BEARING WALLS CLEARLY IDENTIFIED. BUILDER SHALL INSTALL BEARING FOOTINGS (I.E. GRADE BEAMS) AS SHOWN IN DETAIL 1 OF SHEET S-1 UNDER EVERY BEARING WALL AND BEARING POINT IDENTIFIED BY THE TRUSS DESIGNER ON THE REFERENCED TRUSS LAYOUT. THERE ARE NO EXCEPTIONS TO THIS REQUIREMENT. IF THE CONTRACTOR AND/OR SUBCONTRACTOR NEEDS CLARIFICATION, CONTACT THE ENGINEER OF RECORD. FAILURE TO FOLLOW THIS REQUIREMENT WILL REQUIRE EXPENSIVE REPAIR.
4. TERMITE TREATMENT SHALL BE PER CODE

WALL SCHEDULE

EXTERIOR 2"X4" WALL	
INTERIOR 2"X8" WALL	
INTERNAL 2"X4" WALL	
RAILING	

AREA CALCULATIONS

LIVING AREA	1,363 S.F.
FRONT PORCH	111 S.F.
GARAGE	256 S.F.
TOTAL COVERED	1,730 S.F.

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A NEA PLAN FOR:

S.H.S. CONTRACTING SERVICES, LLC
LOT 14 BLOCK 15 E MARIGOLD AVE,
DEFUNIAK SPRINGS
FLOOR PLAN & FOUNDATION PLAN
WALTON COUNTY, FLORIDA

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

DRAWN:
MDC

CHECKED:
JDB

PROJECT NO:
25590.19

CAD FILE:
25590.19.PLAN

DATE	REVISION

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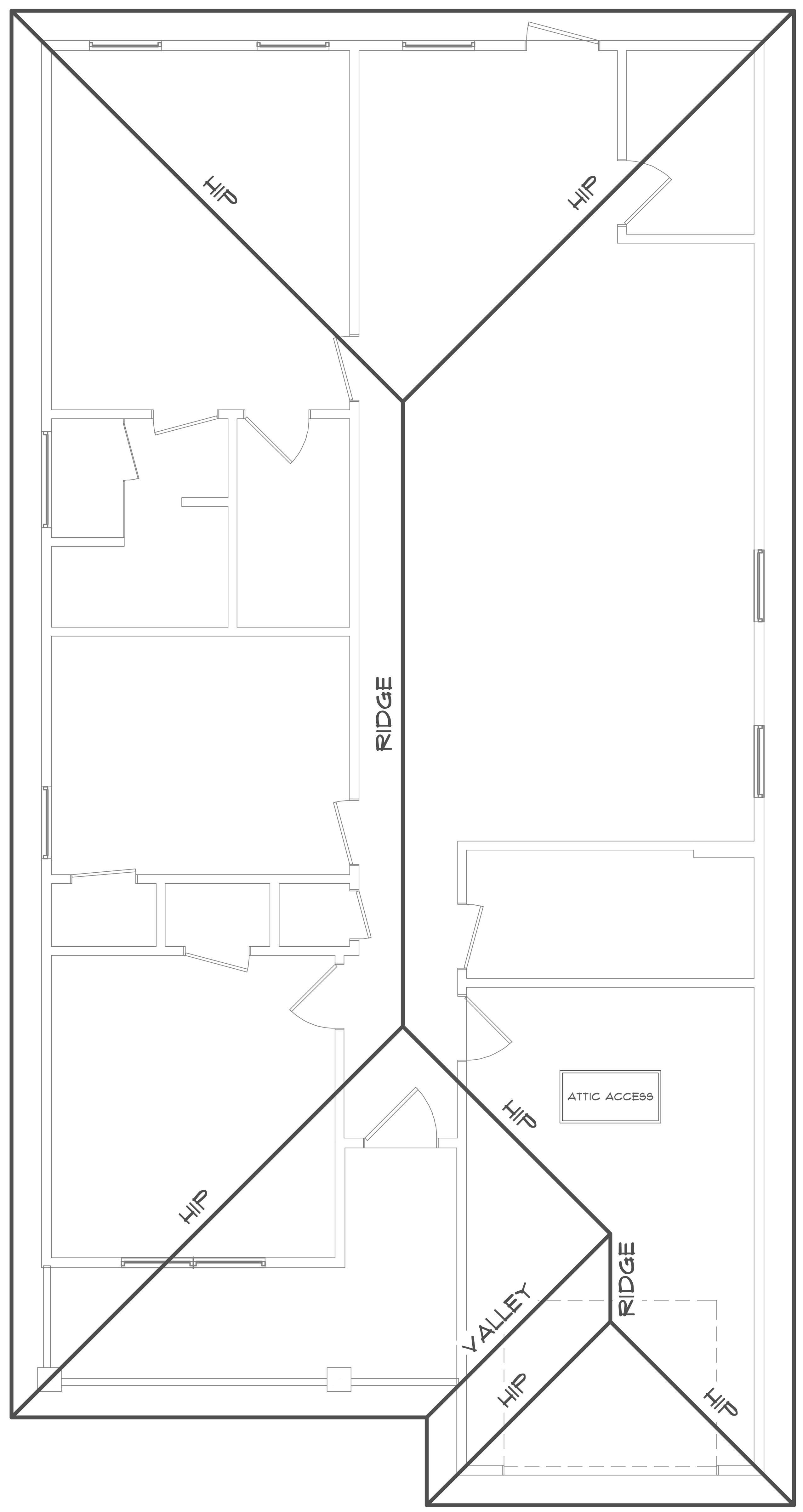
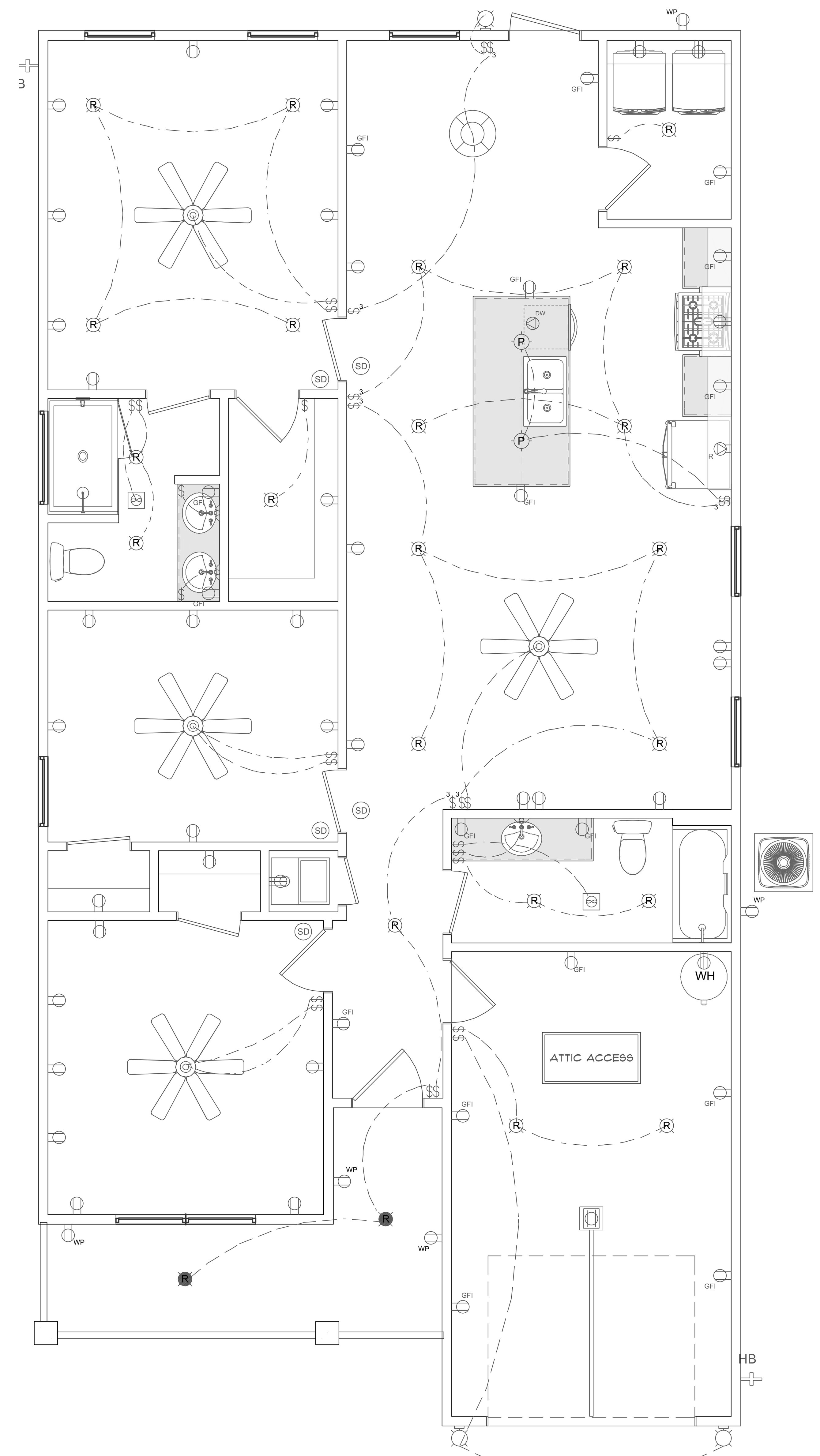
SHEET NUMBER
A-2

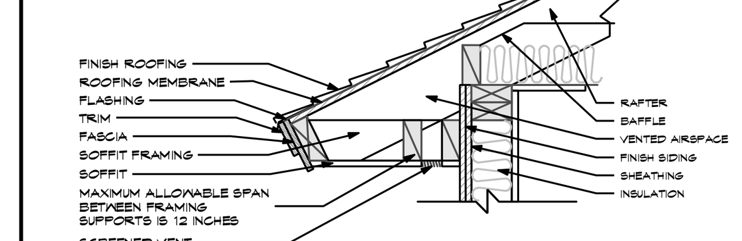
A-2 FLOOR PLAN & FOUNDATION PLAN



A-3 ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"



A-3 ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"



BOXED SOFFIT DETAIL
NOT TO SCALE

ROOF FRAMING PLAN NOTES:

1. THE ROOF SYSTEM WILL BE CONSTRUCTED WITH PRE-ENGINEERED TRUSSES. THE TRUSSES SHALL BE DESIGNED (AND THE TRUSS DRAWINGS SHALL BE SIGNED AND SEALED) BY A PROFESSIONAL ENGINEER WHO IS LICENSED IN THE STATE OF FLORIDA. THE TRUSSES SHALL BE DESIGNED FOR A 150 M.P.H. WIND SPEED (ULTIMATE).
2. THE ROOF OVERHANGS SHALL BE 16", U.N.O.

ELECTRICAL PLAN NOTES:

HOME OWNER SHALL DO A WALK-THRU WITH RELEVANT INSTALLERS TO VERIFY THE EXACT LOCATION FOR OUTLETS, LIGHTS, SWITCHES, CABLE, DATA, PHONE, AUDIO, VACUUM, ETC.

ELECTRICAL NOTES:

1. PROVIDE MIN. 200 AMP SERVICE TO MAIN PANEL
2. ALL APPLIANCES & UTILITIES TO HAVE DEDICATED CIRCUITS. SEE MFG'S SPECS. FOR REQUIREMENTS
3. ELECTRICAL RECEPTACLES IN BATHROOMS, KITCHENS AND GARAGES SHALL BE G.F.C.I. PER NATIONAL ELECTRICAL CODE REQUIREMENTS
4. ALL BEDROOM OUTLETS AND LIGHTS BE ARCH FAULT PROTECTED
5. PROVIDE ONE SMOKE DETECTOR AND CARBON MONOXIDE DETECTOR IN EACH ROOM AND ONE IN EACH CORRIDOR ACCESSING BEDROOMS. CONNECT SMOKE DETECTORS TO HOUSE POWER AND INTER-CONNECT SMOKE DETECTORS TO HOUSE POWER AND INTERCONNECT SO THAT, WHEN ANY ONE IS TRIPPED, THEY ALL WILL SOUND. PROVIDE BATTERY BACKUP FOR ALL UNITS.
6. CIRCUITS SHALL BE VERIFIED WITH HOME OWNER PRIOR TO WIRE INSTALLATION.
7. FINAL SWITCHES FOR TIMERS AND DIMMERS SHALL BE VERIFIED WITH HOME OWNER.
8. FIXTURES TO BE SELECTED BY HOME OWNER.
9. ALL SWITCHES TO BE 48" O/C ASF. OUTLETS TO BE 15" O/C ASF. OUTLETS OVER COUNTERTOPS TO BE 3" ABOVE COUNTER FROM BOTTOM.

(ASF = ABOVE SUBFLOOR)

10. EXTERIOR OUTLETS SHALL BE WATER PROOFED & GFCI.

AUDIO:

1. LOCATE SPEAKERS AND AUDIO CONTROLS AS INDICATED IN THE PLAN; RUN CIRCUIT OF SPEAKER WIRING TO AUDIO HOME PANEL SPECIFIED BY FLOOR;
2. AUDIO SPEAKERS TO BE APPROVED BY HOME OWNER;
3. LOCATE JACKS AS INDICATED IN THE PLAN; INSTALL DATA / CABLE PANEL SIMILAR TO "ON Q". SYSTEM TO BE APPROVED BY HOME OWNER.

DATA / CABLE:

LOCATE SECURITY PANELS AS INDICATED IN THE PLAN; SYSTEM TO BE APPROVED BY HOME OWNER.

ELECTRICAL LEGEND

Symbol	Description
LIGHTING	
P R R	PENDANT / RECESSED / WET RATED / FLUSH MOUNT
	DUAL SPOTLIGHT / SCONCE / WALL LAMP
	UNDER CABINET LED PUCK / LED STRIP / CEILING LED
	CHANDELIER / FAN W/ LIGHT
SWITCHES / OUTLETS	
$ $3 $4	SWITCH / 3-WAY / 4-WAY
GFI WP	OUTLETS - 120V WALL & CEILING GFCI / WATER PROOF / 220V
R DW GD	APPLIANCE SPEC.: REFRIGERATOR / DISH WASHER / GARBAGE DISPOSAL
OTHER MEP	
SD	SMOKE / CARBON MONOXIDE DETECTOR COMBINATION
	CEILING MOUNTED VENTILATION FAN/ VENTILATION FAN W/ LIGHT

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A NEW PLAN FOR:
S.H.S. CONTRACTING SERVICES, LLC
LOT 14 BLOCK 13 E. MARIGOLD AVE., DEFUNIAK SPRINGS
ROOF FRAMING PLAN & ELECTRICAL PLAN
WALTON COUNTY, FLORIDA

SCALE: 1/4" = 1'-0"
DRAWN: MDC
CHECKED: JDB
PROJECT NO: 25590.19
CAD FILE: 25590.19.PLAN

DATE	REVISION

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FINAL

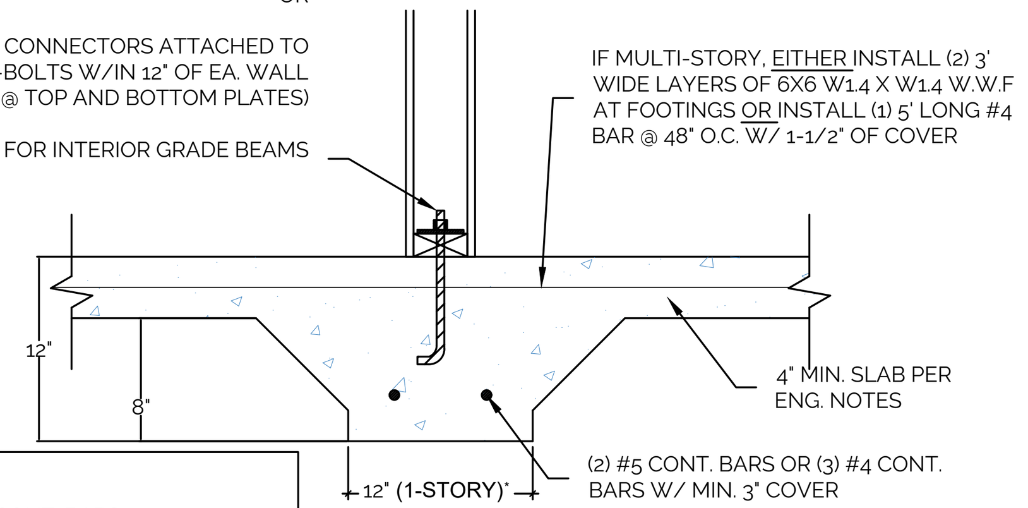
SHEET NUMBER
A-3

IF WALL IS DESIGNATED INTERIOR SHEAR WALL, INSTALL 1/2" X 10" J-BOLTS W/IN 12" OF EA. WALL END AND @ 32" O.C.

OR

IF TRUSS DESIGNER SPECIFIED UPLIFT CONNECTORS ATTACHED TO INTERIOR WALL, INSTALL 1/2" X 10" J-BOLTS W/IN 12" OF EA. WALL END AND @ 32" O.C. (STUD TIES ARE RQ'D @ TOP AND BOTTOM PLATES)

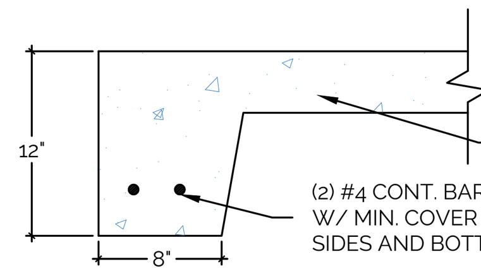
OTHERWISE, J-BOLTS ARE NOT RQ'D FOR INTERIOR GRADE BEAMS



*NOTE:
- FOR 2-STORY, USE 18" WIDE W/ (3) #5 CONT. BARS
- FOR 3-STORY, USE 24" WIDE W/ (4) #5 CONT. BARS AND (1) #5 TRANSVERSE @ 18" O.C.
- FOR 4-STORY, USE 28" WIDE W/ (4) #5 CONT. BARS AND (1) #5 TRANSVERSE @ 18" O.C.

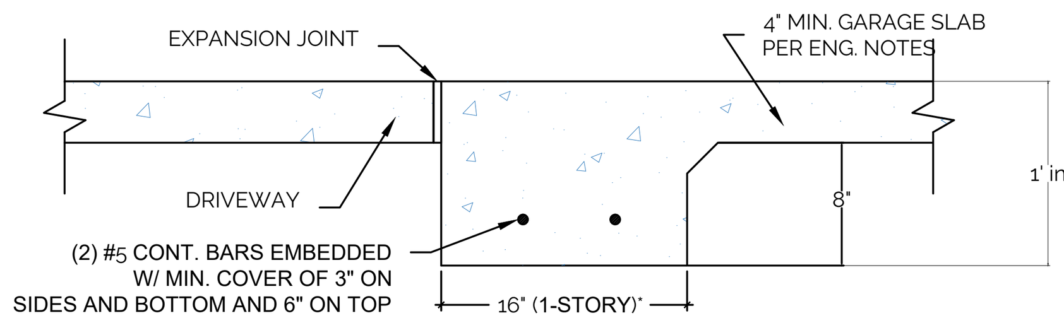
INTERIOR BEARING FOOTING
NOT TO SCALE (N.T.S)

1 / S-1



NON-BEARING FOOTING
NOT TO SCALE (N.T.S)

2 / S-1

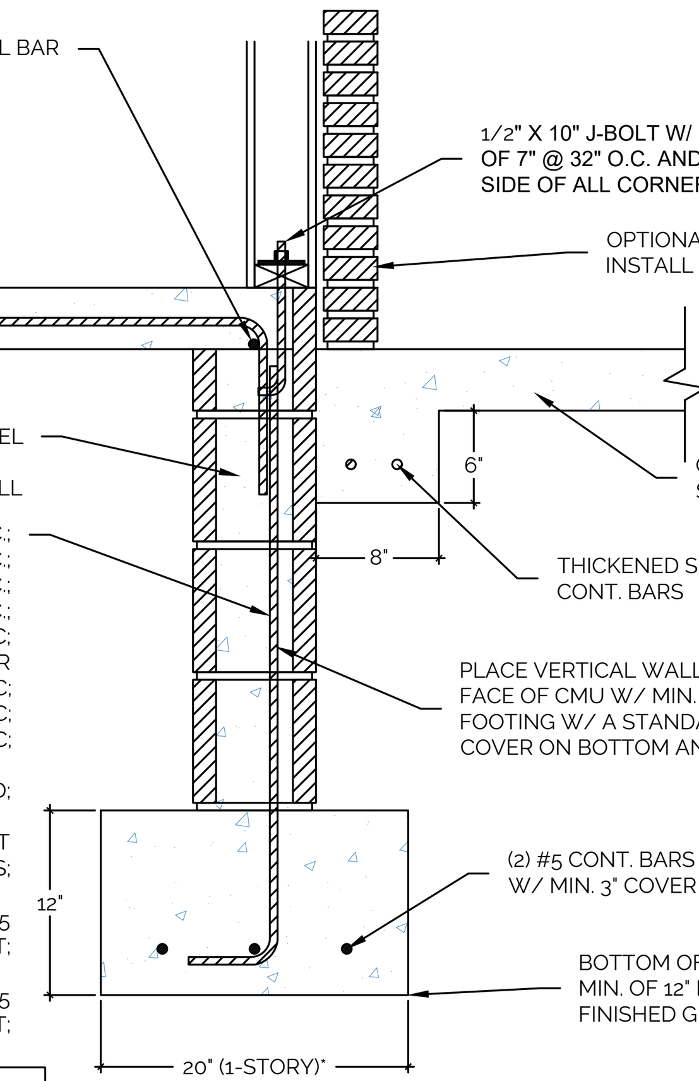


*NOTE:
- FOR 2- OR 3-STORY, USE 14" X 24" W/ (3) CONT. #5 BARS
- FOR 4-STORY, USE 14"X34" W/ (4) CONT. #5 BARS

GARAGE DOOR FOOTING
NOT TO SCALE (N.T.S)

4 / S-1

CAUTION:
- CMU FOUNDATION WALLS ARE DESIGNED TO RELY ON THEIR CONNECTION TO SLAB AT TOP FOR LATERAL RESTRAINT AND ARE UNSTABLE AND RISK FAILURE PRIOR TO SLAB INSTALLATION.
- BUILDER SHALL ADEQUATELY BRACE ALL CMU WALLS BEFORE INSTALLING FILL; FOR OVER 8 CMU HIGH, IT IS HIGHLY RECOMMENDED TO INSTALL TIEBACKS W/ DEADMEN @ 8' O.C. ATTACHED TO EA. BOND BEAM.

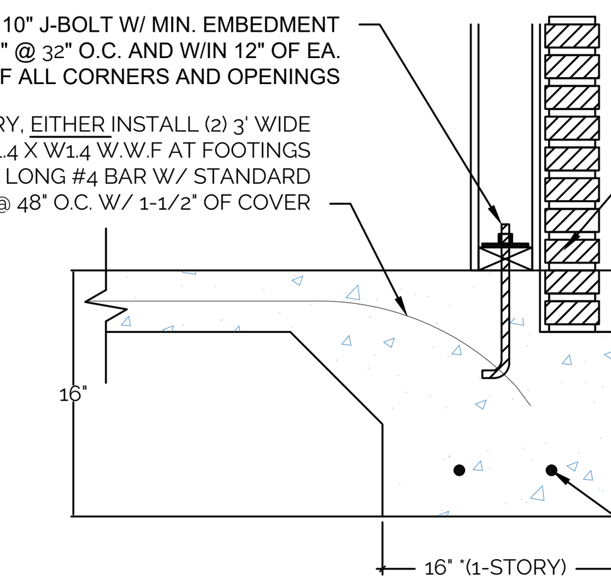


*NOTE:
- FOR 2-STORY W/O BRICK VENEER, USE 14" X 24" W/ (3) CONT. #5 BARS
- FOR 3-STORY W/O BRICK VENEER, USE 14" X 28" W/ (3) CONT. #5 BARS AND (1) 24" #5 TRANSVERSE @ 24" O.C.
- FOR 2-/3-STORY W/ BRICK VENEER OR 4-STORY W/O BRICK VENEER EXTENDING ABOVE 1ST STORY, USE 14"X36" W/ (4) CONT. #5 BARS AND (1) 32" #5 TRANSVERSE @ 16" O.C.

STEMWALL STEP-DOWN FOOTING
NOT TO SCALE (N.T.S)

3 / S-1

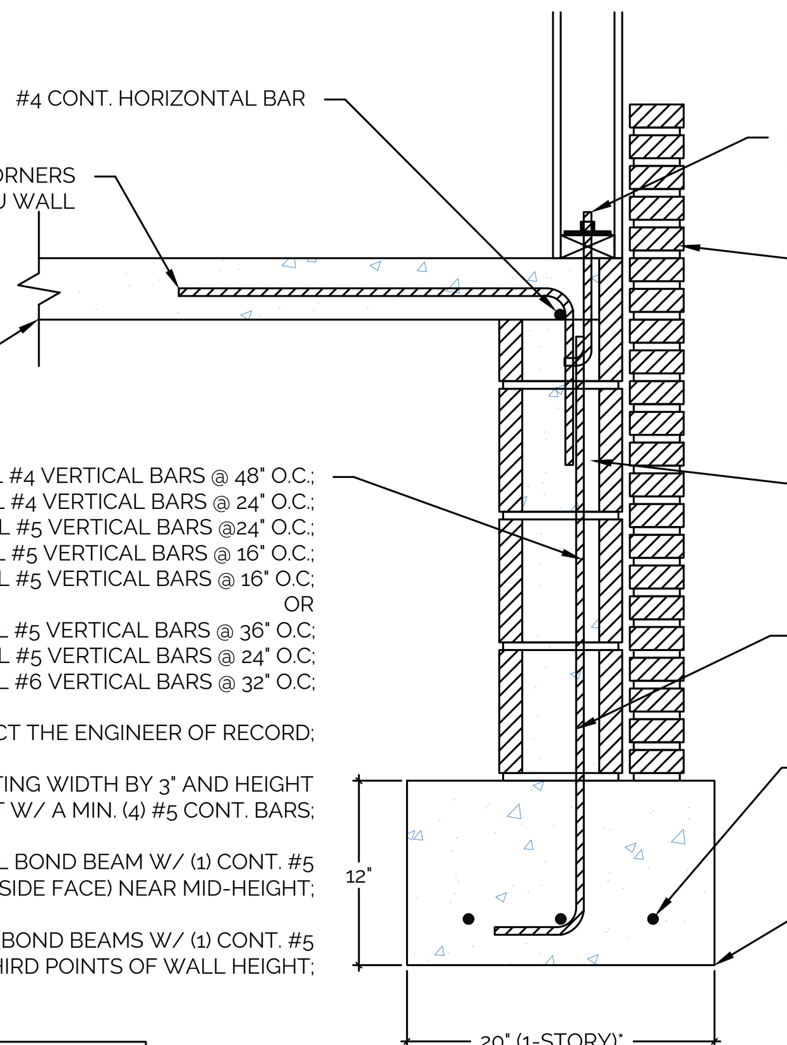
NOTE:
WHERE ENGINEERED FILL OR COMPACTED SOIL IS REQUIRED BY FLORIDA BUILDING CODE (FBC) CHAPTER 18, FBC RESIDENTIAL CHAPTER 4, OR THE BUILDING OFFICIAL, FILL AND/OR SOILS SHALL COMPLY WITH THE FOLLOWING:
1. INSTALL FILL IN THIN HORIZONTAL LOOSE LIFTS (MAX. OF 12") AND COMPACT TO A MIN. SOIL DENSITY OF 95% OF THE MAX. DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST (ASTM D-1557).
2. ALL EXPOSED SUBGRADE SOILS AT THE UNDERCUT ELEVATIONS SHALL BE COMPACTED TO THE SAME DRY DENSITY.
3. FILL MATERIALS USED IN STRUCTURAL AREAS SHOULD HAVE A TARGET MAX. DRY DENSITY OF AT LEAST 100 POUNDS PER CUBIC FOOT. IF LIGHTER WEIGHT FILL MATERIALS ARE USED, IT IS RECOMMENDED THAT A GEOTECHNICAL ENGINEER BE CONSULTED TO ASSESS THE IMPACT ON DESIGN RECOMMENDATIONS.
4. FILL MATERIAL SHOULD BE MOISTURE CONDITIONED TO WITHIN 2% OF ITS OPTIMUM MOISTURE CONTENT PRIOR TO COMPACTION.



*NOTE:
- FOR 2- OR 3-STORY, USE 24" W/ (3) #5 CONT. BARS
- FOR 4-STORY OR 2-/3-STORY W/ BRICK VENEER, USE 34" W/ (4) #5 CONT. BAR AND (1) 28" #5 TRANSVERSE @ 16" O.C.

OPTIONAL MONOLITHIC STEP-DOWN FOOTING
NOT TO SCALE (N.T.S)

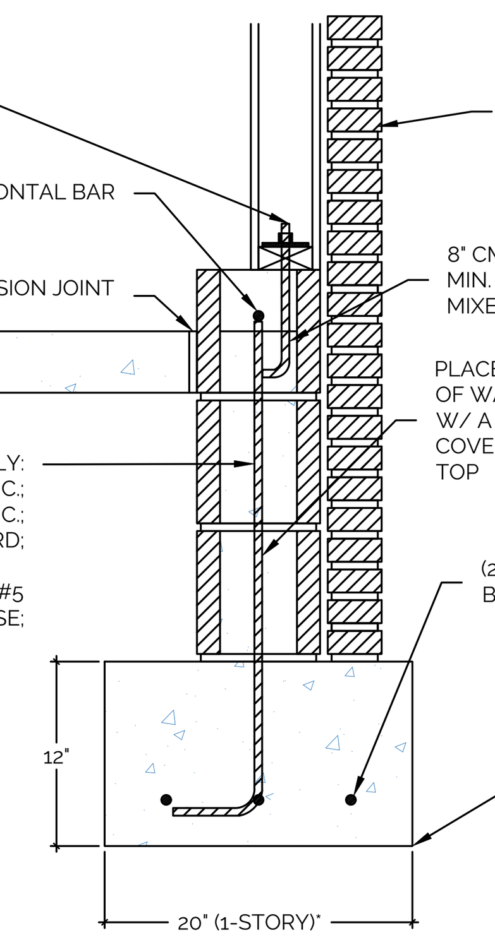
3B / S-1



*NOTE:
- FOR 2-STORY W/O BRICK VENEER, USE 14" X 24" W/ (3) CONT. #5 BARS
- FOR 3-STORY W/O BRICK VENEER, USE 14" X 28" W/ (3) CONT. #5 BARS AND (1) 24" #5 TRANSVERSE @ 24" O.C.
- FOR 2-/3-STORY W/ BRICK VENEER OR 4-STORY W/O BRICK VENEER EXTENDING ABOVE 1ST STORY, USE 14"X36" W/ (4) CONT. #5 BARS AND (1) 32" #5 TRANSVERSE @ 16" O.C.

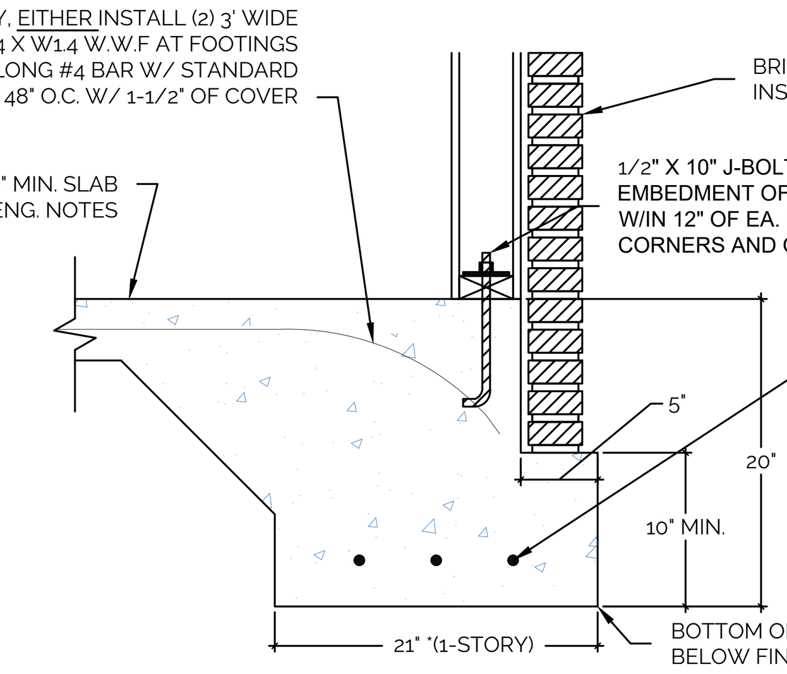
STEMWALL FOOTING
NOT TO SCALE (N.T.S)

5 / S-1



*NOTE:
- FOR 2-STORY W/O BRICK VENEER, USE 14" X 24" W/ (3) CONT. #5 BARS
- FOR 3-STORY W/O BRICK VENEER, USE 14" X 28" W/ (3) CONT. #5 BARS AND (1) 24" #5 TRANSVERSE @ 24" O.C.
- FOR 2-/3-STORY W/ BRICK VENEER OR 4-STORY W/O BRICK VENEER EXTENDING ABOVE 1ST STORY, USE 14"X36" W/ (4) CONT. #5 BARS AND (1) 32" #5 TRANSVERSE @ 16" O.C.

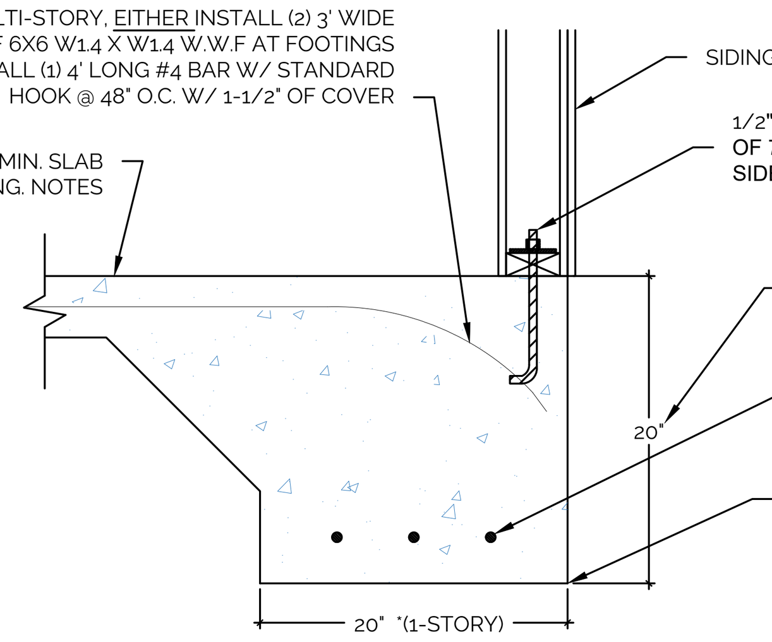
OPTIONAL GARAGE STEMWALL FOOTING (TYP.)
NOT TO SCALE (N.T.S)



*NOTE:
- FOR 2-STORY, W/ BRICK ONLY ON 1ST STORY, USE 20"X 26" W/ (3) #5 CONT. BARS
- FOR 3-STORY, W/ BRICK ONLY ON 1ST STORY, USE 20"X 30" W/ (3) #5 CONT. BARS AND (1) #5 TRANSVERSE @ 18" O.C.
- FOR 4-STORY AND OTHER OPTIONS NOT LISTED, MONOLITHIC NOT ALLOWED

OPTIONAL MONOLITHIC FOOTING W/ BRICK VENEER
NOT TO SCALE (N.T.S)

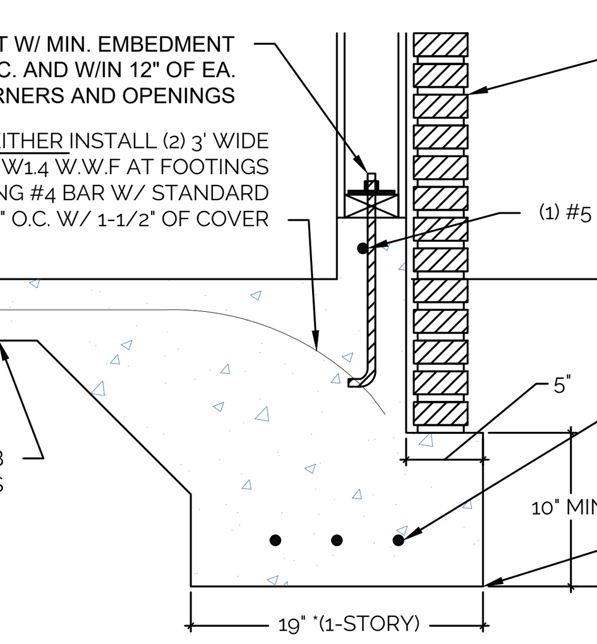
5B / S-1



*NOTE:
- FOR 2-STORY, USE 20"X 24" W/ (3) #5 CONT. BARS
- FOR 3-STORY, USE 20"X 28" W/ (3) #5 CONT. BARS AND (1) #5 TRANSVERSE @ 18" O.C.
- FOR 4-STORY, MONOLITHIC NOT ALLOWED

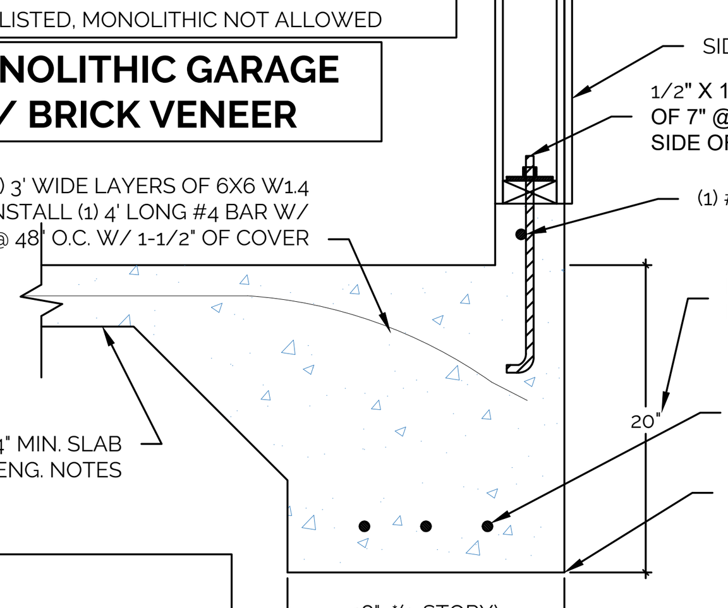
MONOLITHIC FOOTING W/ SIDING OR STUCCO
NOT TO SCALE (N.T.S)

5B / S-1



*NOTE:
- FOR 2-STORY, W/ BRICK ONLY ON 1ST STORY, USE 20"X 26" W/ (3) #5 CONT. BARS
- FOR 3-STORY, W/ BRICK ONLY ON 1ST STORY, USE 20"X 30" W/ (3) #5 CONT. BARS AND (1) #5 TRANSVERSE @ 18" O.C.
- FOR 4-STORY AND OTHER OPTIONS NOT LISTED, MONOLITHIC NOT ALLOWED

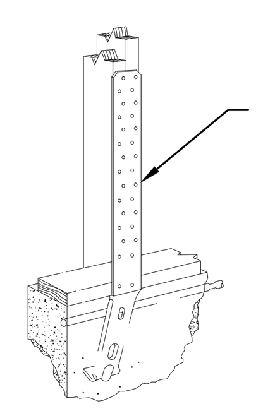
OPTIONAL MONOLITHIC GARAGE FOOTING W/ BRICK VENEER



*NOTE:
- FOR 2-STORY, USE 20" X 24" W/ (3) CONT. #5 BARS
- FOR 3-STORY, USE 20" X 28" W/ (3) CONT. #5 BARS AND (1) 24" #5 TRANSVERSE @ 24" O.C.
- FOR 4-STORY AND OTHER OPTIONS NOT LISTED, MONOLITHIC NOT ALLOWED

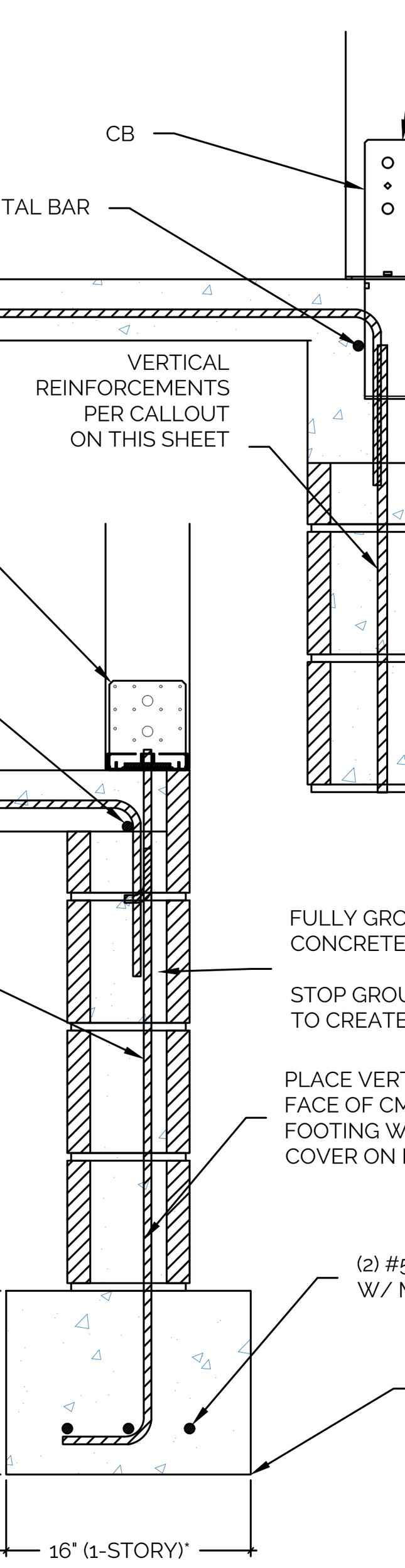
OPTIONAL MONOLITHIC GARAGE FOOTING W/ SIDING OR STUCCO
NOT TO SCALE (N.T.S)

5B / S-1



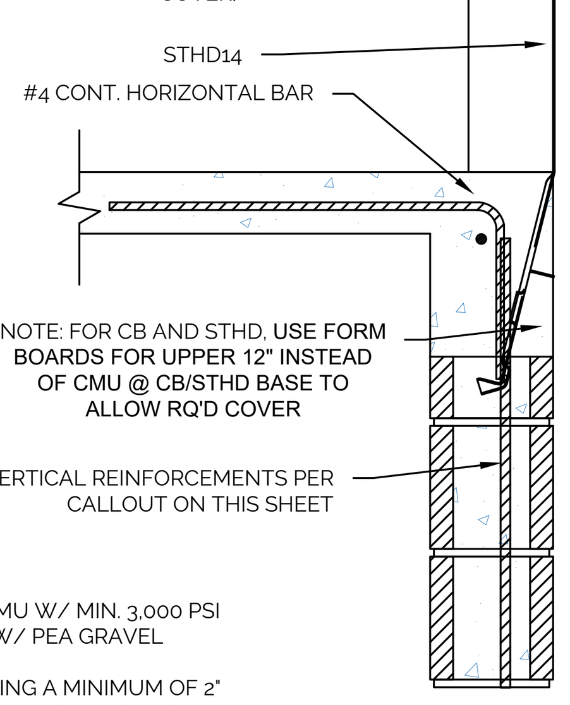
FOR WIND SPEED, V_ULT OF 150 OR LESS W/ EXPOSURE 'B' AND WHERE BEAM SUPPORTS LESS THAN 15' DEEP PORCH ROOF ONLY, ABU BASE W/ J-BOLT PER MFG SPEC (TYP.);

FOR WIND SPEED, V_ULT OF 151 OR MORE OR FOR EXPOSURE 'C' OR 'D' OR WHERE BEAM SUPPORTS UPPER FLOOR OR WHERE PORCH IS 15' DEEP OR MORE, CB OR STHD14 RQ'D;



FOR WIND SPEED, V_ULT OF 150 OR LESS W/ EXPOSURE 'B' AND WHERE BEAM SUPPORTS LESS THAN 15' DEEP PORCH ROOF ONLY, ABU BASE W/ J-BOLT PER MFG SPEC (TYP.).

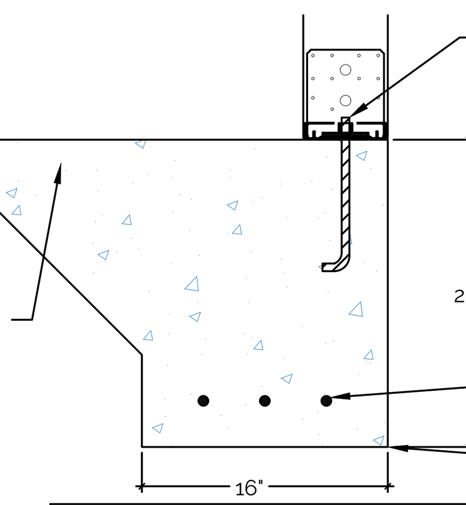
FOR WIND SPEED, V_ULT OF 151 OR MORE OR FOR EXPOSURE 'C' OR 'D' OR WHERE BEAM SUPPORTS UPPER FLOOR OR WHERE PORCH IS 15' DEEP OR MORE, CB OR STHD14 RQ'D. (USE FORM BOARDS FOR UPPER 12" INSTEAD OF CMU @ CB/STHD BASE TO ALLOW RQ'D COVER)



*NOTE:
- FOR 2-STORY, USE 12" X 24" W/ (3) CONT. #5 BARS
- FOR 3-STORY, USE 12" X 28" W/ (3) CONT. #5 BARS AND (1) 24" #5 TRANSVERSE @ 24" O.C.
- FOR 4-STORY, USE 12" X 34" W/ (4) CONT. #5 BARS AND (1) 30" #5 TRANSVERSE @ 18" O.C.

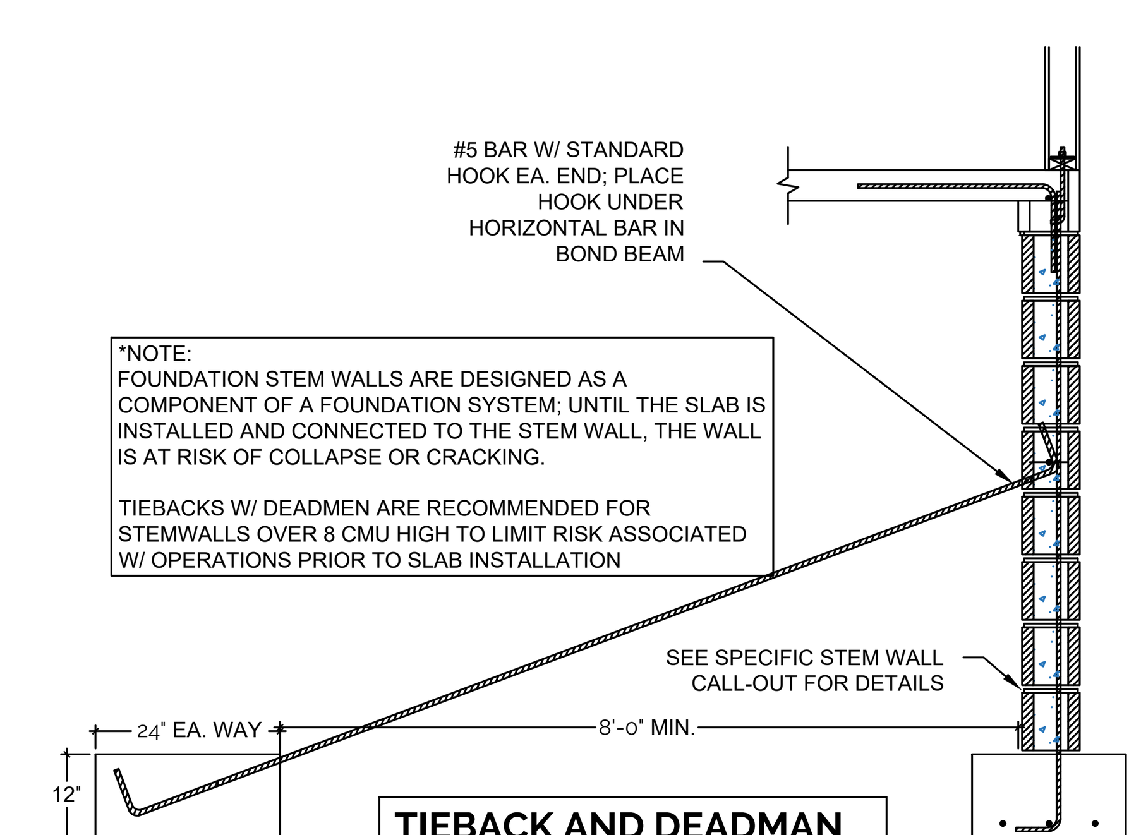
STEMWALL BEARING PORCH FOOTING
NOT TO SCALE (N.T.S)

6 / S-1



MONOLITHIC BEARING PORCH FOOTING
NOT TO SCALE (N.T.S)

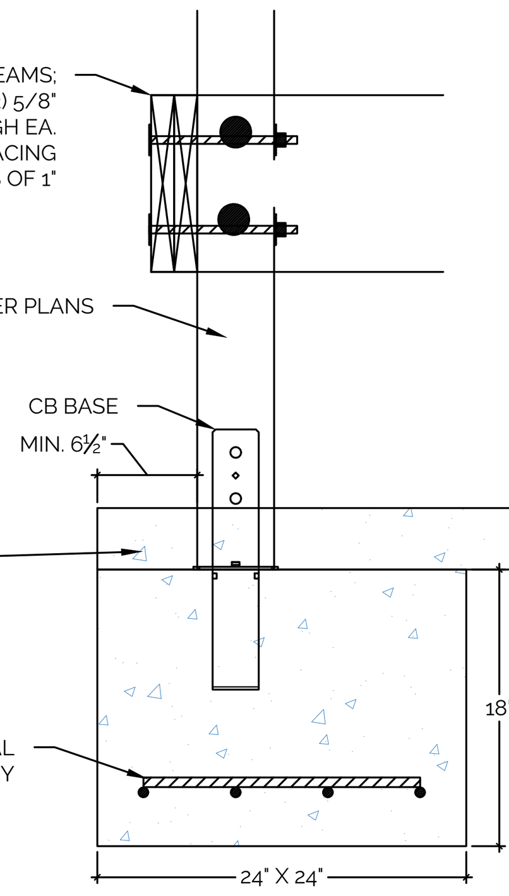
6B / S-1



*NOTE:
FOUNDATION STEM WALLS ARE DESIGNED AS A COMPONENT OF A FOUNDATION SYSTEM; UNTIL THE SLAB IS INSTALLED AND CONNECTED TO THE STEM WALL, THE WALL IS AT RISK OF COLLAPSE OR CRACKING.

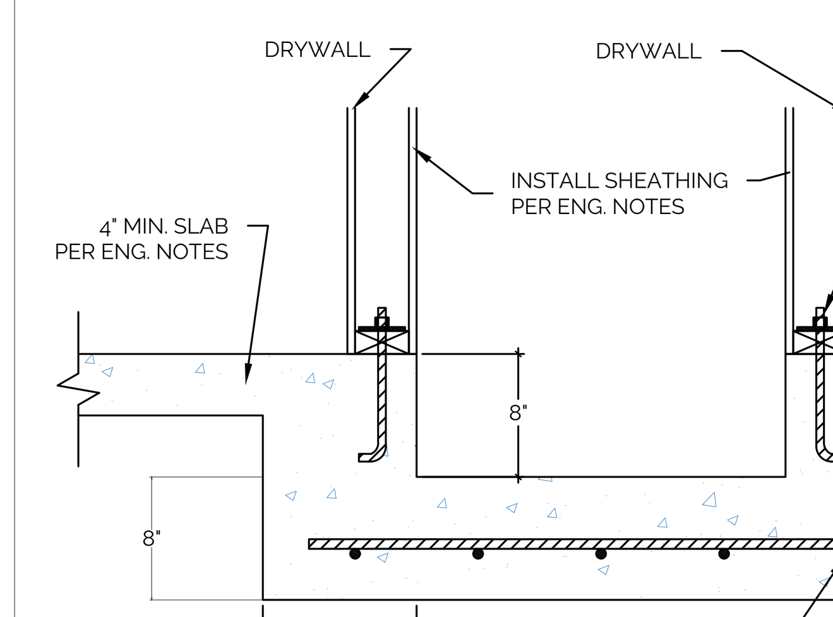
TIEBACKS W/ DEADMEN ARE RECOMMENDED FOR STEMWALLS OVER 8 CMU HIGH TO LIMIT RISK ASSOCIATED W/ OPERATIONS PRIOR TO SLAB INSTALLATION

TIEBACK AND DEADMAN
NOT TO SCALE (N.T.S)



ISOLATED BEARING PORCH FOOTING
NOT TO SCALE (N.T.S)

7 / S-1



ELEVATOR PIT FOOTING
NOT TO SCALE (N.T.S)

10 / S-1

BAYSIDE ENGINEERING & CONSULTING, LLC
FL ENGINEERING REGISTRY # 34567
J.D. BASS, FL P.E. LICENSE # 78460
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SHALIMAR, FL 32579
EMAIL: JOE.BASS@BAYSIDE-ENG.COM
PH: (850) 982-7515

ENGINEERING DRAWINGS AND SPECIFICATIONS

PROJECT ADDRESS AND/OR LOCATION:

S.H.S. CONTRACTING SERVICES, LLC
LOT 14 BLOCK 13 E. MARIGOLD AVE.,
DEFUNIAK SPRINGS
WALTON COUNTY, FLORIDA

DRAWN BY: JDB

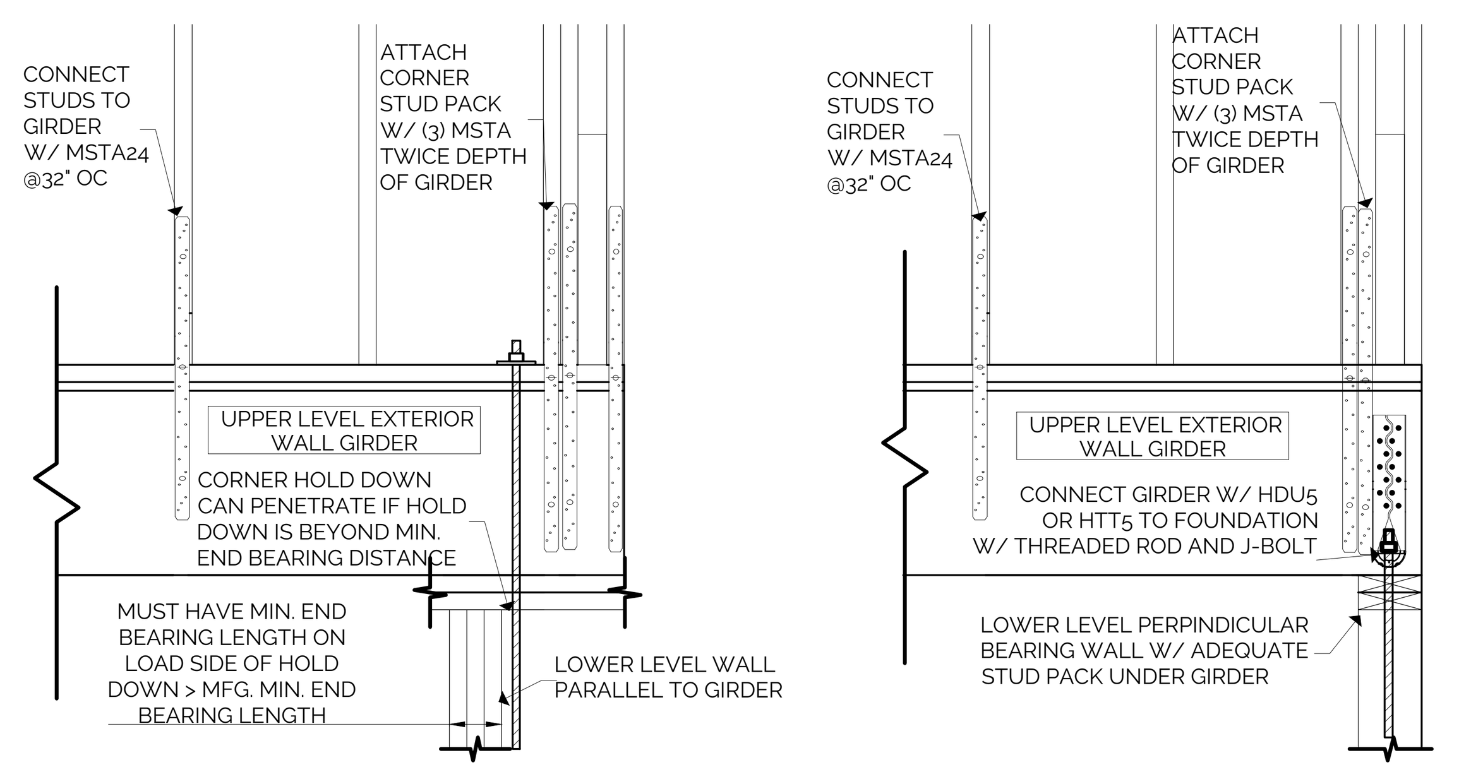
DATE: JUN 10, 2025

SCALE: NOT TO SCALE (NTS)

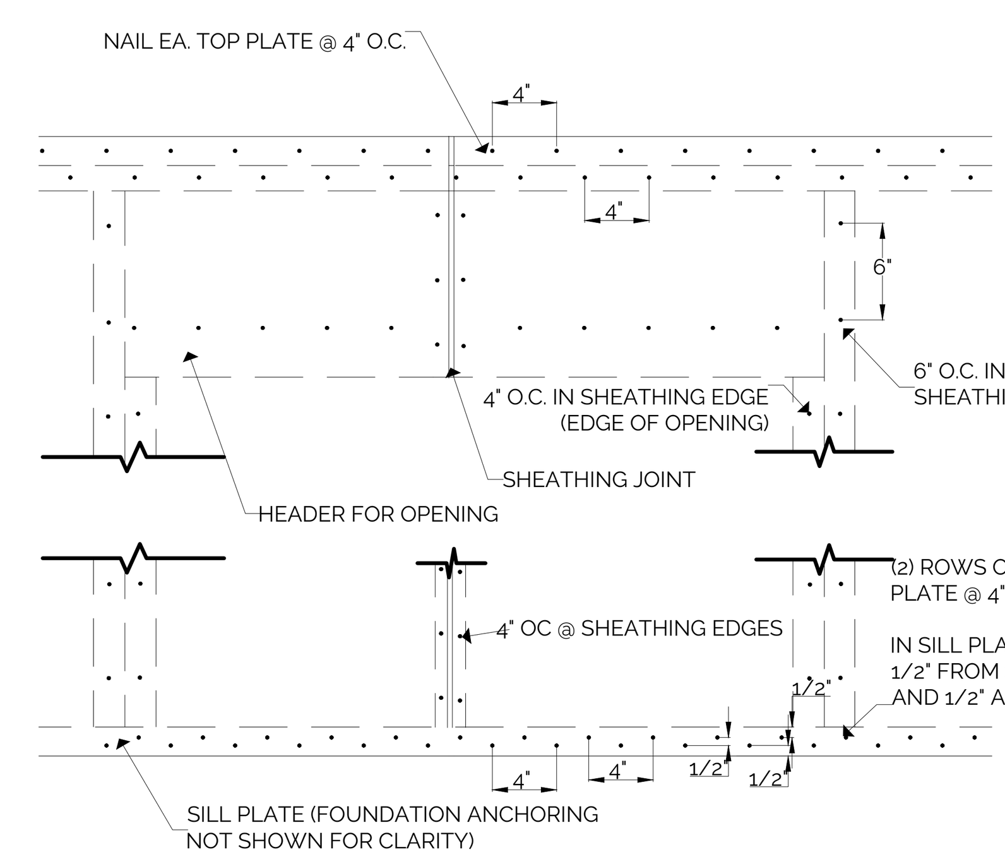
NOTE: ENGINEERING DETAILS AND NOTES TAKE PRECEDENCE OVER ALL OTHER

DRAWING NUMBER:

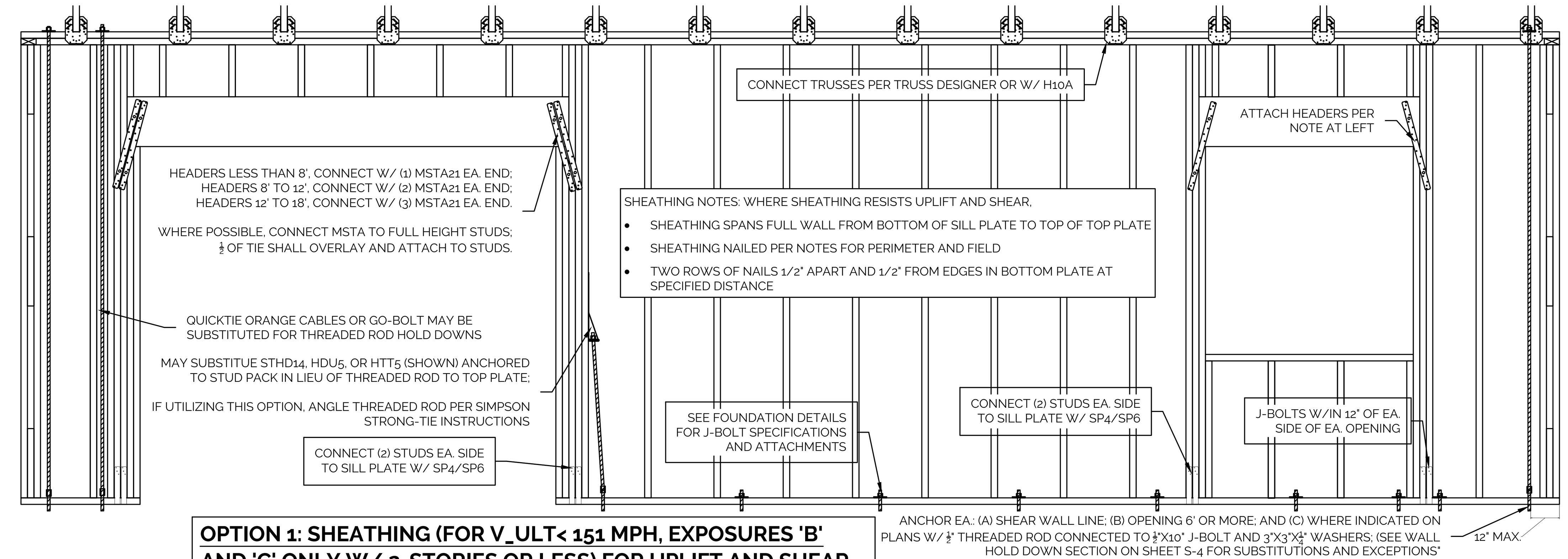
S-1



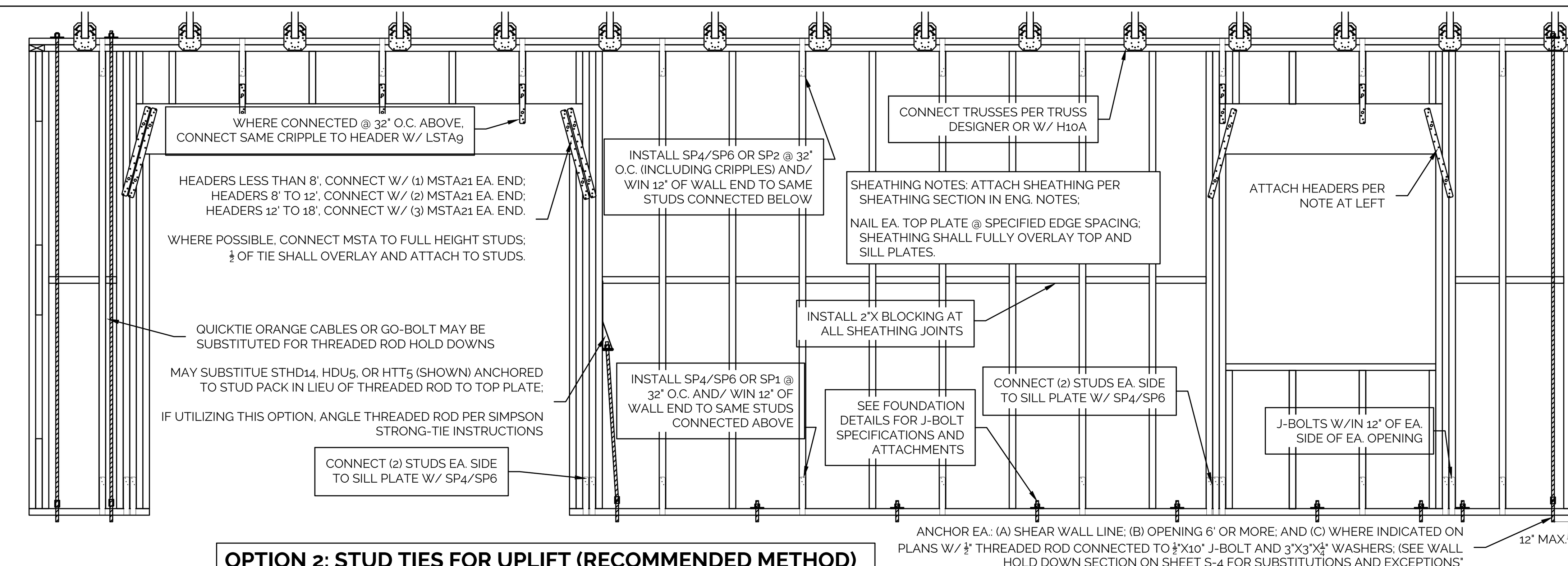
UPPER LEVEL WALLS W/ GIRDER HOLD DOWN
NOT TO SCALE (N.T.S)



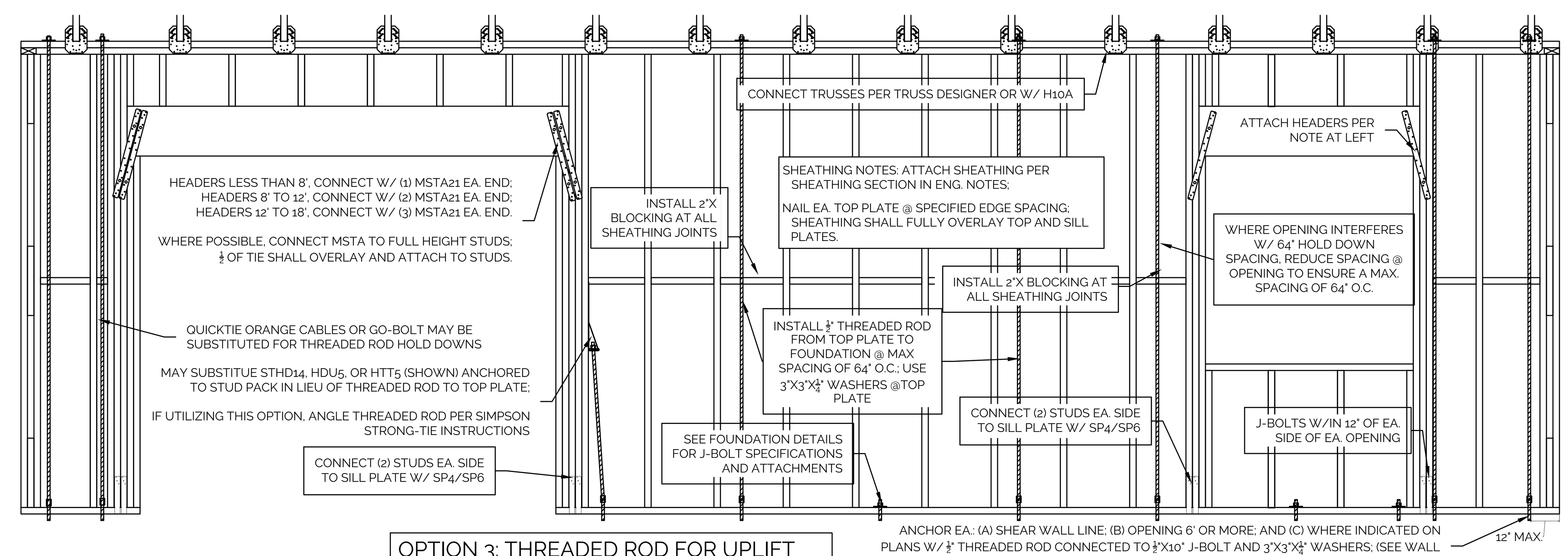
WALL SHEATHING NAIL DETAIL WHERE SHEATHING RESISTS UPLIFT AND SHEAR
NOT TO SCALE (N.T.S)



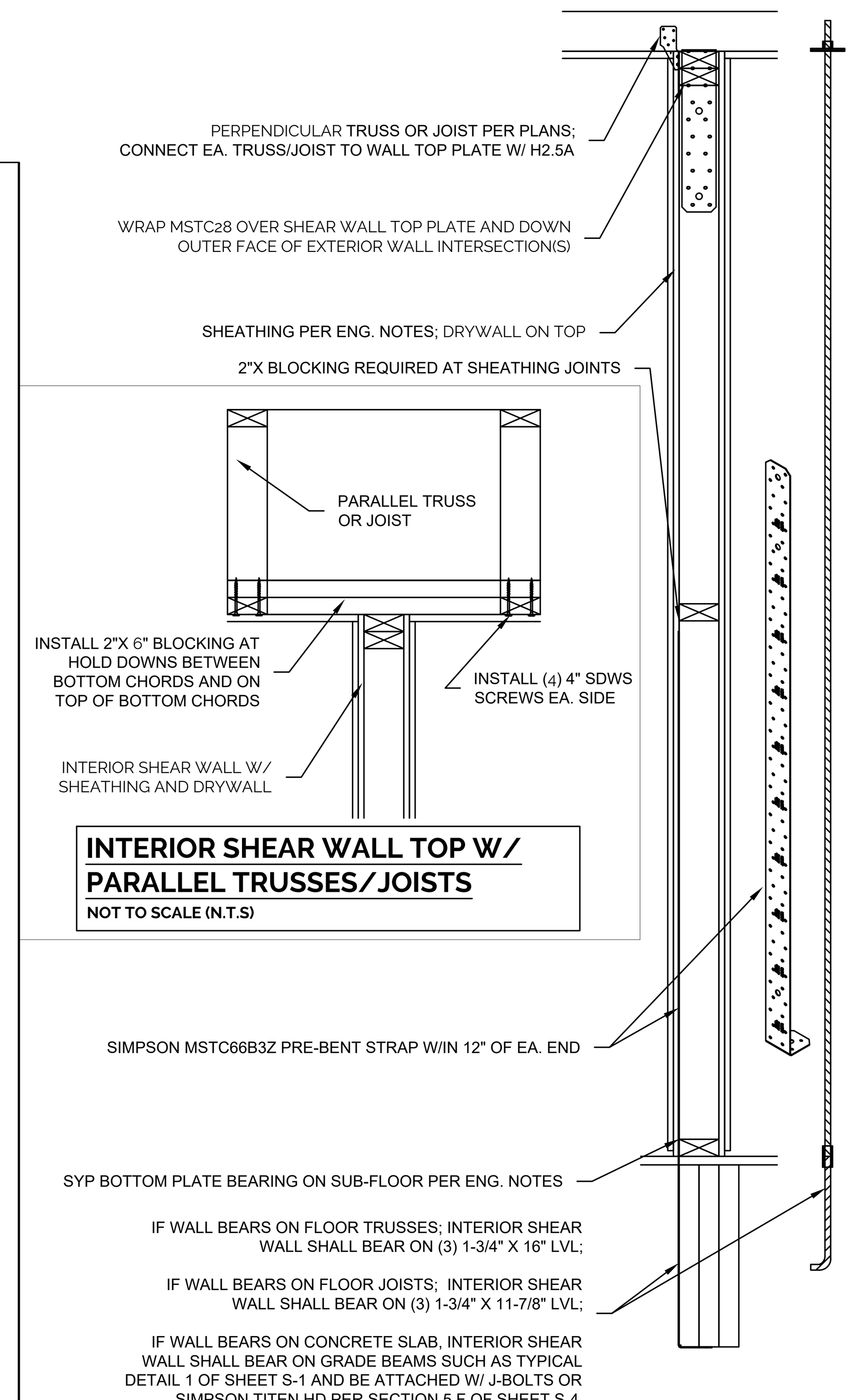
OPTION 1: SHEATHING (FOR V_ULT< 151 MPH, EXPOSURES 'B' AND 'C' ONLY W/ 2-STORIES OR LESS) FOR UPLIFT AND SHEAR
NOT TO SCALE (N.T.S)



OPTION 2: STUD TIES FOR UPLIFT (RECOMMENDED METHOD)
NOT TO SCALE (N.T.S)



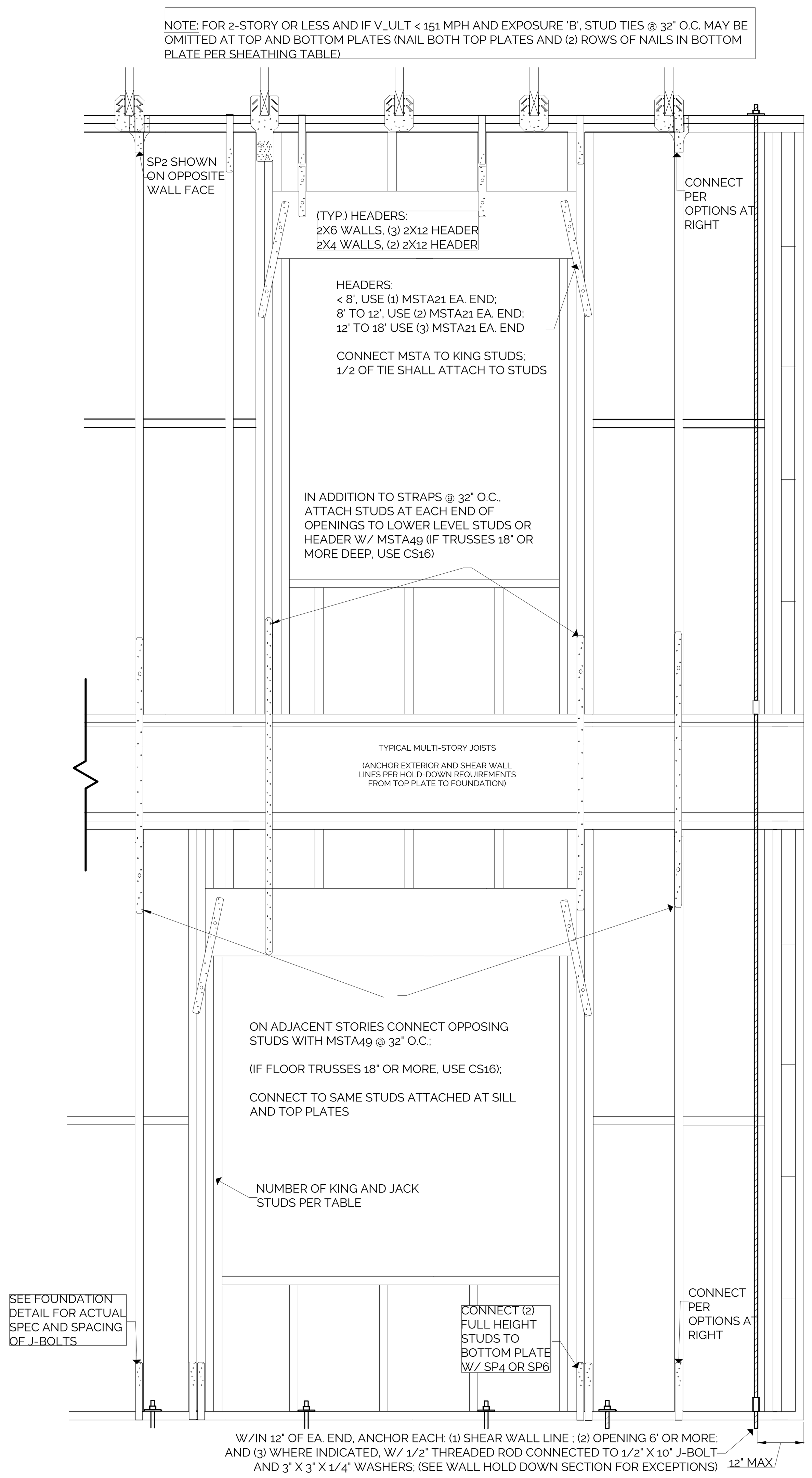
OPTION 3: THREADED ROD FOR UPLIFT
NOT TO SCALE (N.T.S)



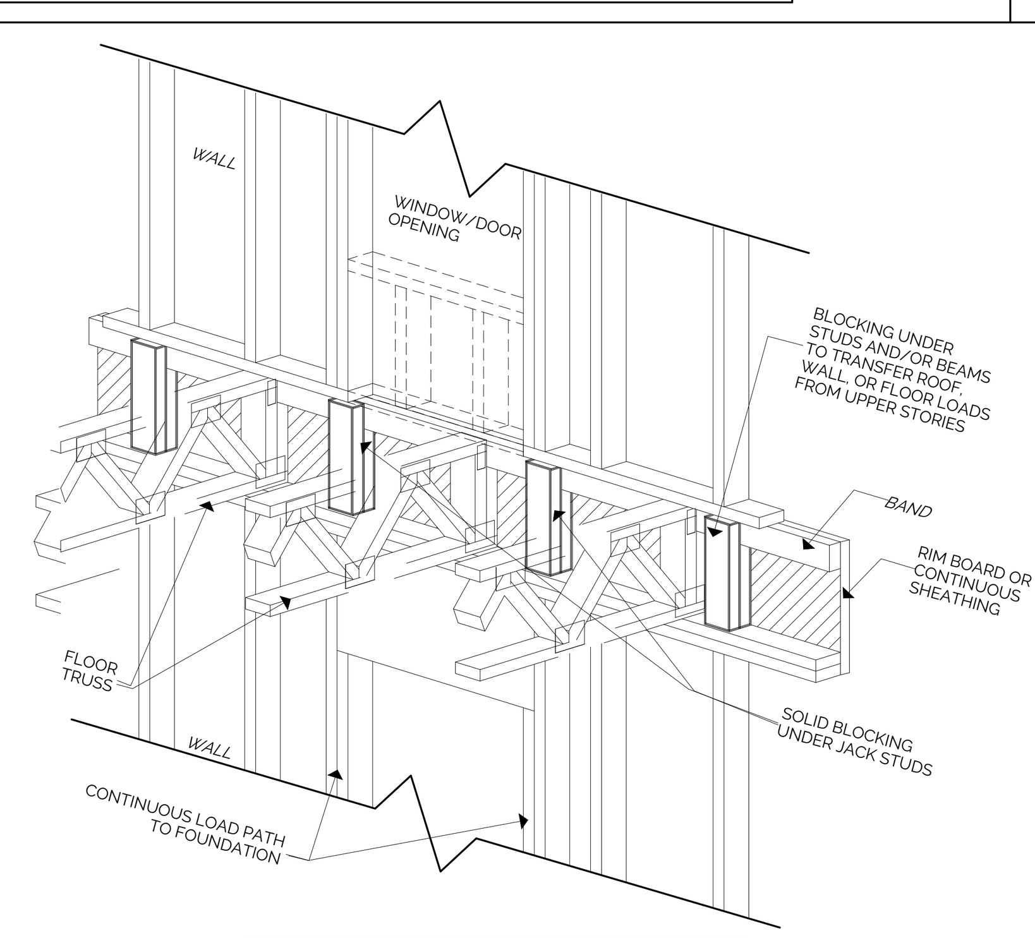
INTERIOR SHEAR WALL TOP W/ PARALLEL TRUSSES/JOISTS
NOT TO SCALE (N.T.S)

INTERIOR SHEAR WALL BEARING ON FLOOR TRUSSES OR JOISTS
NOT TO SCALE (N.T.S)

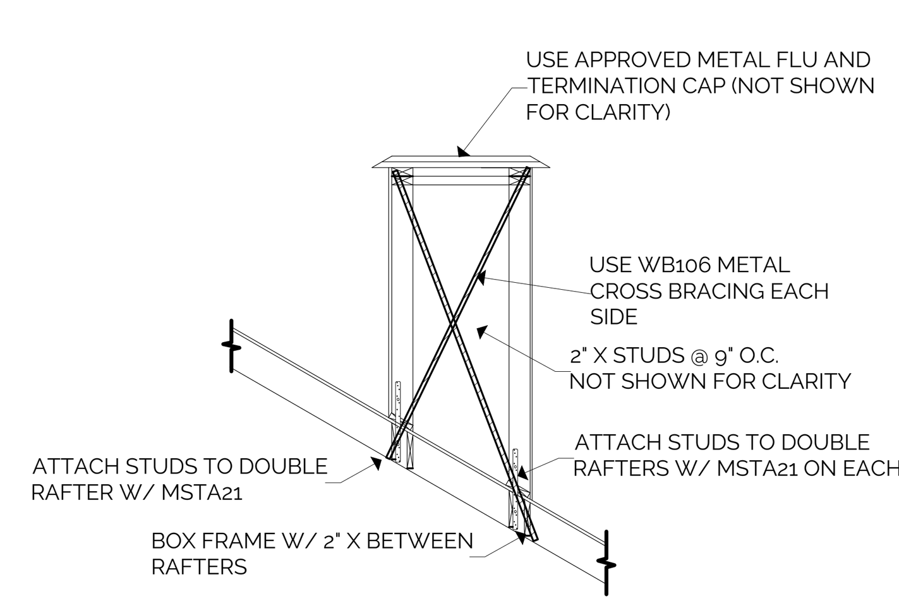
NOTE: FOR 2-STORY OR LESS AND IF V_ULT < 151 MPH AND EXPOSURE 'B', STUD TIES @ 32" O.C. MAY BE OMITTED AT TOP AND BOTTOM PLATES (NAIL BOTH TOP PLATES AND (2) ROWS OF NAILS IN BOTTOM PLATE PER SHEATHING TABLE)



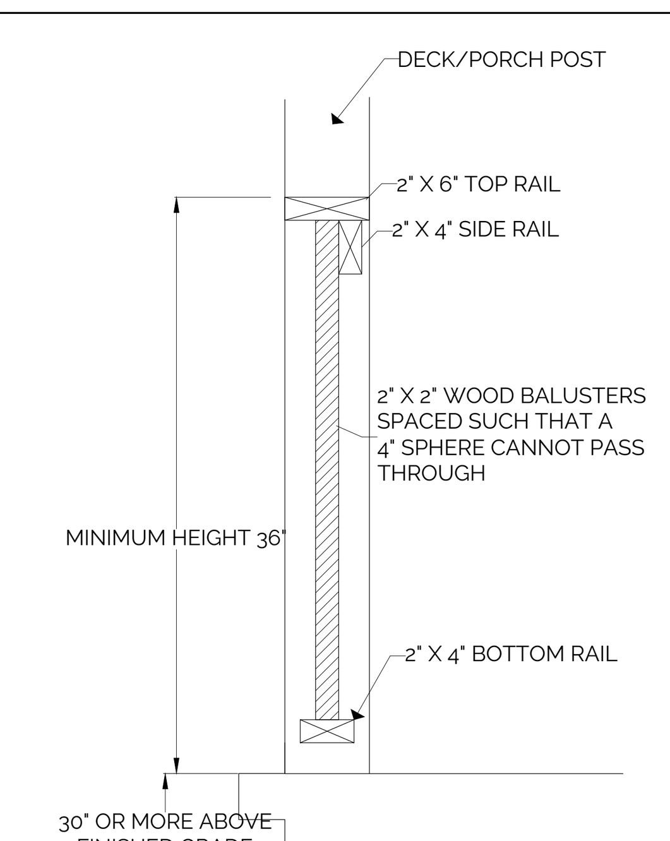
MULTI-LEVEL OPENING CONNECTIONS
NOT TO SCALE (N.T.S)



FLOOR SPACE BLOCKING
NOT TO SCALE (N.T.S)



CHIMNEY FRAMING AND CONNECTION
NOT TO SCALE (N.T.S)



NOTES:

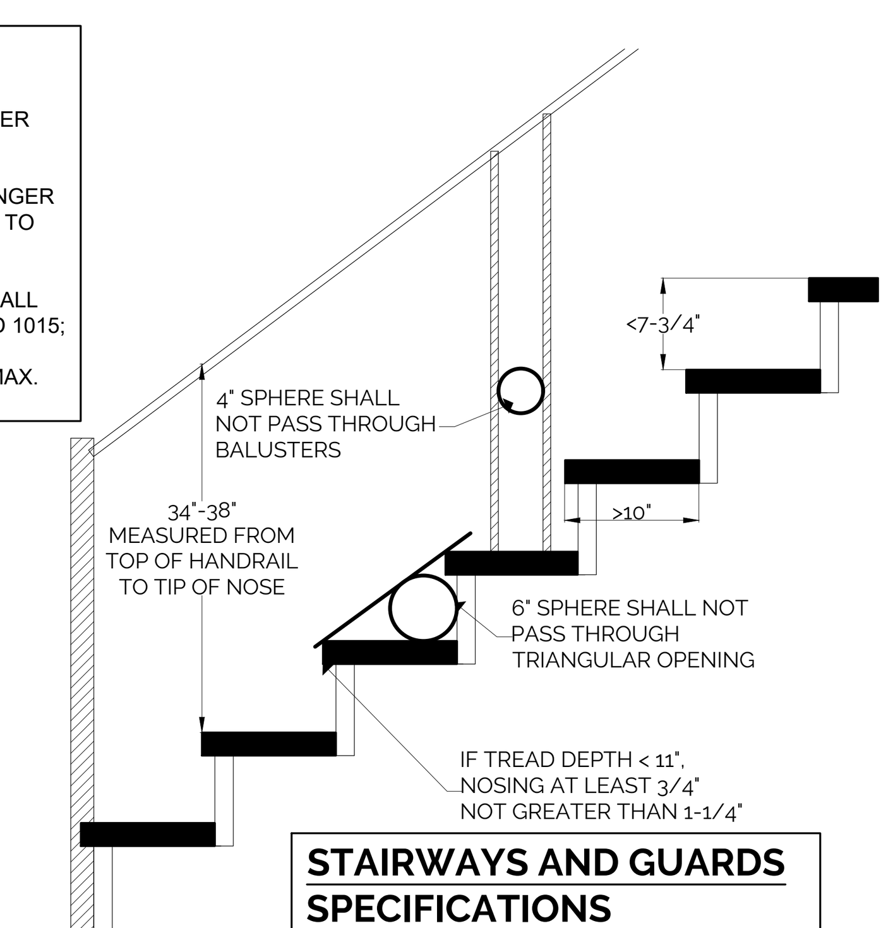
18" MAX. SPACING B/W STRINGERS;
5" MIN. REMAINING OF 2"X STRINGERS AFTER STAIR CUTS;

6' MAX. HORIZONTAL UNSUPPORTED STRINGER SPAN MEASURED FROM RISER ON FLOOR TO SUPPORTED RISER;

STAIRWAYS, HANDRAILS, AND GUARDS SHALL COMPLY W/ FBC SECTIONS 1011, 1014, AND 1015;

3/8" MAX. VARIATION BETWEEN MIN. AND MAX. RISER HEIGHT;

PORCH RAILING SPECIFICATIONS
NOT TO SCALE (N.T.S)



STAIRWAYS AND GUARDS SPECIFICATIONS
NOT TO SCALE (N.T.S)

BAYSIDE ENGINEERING & CONSULTING, LLC
FL ENGINEERING REGISTRY # 34567
J.D. BASS, FL P.E. LICENSE # 78460
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SHALIMAR, FL 32579
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ENGINEERING DRAWINGS AND SPECIFICATIONS

PROJECT ADDRESS AND/OR LOCATION:

S.H.S. CONTRACTING SERVICES, LLC
LOT 14 BLOCK 13 E. MARIGOLD AVE,
DEFUNIAK SPRINGS
WALTON COUNTY, FLORIDA

DRAWN BY: JDB

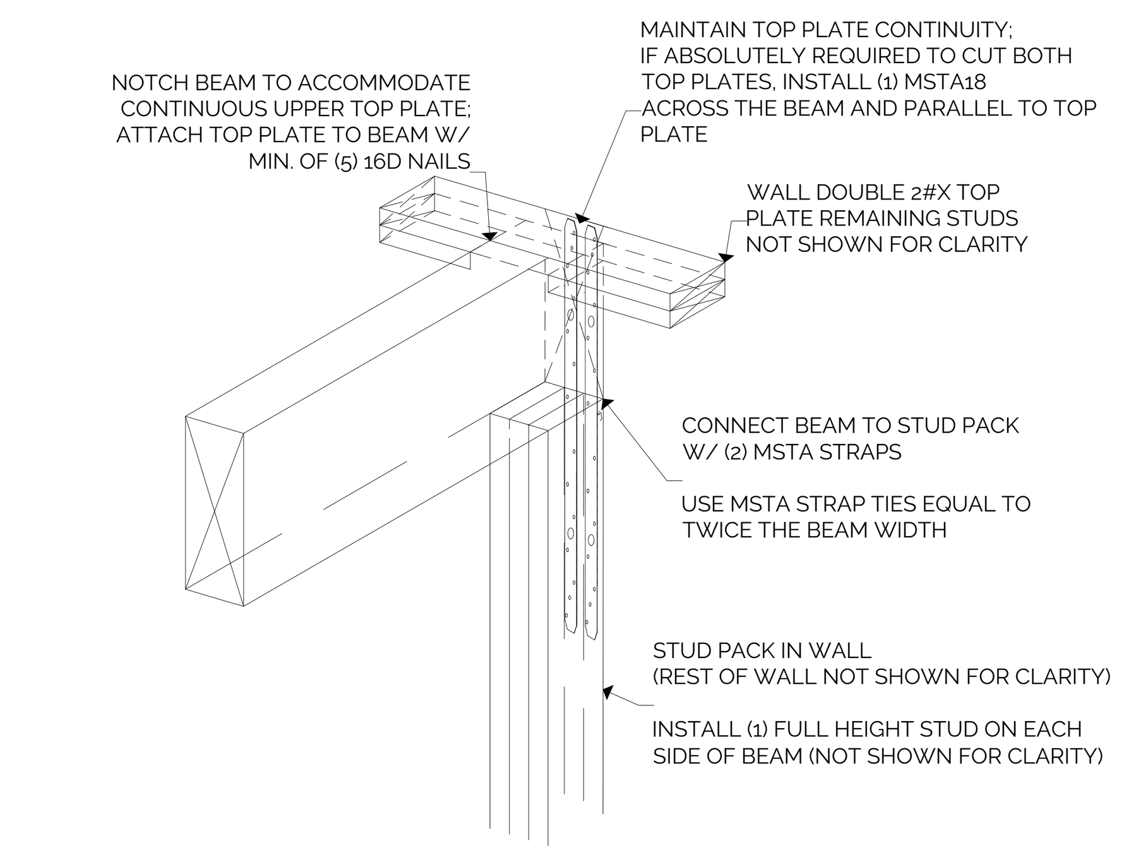
DATE: APR 21, 2025

SCALE: NOT TO SCALE (NTS)

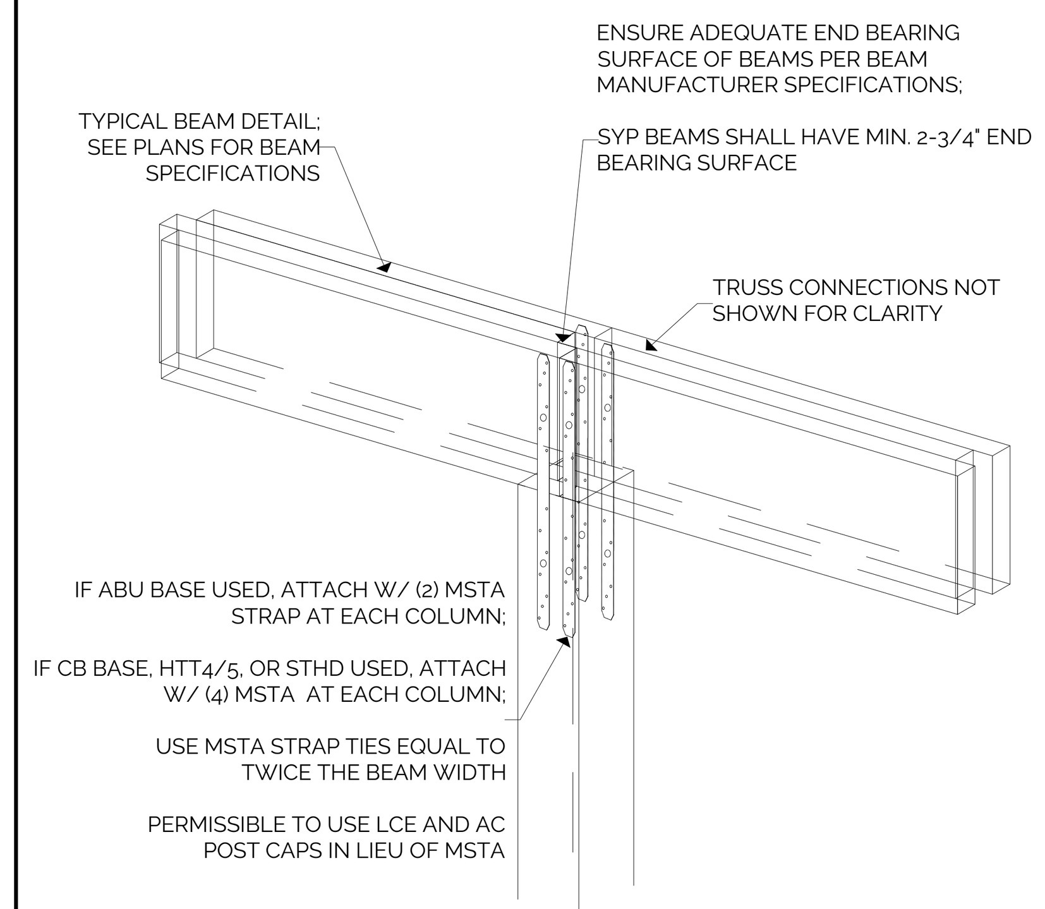
NOTE: ENGINEERING DETAILS AND NOTES TAKE PRECEDENCE OVER ALL OTHER

DRAWING NUMBER:

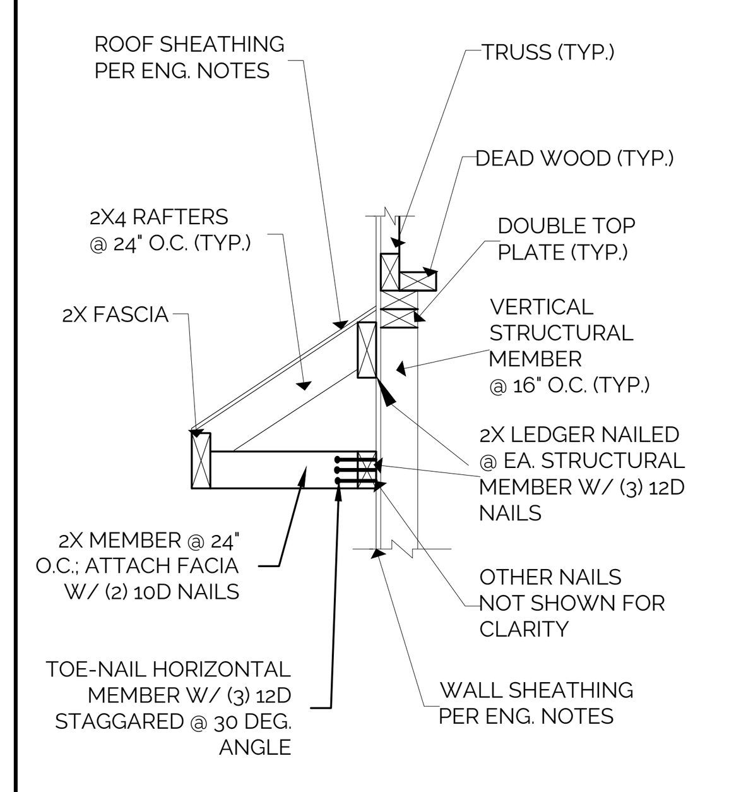
S-2



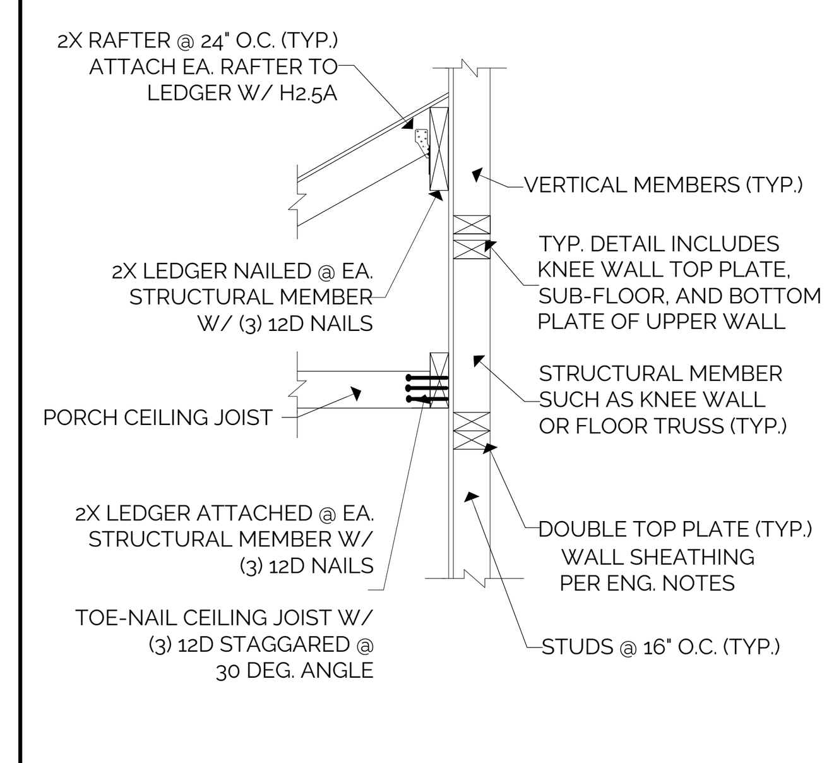
BEAM POCKET
NOT TO SCALE (N.T.S)



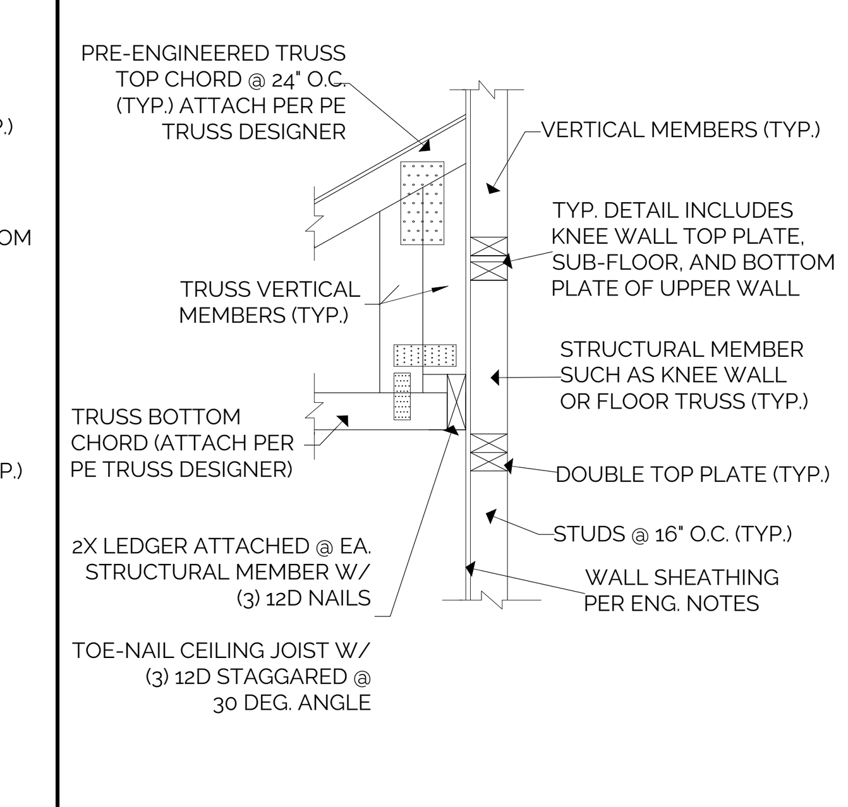
BEAM/POST CONNECTION
NOT TO SCALE (N.T.S)



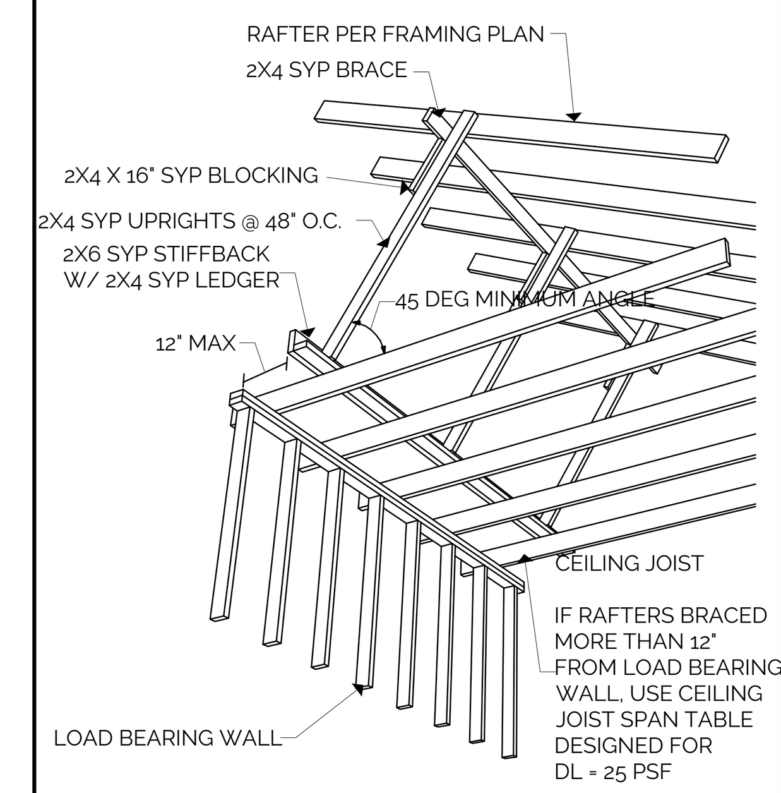
EYEBROW ATTACHMENT
NOT TO SCALE (N.T.S)



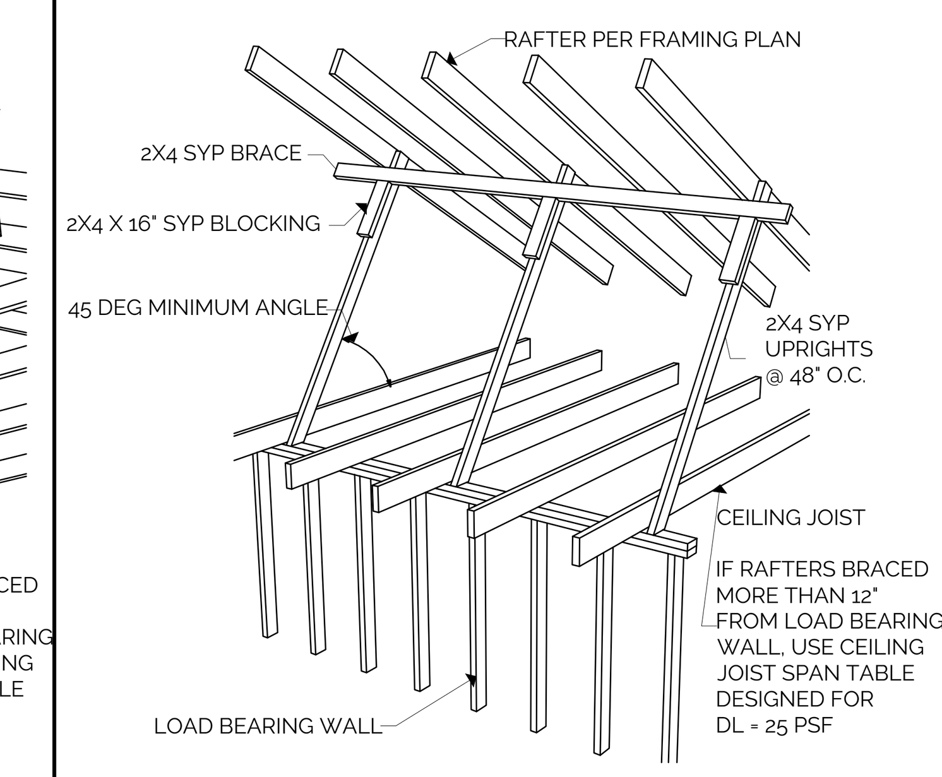
RAFTER/JOIST LEDGER ATTACHMENT
NOT TO SCALE (N.T.S)



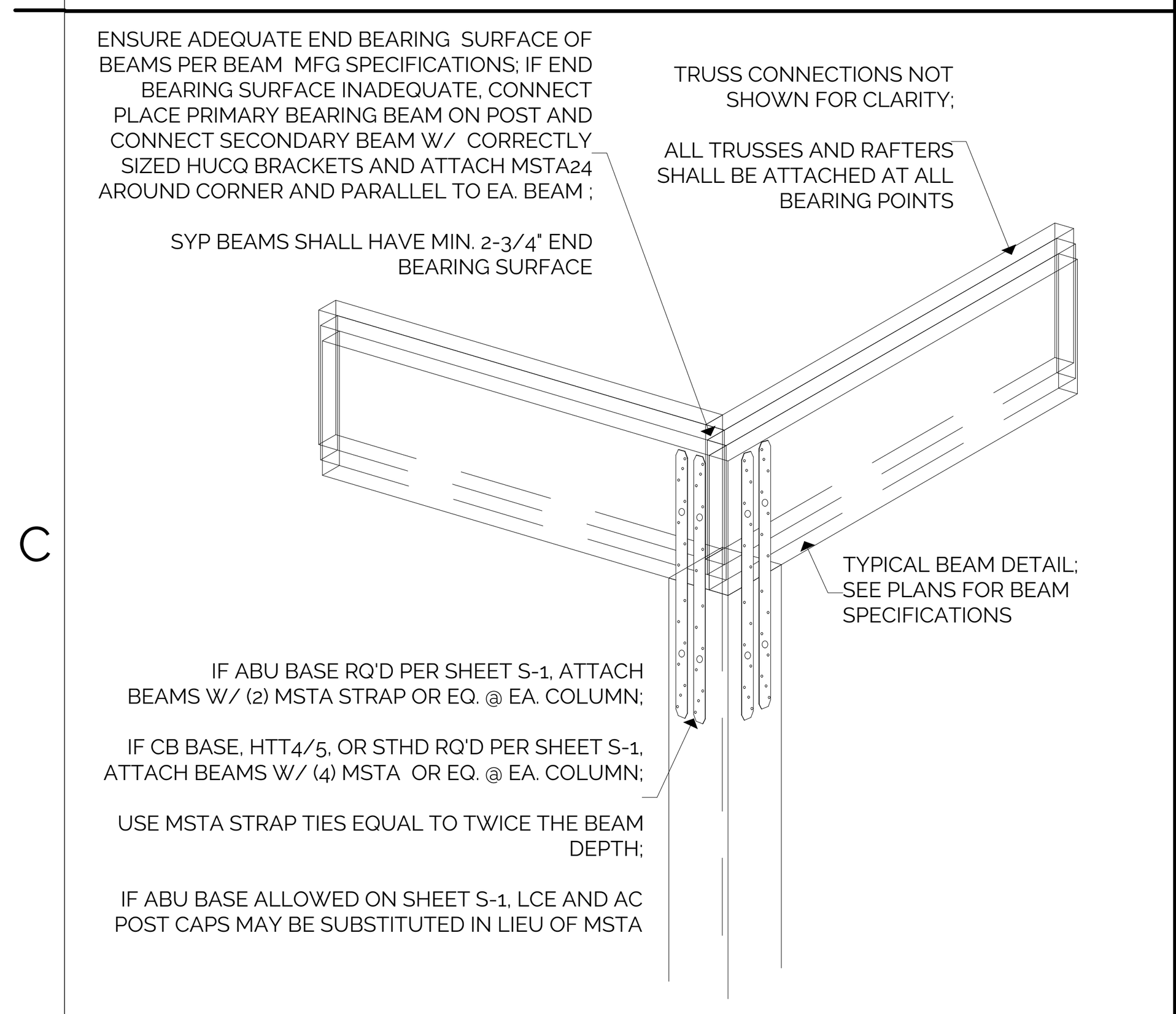
TRUSS LEDGER ATTACHMENT
NOT TO SCALE (N.T.S)



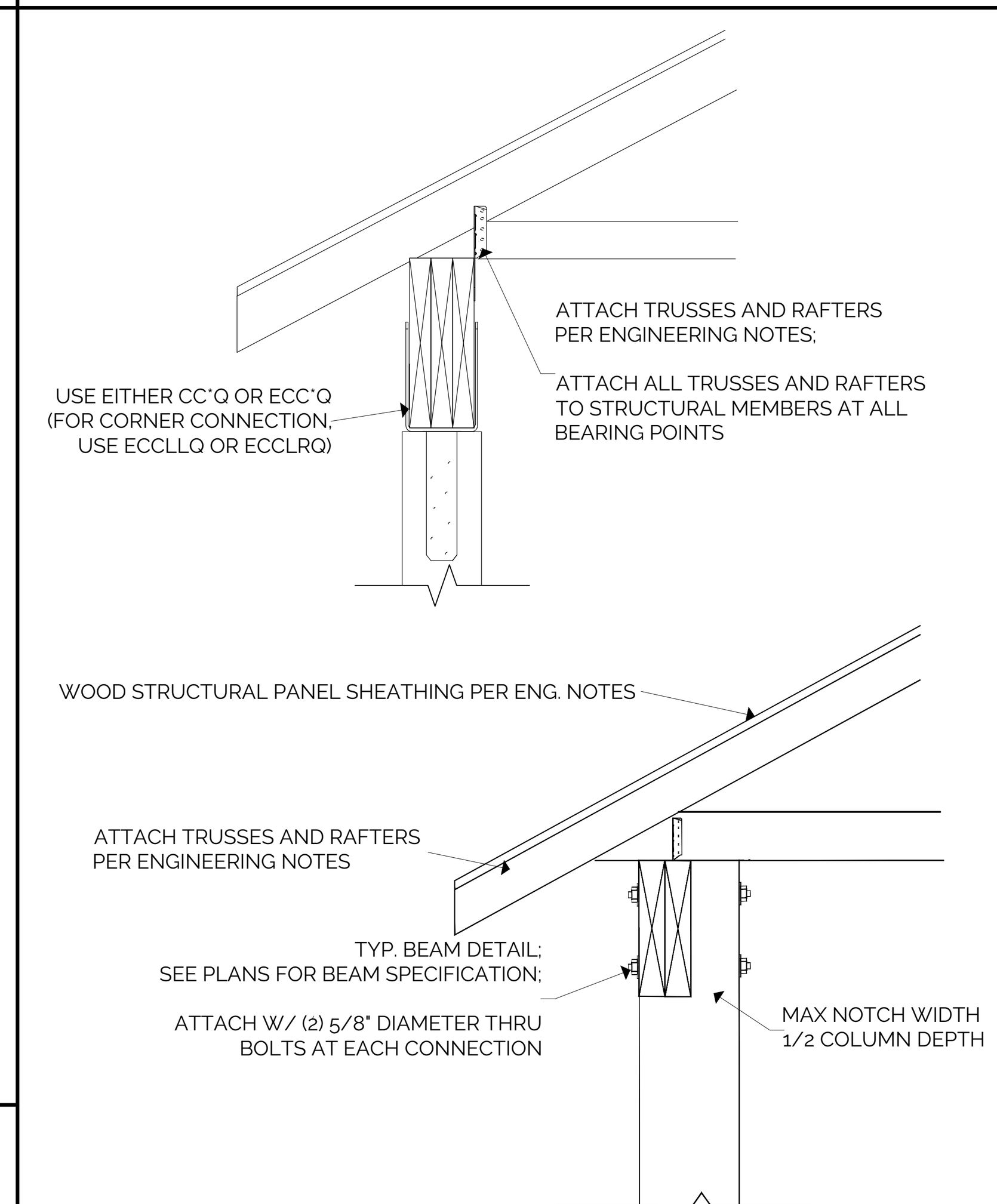
RAFTER BRACING NEAR WALL
NOT TO SCALE (N.T.S)



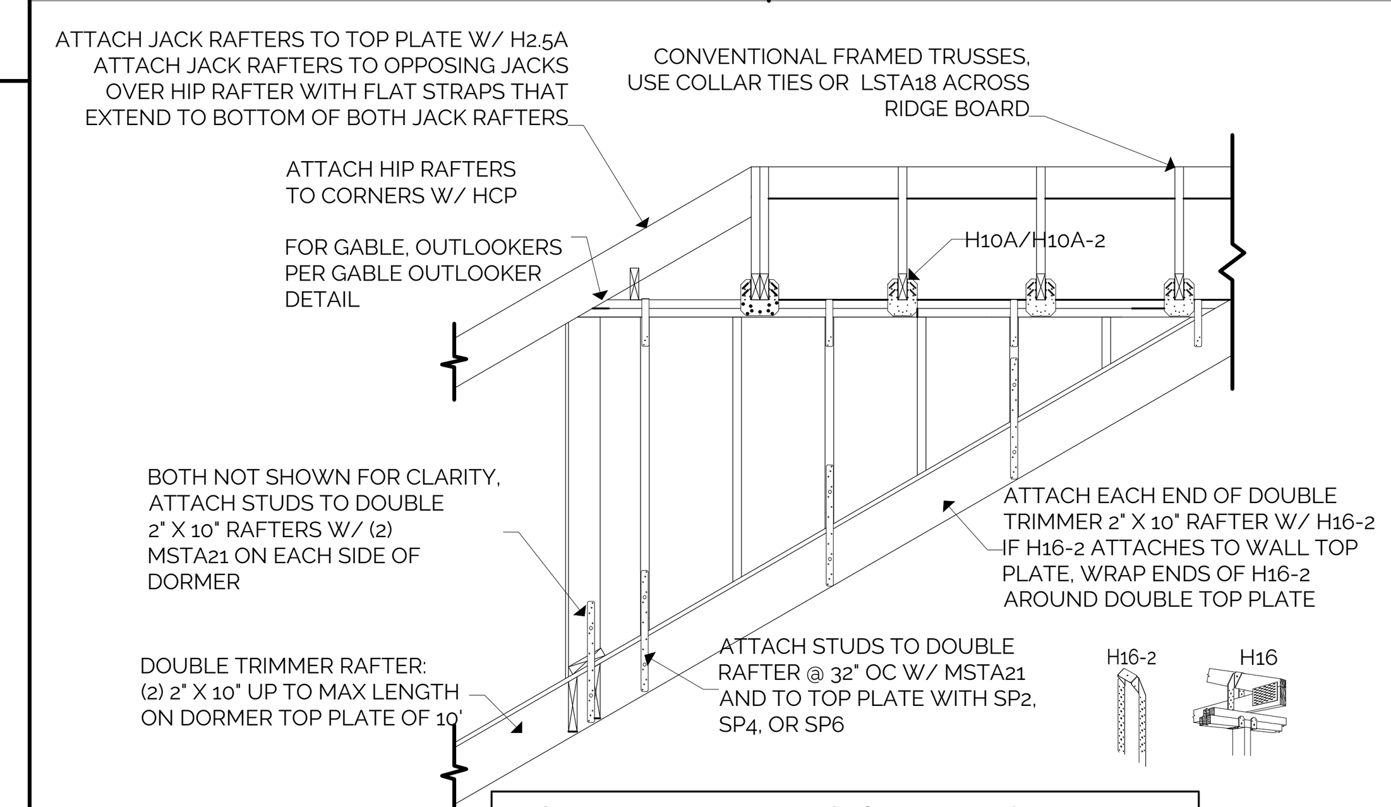
RAFTER BRACING TO WALL
NOT TO SCALE (N.T.S)



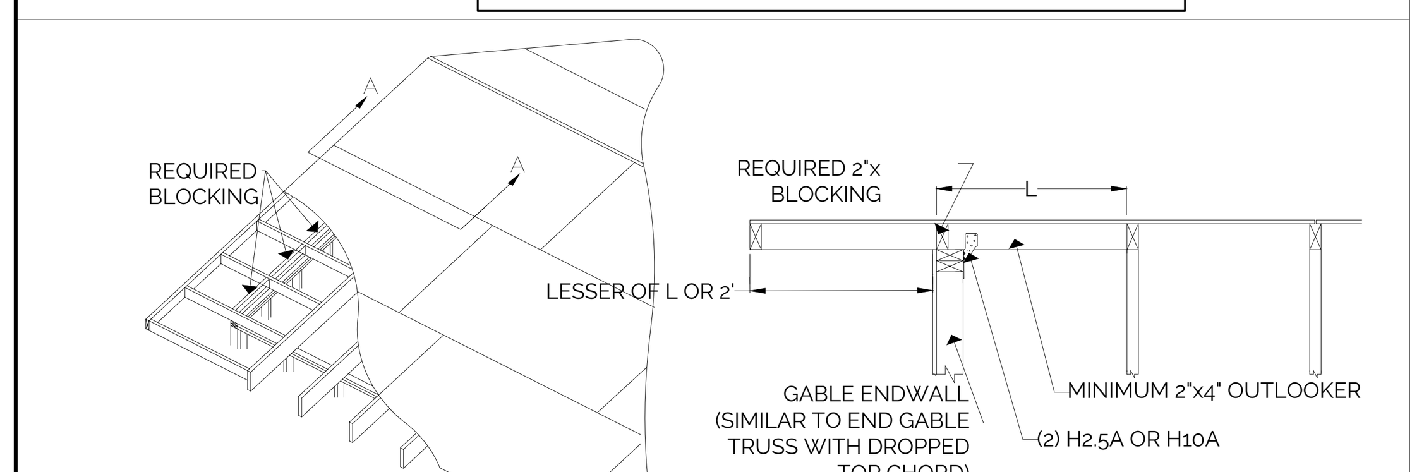
BEAM/POST CONNECTION
NOT TO SCALE (N.T.S)



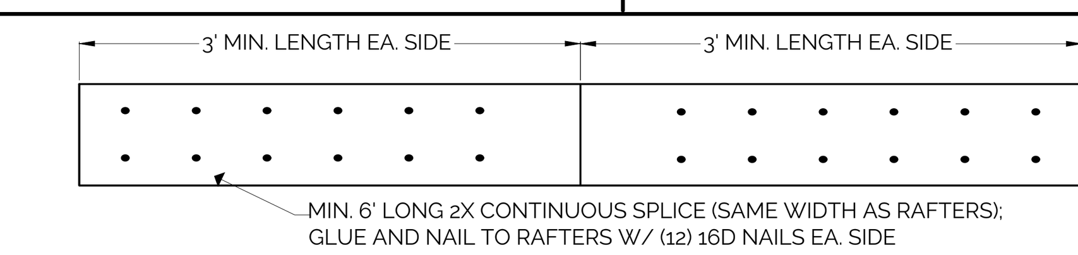
ALTERNATIVE BEAM/POST CONNECTION
NOT TO SCALE (N.T.S)



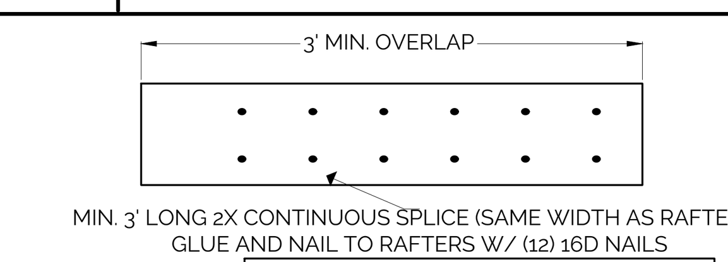
DORMER FRAMING & ATTACHMENT
NOT TO SCALE (N.T.S)



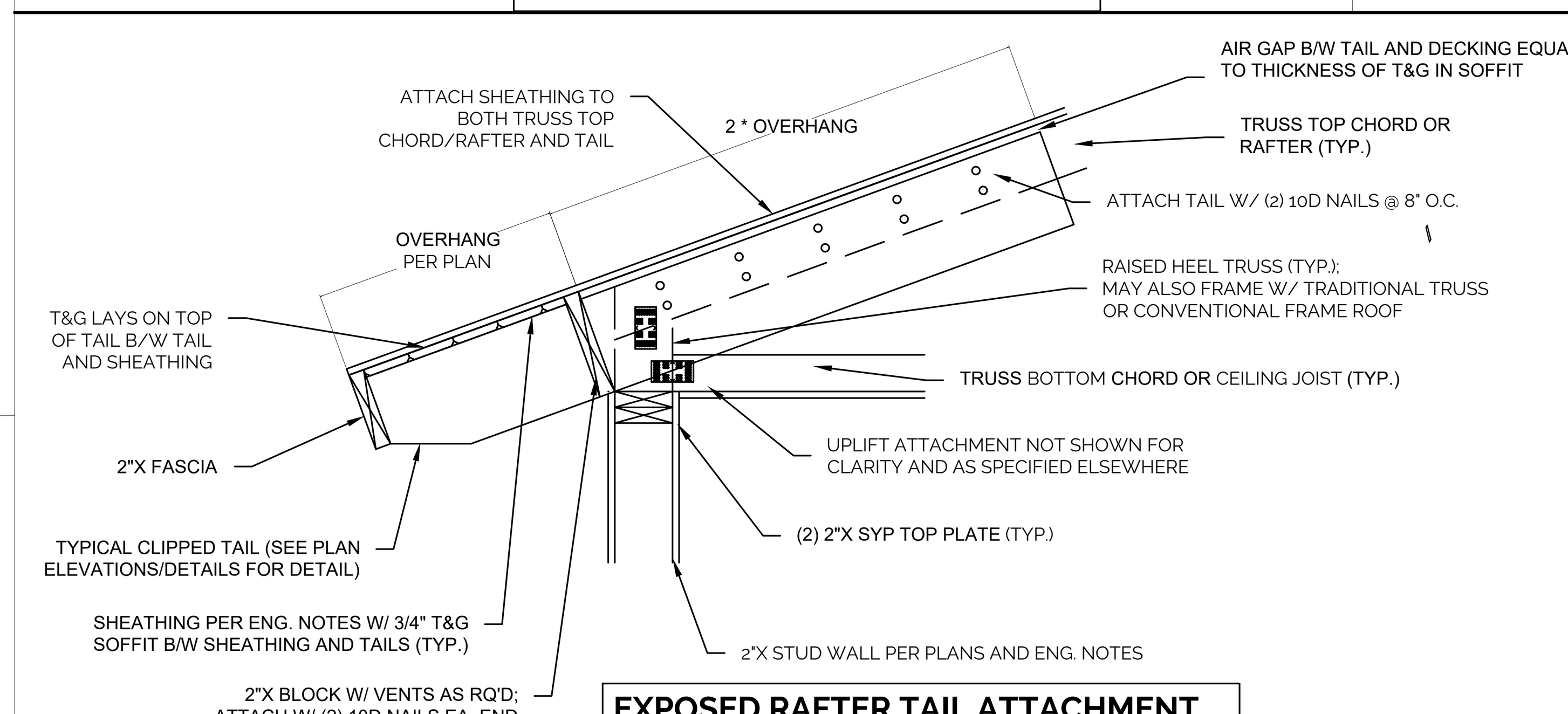
OUTLOOKER ATTACHMENT
NOT TO SCALE (N.T.S)



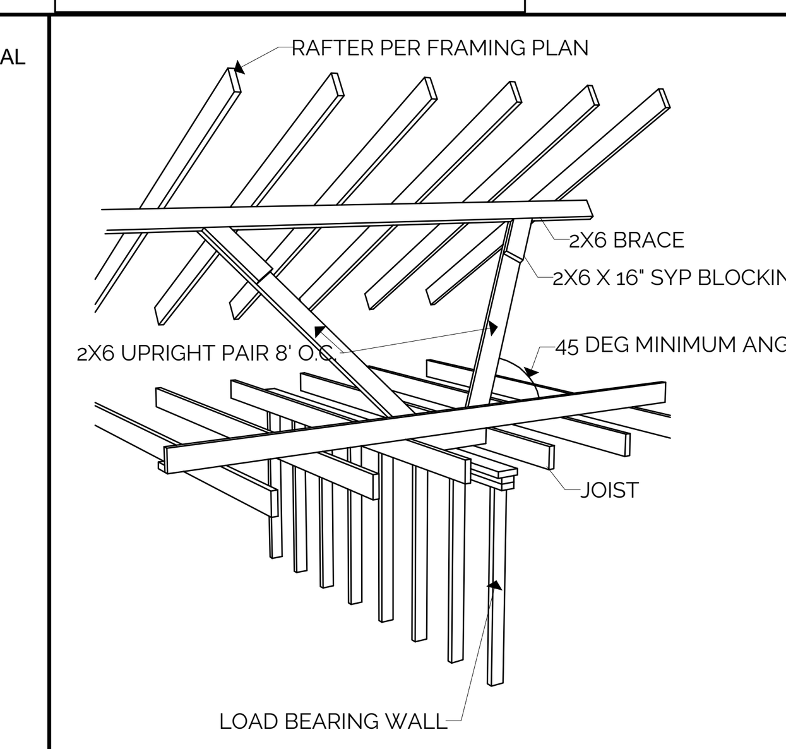
NON-LAPPED RAFTER BUTT JOINT
NOT TO SCALE (N.T.S)



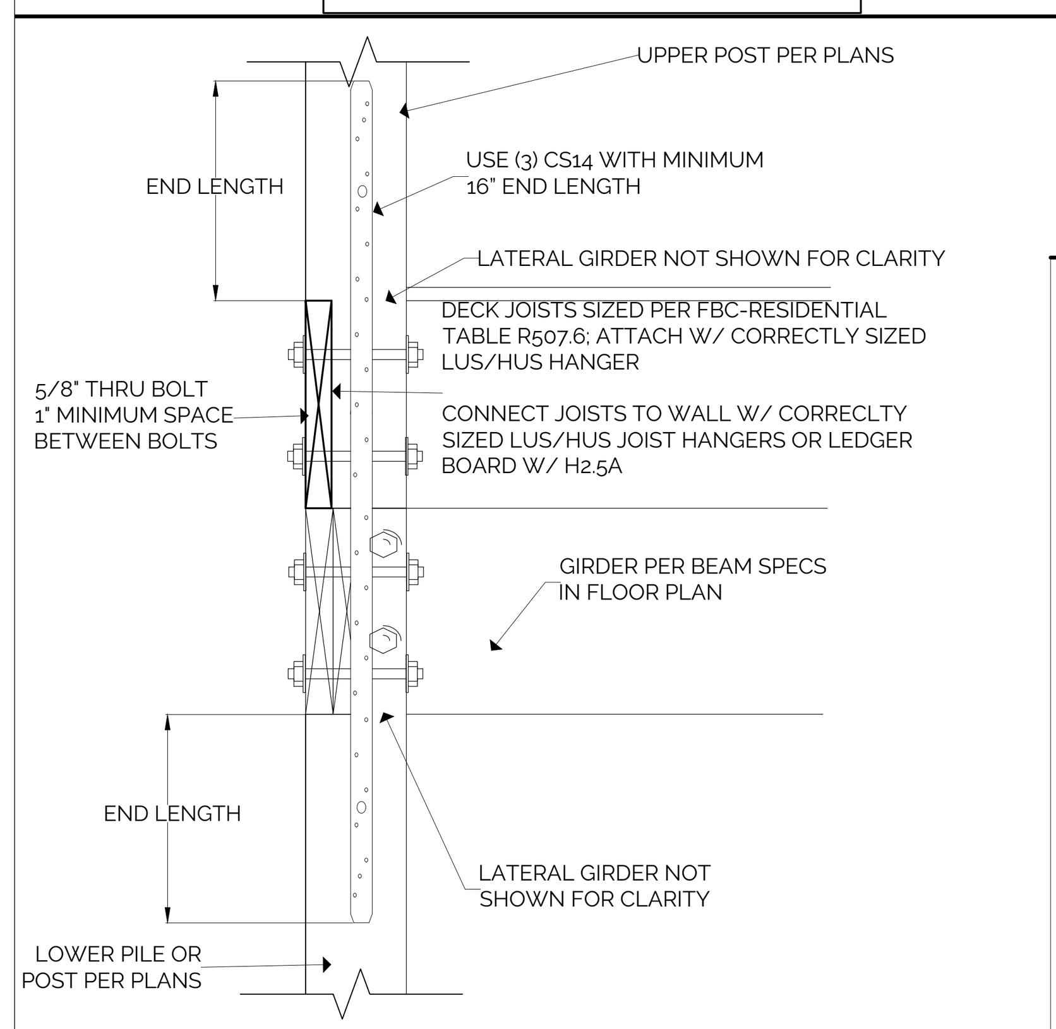
LAPPED RAFTER JOINT
NOT TO SCALE (N.T.S)



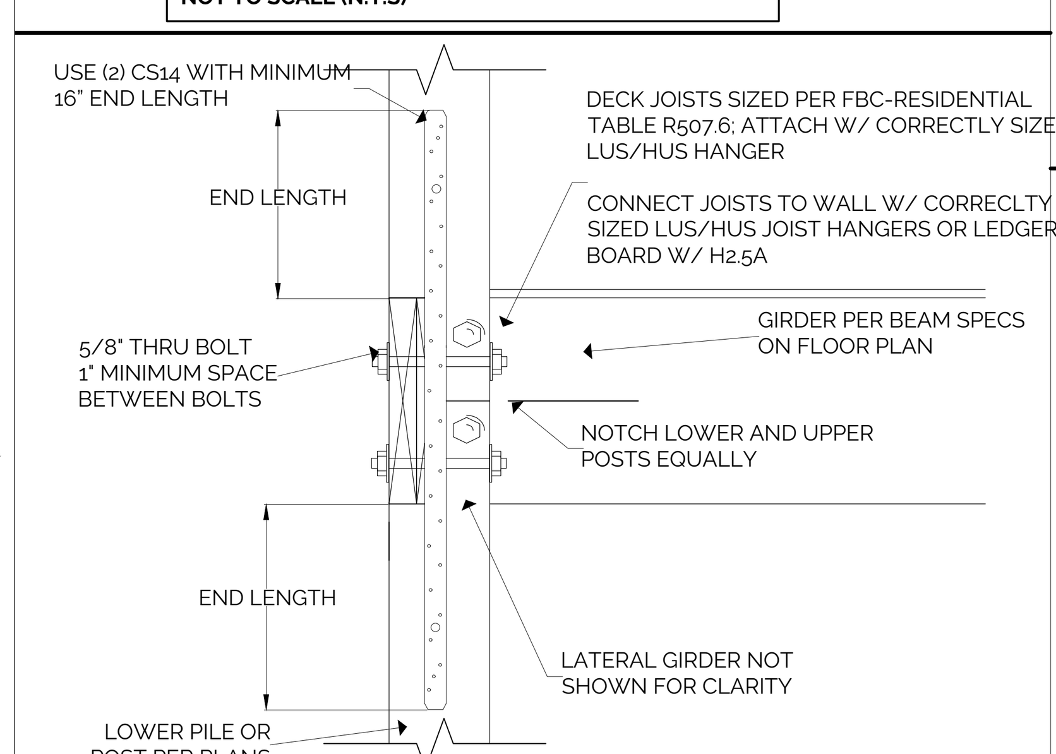
EXPOSED RAFTER TAIL ATTACHMENT
NOT TO SCALE (N.T.S)



RAFTER BRACING TO PARALLEL WALL
NOT TO SCALE (N.T.S)



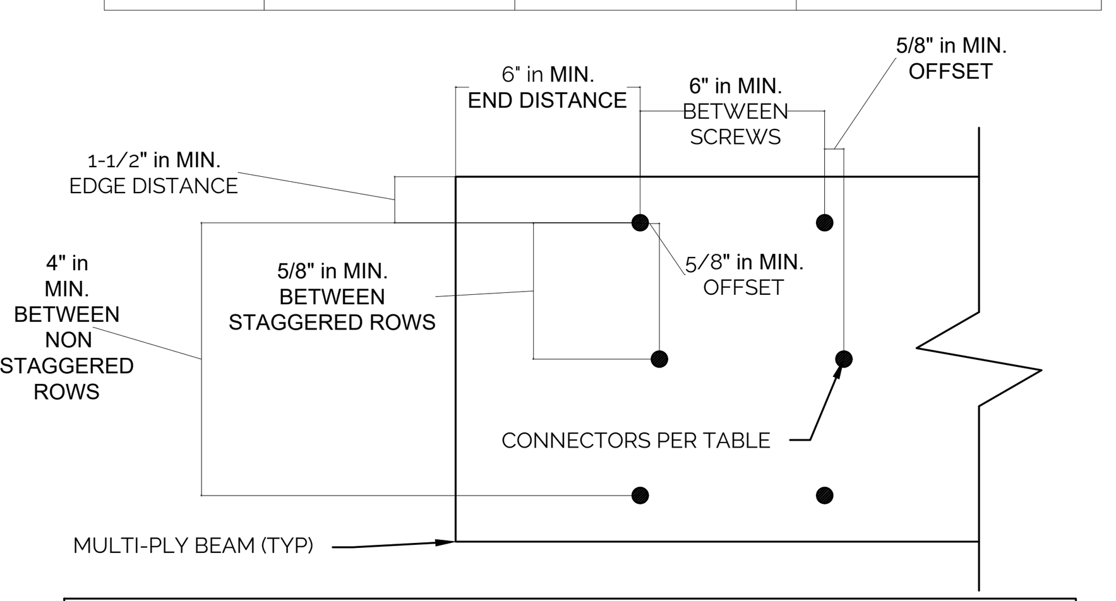
DOUBLE SPAN COLUMN TO COLUMN CONNECTION
NOT TO SCALE (N.T.S)



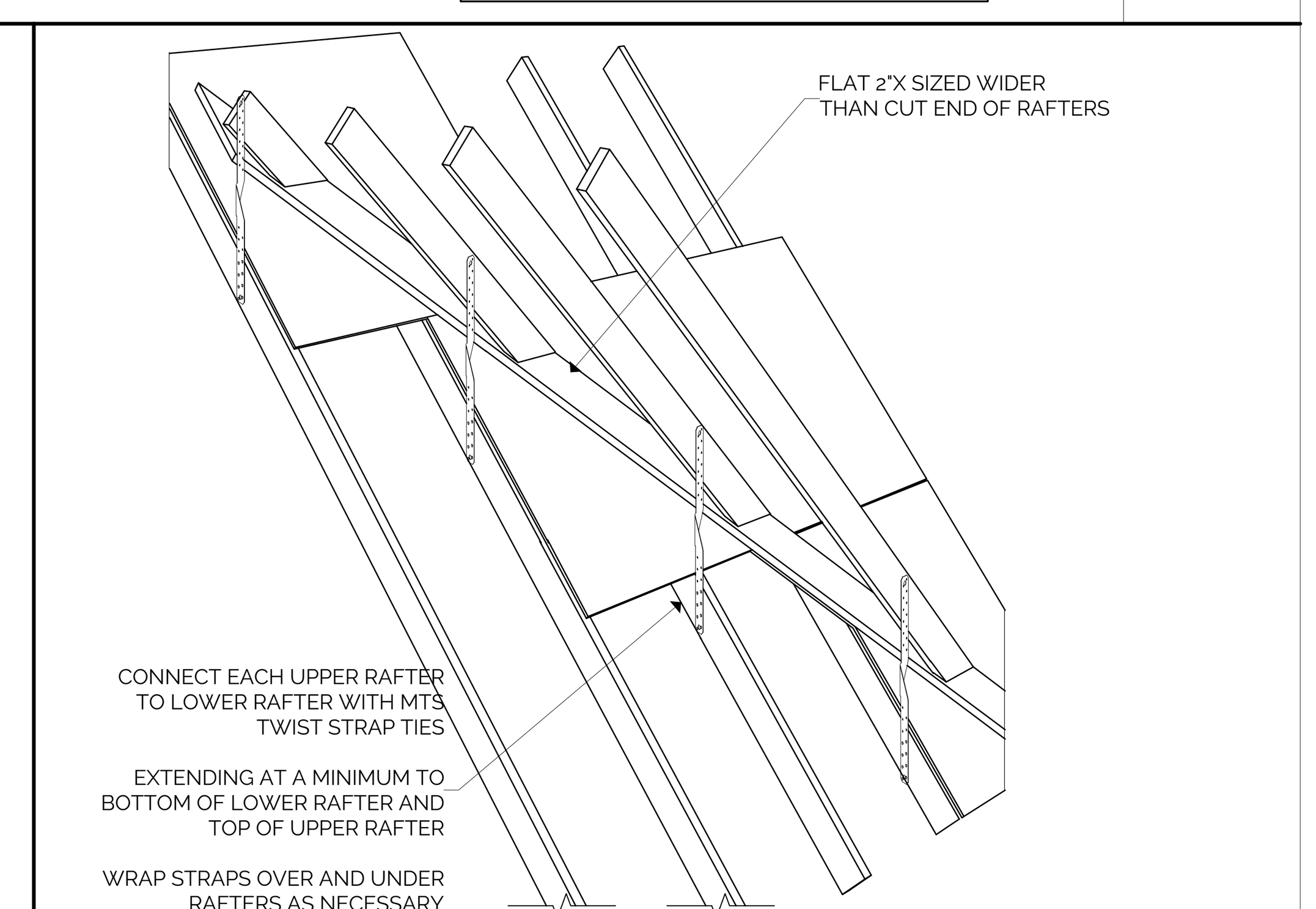
SINGLE SPAN COLUMN TO COLUMN CONNECTION
NOT TO SCALE (N.T.S)

SIDE LOADED AND TOP LOADED BEAM FASTENER SPECIFICATIONS

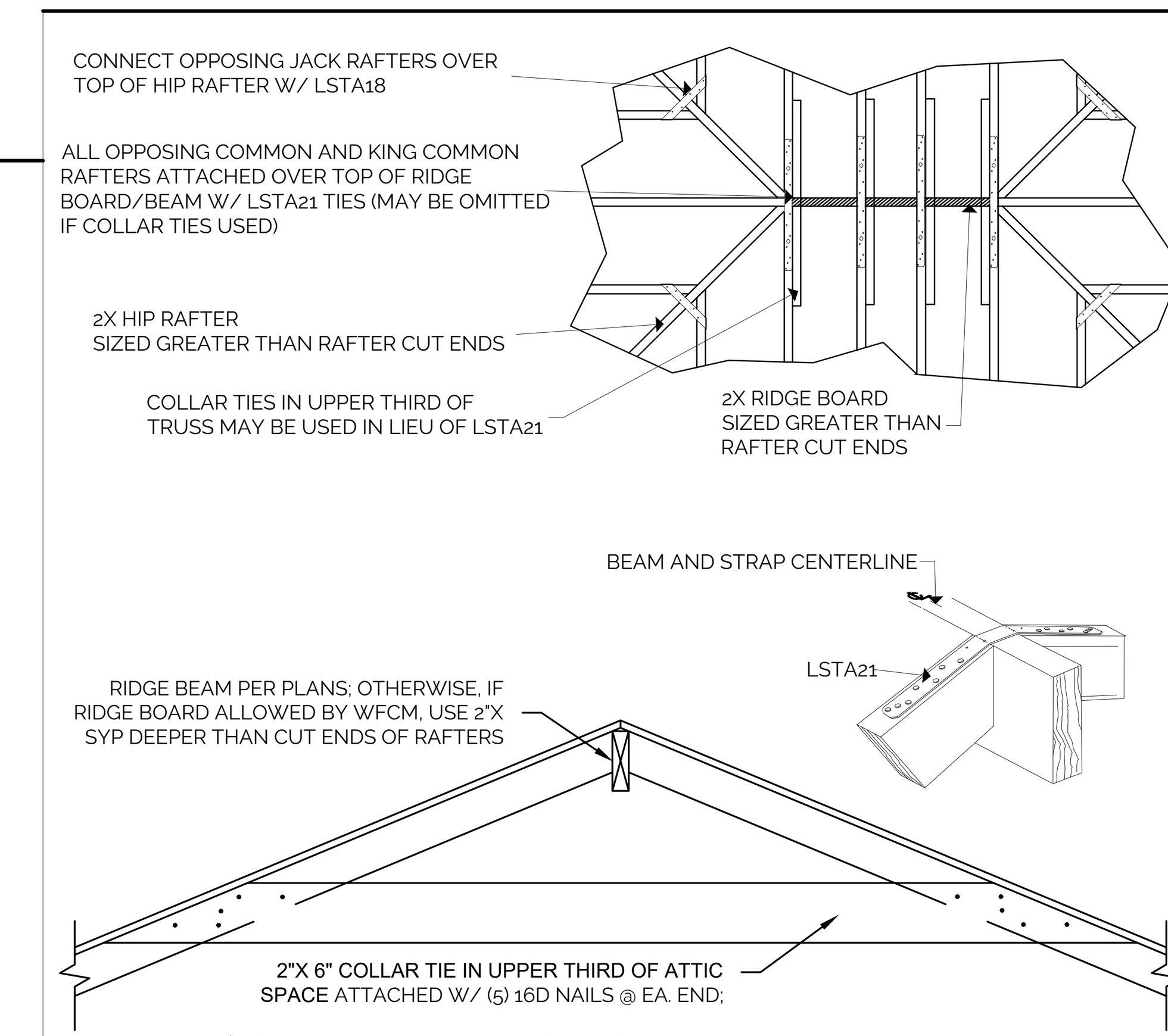
SIDE LOADED BEAMS			TOP LOADED BEAMS
BEAM PLIES	SDW MODEL & LENGTH	# ROWS AND SPACING	# ROWS, NAIL SPEC. AND SPACING
(2)	SDW22338 3-3/8"	(3) ROWS @ 12" O.C.	(3) 10D @ 16" O.C. EA. FACE
(3)	SDW22500 5"	(3) ROWS @ 12" O.C.	
(4)	SDW22634 6-3/4"	(3) ROWS @ 12" O.C.	



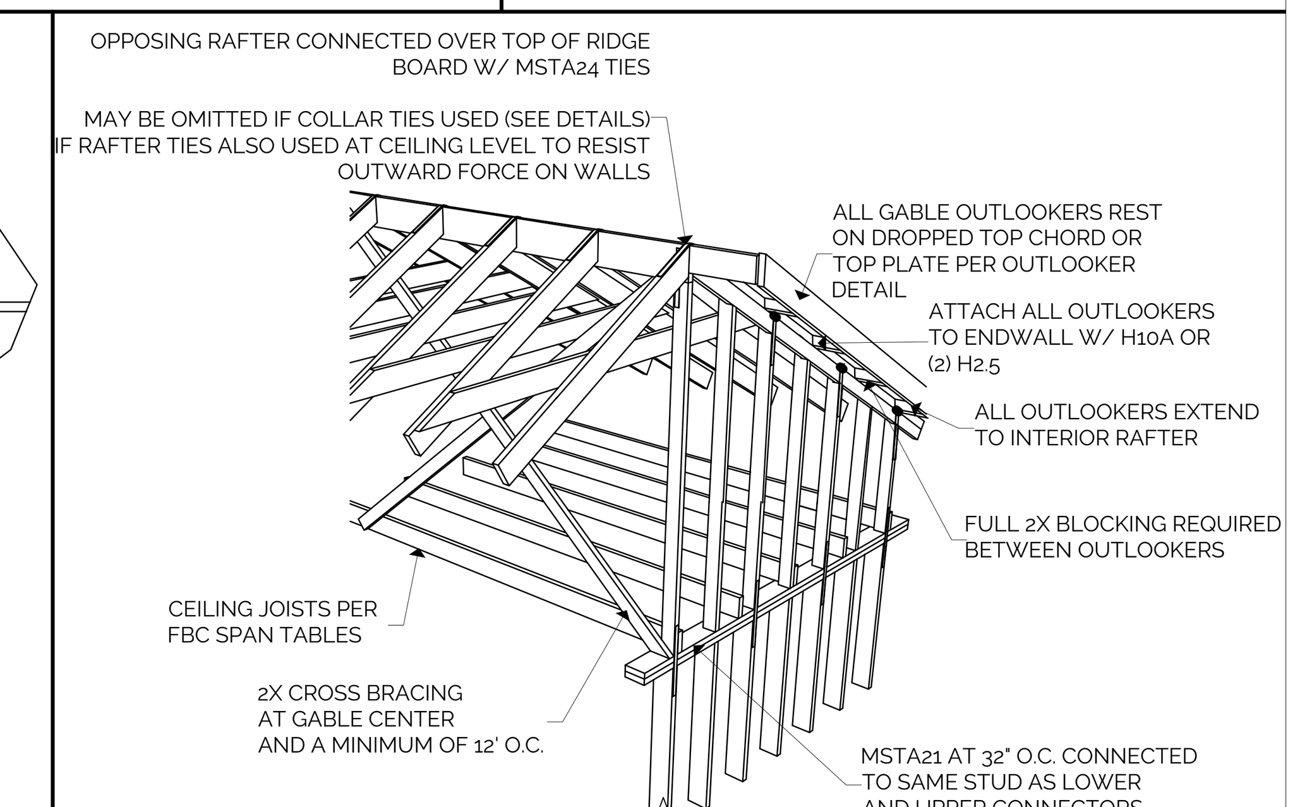
MULTI-PLY BEAM FASTENER SPECIFICATIONS AND SIDE LOADED MULTI-PLY BEAM CONNECTIONS
NOT TO SCALE (N.T.S)



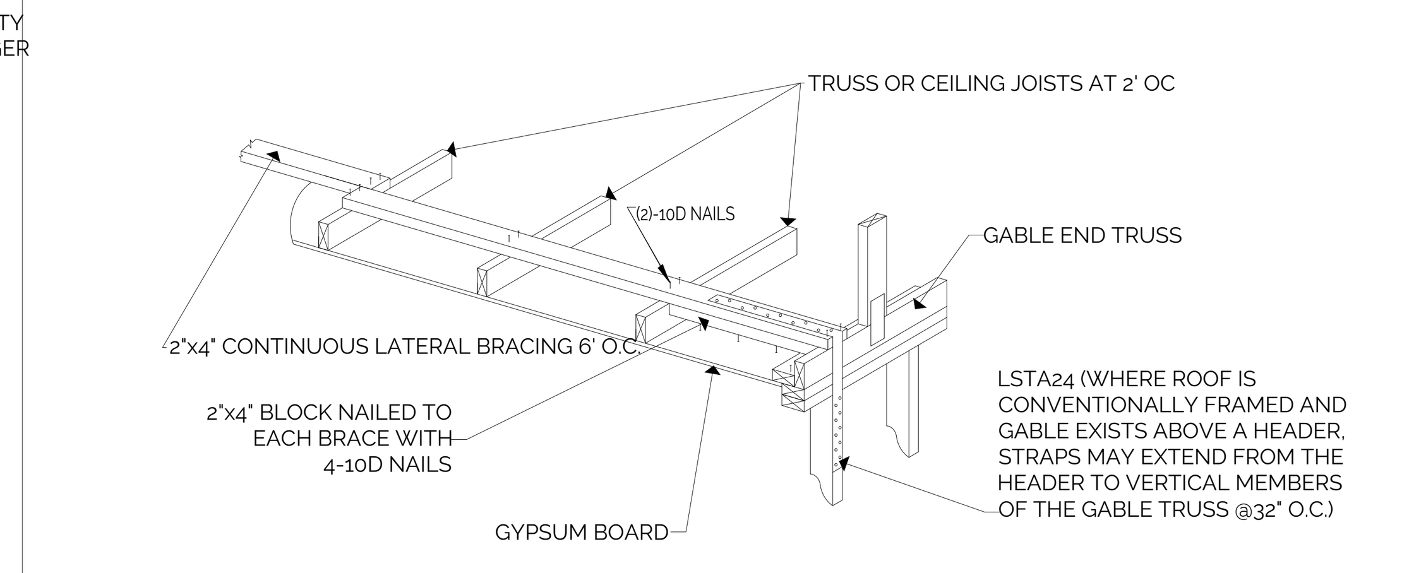
LAY ON VALLEY CONNECTION
NOT TO SCALE (N.T.S)



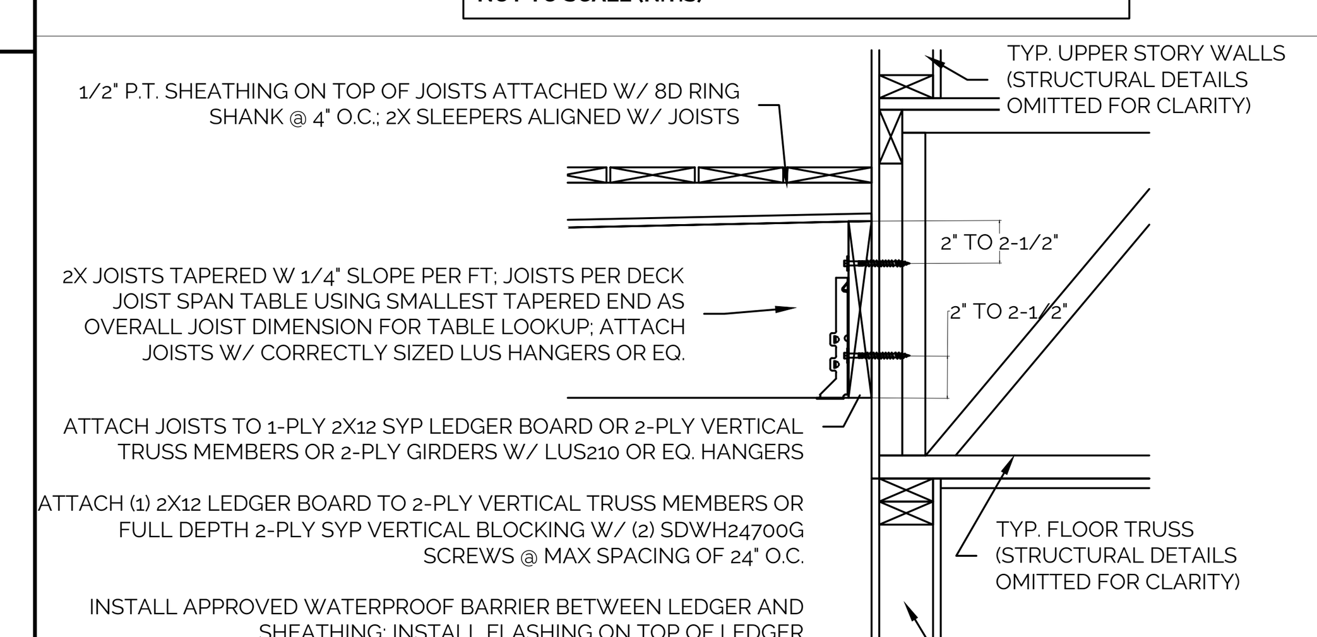
CONVENTIONAL FRAMED RIDGE ATTACHMENT
NOT TO SCALE (N.T.S)



GABLE END PLATFORM FRAMING
NOT TO SCALE (N.T.S)

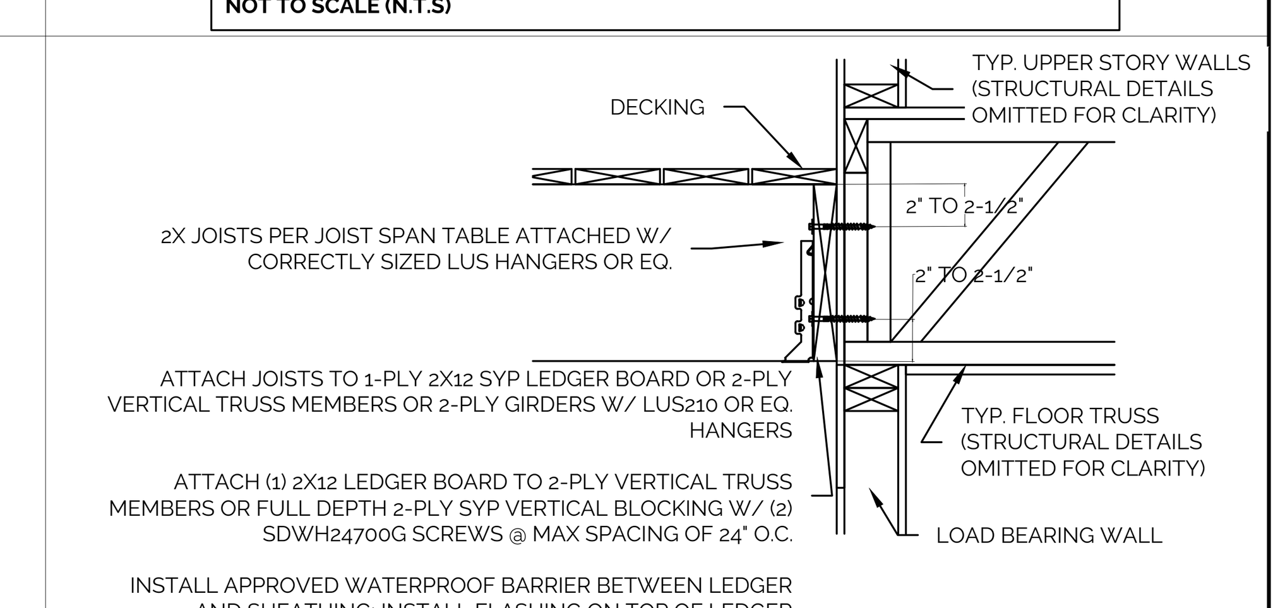


GABLE ENDWALL CEILING BRACING
NOT TO SCALE (N.T.S)



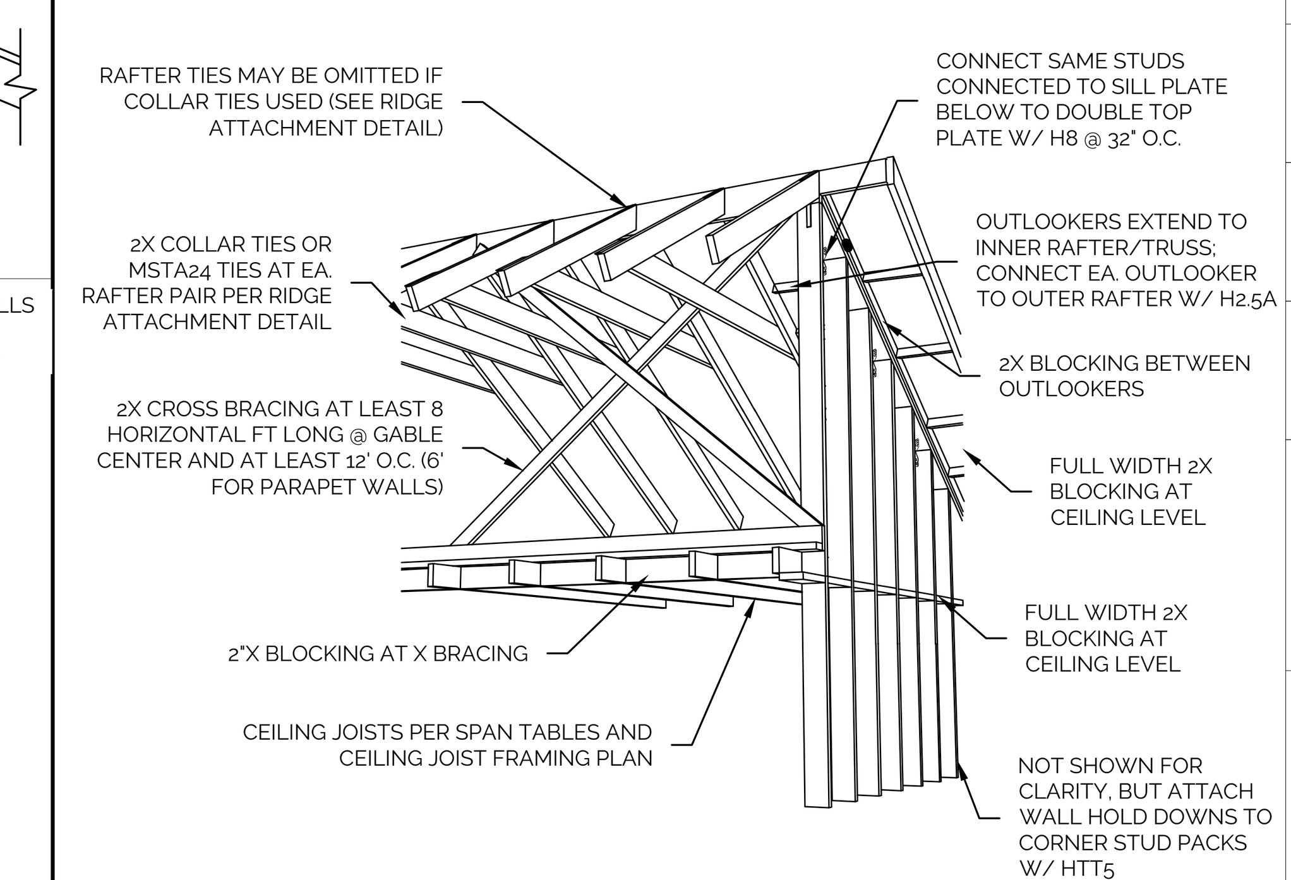
NOTE:
THIS DETAIL DOES NOT APPLY TO BALCONIES W/O DIRECT GRAVITY LOAD PATHS TO THE GROUND AT EA. CORNER; THOSE BALCONIES SHALL BE CANTILEVERED. CONTACT EOR FOR CLARIFICATION

WATERPROOFED DECK ATTACHMENT
NOT TO SCALE (N.T.S)



NOTE:
THIS DETAIL DOES NOT APPLY TO BALCONIES W/O DIRECT GRAVITY LOAD PATHS TO THE GROUND AT EA. CORNER; THOSE BALCONIES SHALL BE CANTILEVERED. CONTACT EOR FOR CLARIFICATION

DECK ATTACHMENT (TYP.)
NOT TO SCALE (N.T.S)



GABLE END BALLOON FRAMING
NOT TO SCALE (N.T.S)

BAYSIDE ENGINEERING & CONSULTING, LLC
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15 GRANDVIEW DR
SHALIMAR, FL 32579
EMAIL: JOE.BASS@BAYSIDE-ENG.COM
PH: (850) 982-7515

ENGINEERING DRAWINGS AND SPECIFICATIONS

IF THIS DOCUMENT IS DIGITALLY SIGNED AND SEALED ON ANY ONE PAGE, THE FOLLOWING APPLIES:

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY J.D. BASS ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

IF THIS DOCUMENT DOES NOT CONTAIN A VALID P.E. SEAL AND SIGNATURE, IT IS NOT CONSIDERED A FINAL DESIGN DOCUMENT.

PROJECT ADDRESS AND/OR LOCATION:

S.H.S. CONTRACTING SERVICES, LLC
LOT 14 BLOCK 13 E. MARIGOLD AVE.,
DEFUNIAK SPRINGS
WALTON COUNTY, FLORIDA

DRAWN BY: JDB

DATE: JUL 8, 2025

SCALE: NOT TO SCALE (NTS)

NOTE: ENGINEERING DETAILS AND NOTES TAKE PRECEDENCE OVER ALL OTHER

DRAWING NUMBER:

S-3

SECTION 1. – DESIGN CRITERIA

A. CONSTRUCTION SHALL COMPLY WITH ALL THE FOLLOWING CODES AND GUIDANCE DOCUMENTS

i. 2023 FLORIDA BUILDING CODE, RESIDENTIAL (FBC-R), 8TH EDITION

ii. AWC: WOOD FRAME CONSTRUCTION MANUAL FOR ONE- AND TWO-FAMILY DWELLINGS, LATEST EDITION.

iii. AWC: SPECIAL DESIGN PROVISIONS FOR WIND AND SEISMIC (SDPWS), LATEST EDITION

iv. AITC: TIMBER CONSTRUCTION MANUAL, LATEST EDITION

v. ACI: CODE REQUIREMENTS FOR RESIDENTIAL CONCRETE, LATEST EDITION (ACI 332)

vi. ACI: BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES, LATEST EDITION (TMS 402/602)

vii. ACI: BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, LATEST EDITION (ACI 318)

viii. CRSI: PLACING REINFORCING BARS, LATEST EDITION

B. DESIGN LOADS

GENERAL		FLOOR TRUSS DESIGN LOADS		ROOF TRUSS DESIGN LOADS	
FLOOR	40 PSF	TCLL	40 PSF	TCLL	20 PSF
DECKS	40 PSF	TCDL	15 PSF	TCDL	15 PSF (SHINGLES AND METAL) 35 PSF (CLAY, TILE, ETC.)
BALCONIES	40 PSF	BCLL	0 PSF	BCLL	0 PSF (EXCEPTIONS PER FBC TABLE R301.5)
ROOF	20 PSF	BCDL	10 PSF	BCDL	10 PSF
		NOTE: AS NOTED ON FLOOR PLANS, INTERIOR SHEAR WALLS BEARING ON FLOOR TRUSS SYSTEMS SHALL BEAR ON FULL LENGTH (3) 1-3/4"X 16" LVL'S			

C. MAIN WIND FORCE RESISTING SYSTEM (MWFRS) DESIGN ASSUMPTIONS

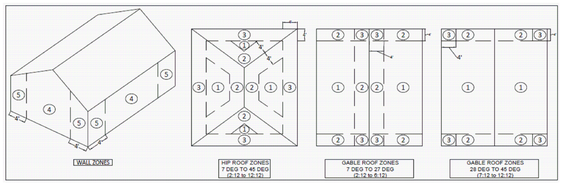
ULTIMATE DESIGN WIND SPEED, V_{ULT}	140 (IF WALTON COUNTY, BY INTERPOLATION)
IMPORTANCE FACTOR	1
RISK CATEGORY	II
EXPOSURE CATEGORY	B
INTERNAL PRESSURE COEFFICIENT	-0.18 TO +0.18
BUILDING TYPE	ENCLOSED
MEAN ROOF HEIGHT	40'

D. MAIN WIND FORCE RESISTING SYSTEM (MWFRS) DESIGN METHOD – DIRECTIONAL PROCEDURE:

ZONE	CONDITION	SIDE	PSF
WALL	WORST CASE: (GC_{Pn}), 4TH STORY (WHERE APPLICABLE)	WINDWARD	
WALL	WORST CASE: (GC_{Pn}), 3RD STORY (WHERE APPLICABLE)	WINDWARD	26.17
WALL	WORST CASE: (GC_{Pn}), 2ND STORY (WHERE APPLICABLE)	WINDWARD	24.07
WALL	WORST CASE: (GC_{Pn}), 1ST STORY	WINDWARD	22.15
ROOF	WORST CASE: NORMAL TO RIDGE	LEEWARD	-21.00
OVERHANG	WORST CASE: NORMAL TO RIDGE	LEEWARD	-36.22

E. ALL COMPONENTS AND CLADDING SHALL COMPLY WITH THE FOLLOWING DESIGN PRESSURES CONSISTENT WITH FBC, RESIDENTIAL TABLE R301.2(2) AND FIGURE R301.2(7):

	ZONES PER FIGURE R301.2(7)	EFFECTIVE WIND AREA (SQ FT)	LOADS (PSF)	
			(+)	(-)
GABLE ROOF > 7° TO 20° (INCL. 2:12 & 4:12)	1	ALL	15.3	-42.6
	2	ALL	15.3	-56.2
	3	ALL	15.3	-73.9
GABLE ROOF > 20° TO 27° (INCL. 5:12 & 6:12)	1	ALL	15.3	-32.8
	2	ALL	15.3	-52.3
	3	ALL	15.3	-62.1
GABLE ROOF > 27° TO 45° (INCL. 7:12 TO 12:12)	1	ALL	21.1	-38.7
	2	ALL	21.1	-42.6
	3	ALL	21.1	-52.3
HIP ROOF 7° TO 20° (INCL. 3:12 & 4:12)	1	ALL	17.2	-38.7
	2	ALL	17.2	-50.5
	3	ALL	17.2	-54.3
HIP ROOF > 20° TO 27° (INCL. 5:12 & 6:12)	1	ALL	17.2	-30.8
	2	ALL	17.2	-42.6
	3	ALL	17.2	-42.6
HIP ROOF > 27° TO 45° (INCL. 7:12 TO 12:12)	1	ALL	17.2	-32.8
	2	ALL	17.2	-38.7
	3	ALL	17.2	-50.5
WALLS	4	10	23.1	-25.0
	4	20	22.0	-24.0
	4	50	20.6	-22.6
	4	100	19.6	-21.6
	5	10	23.1	-30.8
	5	20	22.0	-28.8
	5	50	20.6	-26.1
	5	100	19.6	-24.0



F. PRESUMPTIVE LOAD-BEARING CAPACITY OF SOIL (DEVIATIONS REQUIRE ENGINEER APPROVAL).

i. FBC TABLE R401.4.1 ASSOCIATES 2,000 PSF SOIL BEARING CAPACITY WITH CLASS OF MATERIALS, "SAND, SILTY SAND, CLAYEY SAND, SILTY GRAVEL AND CLAYEY GRAVEL," WHICH ARE TYPICAL FOR THIS GEOGRAPHIC REGION; THEREFORE, PER FBC R401.4.1, SOIL BEARING CAPACITY IS ASSUMED TO BE 2,000 PSF.

ii. THE ENGINEER OF RECORD (EOR) HAS NOT ASSESSED THE SITE OR SOIL. THE EOR HIGHLY RECOMMENDS THE OWNER OBTAIN A GEOTECHNICAL ASSESSMENT BY A LICENSED GEOTECHNICAL ENGINEER TO ASSESS SOIL BEARING CAPACITY AND STABILITY AND TO REVIEW THE PROPOSED FOUNDATION SYSTEM AND PROVIDED RECOMMENDATIONS AS NECESSARY.

SECTION 2. – GENERAL CONSTRUCTION

A. ENGINEERING DRAWINGS SHOWN ARE TYPICAL AND NOT TO SCALE (NTS).

B. EVERY EFFORT HAS BEEN MADE TO AVOID ERRORS; IF A DISCREPANCY EXISTS, THE MORE RESTRICTIVE AND CONSERVATIVE INTERPRETATION CONTROLS THAT SPECIFICATION OR DETAIL UNTIL THE EOR PROVIDES WRITTEN CLARIFICATION STATING OTHERWISE.

C. ALTHOUGH, A SURVEY AND/OR SITE PLAN MAY BE INCLUDED IN THE ENGINEERED SET FOR REFERENCE, THE ENGINEER HAS NOT REVIEWED EITHER AND MAKES ABSOLUTELY NO CLAIM WHATSOEVER AS TO IT/THEIR ACCURACY OR CORRECTNESS.

D. GENERALLY, IF A DISCREPANCY EXISTS BETWEEN PLANS AND ENGINEERING DETAILS OR NOTES, ENGINEERING DETAILS AND NOTES TAKE PRECEDENCE, HOWEVER, UNTIL THE ENGINEER PROVIDES CLARIFICATION, THE MORE CONSERVATIVE INTERPRETATION CONTROLS.

E. UNBALANCED STEMWALLS SHALL BE ADEQUATELY BRACED BEFORE INSTALLING FILL DIRT TO PREVENT DAMAGE DURING INSTALLATION. STEMWALL INTEGRITY RELIES ON LATERAL SUPPORT FROM SLAB AND IS VULNERABLE UNTIL CONNECTED TO SLAB.

F. ALL CONNECTORS, FASTENERS, AND HARDWARE SHALL BEAR THE APPROPRIATE CORROSION RESISTANT RATING FOR GIVEN ENVIRONMENTAL CONDITIONS INCLUDING BUT NOT LIMITED TO HARDWARE USED IN DIRECT CONTACT WITH PRESSURE TREATED LUMBER CONTAINING COPPER SUCH ACQ, CCA, AND OTHERS.

G. ALL COMPONENTS AND CLADDING AND ALL HARDWARE (HURRICANE STRAPS, ETC.) SHALL BE CONNECTED PER MANUFACTURER INSTRUCTIONS WITH CORRECT FASTENERS, FASTENER QUANTITIES, AND ATTACHMENT DETAILS SUCH AS CORRECT ANGLES.

i. WHERE MANUFACTURER INSTRUCTIONS ALLOW BOTH MINIMUM AND MAXIMUM QUANTITIES OF FASTENERS CORRESPONDING TO DIFFERENT UPLIFT VALUES, THE QUANTITY CORRESPONDING TO MAXIMUM UPLIFT VALUE SHALL BE USED.

ii. MANUFACTURER INSTRUCTIONS ARE AVAILABLE HERE: HTTPS://FLORIDABUILDING.ORG/PR/PR_APP_SRCH.ASPX

H. ALTERNATE CONNECTORS MAY BE SUBSTITUTED FOR SIMPSON STRONGTIE IF THEIR LOAD CAPACITIES MEET OR EXCEED THOSE SPECIFIED. ALL CONNECTORS SHALL BE INSTALLED PURSUANT TO MANUFACTURER'S REQUIREMENTS FOR MAXIMUM CAPACITY.

I. ALL HARDWARE SUCH AS THREADED RODS, NUTS, WASHERS, AND COUPLERS SHALL BE MINIMUM ASTM A36, A307 GRADE C MATERIAL PRODUCED FROM 1006-1010 STEEL AND ZINC OR GALVANIZED COATED IAW B633 OR ASTM A153 CLASS C RESPECTIVELY.

J. EACH BEAM AND GIRDER SHALL BE INSTALLED WITH FULL END BEARING SURFACE RECOMMENDED BY THE MANUFACTURER OR THE SOUTHERN FOREST PRODUCTS ASSOCIATION (SEE HTTPS://WWW.SOUTHERNPINE.COM/SPAN-TABLES/) FOR GIVEN SPAN WITH A DIRECT GRAVITY LOAD PATH FULLY BLOCKED ACROSS EACH FLOOR TRUSS/JOIST SPACE. TO THE FOUNDATION.

K. EXTERIOR GLAZED OPENINGS LOCATED IN WIND-BORNE DEBRIS REGIONS SHALL HAVE PROTECTION PURSUANT TO FBC R301.2.1.2.

SECTION 3. – TIMBER SPECIFICATIONS

A. STRUCTURAL TIMBER INCLUDING ALL ROOF MEMBERS SHALL BE VISUALLY GRADED #2 SOUTHERN YELLOW PINE (SYP) WITH MAX MOISTURE CONTENT 19% OR WHERE ALLOWED FOR WALL STUDS LODGE POLE (LP) WITH ALLOWABLE STRESSES AS FOLLOWS:

	NOMINAL DIMENSION (INCHES)	SPECIFIC GRAVITY (G)	MODULUS OF ELASTICITY (E)	COMPRESSION PERPENDICULAR TO GRAIN ($F_{c\perp}$)	COMPRESSION PARALLEL TO GRAIN (F_c)	NON-REPETITIVE MEMBERS DESIGN VALUES (PSI)	REPETITIVE MEMBERS DESIGN VALUES (PSI) (JOISTS, RAFTERS, STUDS, ETC.)	
						NORMAL DURATION (10 YEARS) (C_D = C_T = 1.0)	REPETITIVE MEMBER NORMAL DURATION BONUS (1.15) (C_r = 1.15)	REPETITIVE MEMBER 7-DAY CONSTRUCTION LOADING DURATION (EXTREME WIND) (C_D = 1.6 AND C_r = 1.25)
#2 SYP	2 X 4	0.55	1,400,000	565	1,450	1,100	1,265	1,580
	2 X 6				1,400	1,000	1,150	1,440
	2 X 8				1,350	925	1,065	1,330
	2 X 10				1,300	800	920	1,150
	2 X 12				1,250	750	865	1,080
LODGE POLE (LP)	ALL 2X	0.42	1,100,000	335	1,000	775	NOT ALLOWED	

B. BENDING DESIGN VALUES SHALL BE ADJUSTED BY A FACTOR OF 0.85 WHEN TIMBER MOISTURE CONTENT CAN EXCEED 19%.

C. STRUCTURAL LAMINATED TIMBER AND BEAMS SHALL COMPLY WITH THE FOLLOWING CRITERIA AND MINIMUM ALLOWABLE STRESSES:

DESIGN PROPERTY	GLUE LAMINATED TIMBER	LAMINATED VENEER LUMBER (LVL)
ADDITIONAL	VISUALLY GRADED SYP	N/A
BENDING STRESS	2,400 PSI	3,100 PSI
MODULUS OF ELASTICITY	1,800,000 PSI	2,100,000 PSI
HORIZONTAL SHEAR STRESS (F_v)	300 PSI	285 PSI

SECTION 4. – CONCRETE AND MASONRY REINFORCING STEEL

A. FOOTING AND SLAB REINFORCING STEEL SHALL BE GRADE 60; ALL FOOTING STEEL SHALL BE CONTINOUS WITH CORNER BARS AT ALL CORNERS AND END WALL INTERSECTIONS.

B. ALL SPLICES SHALL BE CONTACT LAP SPLICES, STAGGERED A MINIMUM OF 0.3 TIMES THE LAP SPLICE LENGTH. SHALL NOT BE SPLICED AT POINTS OF INFLECTION, AND MINIMUM LAPS SPLICE LENGTHS SHALL BE AS FOLLOWS.

	TENSION LAP SPLICE LENGTH	TENSION DEVELOPMENT LENGTH	TENSION DEVELOPMENT LENGTH FOR STANDARD HOOK W./ AT LEAST 2-1/2" OF SIDE COVER PERPENDICULAR TO PLANE OF HOOK
#4 BAR	30"	23"	9"
#5 BAR	38"	28"	11"

C. DOWEL HOOKS SHALL HAVE A MINIMUM HOOK LENGTH OF 6" AND BE EMBEDDED IN THE FOOTING A MINIMUM OF 3" ON THE BOTTOM AND SIDES AND 6" ON THE TOP.

D. VERTICAL FOOTING DOWELS SHALL LAP VERTICAL WALL REINFORCEMENTS A MINIMUM OF 25".

SECTION 5. – CONCRETE – FOOTINGS AND SLAB

A. FOOTINGS SHALL BEAR ON UNDISTURBED NATURAL SOILS OR ENGINEERED FILL (SEE FBC 1804.6).

B. EXTERIOR FOOTINGS SHALL BE NOT LESS THAN 12" BELOW FINISHED GRADE; EXTERIOR WALLS SHALL BEAR ON CONTINUOUS FOOTINGS.

C. ALL HORIZONTAL FOOTING BARS SHALL BE CONTINUOUS AND BE SUSPENDED WITH A MINIMUM OF COVER OF 3".

D. CONCRETE FOR FOOTINGS AND SLABS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.

E. EARTH SUPPORT SLAB SHALL BE A MINIMUM OF 4" THICK AND REINFORCED BY EITHER METHOD BELOW:

i. WWF 6 X 6 W1.4 X W1.4 SUSPENDED IN THE MIDDLE TO THE UPPDER 1/3 OF THE SLAB; WWF SHALL CONFORM TO ASTM A1064/A1064 M AND BE SUPPORTED WITH APPROVED MATERIALS OR SUPPORTS AT A SPACING OF 3' OR LESS.

ii. SYNTHETIC REINFORCING FIBERS COMPLIANT WITH ASTM C1116, 1/2" TO 2.25" IN LENGTH, AND MIXED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS BUT AT LEAST 1.0 POUND PER CUBIC YARD.

F. UNLESS OTHERWISE REQUIRED BY HARDWARE ATTACHMENT DETAILS SUCH AS ABU BASES, ALL J-BOLTS SHALL BE A MINIMUM OF 1/2" X 10", EMBEDDED A MINIMUM OF 7", AND SPACED A MAXIMUM OF 32" O.C. IN EXTERIOR WALLS; ONE ANCHOR BOLT SHALL BE LOCATED WITHIN 12" OF EACH END OF EACH SILL PLATE BOARD.

i. IF A J-BOLT IS NOT INSTALLED IN THE CONCRETE AT A REQUIRED LOCATION, A 1/2" STRONG-BOLT® 2 OR TITEN HD® EMBEDDED A MINIMUM OF 5-1/2" MAY BE SUBSTITUTED.

G. EXCAVATIONS FOR POOLS SHALL REMAIN ABOVE A 30° ARC BELOW HORIZONTAL FROM THE BOTTOM OF THE NEAREST FOOTING FACE.

SECTION 6. – MASONRY

A. CMU'S SHALL CONFORM TO ASTM C-90; HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI ON THE NET AREA; AND BE LAID IN A RUNNING BOND.

B. MORTAR FOR CMU STRUCTURES SHALL CONFORM AT A MINIMUM TO ASTM C-270, TYPE M OR TYPE S.

C. STEMWALL CMU CELLS SHALL BE FULLY GROUTED TO A MAXIMUM HEIGHT OF 2' BELOW THE TOP CELL OPENING TO CREATE A KEY. GROUT SHALL CONFORM TO ASTM C-476 AND HAVE A MINIMUM STRENGTH OF 3,000 PSI AT 28 DAYS. CELLS SHALL BE FILLED AT A MAXIMUM LIFT HEIGHT OF 4' AND MECHANICALLY VIBRATED TO PREVENT VOIDS.

D. CMU STEMWALLS SHALL HAVE VERTICAL DOWELS SPACED PER FOUNDATION SECTION DETAIL.

i. TALLER STEMWALLS ARE AT HIGH RISK OF COLLAPSE; BUILDER IS ADVISED TO TAKE SPECIAL PRECAUTIONS TO BRACE STEMWALLS PRIOR TO FILL INSTALLATION; FOR STEMWALLS HIGHER THAN 8 CMU, IT IS HIGHLY RECOMMENDED TO INSTALL DEADMAN TIEBACKS @ 8' O.C. ATTACHED TO EA. BOND BEAM.

E. CMU STEMWALLS SHALL HAVE A CONTINUOUS #4 HORIZONTAL BAR IN THE HEADER BLOCK.

SECTION 7. – FRAMING

A. ALL WALL FRAMING SHALL AT A MINIMUM BE (IF REQUIRED HEIGHT NOT LISTED, CONTACT ENGINEER OF RECORD):

WALL HEIGHT	PLATES	EXTERIOR, LOADBEARING, AND SHEAR WALL			INTERIOR NON-BEARING		
		STUD (#2 GRADE)	SIZE	MAX. SPACING	STUD (#2 GRADE)	SIZE	MAX. SPACING
8' – 9'	SYP	SYP, LP	2X4; 2X6 (SUPPORTS MULTI-LEVEL)	16" O.C.	SYP, LP	2X4	16" O.C.
10'	SYP	SYP, LP	2X4 (SUPPORTS ROOF ONLY); 2X6 (MULTI-LEVEL)	16" O.C.	SYP, LP	2X4	16" O.C.
11'	SYP	SYP	2X6	16" O.C.	SYP, LP	2X4	16" O.C.
12'	SYP	SYP	2X6	16" O.C.	SYP, LP	2X4	16" O.C.

B. STUDS IN EXTERIOR AND SHEAR WALLS SHALL BE FACE NAILED THROUGH SILL AND TOP PLATES.

C. DOUBLE TOP PLATE SHALL BE CONTINUOUS AND CONSIST OF (2) 2X SYP NAILED TOGETHER WITH (2) 12D COMMON NAILS AT 12" O.C. AND SHALL OVERLAP AT CORNERS AND WALL INTERSECTIONS.

D. WOOD-TO-WOOD FRAMED CONNECTIONS SHALL BE MADE WITH ADEQUATE BOLTS OR JOIST HANGERS. HANGER HEIGHT SHALL EQUAL 62% OF JOIST HEIGHT.

E. THE MINIMUM NUMBER OF OPENING KING AND JACK STUDS SHALL COMPLY WITH THIS TABLE; THE STUD PACK AT EACH END OF EXTERIOR AND LOADBEARING WALLS SHALL BE NOT LESS THAN 1/2 THE TOTAL NUMBER OF STUDS DISPLACED; ADDITIONALLY, THE MINIMUM NUMBER OF JACK STUDS SHALL BE EQUAL TO THE BEAM MANUFACTURER'S LISTED MINIMUM END BEARING DISTANCE FOR THE GIVEN SPAN DIVIDED BY 1.5".

HEADER SPAN	SUPPORTS ROOF ONLY		SUPPORTS FLOOR AND ROOF	
	FULL HEIGHT KING STUDS	HEADER SUPPORT JACK STUDS	FULL HEIGHT KING STUDS	HEADER SUPPORT JACK STUDS
< 4'-0"	1	1	1	1
4'-1" TO 6'-0"	2	1	2	2
6'-1" TO 10'-0"	3	2	3	3
10'-1" TO 14'-0"	3	2	4	4
14'-1" TO 18'-0"	3	3	4	4

F. UNLESS NOTED OTHERWISE, LOAD BEARING HEADERS SHALL BE (2) 2"X12" SYP FOR 2"X4" WALLS AND (3) 2"X12" SYP FOR 6" WALLS.

G. FLOOR JOISTS SHALL CONSIST OF SYP VISUALLY GRADED #2 BY QUALIFIED VISUAL GRADERS SIZED AS FOLLOWS.

	FLOOR JOISTS: LL = 40 PSF, DL = 20 PSF, REPETITIVE MEMBER FACTOR 1.15, LOAD DURATION FACTOR 1.0, L/360 LL DEFLECTION, (WHERE JOISTS BEAR A PARALLEL WALL, INSTALL DOUBLE JOISTS). SPAN LIMITS IN FEET-INCHES			
SPACING	2 x 6	2 x 8	2 x 10	2 x 12
12"	9-10	12-6	14-9	17-5
16"	8-6	10-10	12-10	15-1
19.2"	7-9	9-10	11-8	13-9
24"	6-11	8-10	10-5	12-4

H. SHEATHING

i. ALL WALL SHEATHING PANELS SHALL BE INSTALLED WITH ALL JOINTS OCCURING OVER SINGLE 2"X FRAMING MEMBERS.

ii. WALL SHEATHING SHALL EXTEND FROM THE BOTTOM OF THE BOTTOM PLATE TO THE TOP OF THE TOP PLATE.

iii. ALL WOOD STRUCTURAL PANELS SHALL BE RATED STRUCTURAL I, BEAR THE APPROPRIATE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION (APA), AND CONFORM TO THE REQUIREMENTS FOR ITS TYPE IN DOC PS 1 OR PS 2, WITH THE FOLLOWING MINIMUMS:

WHERE	THICKNESS, (IN.) (PANEL SPAN RATING)		FASTENERS (IN.)	FASTENER SPACING (IN.)
FLOORS	23/32 (48/24)		FULL HEAD, 10D RING-SHANK OR SCREWS	6 O.C. EDGES; 6 O.C. FIELD
WALLS	7/16 (24/16)		FULL HEAD, 8D COMMON	4 O.C. EDGES* (NAIL BOTH TOP PLATES); 6 O.C. FIELD
PORCH CEILINGS	7/16 (24/16)		FULL HEAD, 8D COMMON	6 O.C. EDGES; 6 O.C. FIELD
ROOF	V_{ULT} ≤ 149 MPH, EXPOSURE B ONLY	7/16 (24/16)	FULL HEAD, 2-3/8 X 0.113 RING-SHANK	6 O.C. EDGES; 6 O.C. FIELD
	150 MPH ≤ V_{ULT} ≤ 159 MPH, EXPOSURE B ONLY	15/32 (32/16)		
	V_{ULT} ≥ 160 MPH OR EXPOSURES C OR D	19/32 (40/20)	FULL HEAD, 2-1/2 X 0.131 RING-SHANK	4 O.C. EDGES; 4 O.C. FIELD

*IF FULL HEIGHT SHEATHING ALLOWED AND USED IN LIEU OF STUD TIES (SEE WALL UPLIFT SECTION), NAIL BOTTOM PLATE WITH (2) ROWS STAGGERED AT 4" O.C., 1/2" APART AND 1/2" FROM PLATE EDGES.

iv. NAILS IN A SINGLE ROW SHALL NOT BE SPACED CLOSER THAN 3" ON CENTER.

v. ROOF SHEATHING SHALL BE INSTALLED WITH STRENGTH AXIS PERPINDICULAR TO RAFTERS.

SECTION 8. – PRE-ENGINEERED TRUSSES AND GENERAL WIND LOAD CONNECTIONS

A. ALL TRUSS LOADS SHALL BEAR ON FOOTINGS, PILES, OR PIERS VIA WALLS, COLUMNS, OR OTHER STRUCTURAL MEMBERS.

i. INTERIOR FOOTINGS SHOWN ON DRAWINGS INDICATE EXPECTED LOAD BEARING AREAS.

ii. BUILDER SHALL VERIFY WITH THE TRUSS DESIGNER ALL INTERIOR TRUSS LOAD-BEARING POINTS AND ADD INTERIOR BEARING FOOTINGS PER SHEET S-1 TO ACCOMMODATE ALL TRUSS BEARING POINTS.

B. PRE-ENGINEERED WOOD TRUSSES SHALL BE DESIGNED TO MEET APPLICABLE STRUCTURAL DESIGN CRITERIA, INCLUDING THE WIND AND GRAVITY LOAD CRITERIA SPECIFIED ON THIS SHEET; TRUSS DRAWINGS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER.

C. UNLESS THIS PLAN INCLUDES A FLOOR FRAMING PLAN (IF APPLICABLE), CEILING JOIST LAYOUT, AND FOUNDATION PLAN W./ GRADE BEAMS FOR CEILING JOIST BEARING POINTS, THIS PLAN IS ONLY VALID FOR CONSTRUCTION W./ PRE-ENGINEERED TRUSSES.

SECTION 9. – ROOF CONNECTIONS NOT STIPULATED BY PE TRUSS DESIGNER

A. IF ANY RAFTER OR TRUSS TOP CHORD CONDITION IS NOT COVERED ELSEWHERE, THAT RAFTER OR TRUSS TOP CHORD SHALL BE ATTACHED AT EACH BEARING POINT WITH H10A, H10A-2, OR MTS12/16 HURRICANE TIES.

B. RAFTERS BEARING ON STRUCTURAL MEMBERS SUCH AS BEAMS OR DOUBLE TOP PLATES SHALL BE CONNECTED TO SAID MEMBER(S) WITH H10A, H10A-2, OR MTS12/16 (FOR DOUBLE TOP PLATES, WRAP TAILS OVER RAFTER TOP AND UNDER LOWER TOP PLATE).

C. RAFTERS BEARING ON MEMBERS SUCH AS A LEDGER BOARDS, SHALL BE CONNECTED WITH H2.5A OR MTS12/16.

D. RAFTERS BEARING ON CORNERS SHALL BE CONNECTED WITH HCP PLATES OR MTS TWIST STRAPS WRAPPED OVER THE RAFTER.

E. RAFTERS SHALL BEAR DIRECTLY ON BEAMS, GIRDERS, LEDGERS, OR LOADBEARING WALLS OR BE SUPPORTED BY HANGERS.

F. RIDGE BOARD (NON-STRUCTURAL) AND RIDGE BEAM (STRUCTURAL) CONNECTIONS (REFER TO WFCM SECTION 2.5.1.4):

i. RIDGE BOARDS SHALL BE AT LEAST 2" X 6" AND NOT LESS IN DEPTH THAN RAFTER CUT ENDS.

ii. OPPOSING RAFTERS SHALL BE CONNECTED ACROSS RIDGE BOARDS WITH EITHER:

1. LSTA21 TIES PASSING OVER THE RIDGE BOARD OR BEAM; **OR**

2. 2"X 6" SYP COLLAR TIES LOCATED IN THE UPPER THIRD OF ATTIC SPACE ATTACHED WITH (5) 16D NAILS AT EACH END.

iii. IF STRUCTURAL RIDGE BEAMS ARE TO BE USED, CONTACT THE ENGINEER OF RECORD FOR RIDGE BEAM SIZING; RAFTERS SHALL BEAR DIRECTLY ON RIDGE BEAMS OR BE ATTACHED WITH CORRECTLY SIZED LRU HANGERS.

G. RAFTERS AND CEILING JOISTS SHALL CONSIST OF #2 SYP GRADED BY QUALIFIED VISUAL GRADERS; RAFTERS AND ROOF LOADS SHALL BEAR ON AND BE BRACED WITHIN 12" OF LOAD-BEARING WALLS OR OTHER STRUCTURAL MEMBERS; CEILING JOISTS ARE NOT CONSIDERED STRUCTURAL MEMBERS AND NOT INTENDED TO SUPPORT RAFTER OR ROOF LOADS, AND SPANS SHALL BE AS FOLLOWS:

	SPAN LIMITS IN FEET-INCHES							
	RAFTERS: LL = 20 PSF, DL = 15 PSF, REPETITIVE MEMBER FACTOR 1.15, LOAD DURATION FACTOR 1.15, L/240 LL DEFLECTION				CEILING JOISTS: LL = 20 PSF, DL = 10 PSF, REPETITIVE MEMBER FACTOR 1.15, LOAD DURATION FACTOR 1.0, L/240 LL DEFLECTION			
SPACING	2 x 6	2 x 8	2 x 10	2 x 12	2 x 4	2 x 6	2 x 8	2 x 10
12"	13-10	17-6	20-10	24-5	9-3	13-11	17-7	20-11
16"	11-11	15-2	18-0	21-2	8-0	12-0	15-3	18-1
19.2"	10-11	13-10	16-5	19-4	7-4	11-0	13-11	16-6
24"	9-9	12-4	14-8	17-3	6-7	9-10	12-6	14-9

H. GABLE END CONNECTIONS:

i. ROOF LEVEL: THE FIRST (2) TRUSS OR RAFTER SPACES FROM ENDWALL SHALL HAVE 2"X BLOCKING AT ALL SHEATHING JOINTS.

ii. CEILING LEVEL: GABLE ENDWALLS SHALL HAVE CONTINUOUS LATERAL 2"X4" BRACING AT 6' O.C. W./ LSTA24 WRAPPED OVER OUTSIDE WALL.

iii. ALL GABLE OUTLOOKERS SHALL REST ON DROPPED RAFTERS OR TOP PLATES AND BE BLOCKED WITH FULL-WIDTH 2"X BLOCKING.

iv. ALL OUTLOOKERS SHALL EXTEND TO INTERIOR RAFTERS AND BE ANCHORED TO THE TOP CHORD OF DROPPED TRUSSES OR TOP PLATES OF THE GABLE ENDWALL WITH H10A OR (2) H2.5A TIES.

I. HIP CONNECTIONS:

i. HIP RAFTERS SHALL BE NOT LESS IN DEPTH THAN CUT END OF HIP JACKS AND VALLEY JACKS.

ii. OPPOSING JACK RAFTERS SHALL BE CONNECTED TOGETHER WITH LSTA18 STRAP TIES PASSING OVER HIP RAFTER.

J. VALLEY CONNECTIONS:

i. RAFTERS LAYING ON A VALLEY SHALL BE ANCHORED AS LOW AS POSSIBLE TO SUPPORTING RAFTER OR JOIST WITH ADEQUATELY SIZED MTS TWIST STRAP TIES.

ii. VALLEY RAFTERS SHALL BE NOT LESS IN DEPTH THAN CUT END OF HIP JACKS AND VALLEY JACKS.

SECTION 10. – SHEAR WALL

A. SHEAR WALLS SHALL BE CONSTRUCTED WITH SHEATHING AND HOLD DOWNS (SEE WALL HOLD-DOWN SECTION) WITH ADEQUATE DIRECT LOAD PATHS SUCH AS THREADED ROD, GO-BOLTS, ETC. TRANSMITTING LOADS FROM THE WALL TO THE FOUNDATION.

B. ALL EXTERIOR WALLS AND OTHER WALLS AS NOTED ON PLANS SHALL BE CONSIDERED SHEAR WALLS.

C. WHERE USING DOUBLE-SIDED SHEAR WALL, PANEL JOINTS SHALL BE OFFSET ON DIFFERENT FRAMING MEMBERS.

D. WHERE FLOOR JOISTS BEAR INTERIOR SHEAR WALLS AS NOTED ON FLOOR PLAN, INSTALL (3) 1-3/4"X 11-7/8" LVL'S UNDER ENTIRE SHEAR WALL WHERE FLOOR TRUSSES BEAR INTERIOR SHEAR WALLS AS NOTED ON FLOOR PLANS. INSTALL (3) 1-3/4"X 16" LVL'S.

SECTION 11. – WALL HOLD-DOWN CONNECTIONS

A. EACH (a) SHEAR WALL LINE (SERIES OF SHEAR WALLS OFFSET BY NOT MORE THAN 4'); (b) OPENING 6' OR MORE; AND (c) OTHER LOCATIONS NOTED ON PLANS, SHALL BE ANCHORED TO THE FOUNDATION WITHIN 12" OF EACH END (IF MULTIPLE OPENINGS SHARE A SINGLE HEADER, USE THE DIMENSION BETWEEN THE OUTERMOST JACK STUDS) **WITH EITHER**

i. CONNECT WALL TOP PLATE WITH 1/2" THREADED ROD, 3" X 3" X 1/4" WASHERS, AND J-BOLTS, GO-BOLTS, OR QUICKTIE ORANGE CABLES, **OR**

ii. CONNECT STUD PACKS OF 2 OR MORE TO CONCRETE USING STHD14, OR HTT5 OR HDU5 AND THREADED ROD, AND J-BOLTS;

iii. **EXCEPTIONS - THE FOLLOWING MAY BE ANCHORED WITH A SINGLE HOLD-DOWN:** (1) INSIDE CORNERS; AND (2) FULL HEIGHT WALL SEGMENTS LESS THAN 18" WHICH ARE ADJACENT TO OPENINGS SUCH AS BAY WINDOWS.

B. FOR MULTI-STORY EXTERIOR WALLS NOT ALIGNED WITH LOWER-LEVEL EXTERIOR WALLS, THE SAME WALL HOLD DOWN REQUIREMENTS APPLY; AND, SIMILARLY HOLD DOWNS SHALL BE ATTACHED IN A WAY TO TRANSMIT ALL LOADS DIRECTLY TO THE FOUNDATION VIA A LOAD PATH SUCH AS CONTINUOUS THREADED ROD ATTACHED TO J-BOLTS.

SECTION 12. – WALL UPLIFT CONNECTIONS

A. EACH EXTERIOR WALL SHALL BE ANCHORED USING EITHER:

i. FOR VULT ≤ 150 MPH (EXPOSURE B AND C ONLY); FULL HEIGHT SHEATHING CAN BE USED IN LIEU OF SP1, SP2, SP4, AND SP6 STUD PLATE CONNECTORS (EXCEPT, RETAIN SP4 OR SP6 ON BOTTOM OF FULL HEIGHT HEADER STUDS).

1. SHEATHING SHALL BE NAILED WITH (3) ROW OF NAILS TO BOTH TOP PLATES AT 4" O.C. AND TO SILL AND BOTTOM PLATES WITH (2) ROWS STAGGERED AT 4" O.C. 1/2" APART AND 1/2" FROM PLATE EDGES.

2. TRUSS CONNECTORS SHALL BE PLACED ON