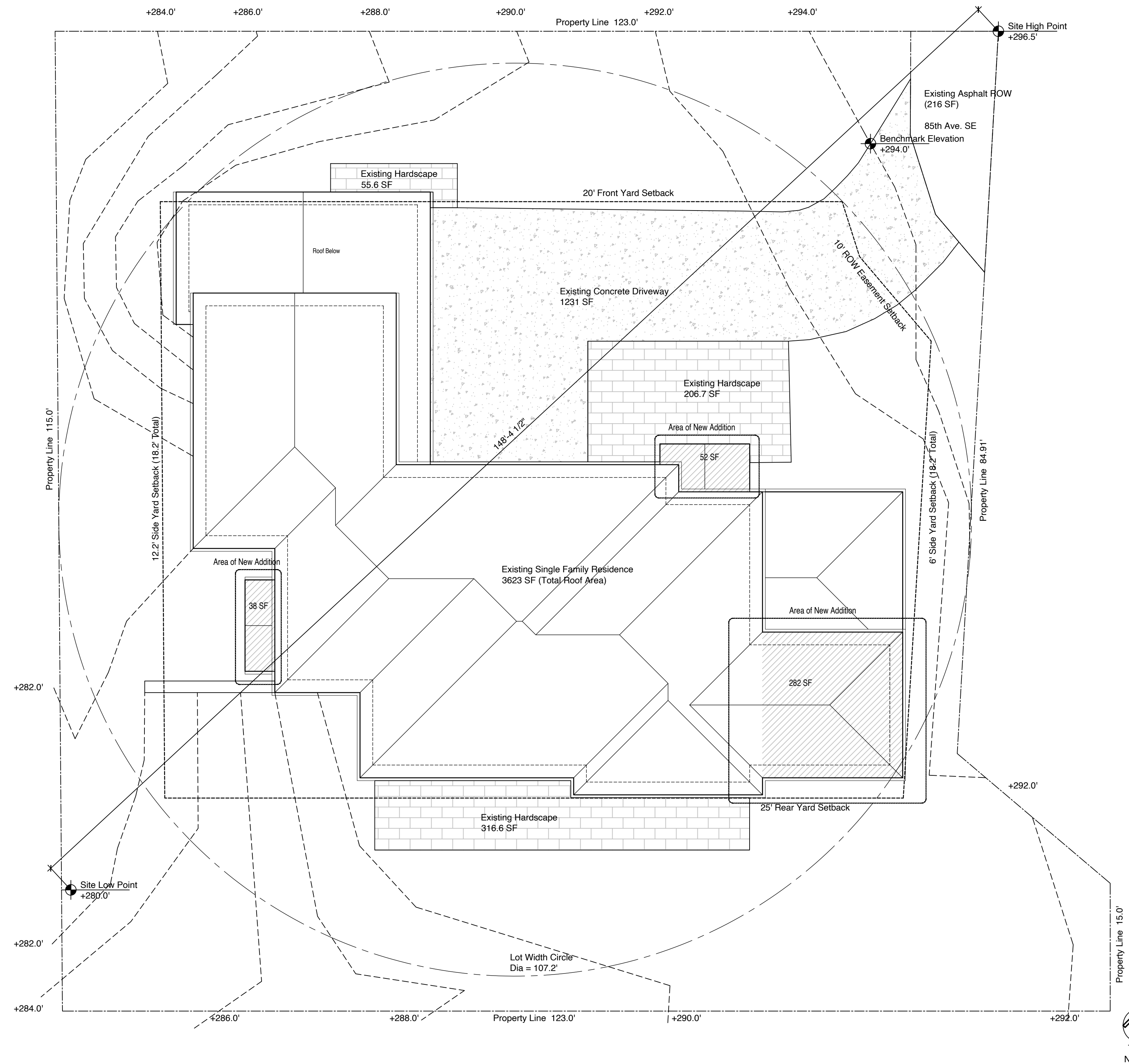


PROJECT DATA	PROPERTY DATA	LOT COVERAGE	CONSTRUCTION DATA	ENERGY DATA
<b>OWNER</b> Pang Ngernsupaluck Tom Mulcahy 4311 85th Ave. SE Mercer Island, WA	<b>PROJECT ADDRESS</b> 4311 85th Ave. SE Mercer Island, WA	<b>LOT AREA</b> 12,733 SF Access Easement Area = 216 SF Net Lot Area = 12,517 SF	<b>AREA SUMMARY</b> Enclosed Square Footage Lower Level (Existing) 651 sq ft Main Level (Existing) 2882 sq ft Upper Level (Existing) 2102 sq ft Upper Level (New) 230 sq ft Total (New) 230 sq ft Total (Combined) 5635 sq ft ADU 651 sq ft	New Conditioned Square footage added: 230 sq ft Additions Less than 500SF = 1.5 Energy Credits Required Heat pump system to be used = 1.0 Credit 5.2 Water Heating System shall be Energy Star rated gas or propane water heater with a min UEF of 0.80 = 0.5 Credits All new and altered building elements to have the following values: Glazing U-Factor (Vertical): 0.30 Glazing U-Factor (Overhead): 0.50 Door U-Factor: 0.30 Entire Slab: R-10 + R10 Perimeter Below grade walls (interior): R-21 Below grade walls (exterior): R-10 Above grade walls: R-21+R4 ci Floor Insulation: R-38 R-49 or R-38 adv Ceilings: R-38 Vaulted Ceilings: R-38
<b>ARCHITECT</b> HhLodesign 215 W. Crockett St. Seattle, WA 98119 Contact: Henry H Lo 206-229-8082	<b>ZONING DESIGNATION</b> R-9.6	<b>LOT SLOPE</b> High Point = 296.5' Low Point = 280.0' Distance = 148.4' Slope = 16.5' / 148.4' = 11.1%		
<b>CONTRACTOR</b> TBD Phone Fax Email <b>CONTACT:</b> <b>STRUCTURAL ENGINEER</b> Burke Engineers 925-639-5512 kolby.burke@burke-engineers.com CONTACT Kolby Burke	<b>HEIGHT LIMIT</b> 30'-0" to Highest point of Roof	<b>LOT COVERAGE ALLOWED</b> <15% Slope Buildings and Driving Surfaces = 40% 5006.8 SF Allowed Required Landscaping Area = 60% 7510.2 SF Required Hardscape = 9% 1126.5 SF Allowed	<b>LOT COVERAGE PROPOSED</b> Structures = 3675 SF Driving Surfaces = 1231 SF Total Proposed (Buildings and Driving Surfaces) = 4906 SF <b>IMPERIOUS SURFACE PROPOSED</b> Proposed Structure = 3675 SF Existing Driveway = 1231 SF Total = 4906 SF Existing Hardscape = 579 SF Total Proposed Impervious Surface = 5485 SF	
	<b>SETBACKS</b> Front Yard Setback 20'-0" Rear Yard Setback 25'-0" Side Yard Setback 17% of Lot Width (107.2') = 18.2' total Min = 33% of 18.2' = 6'			
	<b>ASSESSOR'S TAX NUMBER</b> 182405-9138			
	<b>LEGAL DESCRIPTION</b> LOT A MERCER ISLAND LLR # 99-1353 REC #20010522900002 SD LLR BEING POR SW 1/4 OF NW 1/4 LY BETWEEN 84TH AVE SE & 86TH AVE SE			



215 West Crockett Street  
Seattle, Washington 98119  
206.229.8082



DRAWN BY  
DESIGN BY  
CHECKED BY  
APPROVED BY  
DATE  
June 29, 2022  
REVISIONS

**NM MERCER ISLAND RESIDENCE**  
4311 85th Ave SE  
Mercer Island, Washington



Site Plan

A-1.0

1 Site Plan  
Scale: 1/8" = 1'-0"



215 West Crockett Street  
Seattle, Washington 98119  
206.229.8082

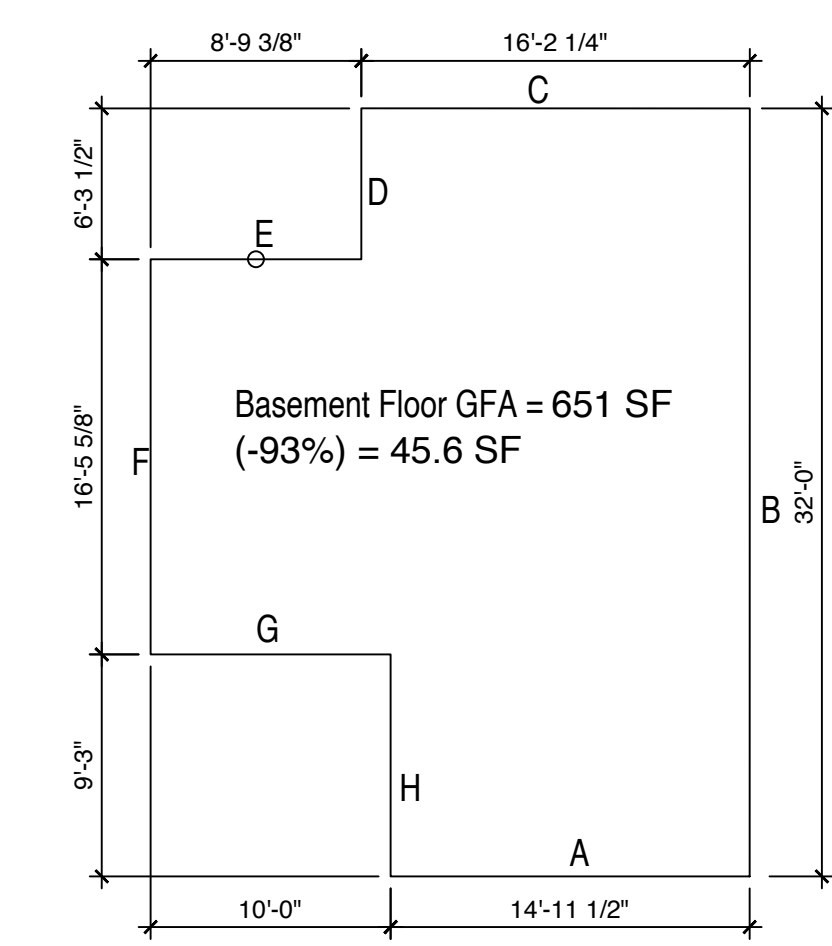
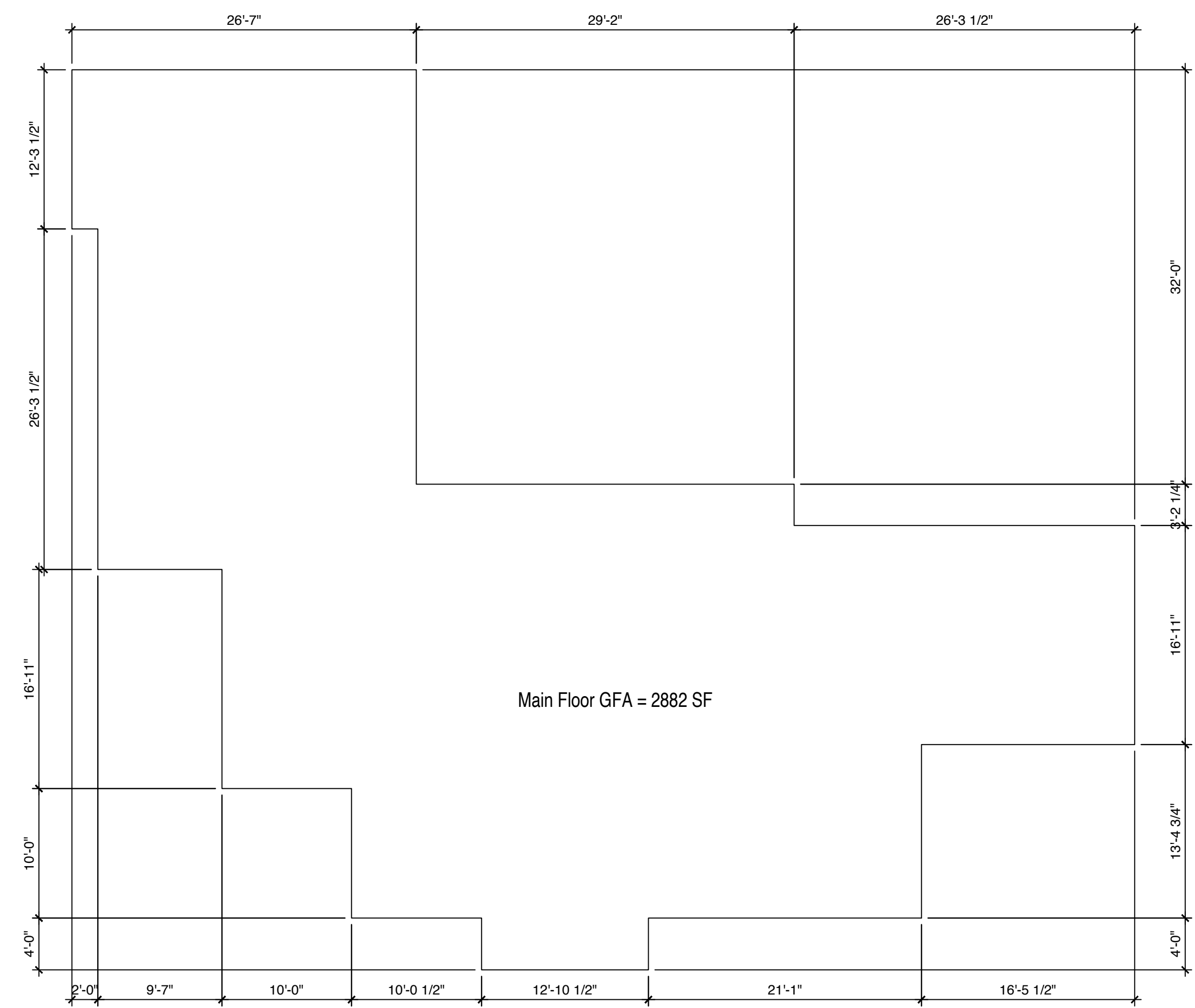
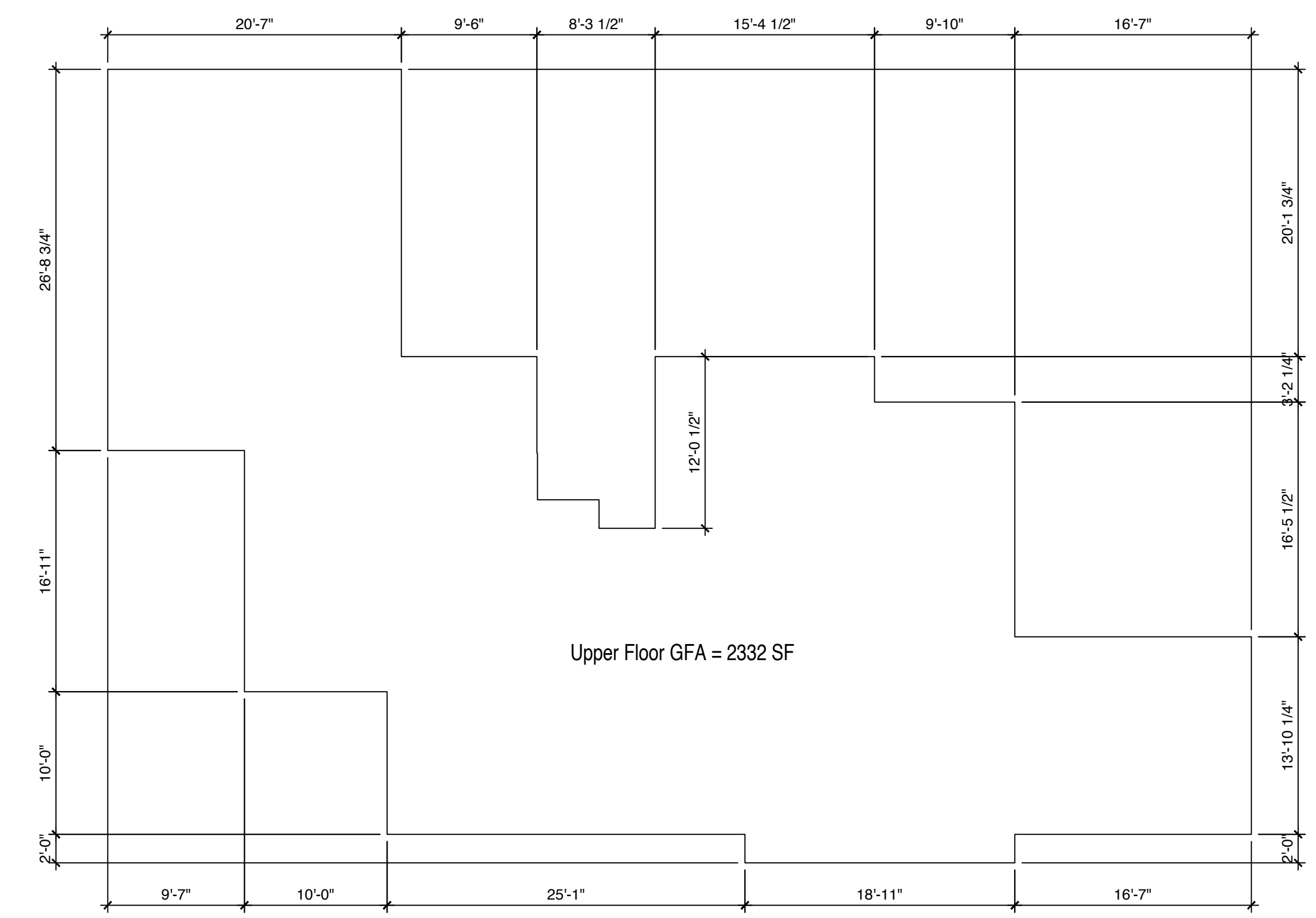
DRAWN BY  
DESIGN BY  
CHECKED BY  
APPROVED BY  
DATE  
January 12, 2022  
REVISIONS

**NM MERCER ISLAND RESIDENCE**  
4311 85th Ave SE  
Mercer Island, Washington



Land Use Calculations

**A-1.1**

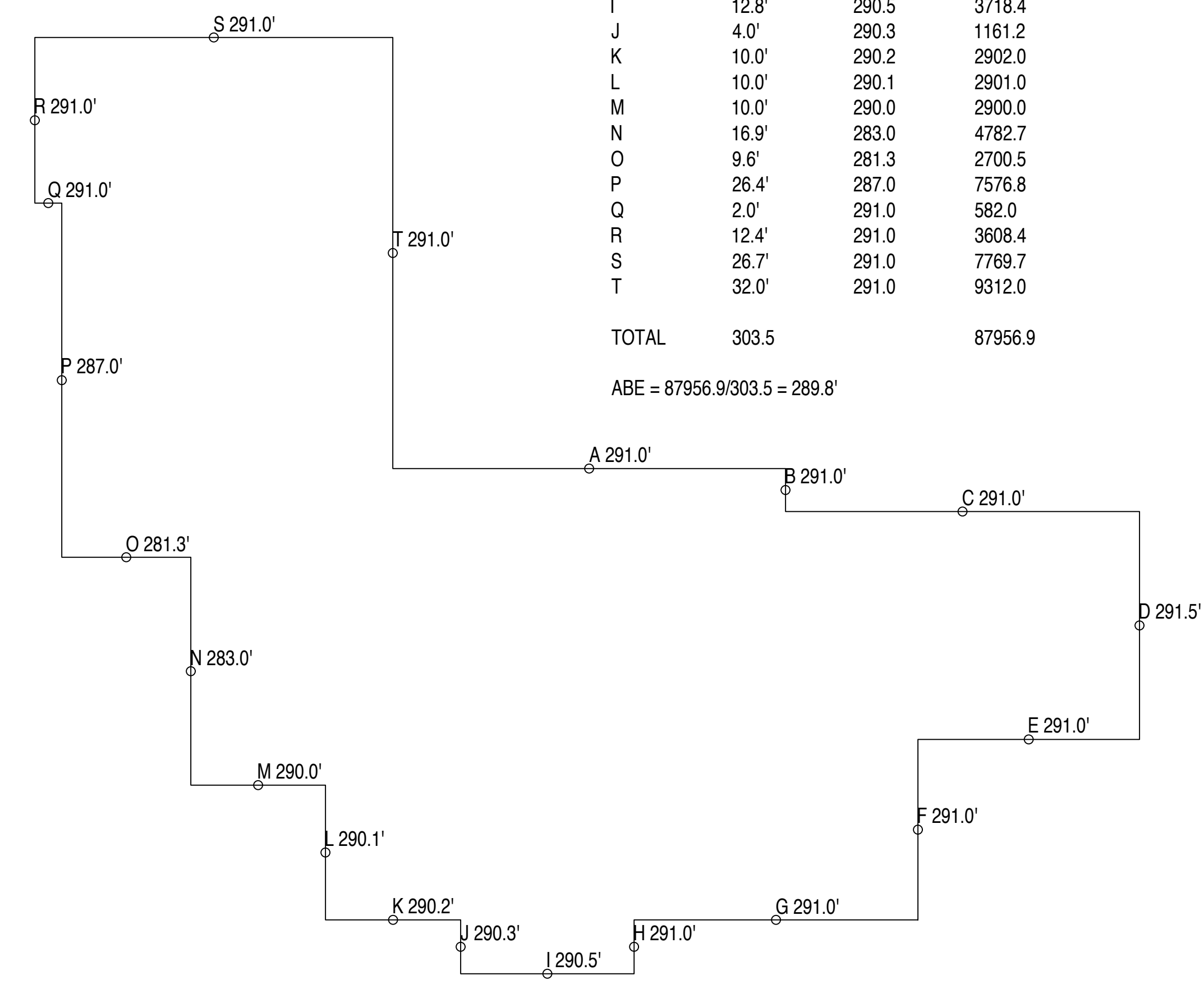


Segment	Length	Coverage	Result
A	15.0'	75%	11.25
B	32.0'	100%	32
C	16.2'	100%	16.2
D	6.3'	100%	6.3
E	8.6'	100%	8.6
F	16.5'	45%	16.5
G	10.0'	75%	7.5
H	9.3'	90%	8.4
<b>TOTAL</b>	<b>113.9</b>		<b>106.8</b>

GROSS FLOOR AREA  
Lot Area = 12,733 SF  
Access Easement Area = 216 SF  
Net Lot Area = 12,517 SF  
GFA allowed (with ADU bonus) = 45% = 5632.7 SF  
Basement Area = 651 SF (-93%) = 45.6 SF  
Main Floor Area = 2882 SF  
Upper Floor Area = 2332 SF  
Total Proposed GFA = 5259.6 SF

Segment	Length	Elev	Product
A	29.2'	291.0	8497.2
B	3.2'	291.0	931.2
C	26.4'	291.0	7682.4
D	16.9'	291.5	4926.4
E	16.5'	291.0	4801.5
F	13.4'	291.0	3899.4
G	21.1'	291.0	6140.1
H	4.0'	291.0	1164
I	12.8'	290.5	3718.4
J	4.0'	290.3	1161.2
K	10.0'	290.2	2902.0
L	10.0'	290.1	2901.0
M	10.0'	290.0	2900.0
N	16.9'	283.0	4782.7
O	9.6'	281.3	2700.5
P	26.4'	287.0	7576.8
Q	2.0'	291.0	582.0
R	12.4'	291.0	3608.4
S	26.7'	291.0	7769.7
T	32.0'	291.0	9312.0
<b>TOTAL</b>	<b>303.5</b>		<b>87956.9</b>

ABE = 87956.9/303.5 = 289.8'



**2 ABE Calculation**  
Scale: 1/8" = 1'-0"

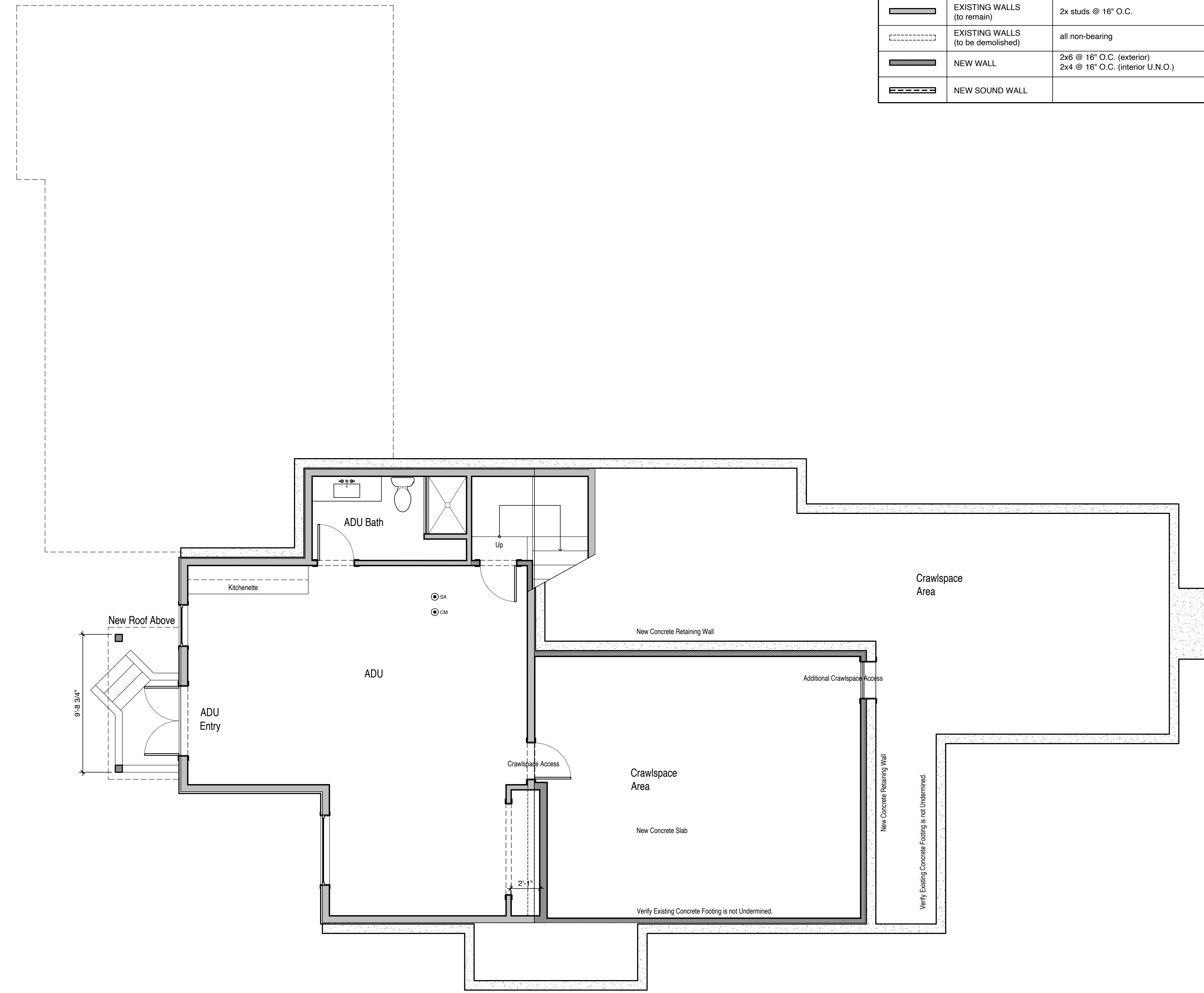
**1 GFA Calculation**  
Scale: 1/8" = 1'-0"



FLOOR PLAN LEGEND		SEE A-01 FOR GENERAL LEGEND
SYMBOL	DESCRIPTION	REMARKS
	EXHAUST FAN	Vent to exterior
	SMOKE DETECTOR	See General Notes FP-5, FP-6 and FP-7
	CO2 DETECTOR	
	EXISTING WALLS (to remain)	2x studs @ 16" O.C.
	EXISTING WALLS (to be demolished)	all non-bearing
	NEW WALL	2x6 @ 16" O.C. (exterior) 2x4 @ 16" O.C. (interior U.N.O.)
	NEW SOUND WALL	

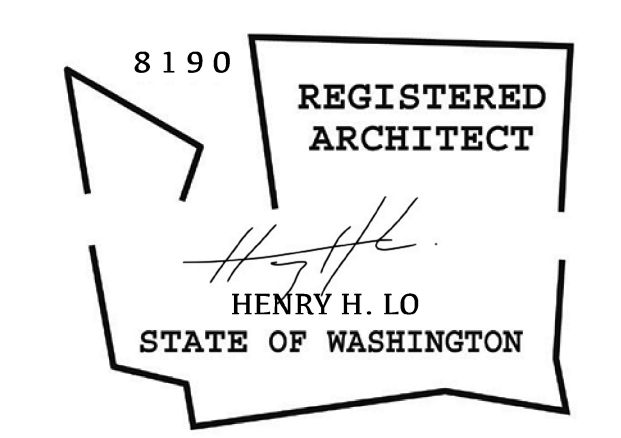


215 West Crockett Street  
Seattle, Washington 98119  
206.229.8082



DRAWN BY  
DESIGN BY  
CHECKED BY  
APPROVED BY  
DATE  
June 26, 2022  
REVISIONS

**NM MERCER ISLAND RESIDENCE**  
4311 85th Ave SE  
Mercer Island, Washington



1 Basement Floor Plan - Option 1.2  
Scale: 1/4" = 1'-0"



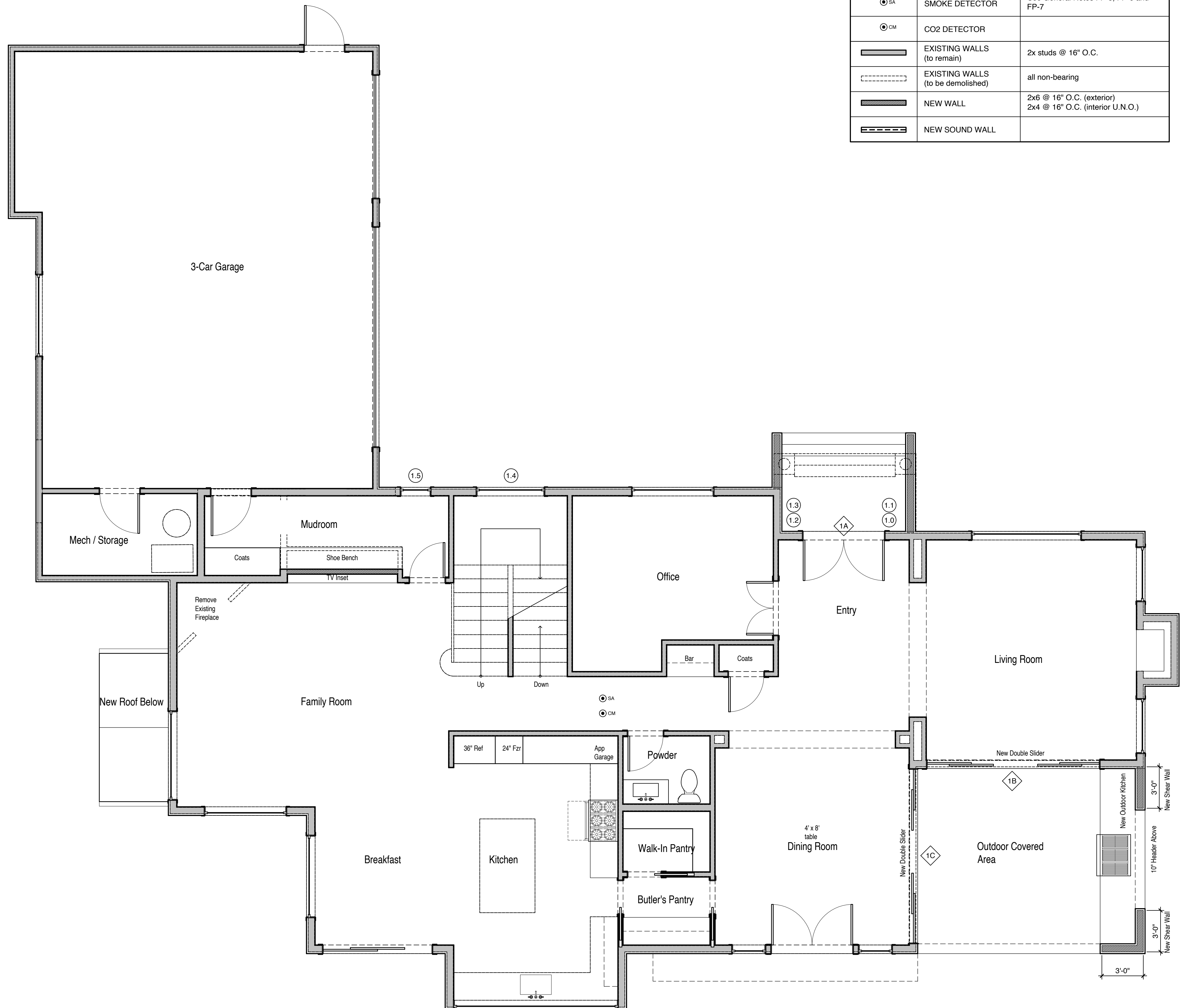
Basement Floor Plan

A-2.0



215 West Crockett Street  
Seattle, Washington 98119  
206.229.8082

FLOOR PLAN LEGEND		SEE A-01 FOR GENERAL LEGEND
SYMBOL	DESCRIPTION	REMARKS
⊙(dm)	EXHAUST FAN	Vent to exterior
⊙SA	SMOKE DETECTOR	See General Notes FP-5, FP-6 and FP-7
⊙CM	CO2 DETECTOR	
—	EXISTING WALLS (to remain)	2x studs @ 16" O.C.
- - - - -	EXISTING WALLS (to be demolished)	all non-bearing
▬	NEW WALL	2x6 @ 16" O.C. (exterior) 2x4 @ 16" O.C. (interior U.N.O.)
▬▬▬▬▬	NEW SOUND WALL	



1 Main Floor Plan - Option 1.2  
Scale: 1/4" = 1'-0"



DRAWN BY  
DESIGN BY  
CHECKED BY  
APPROVED BY  
DATE  
June 28, 2022  
REVISIONS

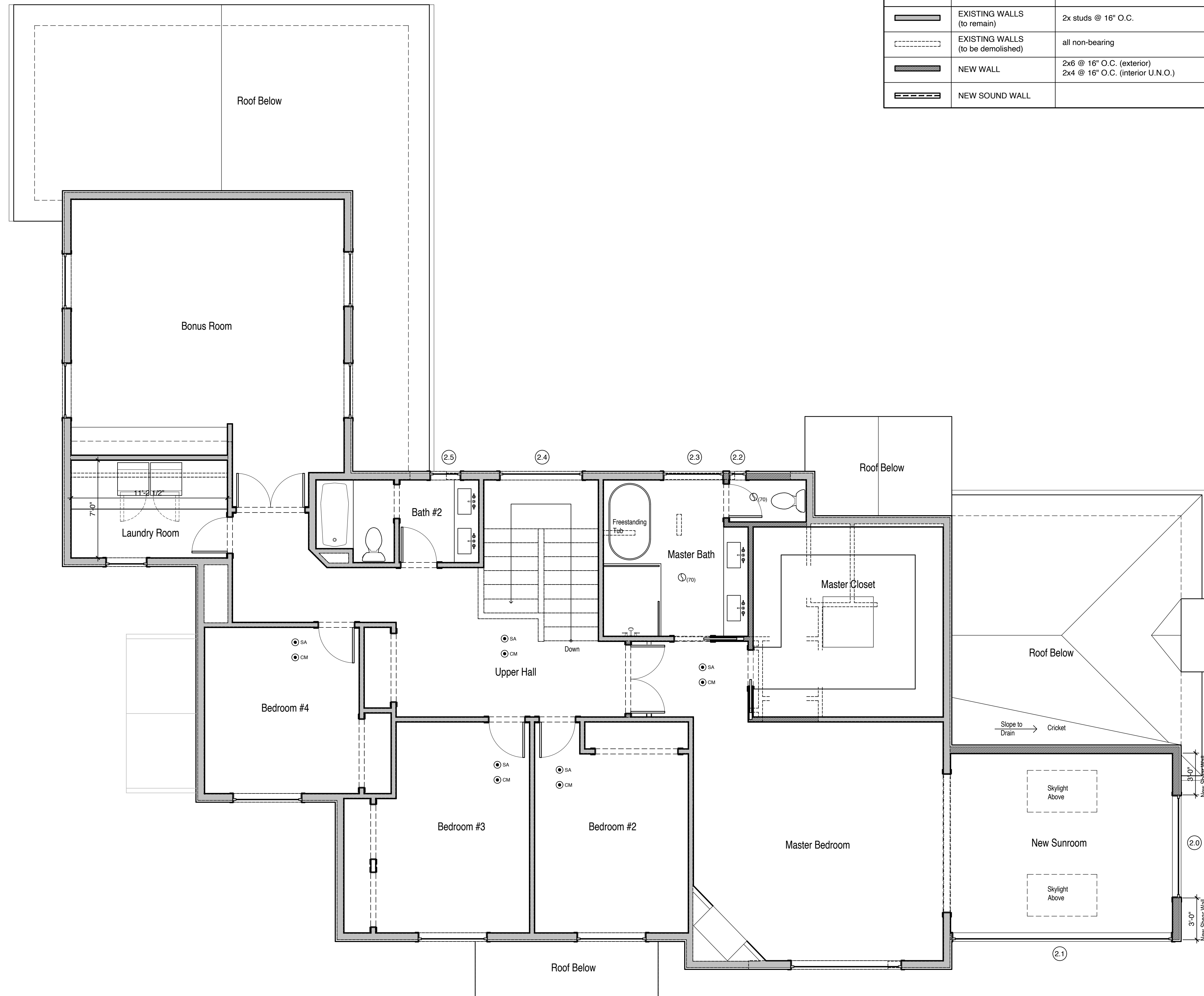
NM MERCER ISLAND RESIDENCE  
4311 85th Ave SE  
Mercer Island, Washington



Main Floor Plan

A-2.1

FLOOR PLAN LEGEND		SEE A-01 FOR GENERAL LEGEND
SYMBOL	DESCRIPTION	REMARKS
	EXHAUST FAN	Vent to exterior
	SMOKE DETECTOR	See General Notes FP-5, FP-6 and FP-7
	CO2 DETECTOR	
	EXISTING WALLS (to remain)	2x studs @ 16" O.C.
	EXISTING WALLS (to be demolished)	all non-bearing
	NEW WALL	2x6 @ 16" O.C. (exterior) 2x4 @ 16" O.C. (interior U.N.O.)
	NEW SOUND WALL	



**H h L o d e s i g n**  
*minimalist spatial creation*

215 West Crockett Street  
 Seattle, Washington 98119  
 206.229.8082

DRAWN BY  
 DESIGN BY  
 CHECKED BY  
 APPROVED BY  
 DATE  
 June 26, 2022  
 REVISIONS

**NM MERCER ISLAND RESIDENCE**  
 4311 85th Ave SE  
 Mercer Island, Washington

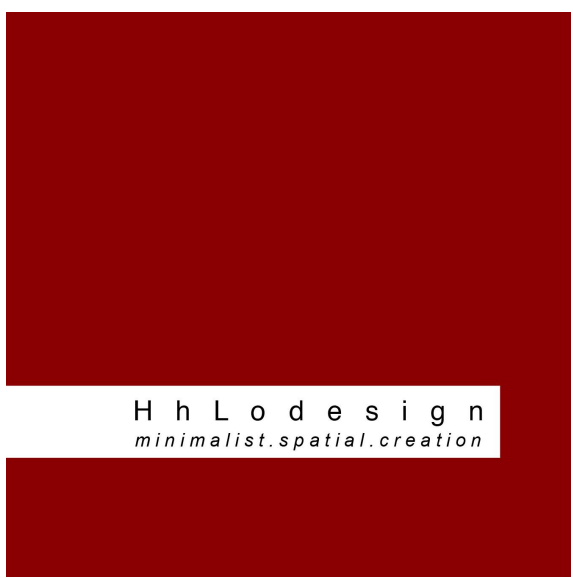
8190 REGISTERED ARCHITECT  
  
 HENRY H. LO  
 STATE OF WASHINGTON

1 Upper Floor Plan - Option 1.2  
 Scale: 1/4" = 1'-0"

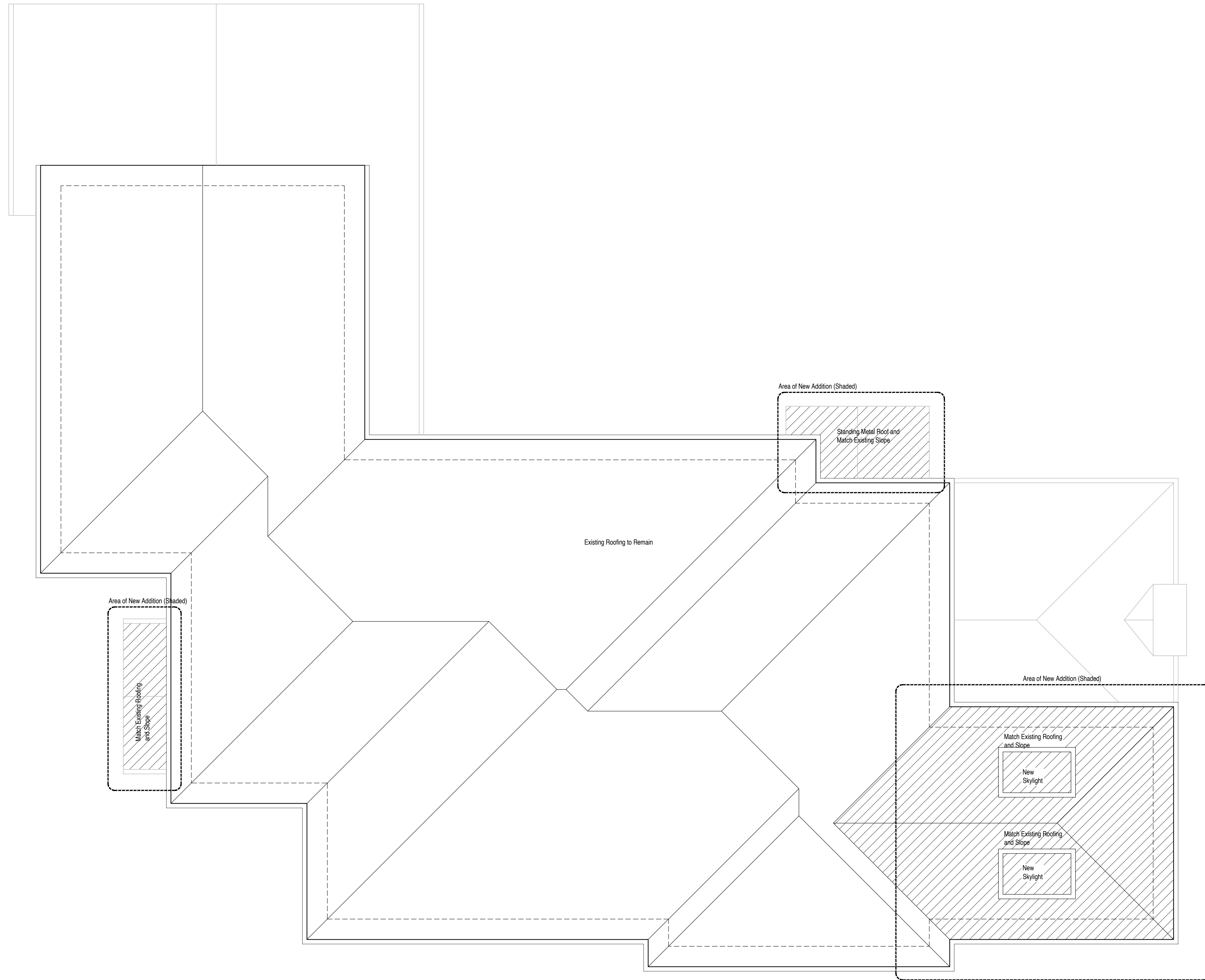


Upper Floor Plan

A-2.2



215 West Crockett Street  
Seattle, Washington 98119  
206.229.8082



DRAWN BY  
DESIGN BY  
CHECKED BY  
APPROVED BY  
DATE  
June 26, 2022

REVISIONS

**NM MERCER ISLAND RESIDENCE**

4311 85th Ave SE  
Mercer Island, Washington



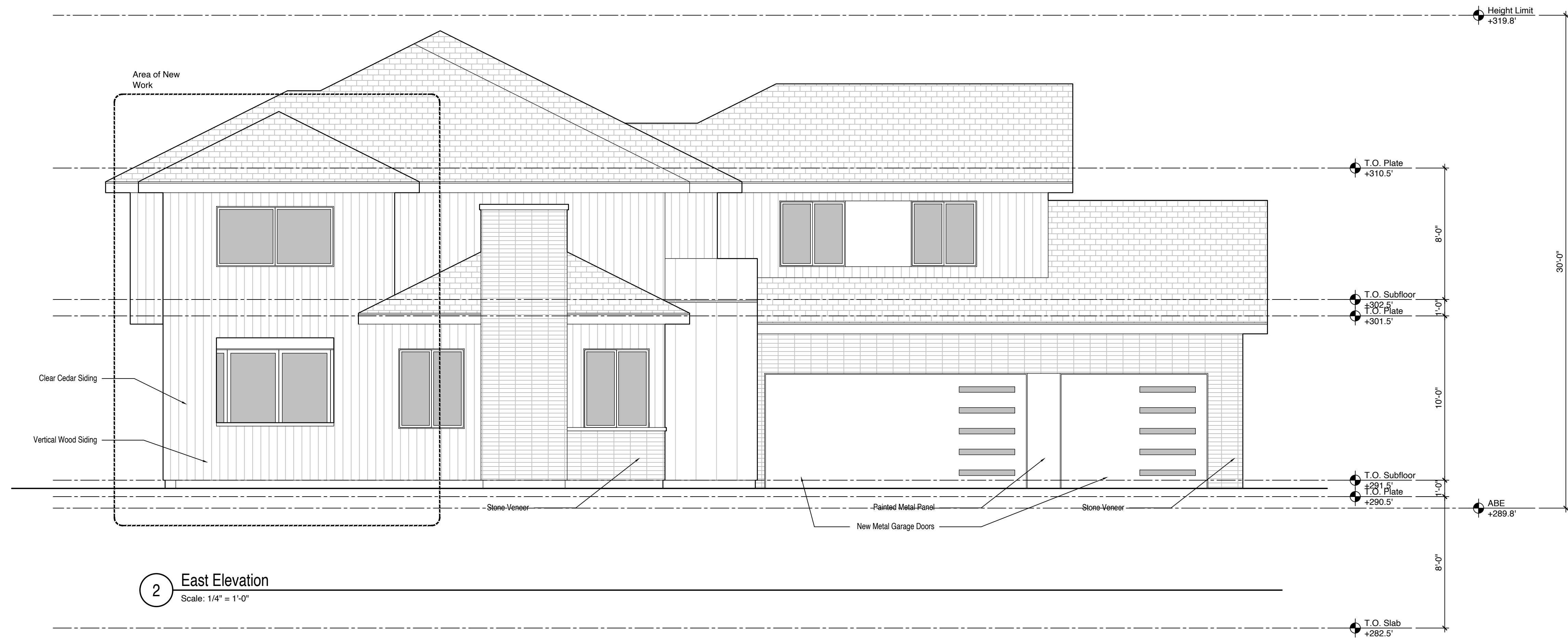
1 Roof Plan - Option 1.2  
Scale: 1/4" = 1'-0"

Roof Plan

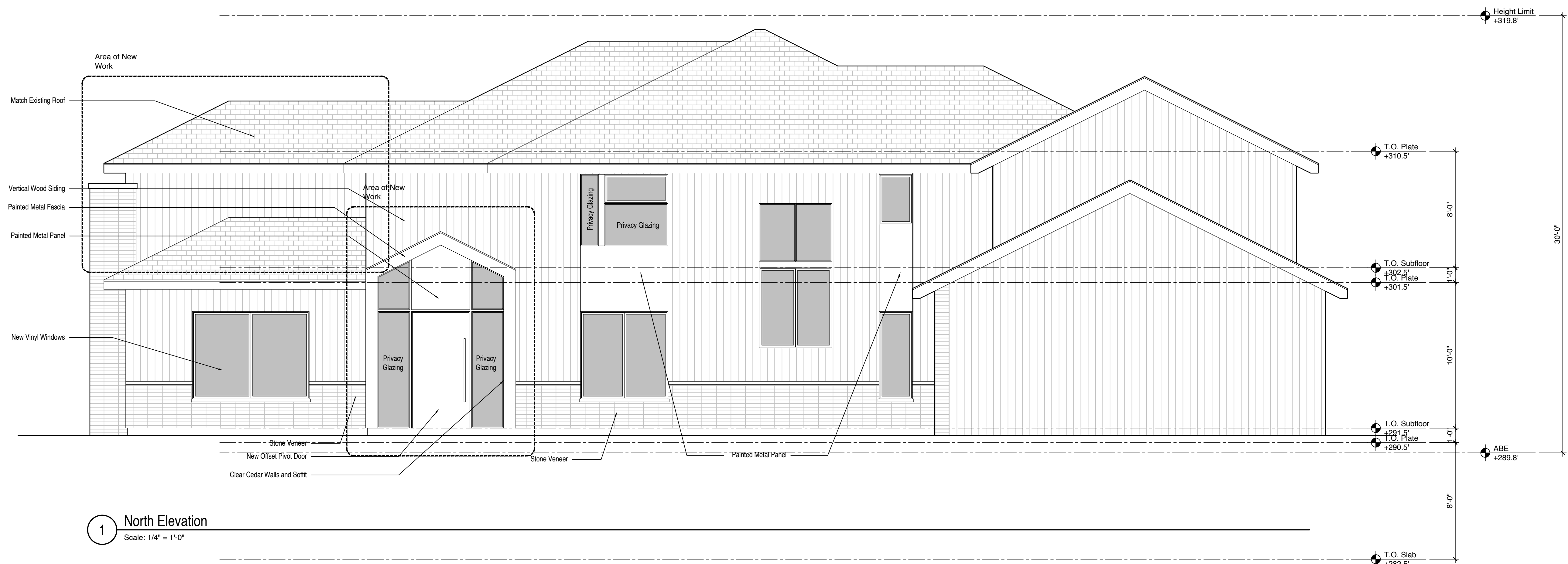
A-2.3



215 West Crockett Street  
Seattle, Washington 98119  
206.229.8082



2 East Elevation  
Scale: 1/4" = 1'-0"



1 North Elevation  
Scale: 1/4" = 1'-0"

DRAWN BY  
DESIGN BY  
CHECKED BY  
APPROVED BY  
DATE  
June 21, 2022  
REVISIONS

NM MERCER ISLAND RESIDENCE

4311 85th Ave SE  
Mercer Island, Washington



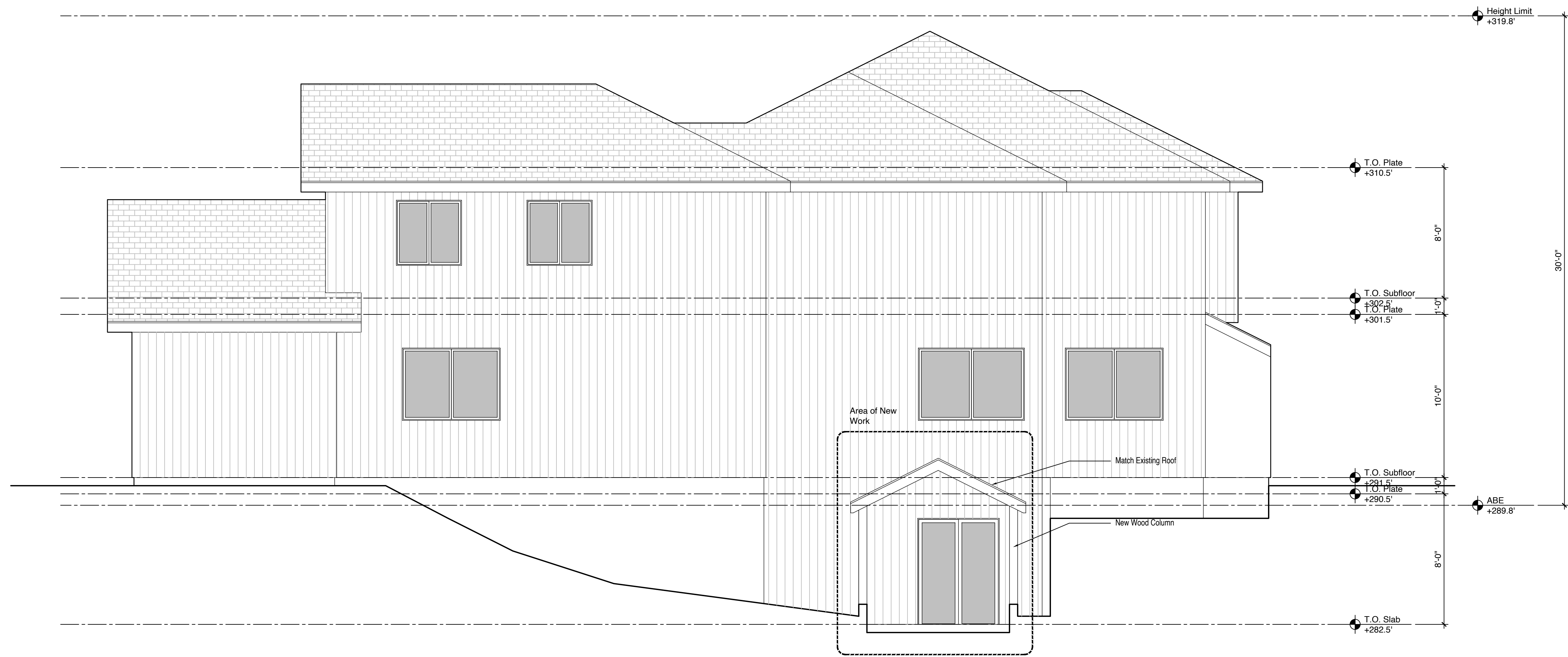
Elevations

A-3.0

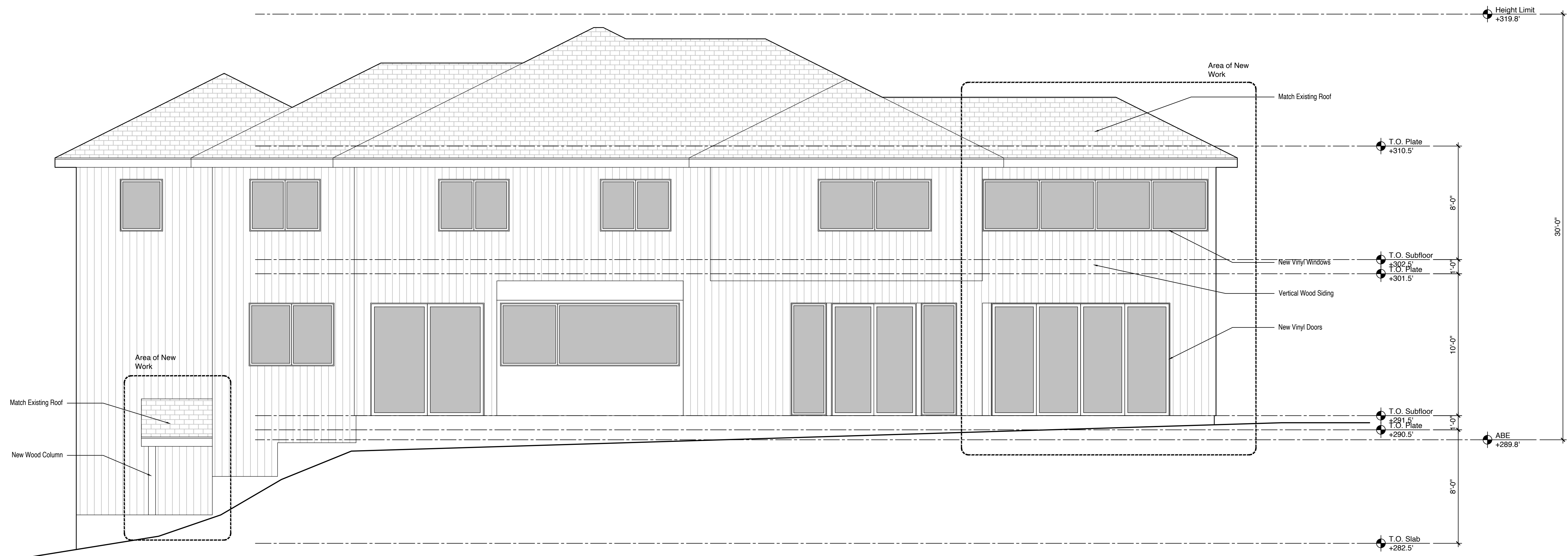




215 West Crockett Street  
Seattle, Washington 98119  
206.229.8082



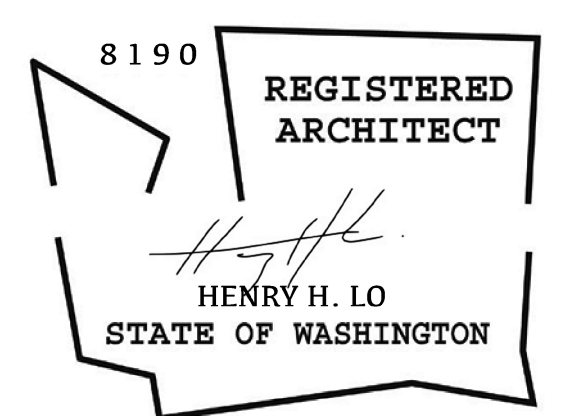
2 West Elevation  
Scale: 1/4" = 1'-0"



1 South Elevation  
Scale: 1/4" = 1'-0"

DRAWN BY  
DESIGN BY  
CHECKED BY  
APPROVED BY  
DATE  
June 21, 2022  
REVISIONS

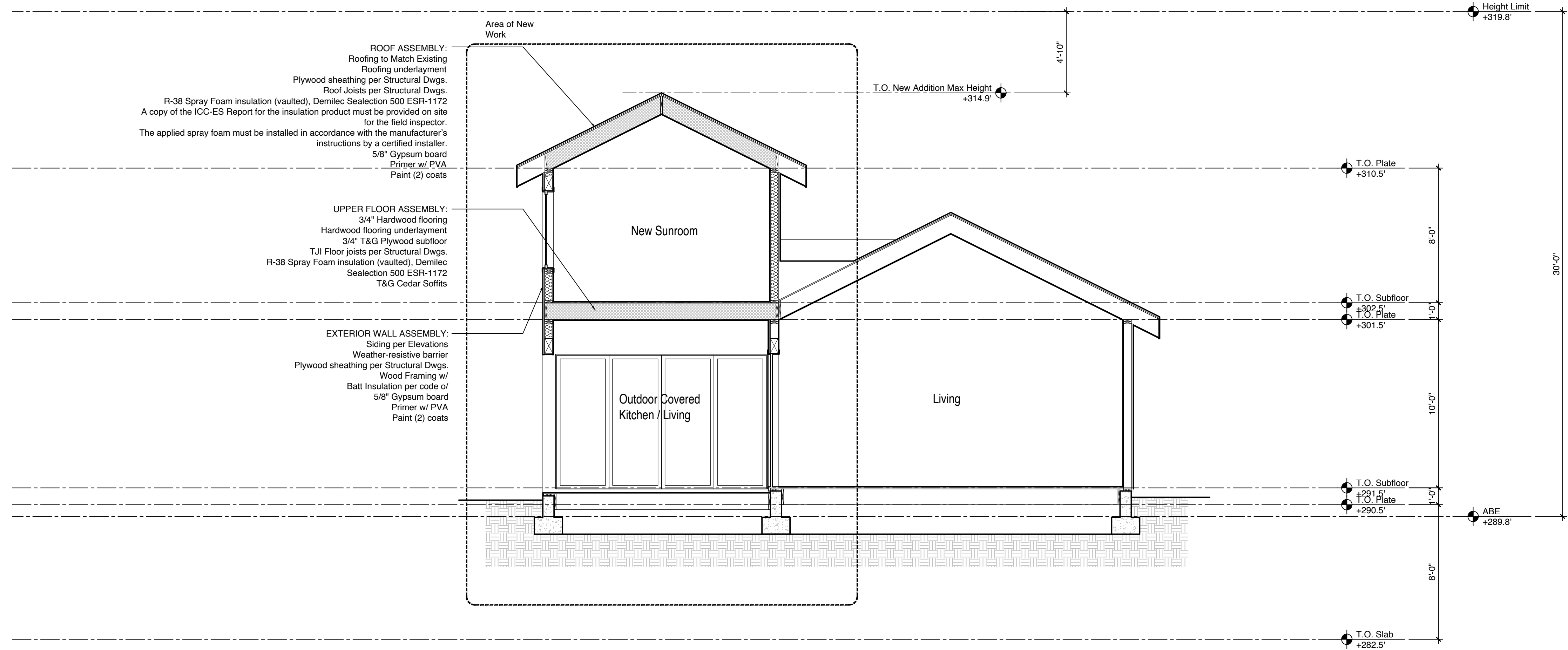
NM MERCER ISLAND  
RESIDENCE  
4311 85th Ave SE  
Mercer Island, Washington



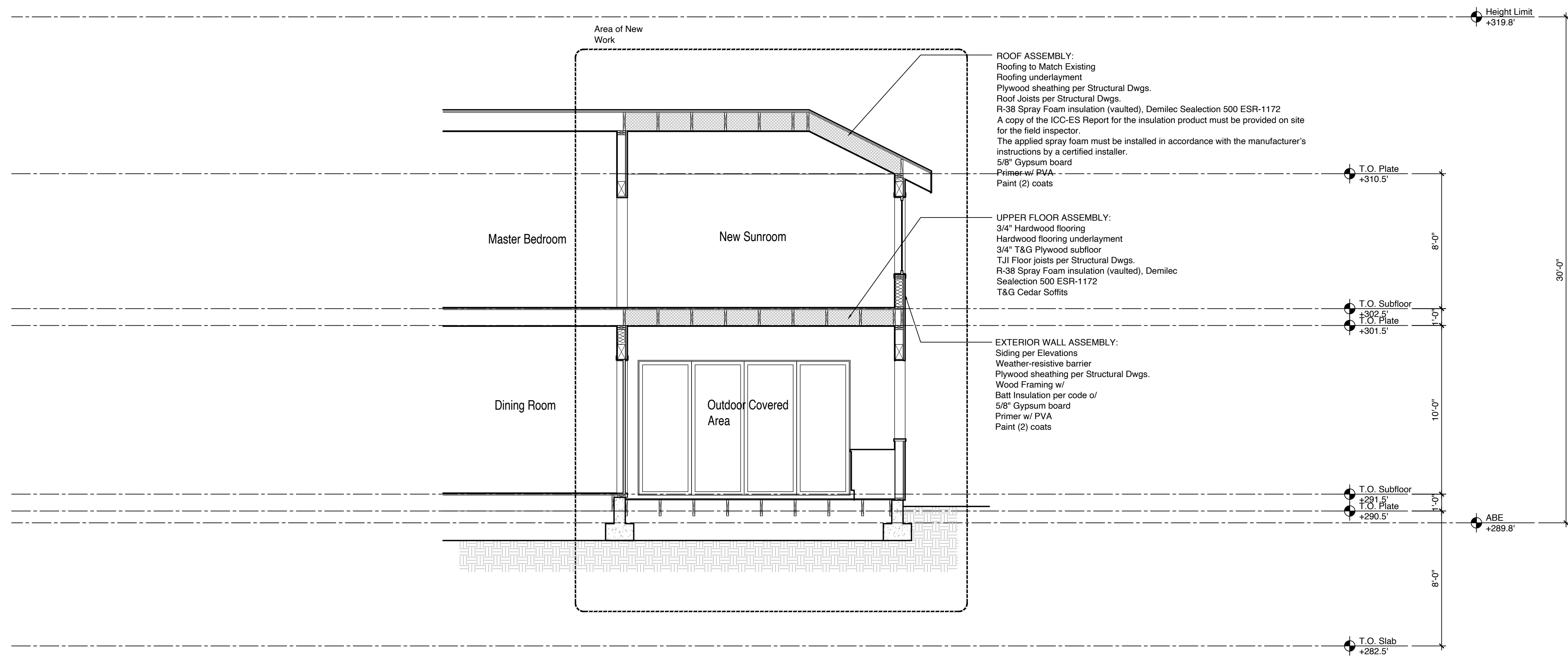
Elevations



215 West Crockett Street  
Seattle, Washington 98119  
206.229.8082



1 Building Section 1  
Scale: 1/4" = 1'-0"



2 Building Section 2  
Scale: 1/4" = 1'-0"

DRAWN BY  
DESIGN BY  
CHECKED BY  
APPROVED BY  
DATE  
June 21, 2022

REVISIONS

NM MERCER ISLAND  
RESIDENCE  
4311 85th Ave SE  
Mercer Island, Washington



Sections

A-4.0

**EXTERIOR DOOR SCHEDULE**

SYMBOL	LOCATION	ROOM	DIAGRAM	TYPE	SIZE	AREA	FINISH	U	REMARKS
1A	Entry	-	1A below	Inswing	1-3/4" x See diagram		Stained Wood	NA	Offset Pivot
1B	Living Room	-	1B Below	Double Slider	1-3/4" x See diagram		Aluminum Clad	0.30	Safety Glazing
1C	Dining Room	-	1B Below	Double Slider	1-3/4" x See diagram		Aluminum Clad	0.30	Safety Glazing

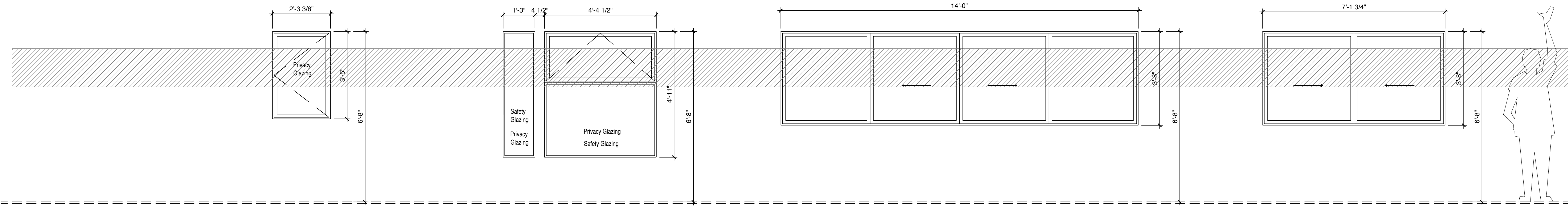
- WINDOW DIAGRAM NOTES**
- Windows are shown from the exterior side.
  - General Contractor to confirm all rough opening sizes and installation requirements with manufacturer prior to order.
  - Manufacturer to review installation locations and confirm safety glazing requirements.
  - Manufacturer to review installation locations and confirm designated units meet egress requirements.
  - Install units per all manufacturer's recommendations.
  - All exterior doors and windows to comply with security requirements of 2018 IRC Section R329
  - CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR APPROVAL BY ARCHITECT PRIOR TO FABRICATION.

**WINDOW SCHEDULE - Lower Level / Main Level**

SYM	LOCATION	ROOM	DIAGRAM	TYPE	SIZE	AREA	FINISH	U	REMARKS
1.0	Entry	-	1.0 below	Picture	See diagram		Aluminum Clad / Ptd.	0.30	
1.1	Entry	-	1.0 below	Picture	See diagram		Aluminum Clad / Ptd.	0.30	
1.2	Entry	-	1.0 below	Picture	See diagram		Aluminum Clad / Ptd.	0.30	
1.3	Entry	-	1.0 below	Picture	See diagram		Aluminum Clad / Ptd.	0.30	
1.4	Stairwell	-	1.4 below	Double Casement	See diagram		Aluminum Clad / Ptd.	0.30	
1.5	Mudroom	-	1.5 below	Casement	See diagram		Aluminum Clad / Ptd.	0.30	
2.0	Sunroom	-	2.0 below	Slider	See diagram		Aluminum Clad / Ptd.	0.30	
2.1	Sunroom	-	2.1 below	Slider	See diagram		Aluminum Clad / Ptd.	0.30	
2.2	Master Bath	-	2.2 below	Picture/Awning	See diagram		Aluminum Clad / Ptd.	0.30	
2.3	Master Bath	-	2.2 below	Picture	See diagram		Aluminum Clad / Ptd.	0.30	
2.4	Stairwell	-	1.4 below	Picture	See diagram		Aluminum Clad / Ptd.	0.30	
2.5	Bath #2	-	2.5 below	Casement	See diagram		Aluminum Clad / Ptd.	0.30	



215 West Crockett Street  
Seattle, Washington 98119  
206.229.8082

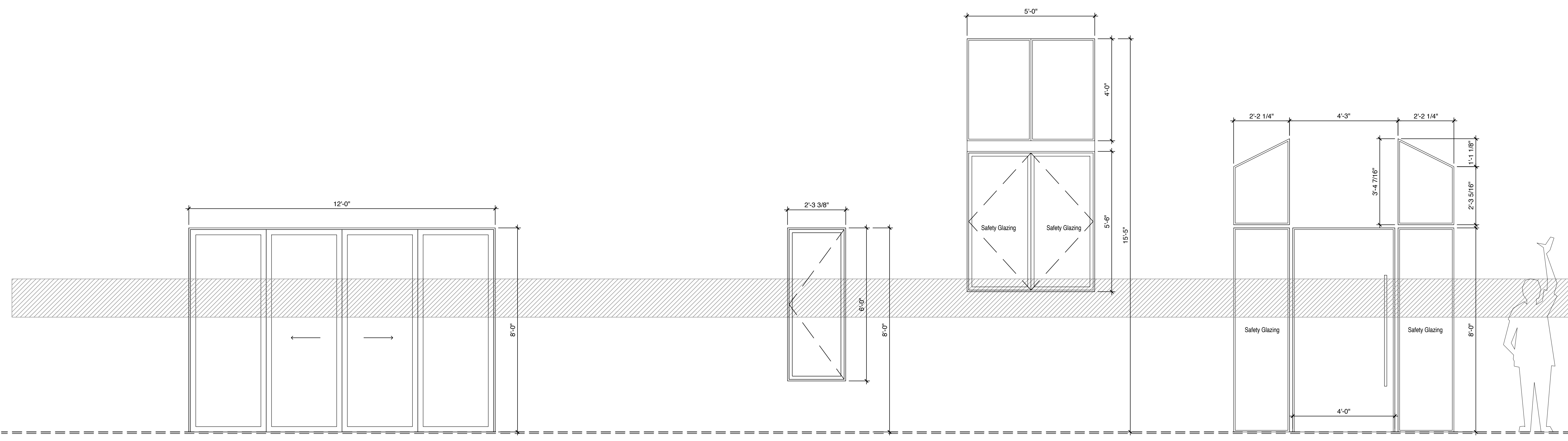


2.5 WINDOW DIAGRAM  
Scale 1/2" = 1'-0"

2.2 WINDOW DIAGRAM  
Scale 1/2" = 1'-0"

2.1 WINDOW DIAGRAM  
Scale 1/2" = 1'-0"

2.0 WINDOW DIAGRAM  
Scale 1/2" = 1'-0"



1B DOOR DIAGRAM  
Scale 1/2" = 1'-0"

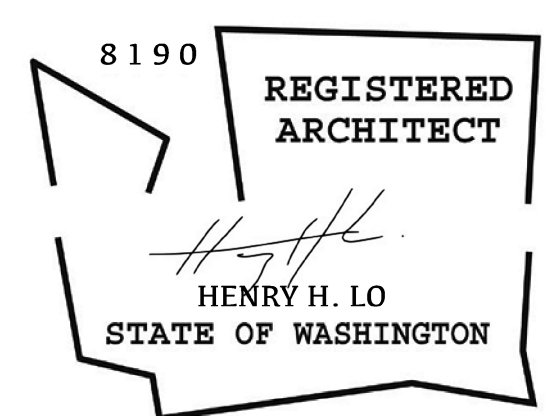
1.5 WINDOW DIAGRAM  
Scale 1/2" = 1'-0"

1.4 WINDOW DIAGRAM  
Scale 1/2" = 1'-0"

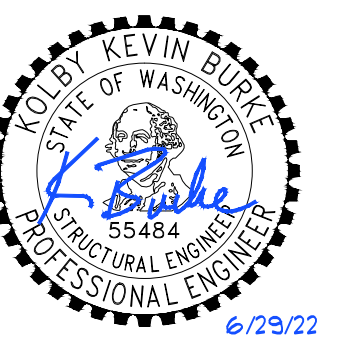
1.0 WINDOW DIAGRAM  
Scale 1/2" = 1'-0"

DRAWN BY  
DESIGN BY  
CHECKED BY  
APPROVED BY  
DATE  
June 21, 2022  
REVISIONS

**NM MERCER ISLAND RESIDENCE**  
4311 85th Ave SE  
Mercer Island, Washington



Window and Door Schedules

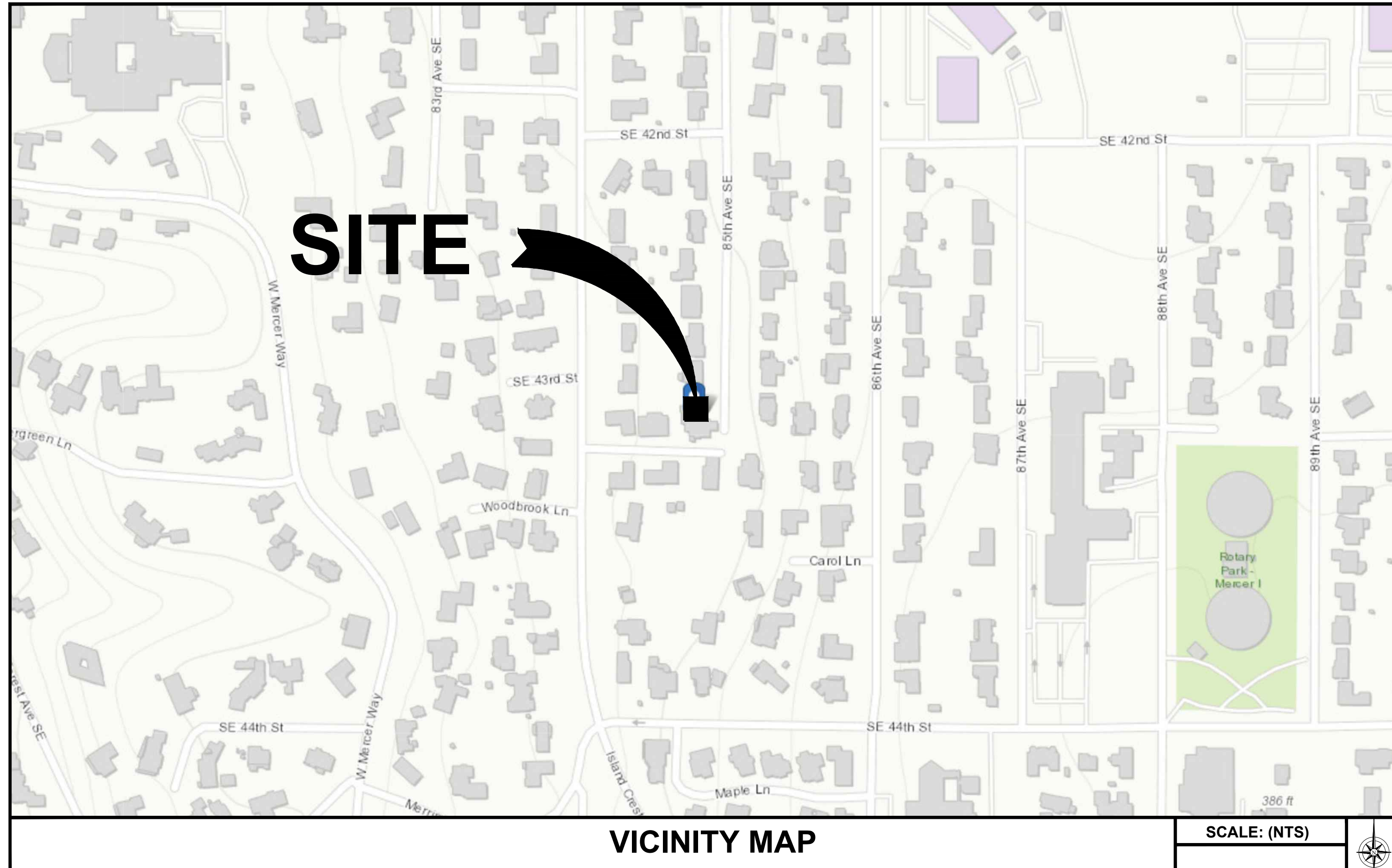


IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

**BURKE CONSULTING ENGINEERS**  
 KOLBY BURKE  
 kolby.burke@burke-engineers.com  
 (925) 639-5512

# SFR REMODEL - ADDITION

SITE NAME:  
**MERCER ISLAND (NM) RESIDENCE  
 (STRUCTURAL)**



COUNTY: KING COUNTY      ZONING: R-9.6  
 SITE PARCEL NUMBER: 182405-9138  
 LEGAL DESCRIPTION: LOT A MERCER ISLAND LLR # 99-1353 REC #20010522900002 SD LLR BEING POR SW 1/4 OF NW 1/4 LY BETWEEN 84TH AVE SE & 86TH AVE SE  
 OWNER: PANG NGERNSUPALUCK & TOM MULCAHY  
 4311 85TH AVE SE  
 MERCER ISLAND, WA 98040  
 ARCHITECT: HENRY LO  
 HhLo DESIGN  
 215 W. CROCKETT ST.  
 SEATTLE, WA 98119  
 ENGINEER: KOLBY BURKE, PE, SE  
 BURKE CONSULTING ENGINEERS, INC.  
 (925)639-5512  
 kolby.burke@burke-engineers.com

**PROJECT INFORMATION**

NEW (TWO-STORY) ADDITION TO EXISTING SINGLE-FAMILY RESIDENCE.

**PROJECT DESCRIPTION**

SHEET	DESCRIPTION	SHEET	DESCRIPTION
T-1	TITLE SHEET		
T-2	GENERAL STRUCTURAL NOTES		
T-3	GENERAL STRUCTURAL NOTES		
S-1	FDTN & LOWER FLR FRAMING		
S-2	LOWER FLR WALL FRAMING		
S-3	UPPER FLR FRAMING		
S-4	UPPER FLR WALL FRAMING		
S-5	ROOF FRAMING PLAN		
SD-1	STRUCTURAL DETAILS		
SD-2	STRUCTURAL DETAILS		

**SHEET INDEX**

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF ALL GOVERNING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

**CODE COMPLIANCE**

REV	DATE	DESCRIPTION	BY
1			

PROJECT: MERCER ISLAND (NM) RESIDENCE  
 4311 85TH AVENUE SE  
 MERCER ISLAND, WA 98040  
 PROJECT NO: 22-014

SHEET TITLE  
**TITLE SHEET**

SHEET  
**T-1**



WOOD FRAMING:

ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE BUILDING CODE. MINIMUM NAILING, UNLESS OTHERWISE NOTED, SHALL CONFORM TO TABLE 2304.10.1 OF THE BUILDING CODE. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS.

GENERAL WOOD CONSTRUCTION: CONFORM TO IBC 2304. UNLESS NOTED OTHERWISE, STUDS SHALL BE SPACED AT 16" O.C., EXTERIOR STUDS SHALL BE 2X6, AND INTERIOR STUDS SHALL BE 2X4. ALL STUD WALLS SHOWN ON STRUCTURAL DRAWINGS SHALL HAVE THEIR LOWER PLATES ATTACHED TO WOOD FRAMING BELOW WITH 16D NAILS AT 6" O.C. STAGGERED OR BOLTED TO CONCRETE OR MASONRY PER WALL ANCHORAGE.

WALL ANCHORAGE: SILL PLATES SHALL BE ANCHORED TO THE CONCRETE FOUNDATION WITH A MINIMUM 1/2" DIAMETER A-307 ANCHOR BOLT EMBEDDED AT LEAST 1" AND SPACED A MAXIMUM OF 5' ON CENTER. MINIMUM (2) ANCHOR BOLTS PER SILL PLATE. PROVIDE (1) ANCHOR WITHIN 12" BUT NOT LESS THAN 1 BOLT DIAMETERS FROM THE END OF EACH SILL PLATE. SEE SHEAR WALL SCHEDULE FOR SHEAR WALL ANCHORAGE. PROVIDE 3" SQUARE MINIMUM X 1/4" THICK STEEL PLATE WASHERS AND HEX NUTS. ANCHORS SHALL BE CENTERED ON THE SILL PLATE AND WASHERS SHALL EXTEND TO WITHIN 1/2" OF THE WALL SHEATHING AT SHEAR WALLS.

HEADERS SHALL BE PER THE PLANS AND HEADER SCHEDULE. UNO PROVIDE TWO STUDS MINIMUM AT THE END OF ALL WALLS AND AT EACH SIDE OF ALL OPENINGS. NAIL TOGETHER INDIVIDUAL MEMBERS OF BUILT UP POSTS WITH TWO ROWS OF 16D @ 12" O.C. STAGGERED. REFER TO THE PLANS AND SHEARWALL SCHEDULE FOR REQUIRED SHEATHING AND NAILING. WHEN NOT OTHERWISE NOTED, PROVIDE 5/8" GYPSUM WALLBOARD ON INTERIOR SURFACES. ALL WALLS SHALL HAVE SINGLE BOTTOM PLATE AND A DOUBLE TOP PLATE. END NAIL TOP PLATE TO EACH STUD WITH TWO 16D NAILS, AND TOENAIL OR END NAIL EACH STUD TO BOTTOM PLATE WITH TWO 16D NAILS. UNLESS NOTED OTHERWISE FACE NAIL DOUBLE TOP PLATE WITH 16D @ 12" O.C. AND LAP MINIMUM 4'-0" AT JOINTS AND PROVIDE EIGHT 16D NAILS @ 4" O.C. EACH SIDE JOINT.

UNLESS OTHERWISE NOTED, GYPSUM WALLBOARD SHALL BE FASTENED TO THE INTERIOR SURFACE OF ALL STUDS AND PLATES WITH NO. 6 X 1-1/4" TYPE S OR M SCREWS @ 8" ON-CENTER.

TIMBER SHIMS SHALL BE EITHER METAL, PLASTIC, OR HARDWOOD SPECIES. WOOD SHIMS SHALL NOT BE USED IN CONTACT WITH MASONRY OR CONCRETE OR FOR MOISTURE EXPOSED APPLICATIONS.

NAILING: CONFORM TO IBC 2304.10 "CONNECTIONS AND FASTENERS". UNLESS NOTED OTHERWISE ALL NAILS SHALL BE COMMON. NAILS SHALL BE DRIVEN FLUSH AND SHALL NOT FRACTURE THE SURFACE OF SHEATHING. NO COUNTERSINKING PERMITTED. TOENAILS SHALL BE DRIVEN AT AN ANGLE OF 30 DEGREES WITH THE MEMBER AND STARTED 1/3 THE LENGTH OF THE NAIL FROM THE MEMBER END. NAIL SIZES SPECIFIED ON THE DRAWINGS ARE BASED ON THE FOLLOWING SPECIFICATIONS:

Table with 5 columns: SIZE, LENGTH, COMMON, SINKER, BOX. Lists various nail sizes and their specifications.

WOOD STRUCTURAL PANELS (SHEATHING): WOOD SHEATHING SHALL CONFORM TO THE U.S. DEPARTMENT OF COMMERCE STANDARDS PS-1 AND PS-2 ACCORDING TO TYPE AND SHALL BE IDENTIFIED BY THE TRADEMARKS OF AN APPROVED TESTING & INSPECTION AGENCY.

SHEATHING SHALL BE APA PERFORMANCE RATED PANELS PER NER REPORT NUMBER 108. SHEATHING MAY BE PLYWOOD PER UBC STD 23-2 OR ORIENTED STRAND BOARD (OSB) PER UBC STD 23-3, UNLESS NOTED OTHERWISE. PLYWOOD PANELS SHALL BE GRADE CD AND ALSO CONFORM TO PS 1-23 (UBC STD 23-2). ALL PANELS SHALL BE IDENTIFIED AS EXPOSURE 1 UNLESS NOTED OTHERWISE. PANEL RATINGS TO BE AS FOLLOWS UNLESS NOTED OTHERWISE.

ROOF: 19/32" (OR 5/8") THICK, 40/20
WALLS: 7/16" (OR 1/2") THICK, 32/16
FLOORS: 23/32" (OR 3/4") THICK, TONGUE AND GROOVE, 48/24

UNLESS OTHERWISE NOTED ON THE PLANS, ROOF AND FLOOR SHEATHING SHALL BE INSTALLED STAGGERED WITH GRAIN PERPENDICULAR TO SUPPORTS AND NAILED WITH 10D NAILS @ 6" O.C. TO FRAMED PANEL EDGES AND OVER STUD WALLS SHOWN ON PLANS AND @ 12" O.C. TO INTERMEDIATE SUPPORTS. PROVIDE APPROVED SHEATHING EDGE CLIPS @ 16" O.C. AT UNBLOCKED ROOF SHEATHING EDGES. INSTALLED WITH 1/8" GAP BETWEEN PANELS.

UNLESS OTHERWISE NOTED ON THE PLANS, WALL SHEATHING MAY BE INSTALLED HORIZONTALLY OR VERTICALLY. UNSUPPORTED EDGES SHALL BE BLOCKED AND ALL EDGES INSTALLED SHALL BE NAILED WITH 10D @ 6" O.C., NAIL WITH 10D @ 12" O.C. AT INTERMEDIATE SUPPORTS. NAIL SHEAR WALL SHEATHING TO ALL HOLDDOWN STUDS USING EDGE NAIL SPACING WHEN HOLDDOWN STUD DOES NOT OCCUR AT PANEL EDGE.

NOTCHES AND HOLES IN WOOD FRAMING: NOTCHES ON THE ENDS OF SOLID SAWN JOISTS AND RAFTERS SHALL NOT EXCEED ONE-FOURTH THE JOIST DEPTH. NOTCHES IN THE TOP OR BOTTOM OF SOLID SAWN JOISTS SHALL NOT EXCEED ONE-SIXTH THE DEPTH AND SHALL NOT BE LOCATED IN THE MIDDLE THIRD OF THE SPAN. HOLES BORED IN THE SOLID SAWN JOISTS AND RAFTERS SHALL NOT BE WITHIN 2 INCHES OF THE TOP OR BOTTOM OF THE JOIST, AND THE DIAMETER OF ANY SUCH HOLE SHALL NOT EXCEED ONE-THIRD THE DEPTH OF THE JOIST.

IN EXTERIOR WALLS AND BEARING PARTITIONS, ANY WOOD STUD IS PERMITTED TO BE CUT OR NOTCHED TO A DEPTH NOT EXCEEDING 25 PERCENT OF ITS WIDTH. A HOLE NOT GREATER IN DIAMETER THAN 40 PERCENT OF THE STUD WIDTH IS PERMITTED TO BE BORED IN ANY WOOD STUD. IN NO CASE SHALL THE EDGE OF THE BORED HOLE BE NEARER THAN 5/8 INCH TO THE EDGE OF THE STUD. BORED HOLES SHALL NOT BE LOCATED AT THE SAME SECTION OF STUD AS A CUT OR NOTCH.

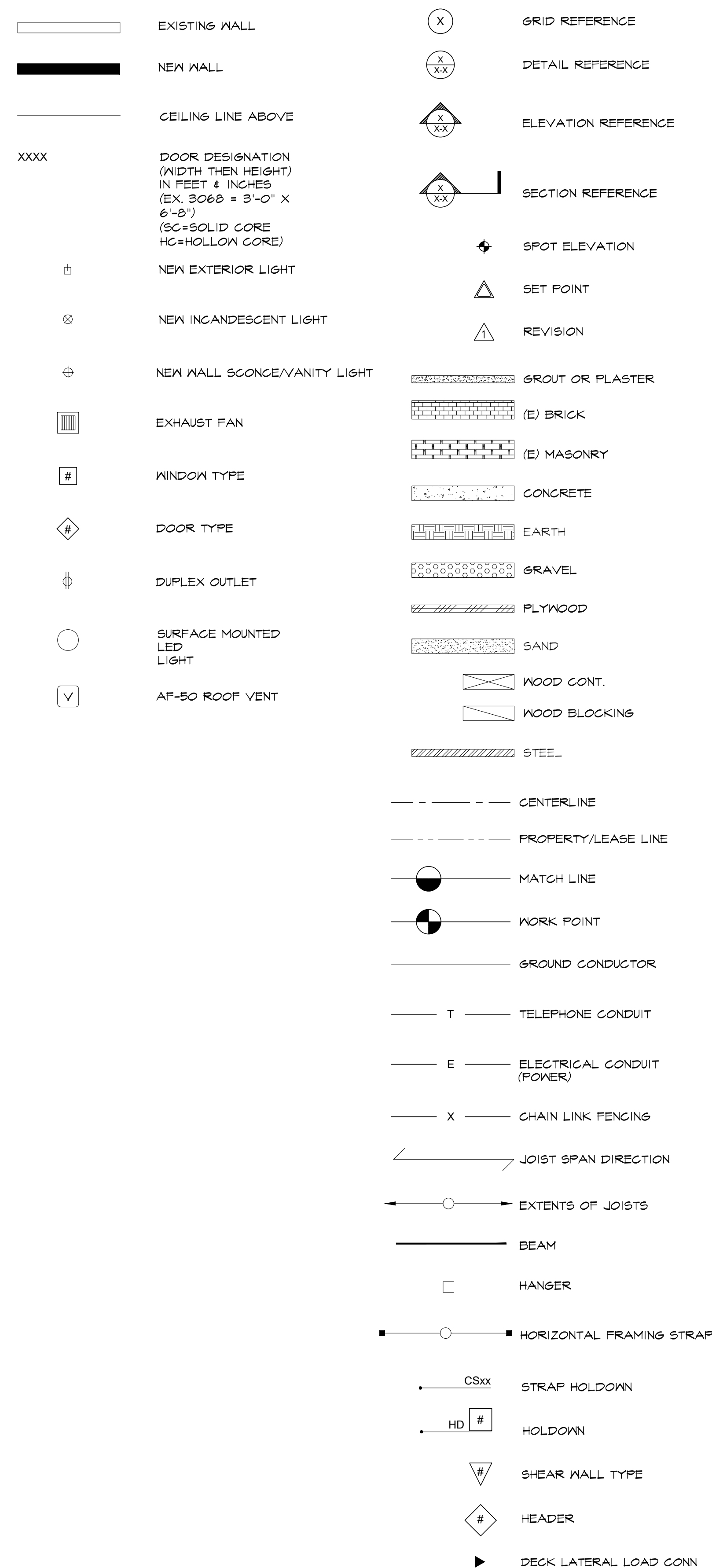
FLOOR AND ROOF FRAMING: PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH AND AROUND ALL OPENINGS IN FLOORS OR ROOFS UNLESS OTHERWISE NOTED. PROVIDE SOLID BLOCKING AT ALL BEARING POINTS. TOE-NAIL JOISTS TO SUPPORTS WITH TWO 16D NAILS. ATTACH TIMBER JOISTS TO FLUSH HEADERS OR BEAMS WITH SIMPSON METAL JOIST HANGERS IN ACCORDANCE WITH NOTES ABOVE. NAIL ALL MULTI JOIST BEAMS TOGETHER WITH TWO ROWS 16D @ 12" ON-CENTER.

POST-INSTALLED ANCHORS: ANCHORS TO EXISTING CONCRETE SHALL BE HILTI ADHESIVE ANCHORS WITH HILTI HIT-RE 500 V3 EPOXY MORTAR. PROVIDE 5/8" DIAMETER HAS-E-SS ANCHOR BOLTS EMBEDDED A MINIMUM OF 8" INTO CONCRETE, UNLESS NOTED OTHERWISE.

SETTLEMENT SHRINKAGE:

DUE TO CROSS GRAIN WOOD SHRINKAGE, NEW BUILDING CONSTRUCTION IS EXPECTED TO SETTLE APPROXIMATELY 3/8" PER STORY. ALL PLUMBING AND MECHANICAL DUCTS SHALL BE DESIGNED WITH FLEXIBLE JOINTS OR OTHER MEANS TO APPROPRIATELY ACCOMMODATE THIS NORMAL SETTLEMENT. ALL INTERIOR AND EXTERIOR SHEATHING AND FINISHES SHALL BE INSTALLED SUCH THAT NO DAMAGE WILL OCCUR. SHRINKAGE IS EXPECTED IN THE DEPTH OF THE FLOOR PLATES AND NOT IN THE LENGTH OF THE WALL.

LEGEND



ABBREVIATION LIST

Table with 4 columns: DIM TO BE FIELD VERIFIED, HORIZ, HORIZONTAL, and a fourth column for additional abbreviations. Lists various construction abbreviations like AB, AFF, AGL, ALT, APPROX, ARCH, AMSL, B/, BLDG, BLKG, BM, BOF, BOT, BP, BRG, BTWN, B.U., C, (-C), CANT., CIP, CI, CJP, CL, CLR, CMU, COL, CONC, CONN, CONST, CONT, CONTR, COORD, CTR, CY, DBL, DEMO, DF, DIA OR, DIAG, DIM, DIST, DL, DN, DP, DWG, DWL, EA, EF, EJ, EL, ELEV., EMBED, ENGR, EOR, EQUIP, EQ, EW, EX OR (E), EXP, EXT, F/, FDN, FF, FIN, FLR, FRMG, FS, FTG, GA, GALV, GEO, GLB, GR, GWB, HD, HDR, HF, HGR, etc.



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

BURKE CONSULTING ENGINEERS logo and contact information: KOLBY BURKE, kolby.burke@burke-engineers.com, (925) 639-5512.

Table with 4 columns: REV, DATE, DESCRIPTION, BY. Contains a revision record.

PROJECT: MERCER ISLAND (NM) RESIDENCE
4311 85TH AVENUE SE
MERCER ISLAND, WA 98040
PROJECT NO: 22-014

SHEET TITLE: GENERAL NOTES

SHEET: T-3

**LEGEND**

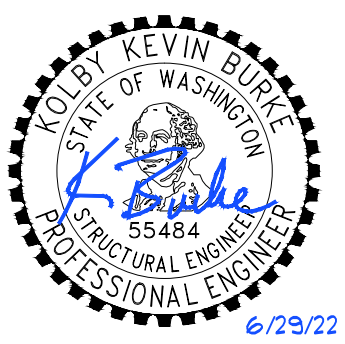
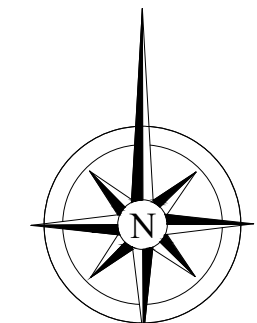
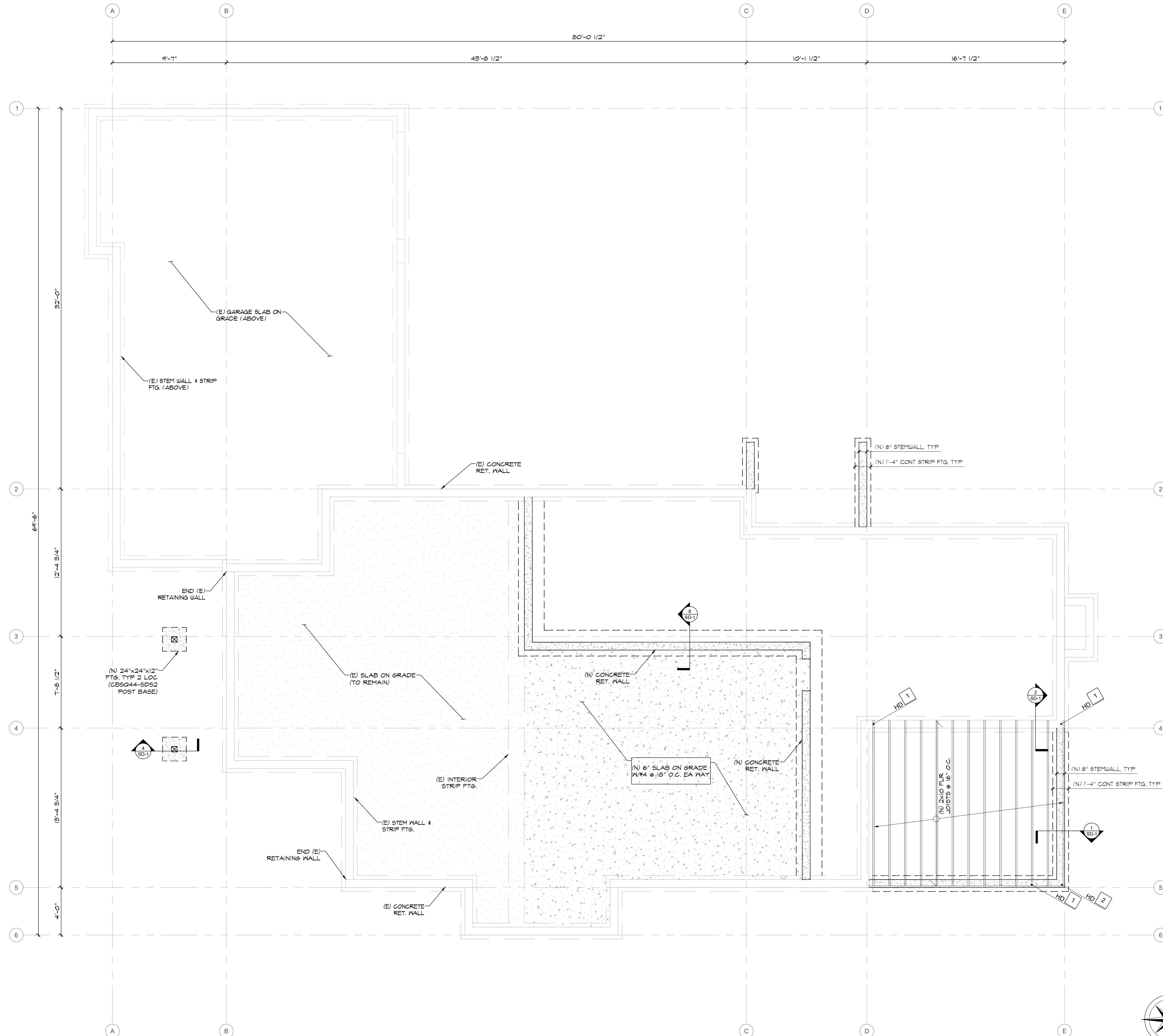
- (N) INTERIOR CONC STRIP FTG
- (N) CONC STEM WALL & STRIP FTG
- (N) CONC SPREAD FTG
- (E) CONC STEM WALL & STRIP FTG (TO REMAIN)
- HD # HOLDOWN

**TYP. FOUNDATION PLAN NOTES:**

1. GENERAL STRUCTURAL NOTES AND ABBREVIATIONS PER SHEET T-2 AND T-3.
2. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCH. PROVIDED DIMENSIONS ARE TO FACE OF CONCRETE STEM WALL OR CENTER OF INDIVIDUAL FOOTING. OUTSIDE FACE OF STEM WALL ALIGNS WITH OUTSIDE FACE OF STUD WALL UNO. 5THD HOLDOWNS ARE DIMENSIONED TO CENTER OF STRAP. HDU/HD/HTT HOLDOWNS ARE DIMENSIONED TO CENTER OF ANCHOR BOLT.
3. VERIFY ALL T/C CONC ELEVATIONS ON ALL CONCRETE INCLUDING PARTIAL HEIGHT RETAINING WALLS. CONCRETE TO EXTEND MIN 8" ABOVE FINISHED GRADE. PROVIDE 1" RECESS AT DOUBLE SIDED SHEARWALLS TO ACCOMMODATE 3X SILL PLATE.
4. PROVIDE 6 MIL BLACK POLYETHYLENE VAPOR BARRIER OVER ENTIRE CRAWL SPACE. LAP EDGES 6" MIN.
5. FOOTINGS ARE TO BEAR ON COMPETENT NATIVE SOIL OR STRUCTURAL FILL CAPABLE OF SUPPORTING THE ASSUMED BEARING PRESSURE PER GENERAL NOTES. REFERENCE GEOTECHNICAL REPORT (IF AVAILABLE) FOR SUBGRADE PREPARATION, FILL REQUIREMENTS, FOOTING DRAINS, AND OTHER REQUIREMENTS. PROVIDE FOOTING DRAINS AROUND PERIMETER OF BUILDING.
6. PRIOR TO POURING CONCRETE CONTRACTOR SHALL LOCATE AND VERIFY LOCATIONS OF ALL FOUNDATION OPENINGS, PENETRATIONS, AND SLOPES.
7. SILL ANCHOR BOLTS (J-BOLTS) SHALL BE ASTM F1554 (36KSI) HDG, ASTM A307 6R C (36KSI) HDG, OR SIM. ANCHOR BOLTS TO BE 1/2"Ø X 1" MIN EMBEDMENT. SPACING PER SHEARWALL SCHEDULE (60" O.C. MAX). EACH ANCHOR BOLT TO HAVE STANDARD HDG NUT AND WASHER INSTALLED OVER 3"X3"X1/4" HDG PLATE WASHER WITH EDGE OF PLATE WASHER LOCATED WITHIN 1/2" OF SHEATHED FACE OF WALL. FOR TWO-SIDED SHEARWALLS 1/2X6 WALL FRAMING USE 4X4X1/4" PLATE WASHERS OR STAGGER ANCHOR BOLTS SO THAT EVERY OTHER PLATE WASHER IS LOCATED WITHIN 1/2" OF EACH FACE OF WALL.
8. HOLDOWNS BY SIMPSON STRONG-TIE. INSTALLATION PER MANUFACTURER'S SPECIFICATIONS. ALTERNATIVE SOLUTIONS SHALL BE SUBMITTED TO EOR FOR APPROVAL PRIOR TO INSTALLATION. HOLDOWN THREADED RODS SHALL BE ASTM F1554 (36KSI) HDG UNO. EMBEDDED END OF THREADED ROD TO HAVE 3"X3"X1/4" HDG PLATE WASHER BETWEEN TWO SNUG-TIGHT HDG STANDARD NUTS.
9. CJ INDICATES CONTROL JOINT.

**TYP. FRAMING PLAN NOTES:**

1. LUMBER GRADE PER GENERAL STRUCTURAL NOTES.
2. FLOOR SHEATHING PER GENERAL NOTES. ALL SHEATHING TO BE GLUED AND NAILED TO FRAMING PER MANUFACTURER RECOMMENDATIONS. USE 10d COMMON NAILS (0.148 "X 2 1/2") @ 6" O.C. AT PANEL EDGES AND AT ALL FRAMING DESIGNATED WITH "EDGE NAILING" OR "WEN", AND 12" O.C. IN THE FIELD. UNO. PANEL EDGE JOINTS TO BE STAGGERED BETWEEN ADJACENT PANELS OF SHEATHING. PROVIDE GAP BETWEEN PANELS TO ALLOW FOR NATURAL EXPANSION/CONTRACTION (1/8" GAP TYP).
3. LOCATE ALL OPENINGS AND PENETRATIONS AND VERIFY NO CONFLICT WITH FLOOR FRAMING, MECHANICAL, ELECTRICAL, AND PLUMBING DRAININGS BY OTHERS.
4. ALL WOOD LOCATED WITHIN 8" OF FINISHED GRADE, EXPOSED TO WEATHER OR IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED. ALL FASTENERS IN CONTACT WITH FIRE-RETARDANT OR PRESSURE-TREATED WOOD SHALL BE COVERED IN PROTECTIVE COATING (I.E. HDG OR SIM).
5. ALL POSTS ABOVE THE FLOOR FRAMING SHALL BE BLOCKED WITHIN THE FLOOR DEPTH ("VERTICAL GRAIN BLKS", "VERTICAL CRUSH BLKS", OR "VCB"). BLOCKING WIDTH SHALL MATCH WIDTH OF POST OR BUNDLED STUDS ABOVE AND EXTEND FULL FLOOR DEPTH. ALL TIES AND HANGERS TO BE MANUFACTURED BY SIMPSON STRONG-TIE. INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS. ALTERNATIVE SOLUTIONS SHALL BE SUBMITTED TO EOR FOR APPROVAL PRIOR TO INSTALLATION.



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

**BURKE CONSULTING ENGINEERS**  
 KOLBY BURKE  
 kolby.burke@burke-engineers.com  
 (925) 639-5512

REV	DATE	DESCRIPTION	BY
1			

PROJECT: MERCER ISLAND (NM) RESIDENCE  
 4311 85TH AVENUE SE  
 MERCER ISLAND, WA 98040

PROJECT NO: 22-014

SHEET TITLE  
**FDTN & MAIN FLR FRAMING PLAN**

SHEET  
**S-1**

**FOUNDATION & MAIN FLOOR FRAMING PLAN**

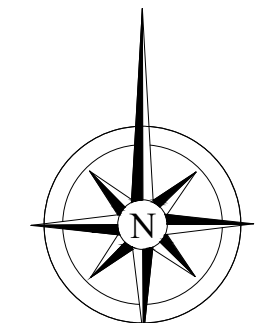
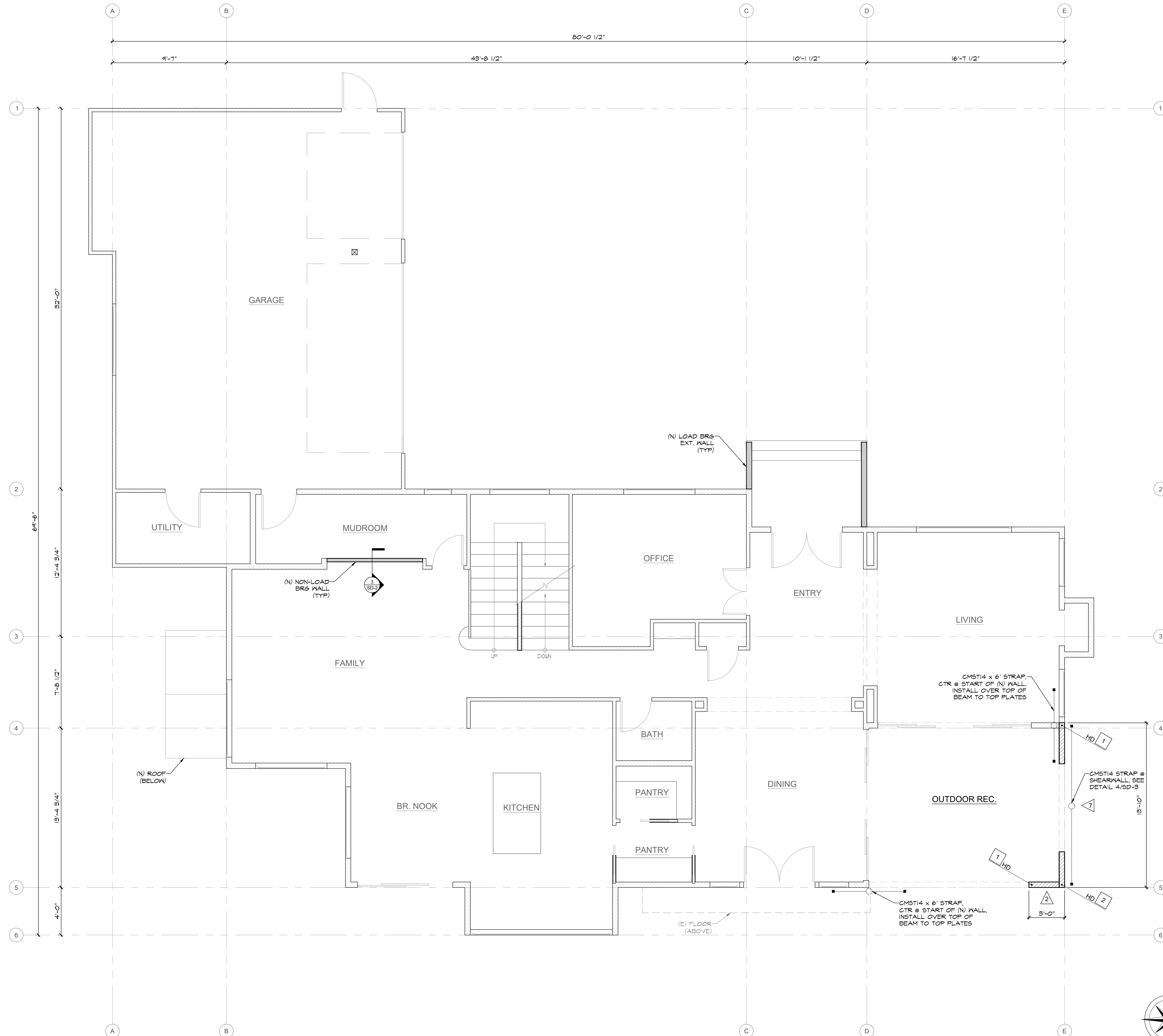
SCALE: 1/4" = 1'-0" (24x36)  
 (OR) 1/8" = 1'-0" (11x17)

**LEGEND**

- (E) WALL (TO REMAIN)
- (N) WALL
- (N) SHEAR WALL
- HORIZONTAL FRAMING STRAP
- HD # HOLDOWN
- CSxx VERTICAL STRAP HOLDOWN
- SHEAR WALL TYPE

**TYP. WALL FRAMING NOTES:**

1. GENERAL STRUCTURAL NOTES AND ABBREVIATIONS PER SHEET T-2 AND T-3.
2. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCH.
3. LUMBER GRADE PER GENERAL STRUCTURAL NOTES.
4. ALL BUNDLED STUDS SPECIFIED PER PLAN SHALL BE CONNECTED TOGETHER WITH 16d @ 6" O.C.
5. EXTERIOR WALL STUDS SHALL BE 2X6 @ 16" O.C. (S10'), 2X6 @ 12" O.C. (N10') UNO. INTERIOR WALL STUDS SHALL BE 2X4 @ 16" O.C. UNO.
6. ALL NON-LOAD BEARING WALLS TO BE FRAMED MIN 0.25" UNDER FLOOR SYSTEM.
7. PROVIDE ONE KING STUD AND ONE JACK/TRIMMER STUD MINIMUM AT EVERY HEADER UNO. JACK/TRIMMER STUDS SHOULD BE CONTINUOUS TO THE FOUNDATION AND SHALL HAVE ("VERTICAL GRAIN BLKS", "VERTICAL CRUSH BLKS", OR "VCB") WITHIN THE FLOOR FRAMING DEPTH MATCHING THE WIDTH OF JACK/TRIMMER STUDS.
8. ALL POSTS ABOVE THE FLOOR FRAMING SHALL BE BLOCKED WITHIN THE FLOOR DEPTH ("VERTICAL GRAIN BLKS", "VERTICAL CRUSH BLKS", OR "VCB"). BLOCKING WIDTH SHALL MATCH WIDTH OF POST OR BUNDLED STUDS ABOVE AND EXTEND FULL FLOOR DEPTH.
9. SHEAR WALL SHEATHING AND NAILING REQUIREMENTS PER SHEAR WALL SCHEDULE. ALL EXTERIOR WALLS SHALL BE TYPE I UNO.
10. STUD QUANTITIES, POST SIZE, HOLDOWN, AND SHEARWALL REQUIREMENTS PER GENERAL NOTES 'WOOD FRAMING', SHEAR WALL SCHEDULE, AND TYPICAL WALL FRAMING DETAILS.
11. ALL SHEATHING PANEL EDGES TO OCCUR OVER STUDS, PLATES, RIMS, OR HORIZONTAL BLOCKING. PANEL EDGE NAILING PER SHEARWALL SCHEDULE. FIELD NAILING AT 12" O.C. UNO.
12. PROVIDE MIN TWO 2X STUDS AT EACH END OF SHEARWALL UNO. PROVIDE PANEL EDGE NAILING INTO EACH STUD AT END OF WALL.
13. SHEAR WALL PANEL EDGE STUDS INDICATE THE MINIMUM STUD WIDTH AT ABUTTING PANEL EDGES. TWO 2X STUDS ARE AN ACCEPTABLE ALTERNATE FOR 3X STUDS. TWO 2X STUDS ARE TO BE NAILED TOGETHER WITH TWO ROWS 10d NAILS AT 6" O.C. (4" O.C. @ S11 TYPE 6 AND S11 TYPE 7). AT DOUBLE SIDED SHEAR WALLS VERTICAL PANEL EDGES TO BE STAGGERED ON OPPOSITE SIDES OF THE WALL EXCEPT END OF SHEAR WALL.
14. RBC INSTALLED DIRECTLY AGAINST FRAMING USE 10d SHORT (148X 1.5"). LTP4 INSTALLED OVER PLYWOOD SHALL USE 8d COMMON NAILS (1310 X 2.5"). LTP4 INSTALLED DIRECTLY AGAINST FRAMING MAY USE 8d SHORT (131X 1.5").
15. HORIZONTAL STRAPS INDICATED ON FRAMING PLANS SHALL BE CENTERED OVER THE TOP PLATE, BEAM, OR BLOCKING. STRAP LENGTH PER PLAN.
16. STRAPS AT SHEAR WALLS INDICATES THAT A WINDOW IS INCORPORATED WITHIN THE SHEAR WALL. REFER TO FORCE-TRANSFER AROUND OPENING DETAIL FOR FRAMING REQUIREMENTS.
17. 5THD HOLDOWNS ARE DIMENSIONED TO CENTER OF STRAP. HDU/HD HOLDOWNS ARE DIMENSIONED TO CENTER OF ANCHOR BOLT.
18. SILL ANCHOR BOLTS (J-BOLTS) SHALL BE ASTM F1554 (36KSI) HD6, ASTM A307 (36KSI) HD6, OR SIM. ANCHOR BOLTS TO BE 1/2" Ø X 7" MIN EMBEDMENT. SPACING PER SHEARWALL SCHEDULE (60" O.C. MAX). EACH ANCHOR BOLT TO HAVE STANDARD HD6 NUT AND WASHER INSTALLED OVER 3"X3"X1/4" HD6 PLATE WASHER WITH EDGE OF PLATE WASHER LOCATED WITHIN 1/2" OF SHEATHED FACE OF WALL. FOR TWO-SIDED SHEARWALLS 1/2X6 WALL FRAMING USE 4X4X1/4" PLATE WASHERS OR STAGGER ANCHOR BOLTS SO THAT EVERY OTHER PLATE WASHER IS LOCATED WITHIN 1/2" OF EACH FACE OF WALL.
19. ALL TIES AND HANGERS TO BE MANUFACTURED BY SIMPSON STRONG-TIE. INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS. ALTERNATIVE SOLUTIONS SHALL BE SUBMITTED TO EOR FOR APPROVAL PRIOR TO INSTALLATION.



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

**BURKE CONSULTING ENGINEERS**  
 KOLBY BURKE  
 kolby.burke@burke-engineers.com  
 (925) 639-5512

REV	DATE	DESCRIPTION	BY

PROJECT: MERCER ISLAND (NM) RESIDENCE  
 4311 85TH AVENUE SE  
 MERCER ISLAND, WA 98040  
 PROJECT NO: 22-014

SHEET TITLE  
**MAIN FLOOR WALL FRAMING**

SHEET  
**S-2**

**MAIN FLOOR WALL FRAMING PLAN**

10' 0' 5' 10' SCALE: 1" = 10'-0" (24x36)  
 (OR) 1/2" = 10'-0" (11x17)

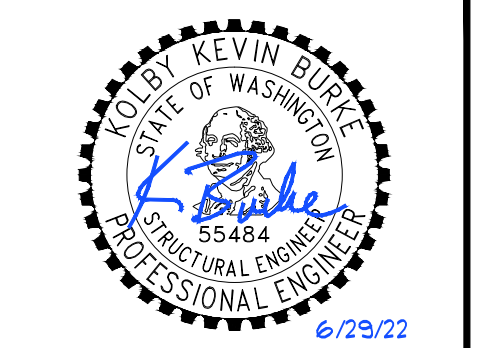
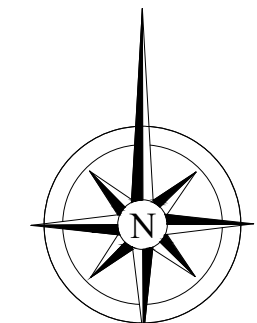
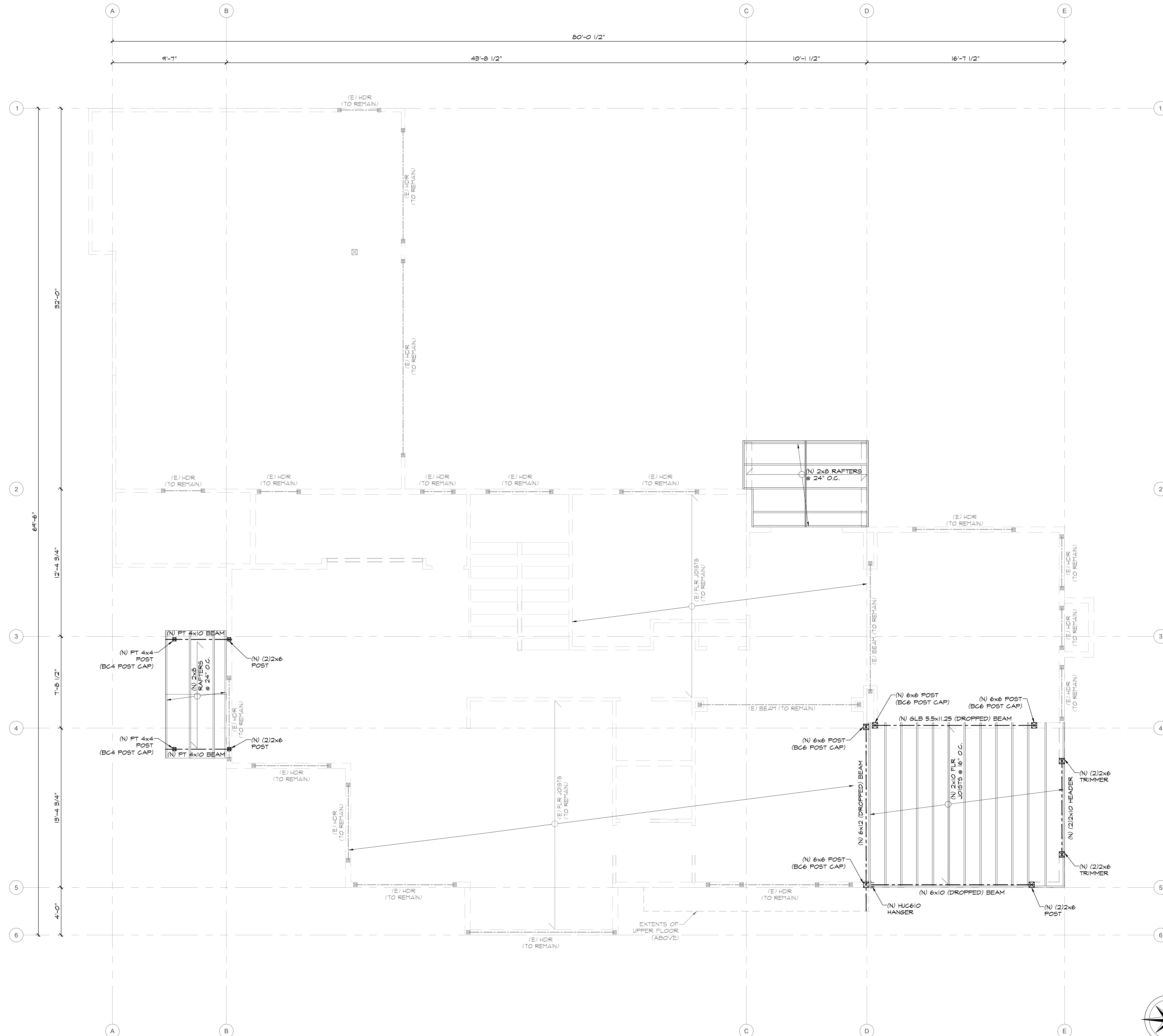


**LEGEND**

- (E) WALL (TO REMAIN)  
AND/OR (N) WALL (BELOW)
- (N) OR MODIFIED JOISTS/RAFTERS
- (E) JOISTS/RAFTERS
- SPAN/EXTENTS OF JOISTS/RAFTERS
- (N) OR (E) BEAM/HEADER
- (N) HEADER (SEE DETAILS FOR SCHEDULE)
- HANGER

**TYP. FRAMING PLAN NOTES:**

1. GENERAL STRUCTURAL NOTES AND ABBREVIATIONS PER SHEET T-2 AND T-3.
2. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCH.
3. LUMBER GRADE PER GENERAL STRUCTURAL NOTES.
4. FLOOR SHEATHING PER GENERAL NOTES. ALL SHEATHING TO BE GLUED AND NAILED TO FRAMING PER MANUFACTURER RECOMMENDATIONS. USE 10d COMMON NAILS (0.148" x 2.1/2") @ 6" O.C. AT PANEL EDGES AND AT ALL FRAMING DESIGNATED WITH "EDGE NAILING" OR "WEN", AND 12" O.C. IN THE FIELD. UNO, PANEL EDGE JOINTS TO BE STAGGERED BETWEEN ADJACENT PANELS OF SHEATHING. PROVIDE GAP BETWEEN PANELS TO ALLOW FOR NATURAL EXPANSION/CONTRACTION (1/8" GAP TYP).
5. LOCATE ALL OPENINGS AND PENETRATIONS AND VERIFY NO CONFLICT WITH FLOOR FRAMING, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS BY OTHERS.
6. ALL WOOD LOCATED WITHIN 8" OF FINISHED GRADE, EXPOSED TO WEATHER OR IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED. ALL FASTENERS IN CONTACT WITH FIRE-RETARDANT OR PRESSURE-TREATED WOOD SHALL BE COVERED IN PROTECTIVE COATING (I.E. HDRS OR SIM).
7. ALL BEAMS SHALL BE SUPPORTED BY MIN TWO STUDS BELOW EACH END. UNO, ALL BEAMS SHALL BE FRAMED "TOP FLUSH" WITH JOISTS. UNO, "TOP FLUSH" OR "TF" INDICATES T/B/EAM EQUAL T/JOISTS AND B/B/EAM EXTENDING BELOW B/JOISTS. "BOTTOM FLUSH" OR "BF" INDICATES B/B/EAM EQUAL B/JOISTS AND T/B/EAM EXTENDING ABOVE T/JOISTS. "DROPPED BEAM" OR "DB" INDICATES T/B/EAM EQUAL B/JOISTS.
8. ALL NON-LOAD BEARING WALLS TO BE FRAMED MIN 0.25" UNDER FLOOR SYSTEM.
9. STUD QUANTITIES, POST SIZE, HOLDOWN, AND SHEARWALL REQUIREMENTS PER GENERAL NOTES 'WOOD FRAMING', SHEAR WALL SCHEDULE, AND TYPICAL WALL FRAMING DETAILS.
10. ALL POSTS ABOVE THE FLOOR FRAMING SHALL BE BLOCKED WITHIN THE FLOOR DEPTH ("VERTICAL GRAIN BLOCKS", "VERTICAL CRUSH BLOCKS" OR "VCB"). BLOCKING WIDTH SHALL MATCH WIDTH OF POST OR BUNDLED STUDS ABOVE AND EXTEND FULL FLOOR DEPTH.
11. ALL TIES AND HANGERS TO BE MANUFACTURED BY SIMPSON STRONG-TIE. INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS. ALTERNATIVE SOLUTIONS SHALL BE SUBMITTED TO EOR FOR APPROVAL PRIOR TO INSTALLATION.
12. ENGINEERED FLOOR TRUSSES TO BE DESIGNED BY OTHERS. REFER TO STRUCTURAL GENERAL NOTES FOR SUBMITTAL INFORMATION AND DESIGN CRITERIA.
13. FIRE-PROOFING AND MOISTURE-PROOFING REQUIREMENTS PER IRC.



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

**BURKE CONSULTING ENGINEERS**  
KOLBY BURKE  
kolby.burke@burke-engineers.com  
(925) 639-5512

REV	DATE	DESCRIPTION	BY
1			



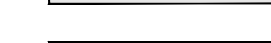
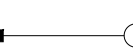



PROJECT: MERCER ISLAND (NM) RESIDENCE  
4311 85TH AVENUE SE  
MERCER ISLAND, WA 98040

PROJECT NO: 22-014

SHEET TITLE  
**UPPER FLOOR FRAMING PLAN**

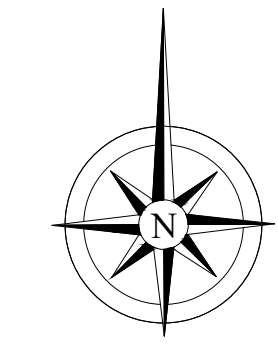
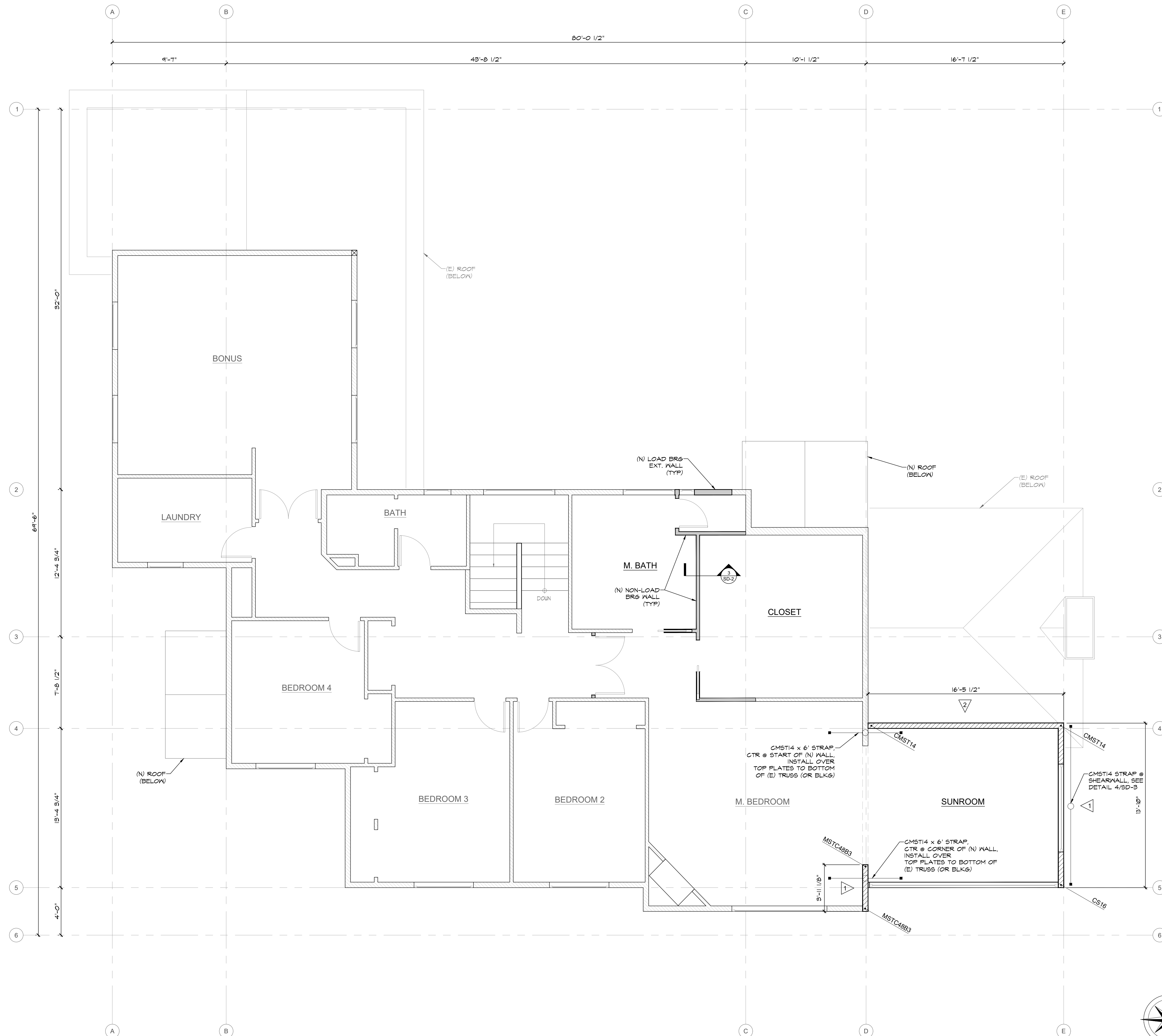
SHEET  
**S-3**

**LEGEND**

-  (E) WALL (TO REMAIN)
-  (N) WALL
-  (N) SHEAR WALL
-  HORIZONTAL FRAMING STRAP
-  HD # HOLDOWN
-  CSxx VERTICAL STRAP HOLDOWN
-  SHEAR WALL TYPE

**TYP. WALL FRAMING NOTES:**

1. GENERAL STRUCTURAL NOTES AND ABBREVIATIONS PER SHEET T-2 AND T-3.
2. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCH.
3. LUMBER GRADE PER GENERAL STRUCTURAL NOTES.
4. ALL BUNDLED STUDS SPECIFIED PER PLAN SHALL BE CONNECTED TOGETHER WITH 16d @ 6" O.C.
5. EXTERIOR WALL STUDS SHALL BE 2X6 @ 16" O.C. (S10'), 2X6 @ 12" O.C. (S10') UNO. INTERIOR WALL STUDS SHALL BE 2X4 @ 16" O.C. UNO.
6. ALL NON-LOAD BEARING WALLS TO BE FRAMED MIN 0.25" UNDER FLOOR SYSTEM.
7. PROVIDE ONE KING STUD AND ONE JACK/TRIMMER STUD MINIMUM AT EVERY HEADER UNO. JACK/TRIMMER STUDS SHOULD BE CONTINUOUS TO THE FOUNDATION AND SHALL HAVE ("VERTICAL GRAIN BLKG", "VERTICAL CRUSH BLKG", OR "VCB") WITHIN THE FLOOR FRAMING DEPTH MATCHING THE WIDTH OF JACK/TRIMMER STUDS.
8. ALL POSTS ABOVE THE FLOOR FRAMING SHALL BE BLOCKED WITHIN THE FLOOR DEPTH ("VERTICAL GRAIN BLKG", "VERTICAL CRUSH BLKG", OR "VCB"). BLOCKING WIDTH SHALL MATCH WIDTH OF POST OR BUNDLED STUDS ABOVE AND EXTEND FULL FLOOR DEPTH.
9. SHEAR WALL SHEATHING AND NAILING REQUIREMENTS PER SHEAR WALL SCHEDULE. ALL EXTERIOR WALLS SHALL BE TYPE I UNO.
10. STUD QUANTITIES, POST SIZE, HOLDOWN, AND SHEARWALL REQUIREMENTS PER GENERAL NOTES 'WOOD FRAMING', SHEAR WALL SCHEDULE, AND TYPICAL WALL FRAMING DETAILS.
11. ALL SHEATHING PANEL EDGES TO OCCUR OVER STUDS, PLATES, RIMS, OR HORIZONTAL BLOCKING. PANEL EDGE NAILING PER SHEARWALL SCHEDULE. FIELD NAILING AT 12" O.C. UNO.
12. PROVIDE MIN TWO 2X STUDS AT EACH END OF SHEARWALL UNO. PROVIDE PANEL EDGE NAILING INTO EACH STUD AT END OF WALL.
13. SHEAR WALL PANEL EDGE STUDS INDICATE THE MINIMUM STUD WIDTH AT ABUTTING PANEL EDGES. TWO 2X STUDS ARE AN ACCEPTABLE ALTERNATE FOR 3X STUDS. TWO 2X STUDS ARE TO BE NAILED TOGETHER WITH TWO ROWS 10d NAILS AT 6" O.C. (4" O.C. @ S11 TYPE 6 AND S11 TYPE 7). AT DOUBLE SIDED SHEAR WALLS VERTICAL PANEL EDGES TO BE STAGGERED ON OPPOSITE SIDES OF THE WALL EXCEPT END OF SHEAR WALL.
14. RBC INSTALLED DIRECTLY AGAINST FRAMING USE 10d SHORT (148X 1.5"). LTP4 INSTALLED OVER PLYWOOD SHALL USE 8d COMMON NAILS (1310 X 2.5"). LTP4 INSTALLED DIRECTLY AGAINST FRAMING MAY USE 8d SHORT (131X 1.5").
15. HORIZONTAL STRAPS INDICATED ON FRAMING PLANS SHALL BE CENTERED OVER THE TOP PLATE, BEAM, OR BLOCKING. STRAP LENGTH PER PLAN.
16. STRAPS AT SHEAR WALLS INDICATES THAT A WINDOW IS INCORPORATED WITHIN THE SHEAR WALL. REFER TO FORCE-TRANSFER AROUND OPENING DETAIL FOR FRAMING REQUIREMENTS.
17. STHD HOLDOWNS ARE DIMENSIONED TO CENTER OF STRAP. HDU/HD HOLDOWNS ARE DIMENSIONED TO CENTER OF ANCHOR BOLT.
18. SILL ANCHOR BOLTS (J-BOLTS) SHALL BE ASTM F1554 (36KSI) HD6, ASTM A307 (36KSI) HD6, OR SIM. ANCHOR BOLTS TO BE 1/2" Ø X 7" MIN EMBEDMENT. SPACING PER SHEARWALL SCHEDULE (60" O.C. MAX). EACH ANCHOR BOLT TO HAVE STANDARD HD6 NUT AND WASHER INSTALLED OVER 3" X 3" X 1/4" HD6 PLATE WASHER WITH EDGE OF PLATE WASHER LOCATED WITHIN 1/2" OF SHEATHED FACE OF WALL. FOR TWO-SIDED SHEARWALLS 1/2 X 6 WALL FRAMING USE 4X4 X 1/4" PLATE WASHERS OR STAGGER ANCHOR BOLTS SO THAT EVERY OTHER PLATE WASHER IS LOCATED WITHIN 1/2" OF EACH FACE OF WALL.
19. ALL TIES AND HANGERS TO BE MANUFACTURED BY SIMPSON STRONG-TIE. INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS. ALTERNATIVE SOLUTIONS SHALL BE SUBMITTED TO EOR FOR APPROVAL PRIOR TO INSTALLATION.



**UPPER FLOOR WALL FRAMING PLAN**

10' 0' 5' 10' SCALE: 1" = 10'-0" (24x36)  
(OR) 1/2" = 10'-0" (11x17)

1

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

**BURKE CONSULTING ENGINEERS**  
KOLBY BURKE  
kolby.burke@burke-engineers.com  
(925) 639-5512

REV	DATE	DESCRIPTION	BY

PROJECT: MERCER ISLAND (NM) RESIDENCE  
4311 85TH AVENUE SE  
MERCER ISLAND, WA 98040

PROJECT NO: 22-014

SHEET TITLE  
**UPPER FLOOR WALL FRAMING**

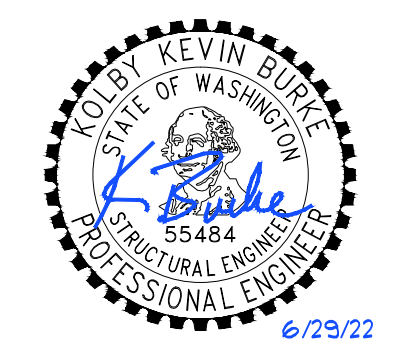
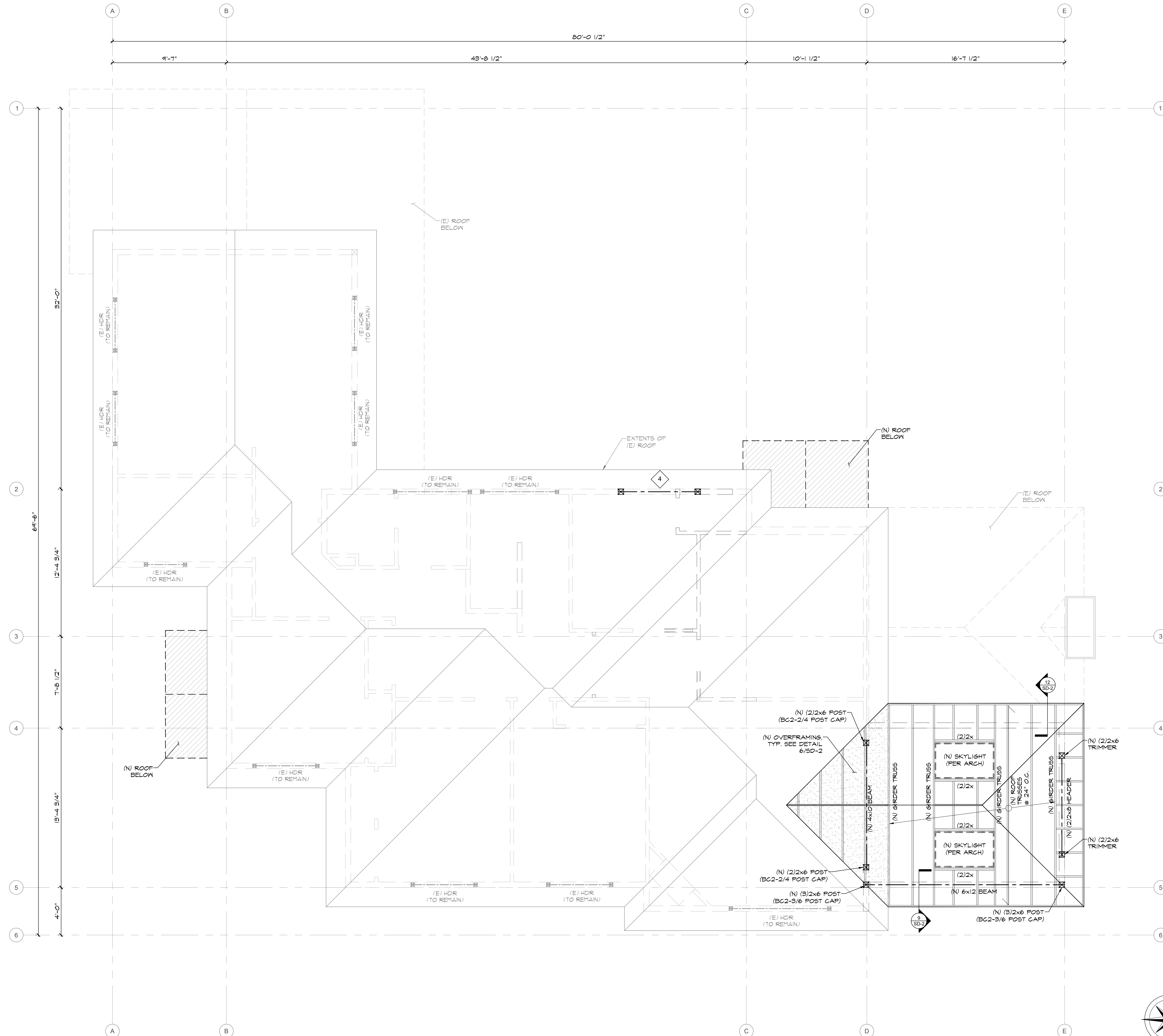
SHEET  
**S-4**

**LEGEND**

- (E) WALL (TO REMAIN)  
AND/OR (N) WALL (BELOW)
- (N) OR MODIFIED JOISTS/RAFTERS
- (E) JOISTS/RAFTERS
- SPAN/EXTENTS OF JOISTS/RAFTERS
- LOG OF (N) BEAM OR HEADER
- (N) HEADER (SEE DETAIL 4/SD-2 FOR SCHEDULE)
- HANGER

**TYP. ROOF FRAMING PLAN NOTES:**

1. GENERAL STRUCTURAL NOTES AND ABBREVIATIONS PER SHEET T-2 AND T-3.
2. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCH. LUMBER GRADE PER GENERAL STRUCTURAL NOTES.
3. ROOF SHEATHING PER GENERAL NOTES. ALL SHEATHING TO BE GLUED AND NAILED TO FRAMING PER MANUFACTURER RECOMMENDATIONS. USE 10d COMMON NAILS (0.148 "X 3") @ 6" O.C. AT PANEL EDGES AND AT ALL FRAMING DESIGNATED WITH "EDGE NAILING" OR "WEN", AND 12" O.C. IN THE FIELD. UNO. PANEL EDGE JOINTS TO BE STAGGERED BETWEEN ADJACENT PANELS OF SHEATHING. PROVIDE GAP BETWEEN PANELS TO ALLOW FOR NATURAL EXPANSION/CONTRACTION (1/8" GAP TYP).
5. ALL ROOF TRUSSES OR RAFTERS SHALL BE SPACED NO FURTHER APART THAN 24" O.C. AND SHALL BE CONNECTED TO TOP PLATE WITH H2.5 TIE UNO.
6. ALL GIRDER TRUSSES SHALL BE CONNECTED TO TOP PLATE WITH TWO H6 TIES UNO.
7. LOCATE ALL OPENINGS AND PENETRATIONS AND VERIFY NO CONFLICT WITH FLOOR FRAMING, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS BY OTHERS.
8. ALL BEAMS AND GIRDER TRUSSES SHALL BE SUPPORTED BY MIN TWO STUDS BELOW EACH END, UNO. ALL BEAMS SHALL BE FRAMED "TOP FLUSH" WITH JOISTS, UNO. "TOP FLUSH" OR "TF" INDICATES T/BEAM EQUAL T/JOISTS AND B/BEAM EXTENDING BELOW B/JOISTS. "BOTTOM FLUSH" OR "BF" INDICATES B/BEAM EQUAL B/JOISTS AND T/BEAM EXTENDING ABOVE T/JOISTS. "DROPPED BEAM" OR "DB" INDICATES T/BEAM EQUAL B/JOISTS.
4. ALL NON-LOAD BEARING WALLS TO BE FRAMED MIN 0.25" UNDER FLOOR SYSTEM.
10. HORIZONTAL STRAPS INDICATED ON FRAMING PLANS SHALL BE CENTERED OVER THE TOP PLATE, BEAM, OR BLOCKING. STRAP LENGTH PER PLAN.
11. ALL TIES AND HANGERS TO BE MANUFACTURED BY SIMPSON STRONG-TIE. INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS. ALTERNATIVE SOLUTIONS SHALL BE SUBMITTED TO EOR FOR APPROVAL PRIOR TO INSTALLATION.
12. ENGINEERED ROOF TRUSSES, WHEN CALLED OUT ON PLANS, TO BE DESIGNED BY OTHERS. REFER TO STRUCTURAL GENERAL NOTES FOR SUBMITTAL INFORMATION AND DESIGN CRITERIA.
  - a. DEAD AND LIVE LOADS INDICATED IN GENERAL STRUCTURAL NOTES SHALL BE USED FOR TRUSS DESIGN.
  - b. CHANGES TO LAYOUT MUST BE SUBMITTED TO THE ARCHITECT AND EOR FOR REVIEW AND APPROVAL.
  - c. TRUSS SUBMITTAL PACKAGE TO BE PROVIDED TO EOR FOR REVIEW. REFERENCE GENERAL STRUCTURAL NOTES FOR SUBMITTAL REQUIREMENTS.
  - d. (XXX LBS SHEAR/DRAW) INDICATE SHEAR TRANSFER LOAD. SHEAR TRUSS SHALL BE DESIGNED TO BE ABLE TO TRANSFER SPECIFIED LATERAL LOAD APPLIED AT THE TOP CHORD TO THE BOTTOM CHORD AND INTO SHEARWALL BELOW.
  - e. ROOF TRUSSES SHOULD BE DESIGNED FOR ADDITIONAL LOADS WHERE APPLICABLE AS SPECIFIED BY THE ARCHITECT (I.E. MECHANICAL UNITS, ROOF DECKS AND PATIOS, GREEN ROOFS, SOLAR UNITS, ETC).
  - f. TRUSS DESIGN FOR BEARING AT TOP PLATES TO BE DESIGNED FOR COMPRESSION PERPENDICULAR TO GRAIN.
13. COMPOSITE ROOFING MATERIAL TO MATCH EXISTING.
14. ROOF DRAINAGE TO MATCH EXISTING.



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

**BURKE CONSULTING ENGINEERS**  
 KOLBY BURKE  
 kolby.burke@burke-engineers.com  
 (925) 639-5512

REV	DATE	DESCRIPTION	BY
1			

PROJECT: MERCER ISLAND (NM) RESIDENCE  
 4311 85TH AVENUE SE  
 MERCER ISLAND, WA 98040

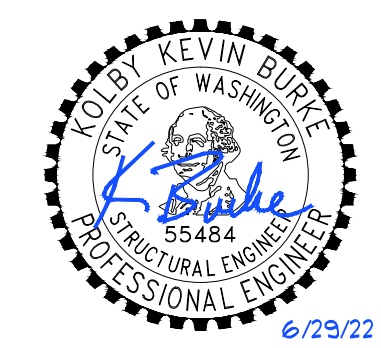
PROJECT NO: 22-014

SHEET TITLE  
**ROOF FRAMING PLAN**

SHEET  
**S-5**

**ROOF FRAMING PLAN**

SCALE: 1/4" = 1'-0" (24x36)  
 (OR) 1/8" = 1'-0" (11x17)



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

**BURKE CONSULTING ENGINEERS**  
 KOLBY BURKE  
 kolby.burke@burke-engineers.com  
 (925) 639-5512

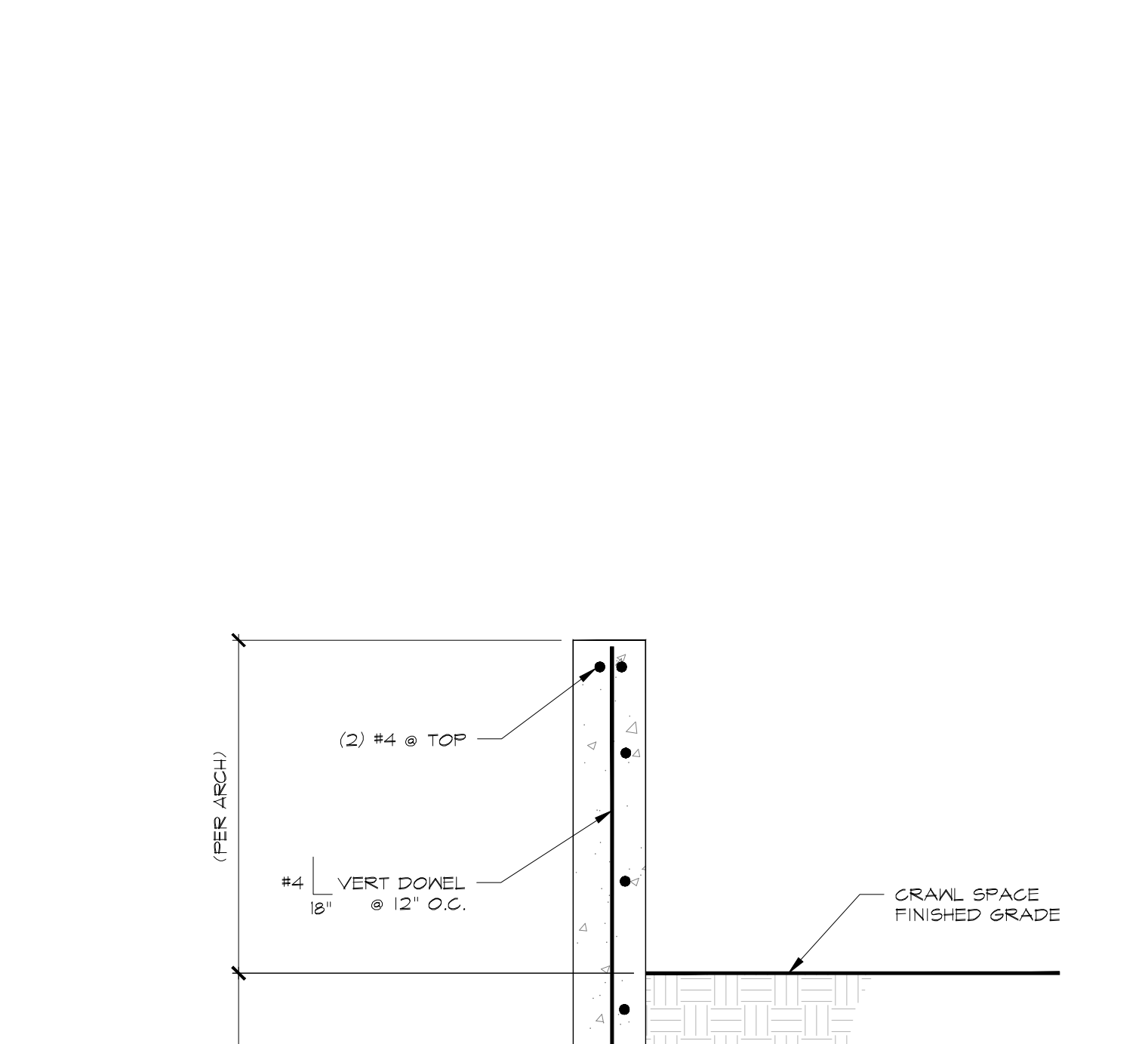
REV	DATE	DESCRIPTION	BY

PROJECT: MERCER ISLAND (NW) RESIDENCE  
 4311 85TH AVENUE SE  
 MERCER ISLAND, WA 98040  
 PROJECT NO: 22-014

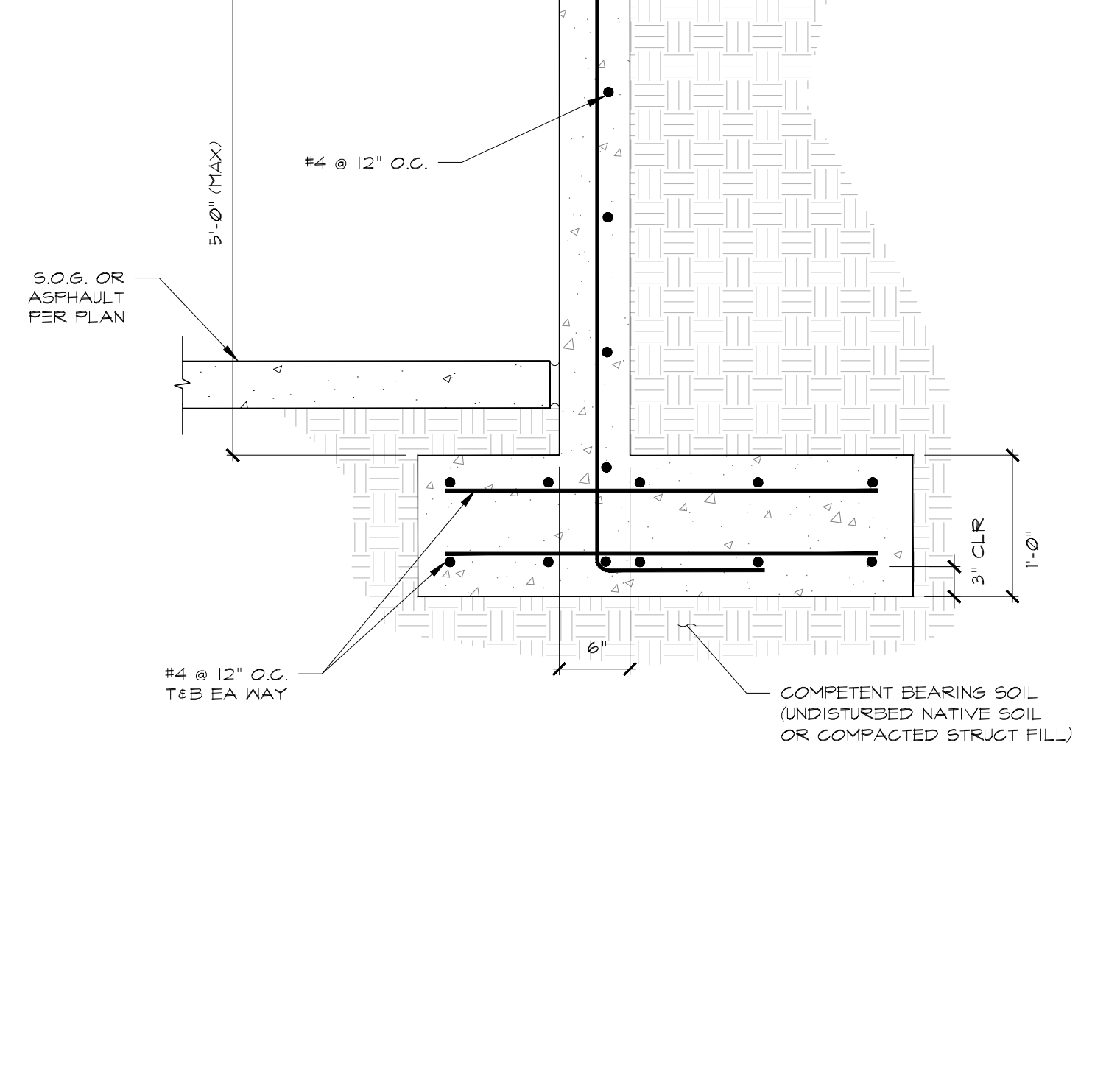
SHEET TITLE  
**STRUCTURAL DETAILS**

SHEET  
**SD-1**

**NOT USED** SCALE N.T.S. **12**



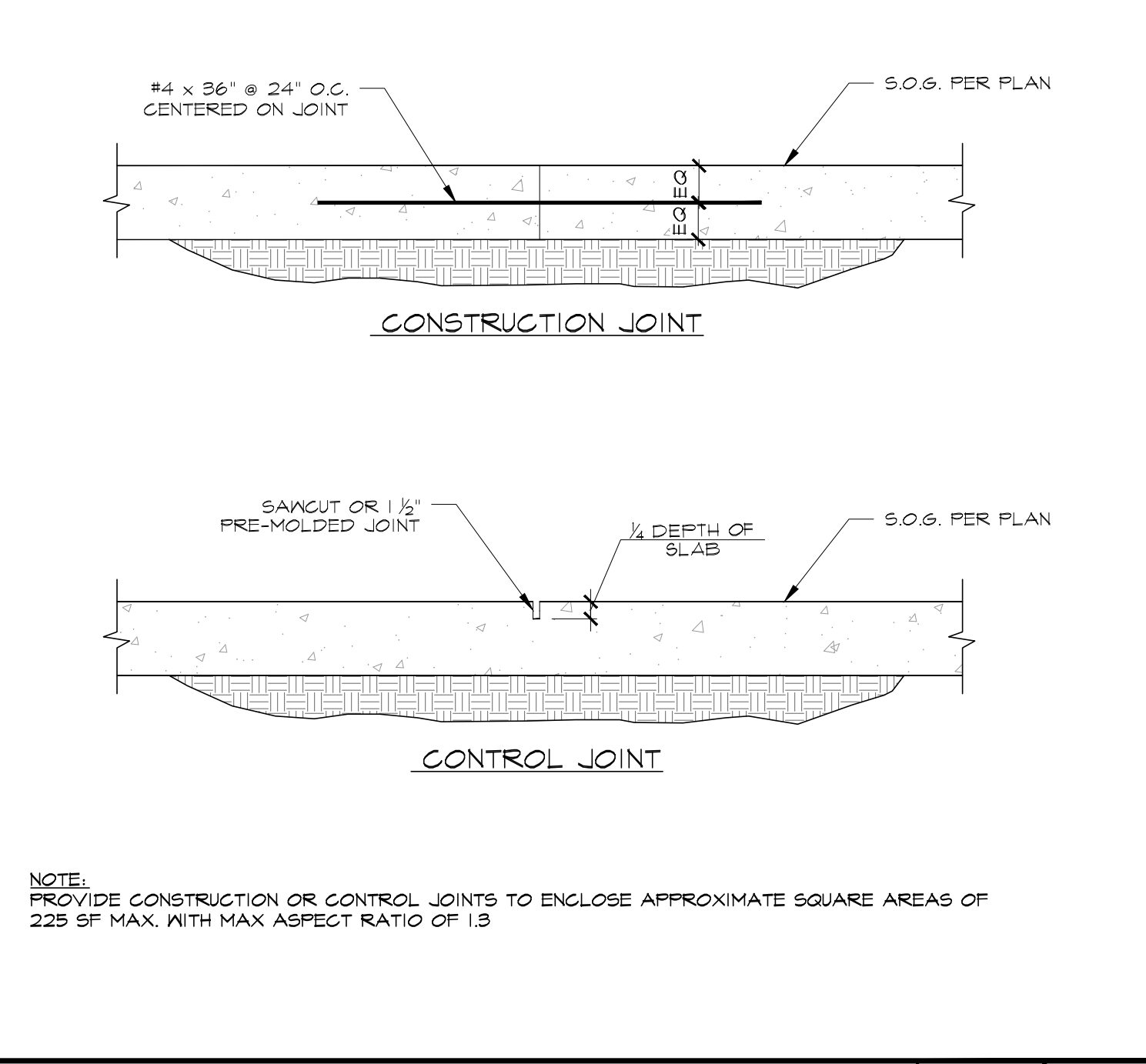
**NOT USED** SCALE N.T.S. **11**



**TYP. CONC. ENTRY STAIRS** SCALE N.T.S. **6**

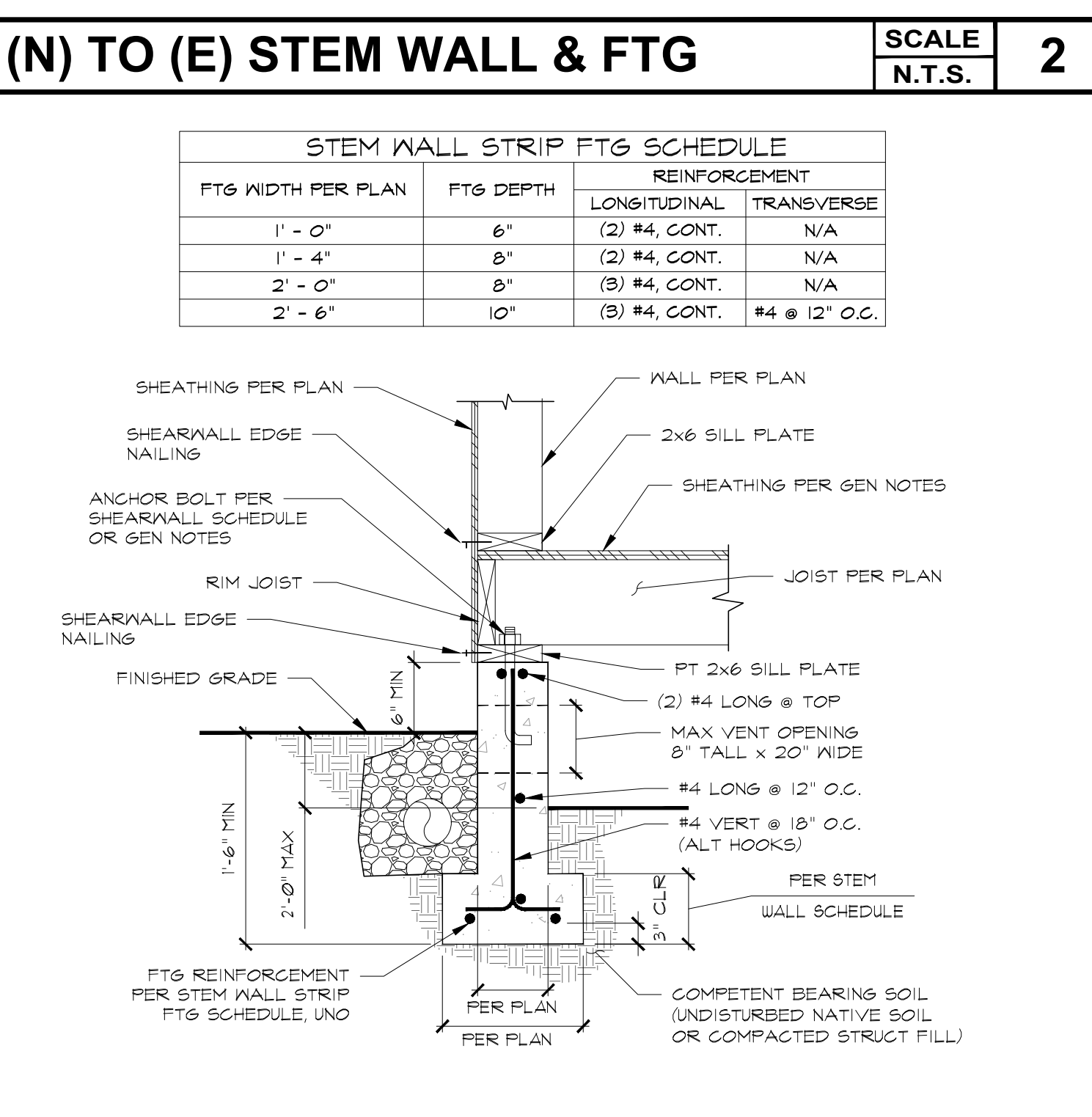
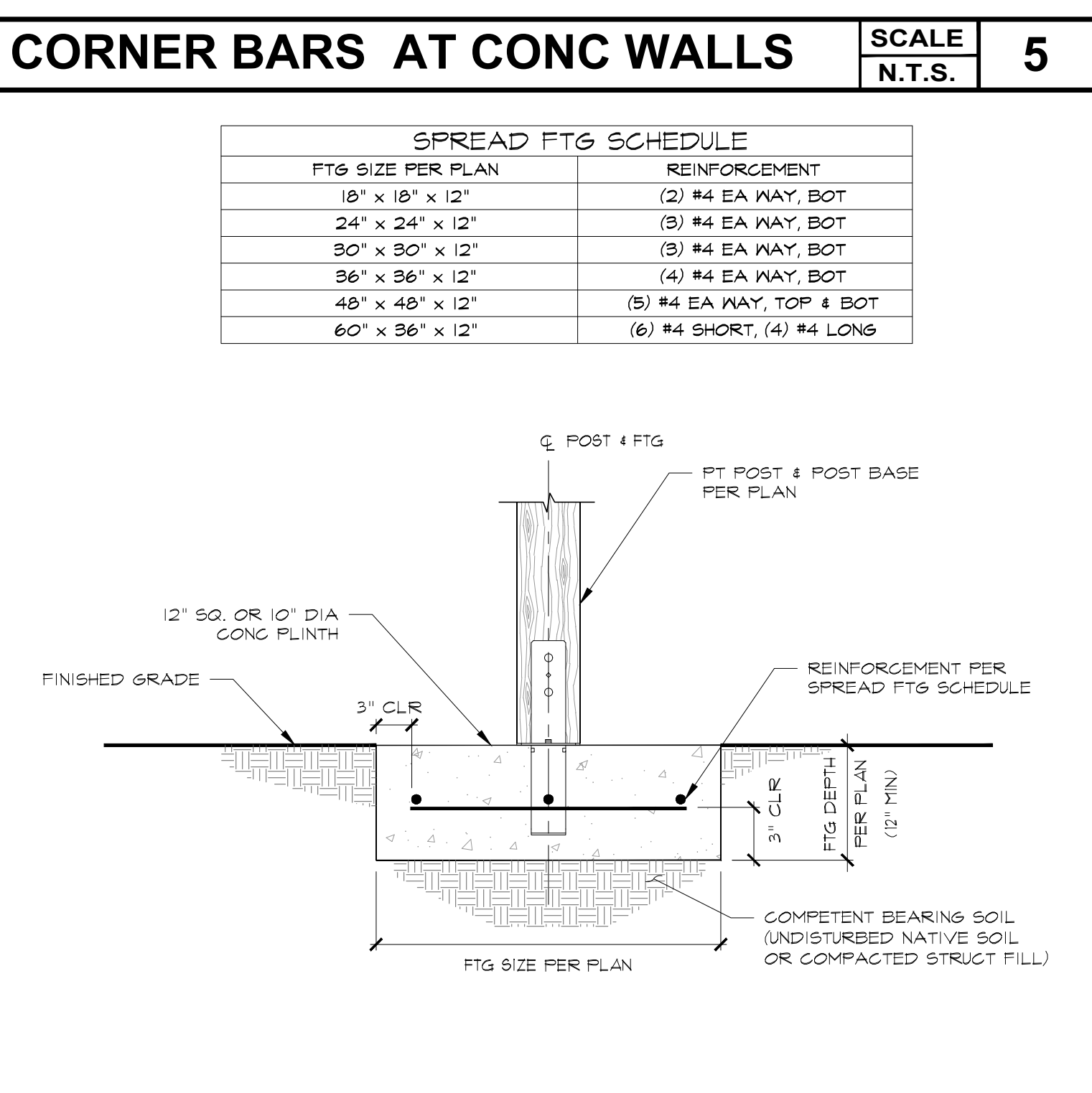
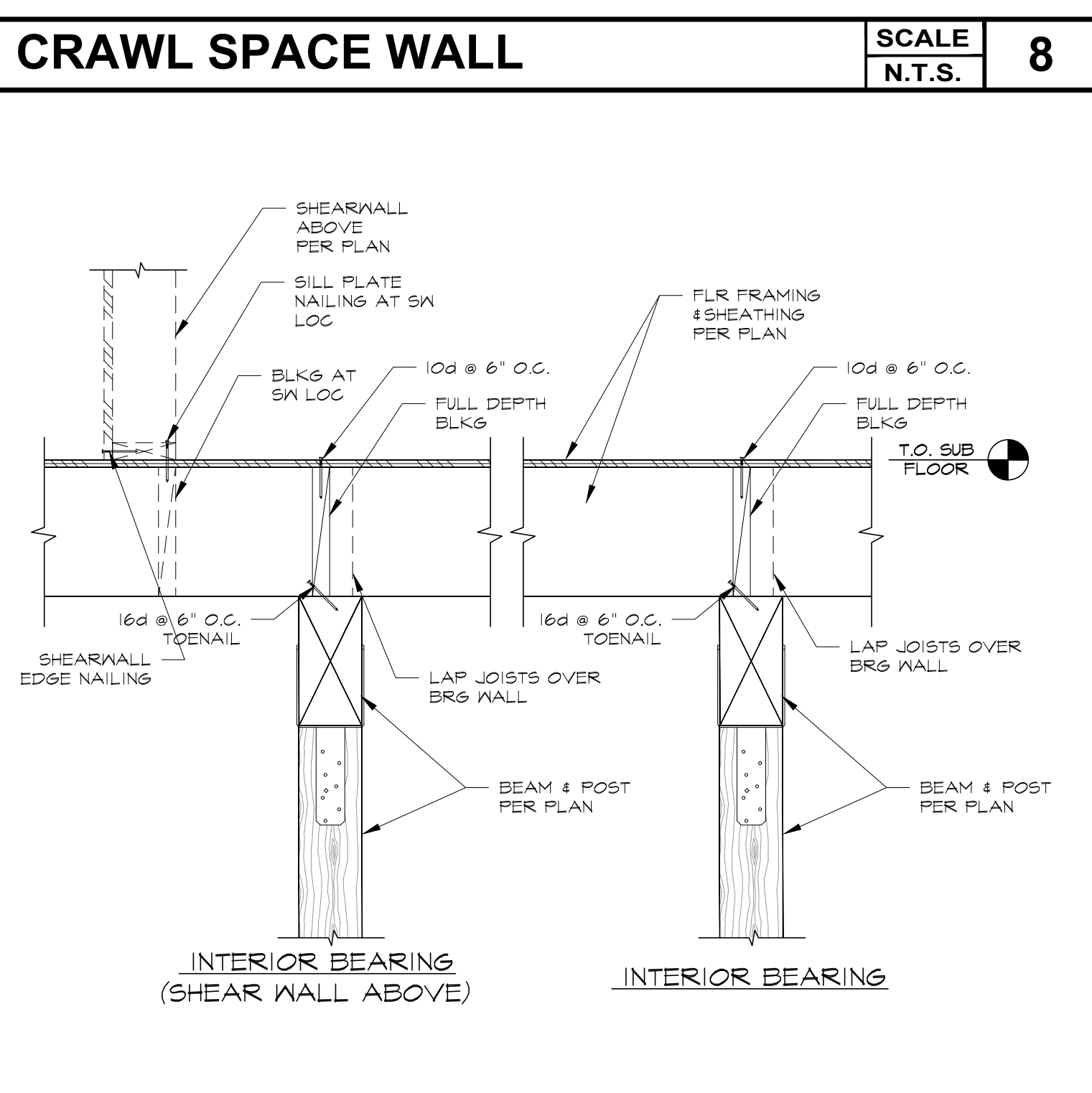
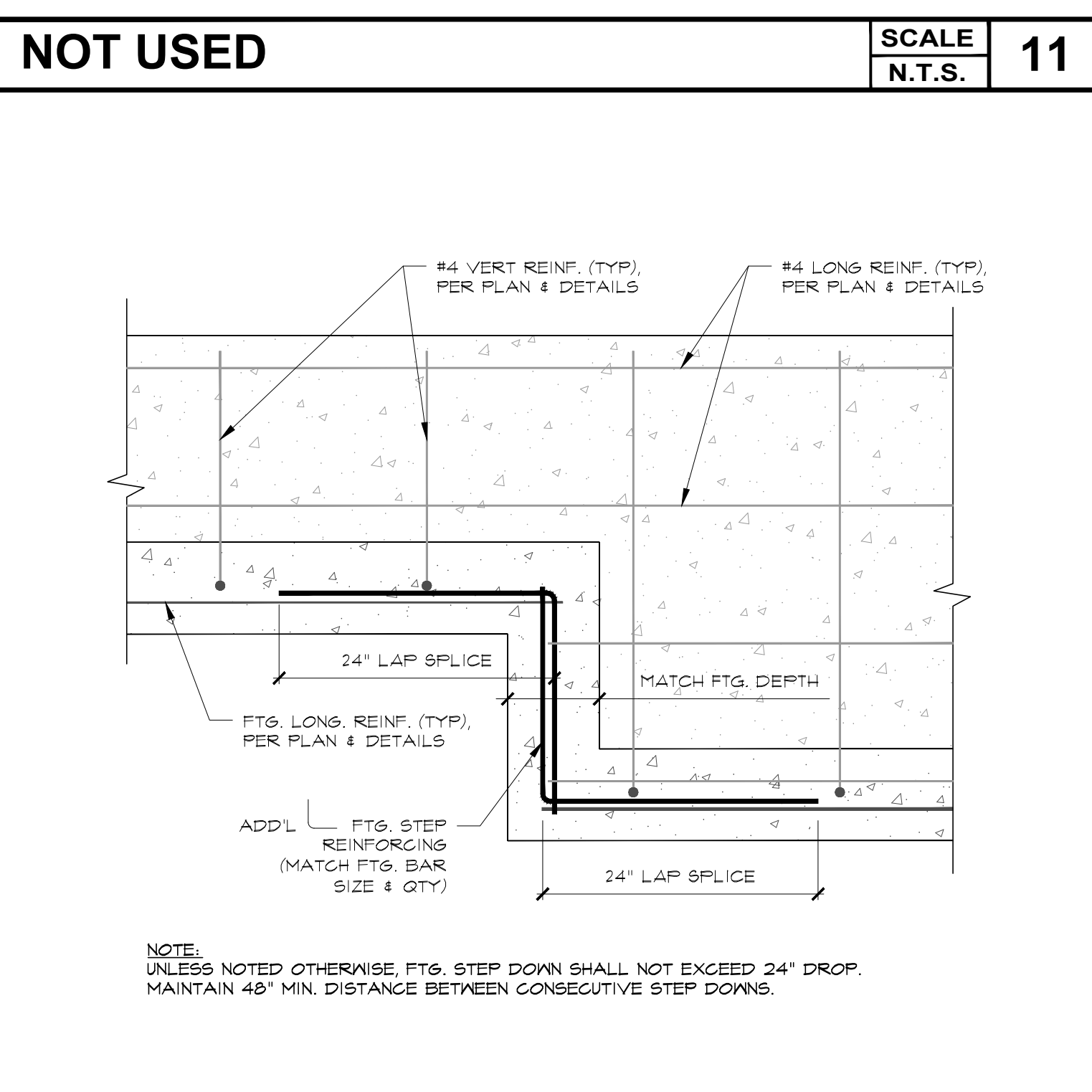
BAR SIZE PER WALL	LAP SPLICE LENGTH	STD HOOK LENGTH
#4	2' - 6"	0' - 8"
#5	3' - 0"	0' - 10"
#6	3' - 8"	1' - 0"
#8	5' - 0"	1' - 3"

NOTE: WHERE INTERSECTING WALLS CONTAIN DIFFERENT SIZE HORIZONTAL REINFORCING BARS, CORNER BARS INSTALLED SHALL MATCH THE LARGER OF THE REINFORCING BARS.



**S.O.G. CONSTR/CONTROL JOINT** SCALE N.T.S. **3**

NOTE: PROVIDE CONSTRUCTION OR CONTROL JOINTS TO ENCLOSE APPROXIMATE SQUARE AREAS OF 225 SF MAX. WITH MAX ASPECT RATIO OF 1:3

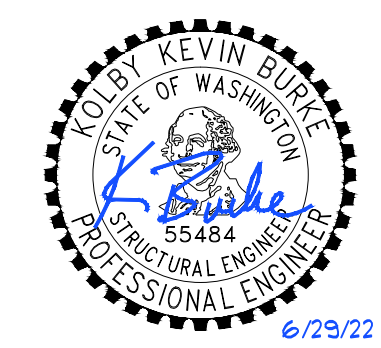


SCALE N.T.S. **10**

SCALE N.T.S. **7**

SCALE N.T.S. **4**

SCALE N.T.S. **1**



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

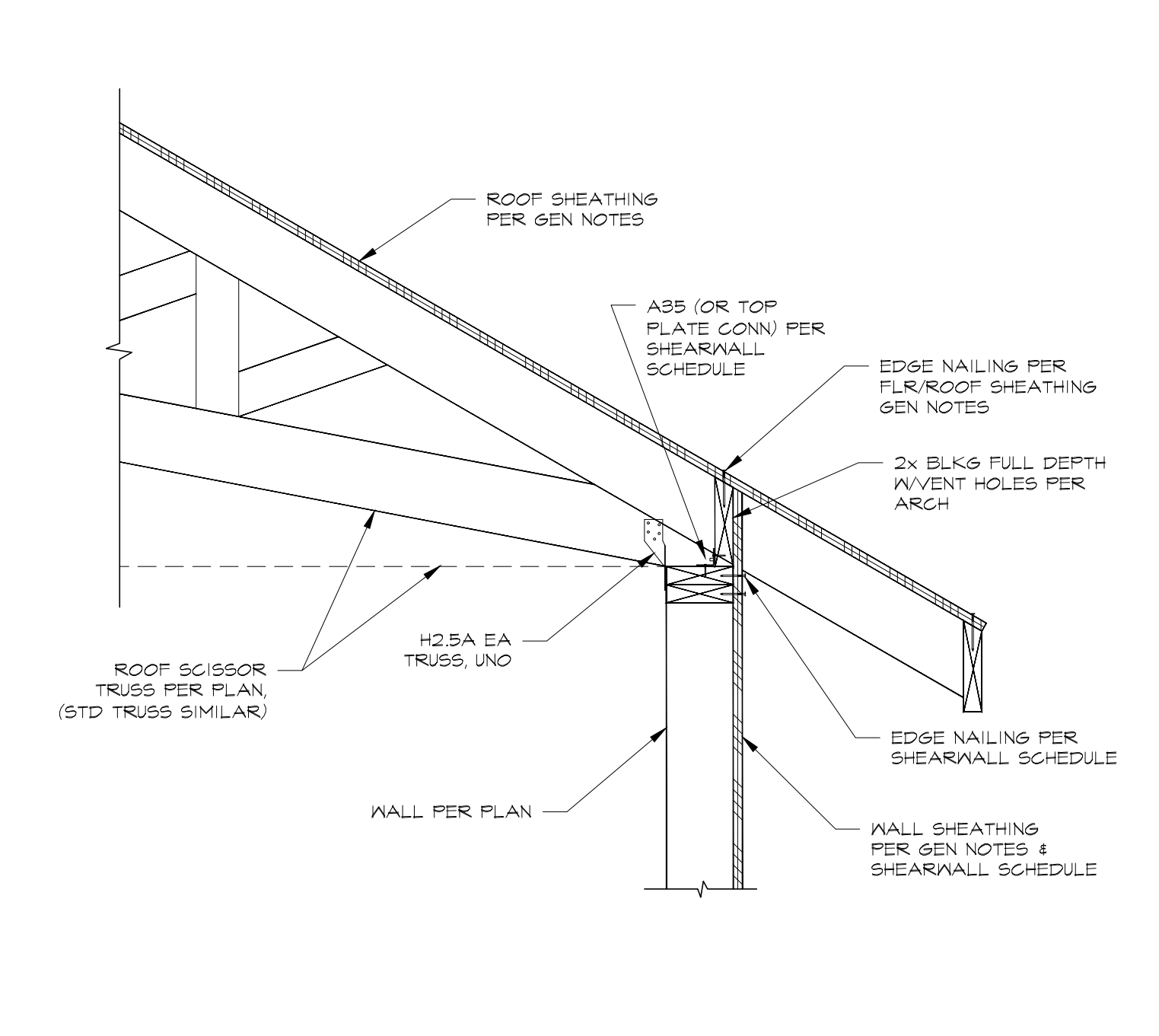
**BURKE CONSULTING ENGINEERS**  
 KOLBY BURKE  
 kolby.burke@burke-engineers.com  
 (925) 639-5512

REV	DATE	DESCRIPTION	BY

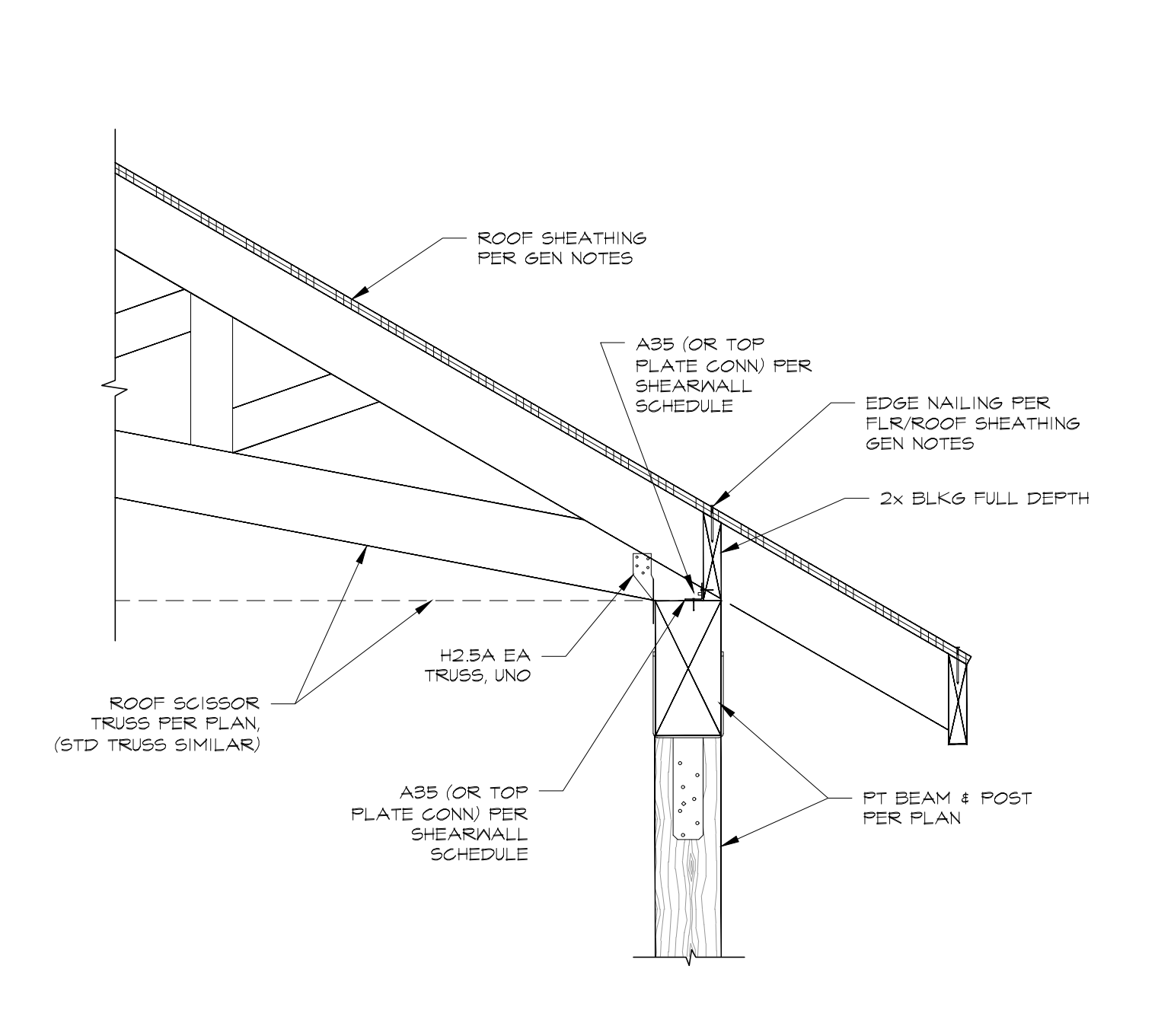
PROJECT: MERCER ISLAND (NW) RESIDENCE  
 4311 85TH AVENUE SE  
 MERCER ISLAND, WA 98040  
 PROJECT NO: 22-014

SHEET TITLE  
**STRUCTURAL DETAILS**

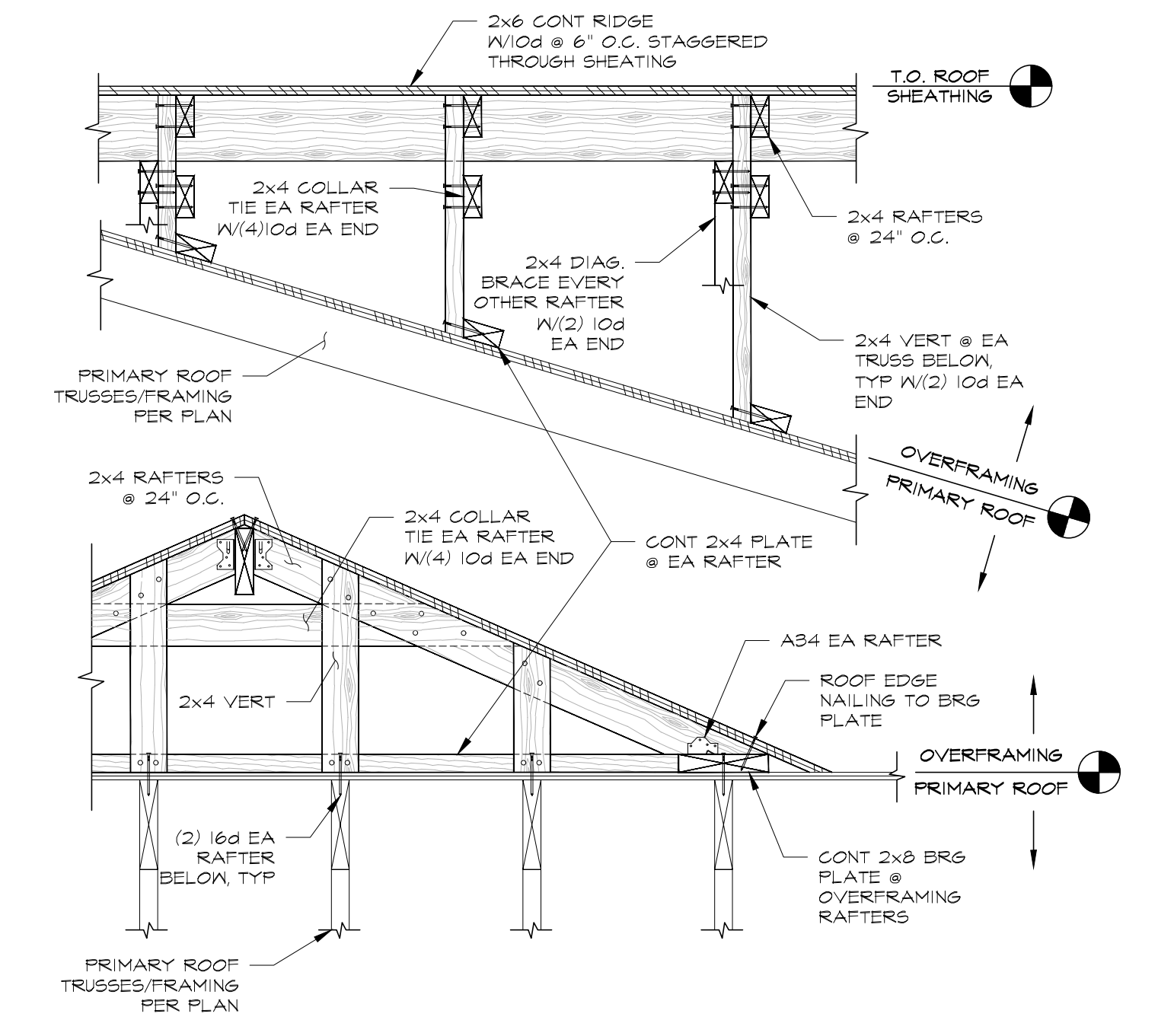
SHEET  
**SD-2**



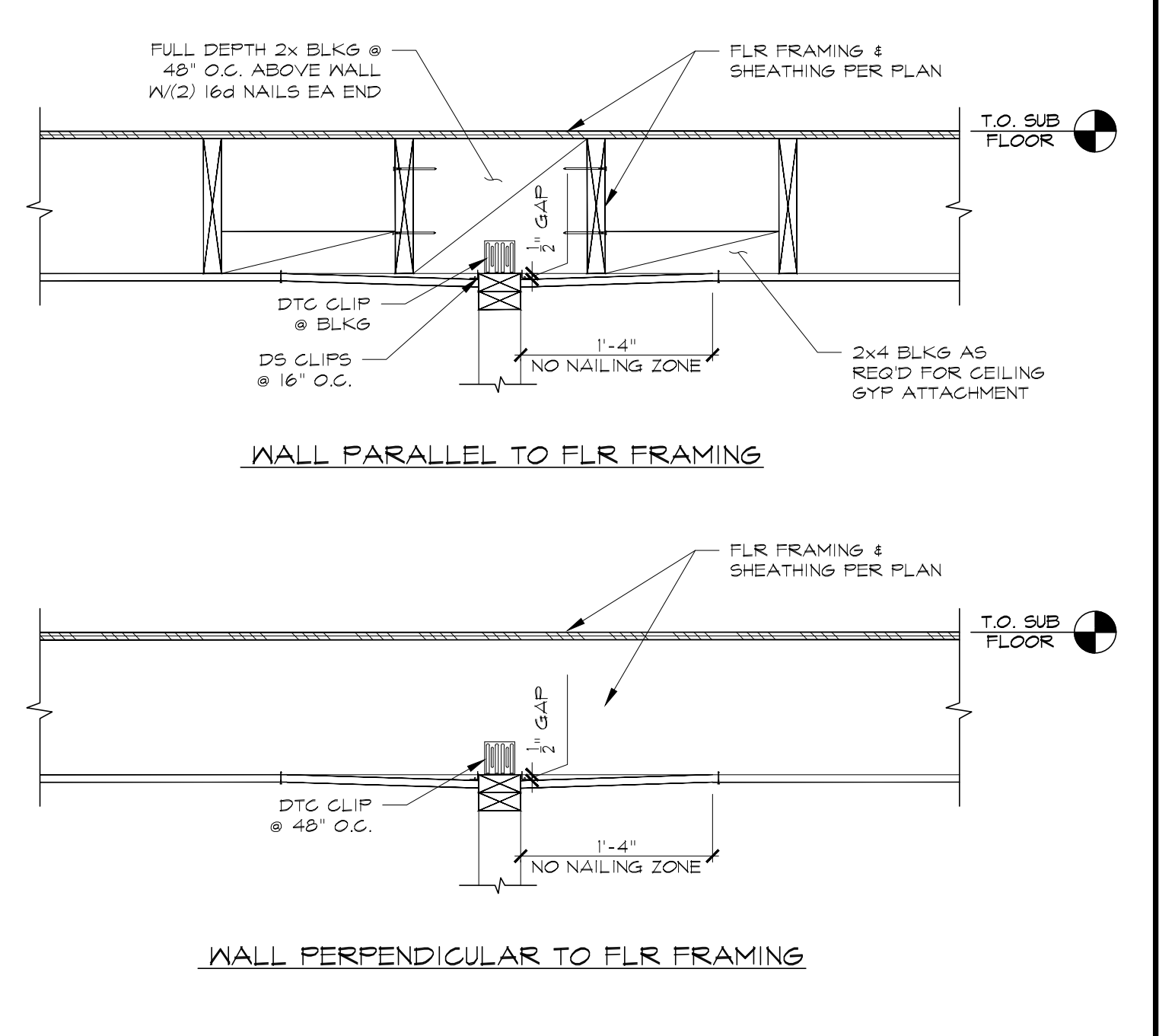
**EXTERIOR WALL (@ TRUSS)** SCALE N.T.S. **12**



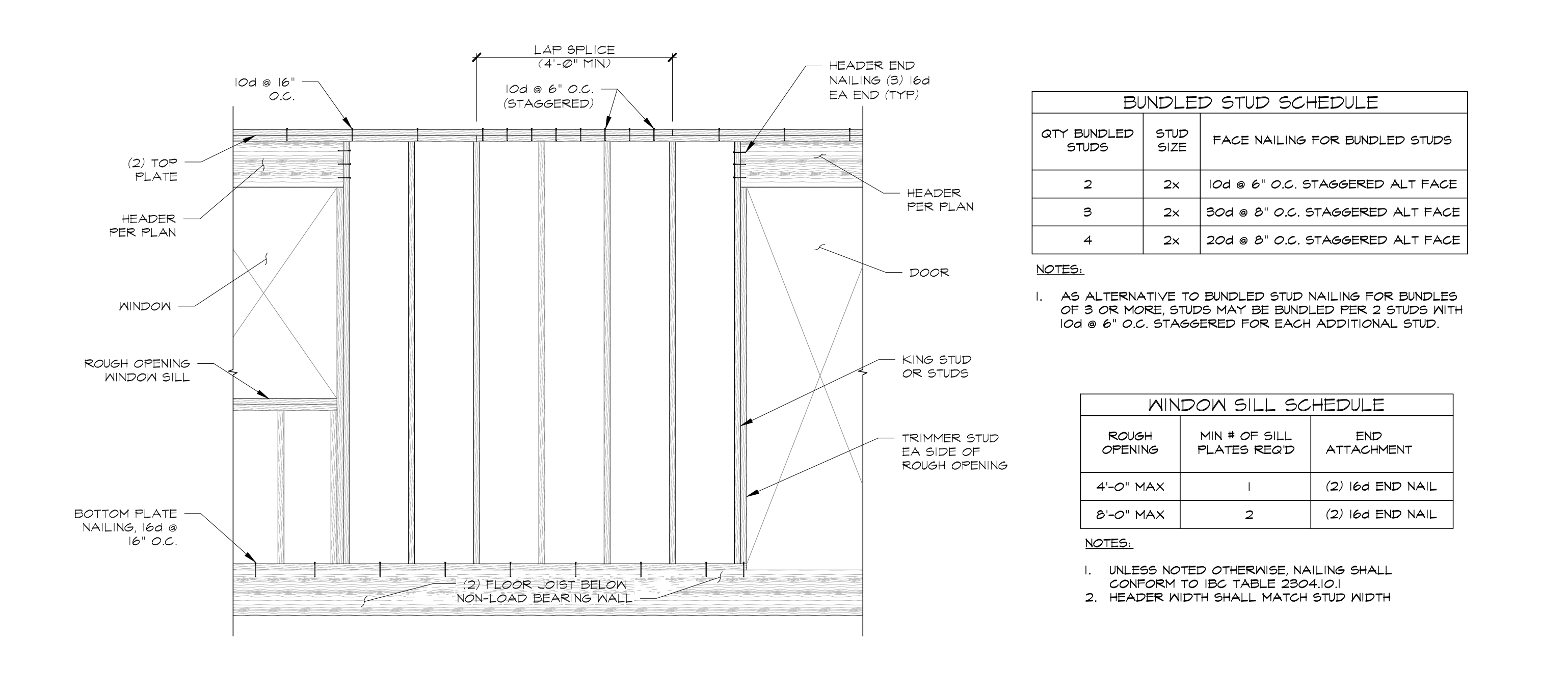
**BEAM & POST (@ TRUSS)** SCALE N.T.S. **9**



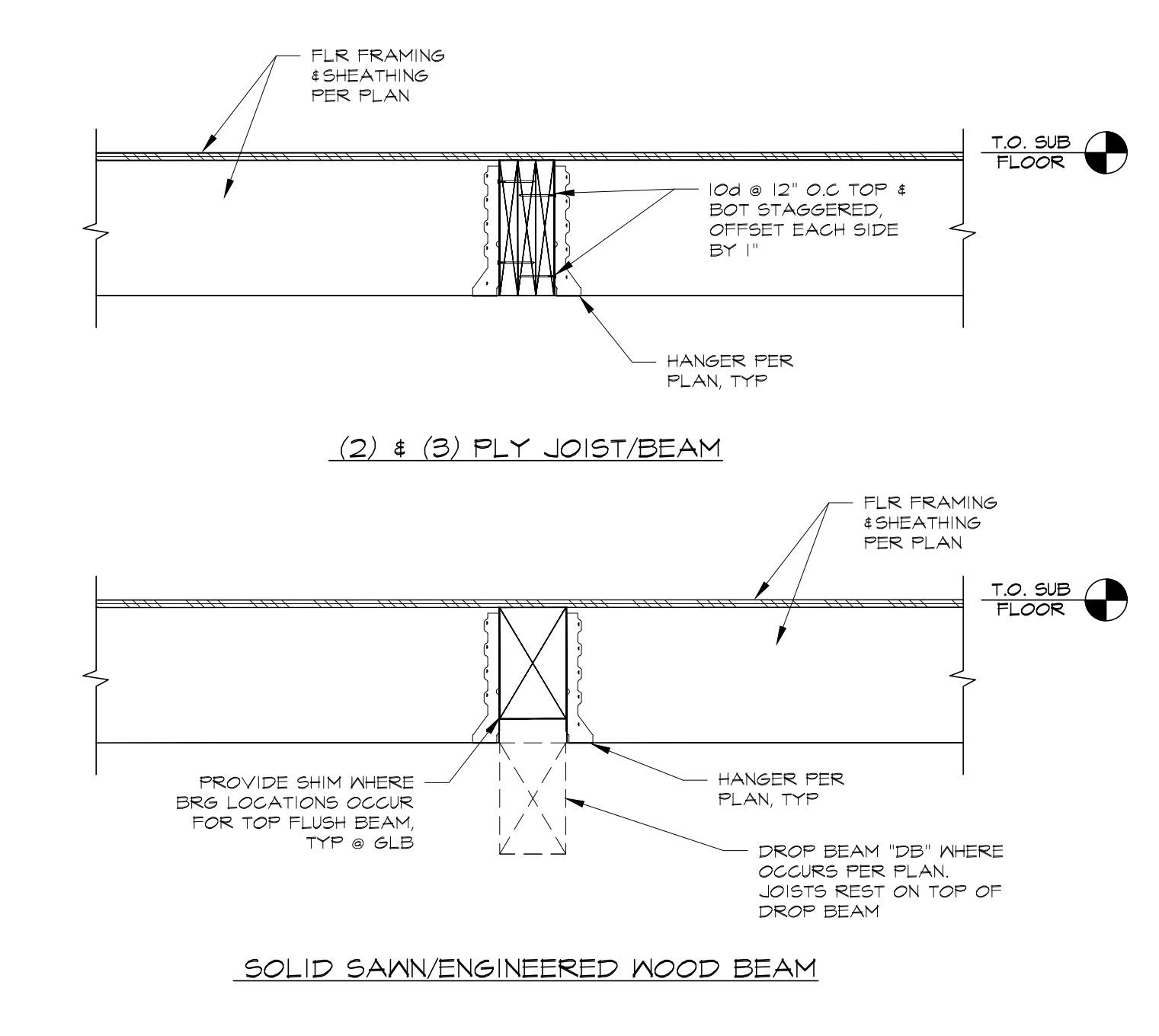
**ROOF OVERFRAMING** SCALE N.T.S. **6**



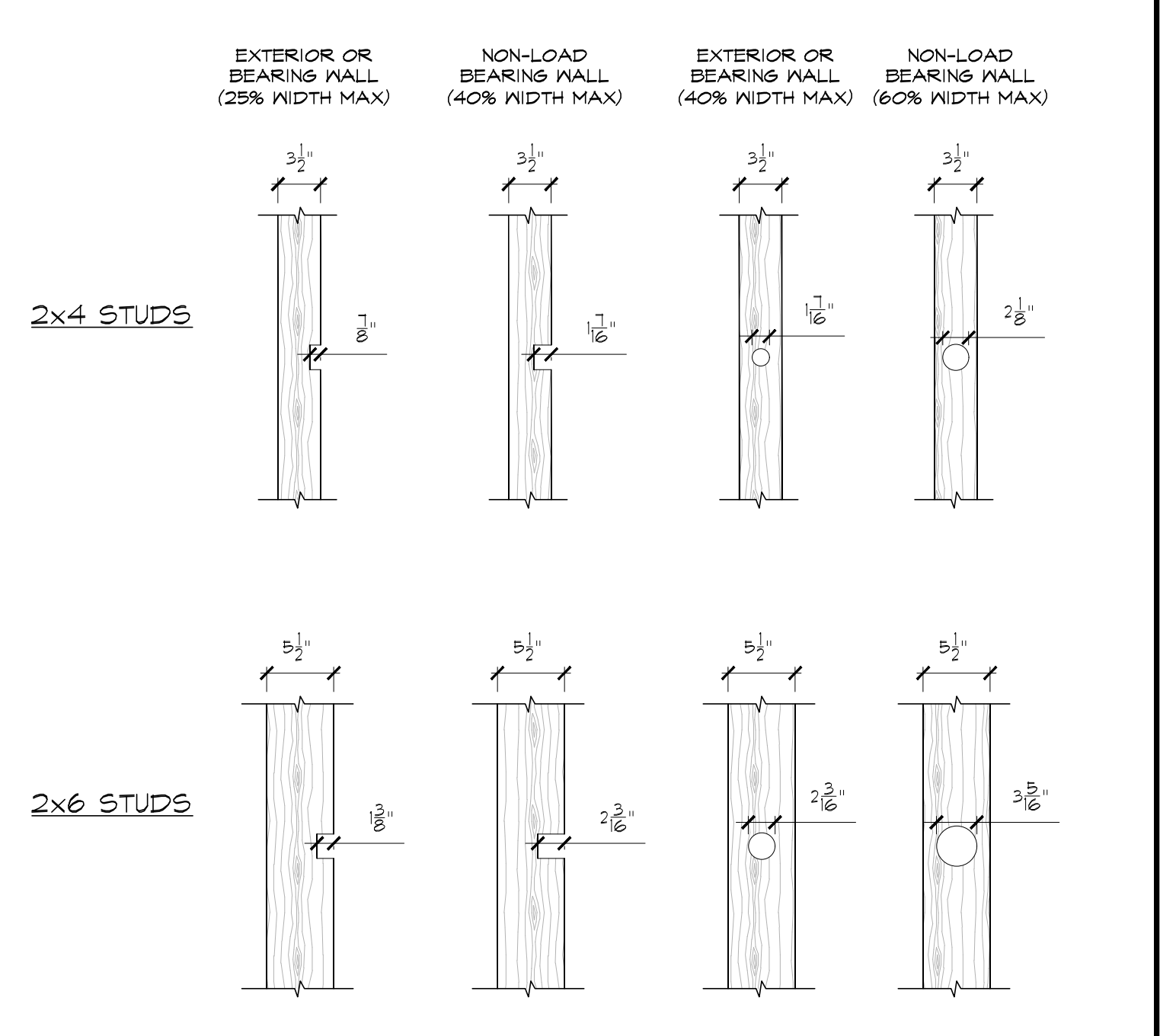
**CEILING @ PARTITION WALL** SCALE N.T.S. **3**



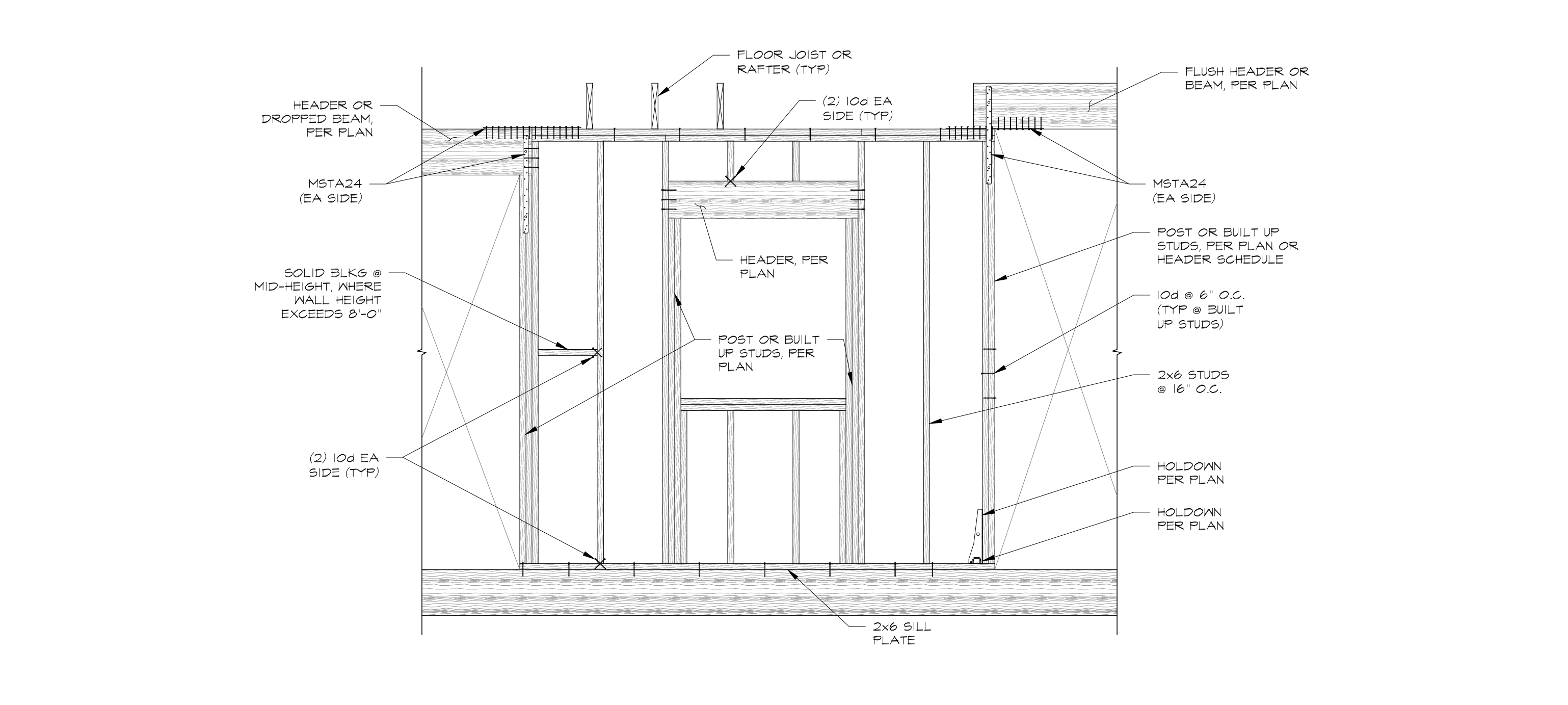
**TYPICAL NON-LOAD BEARING WALL FRAMING** SCALE N.T.S. **8**



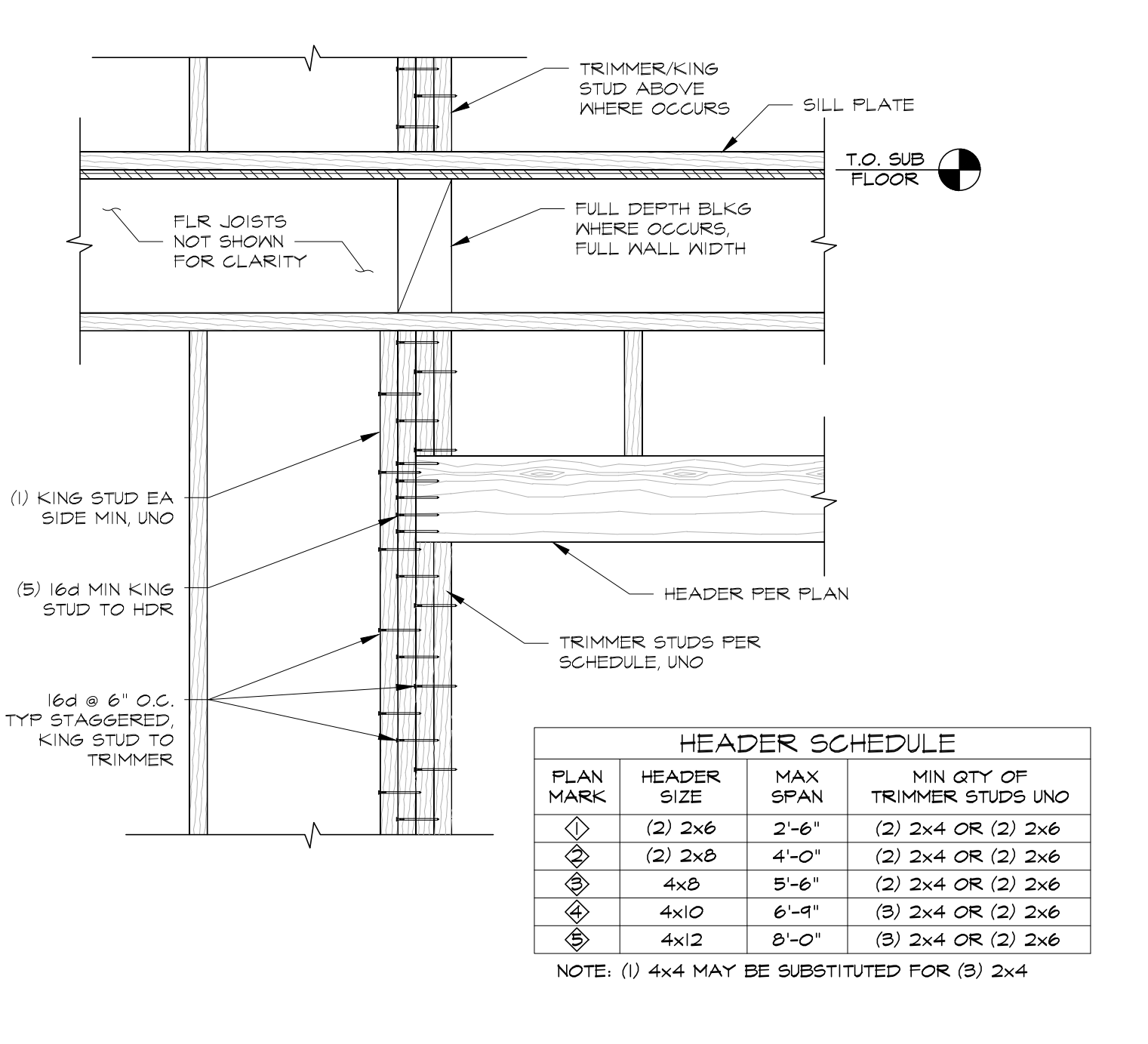
**FLOOR JOIST TO BEAM CONN.** SCALE N.T.S. **5**



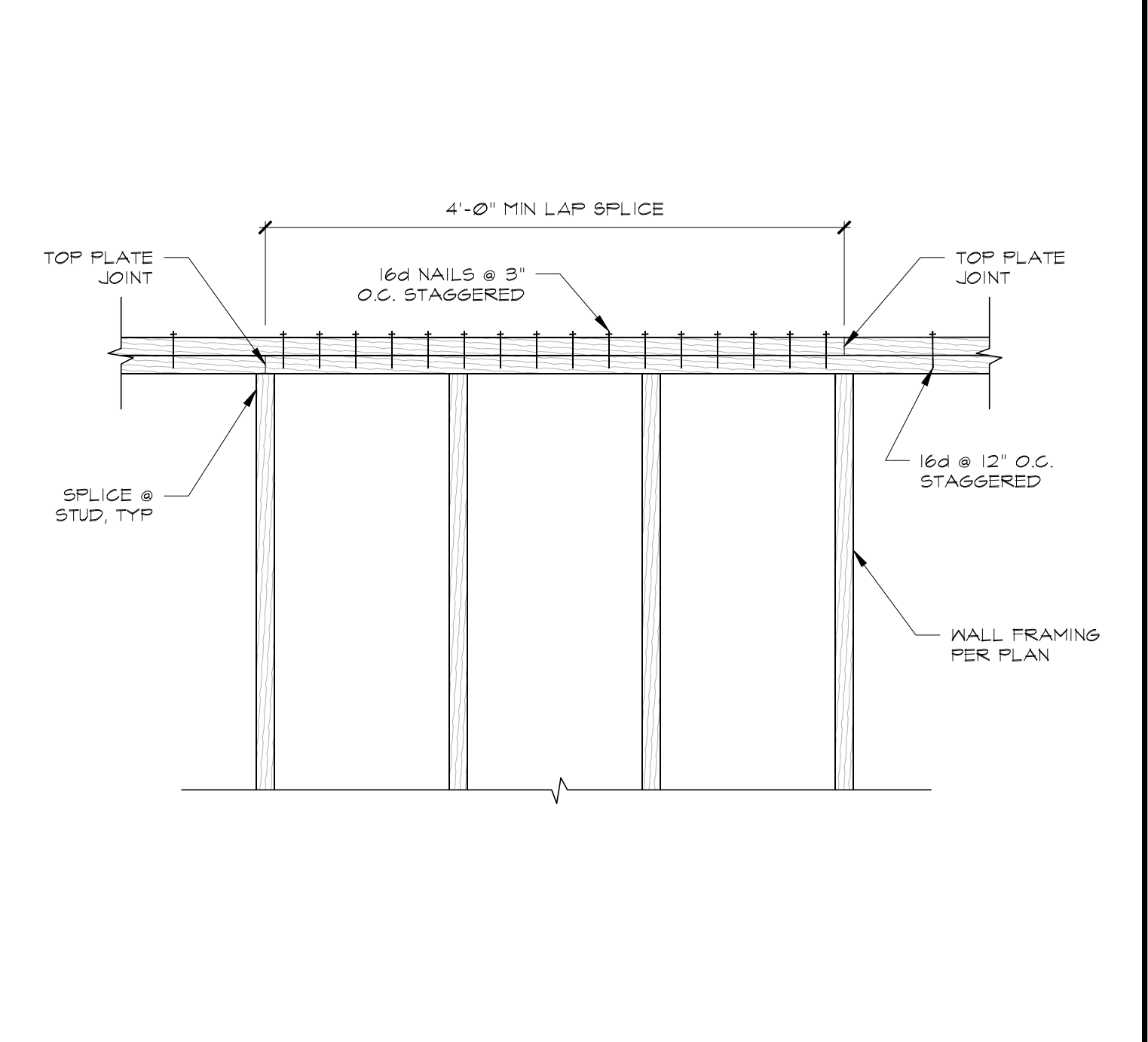
**ALLOWABLE STUD NOTCH & HOLE** SCALE N.T.S. **2**



**TYPICAL LOAD BEARING WALL FRAMING** SCALE N.T.S. **7**



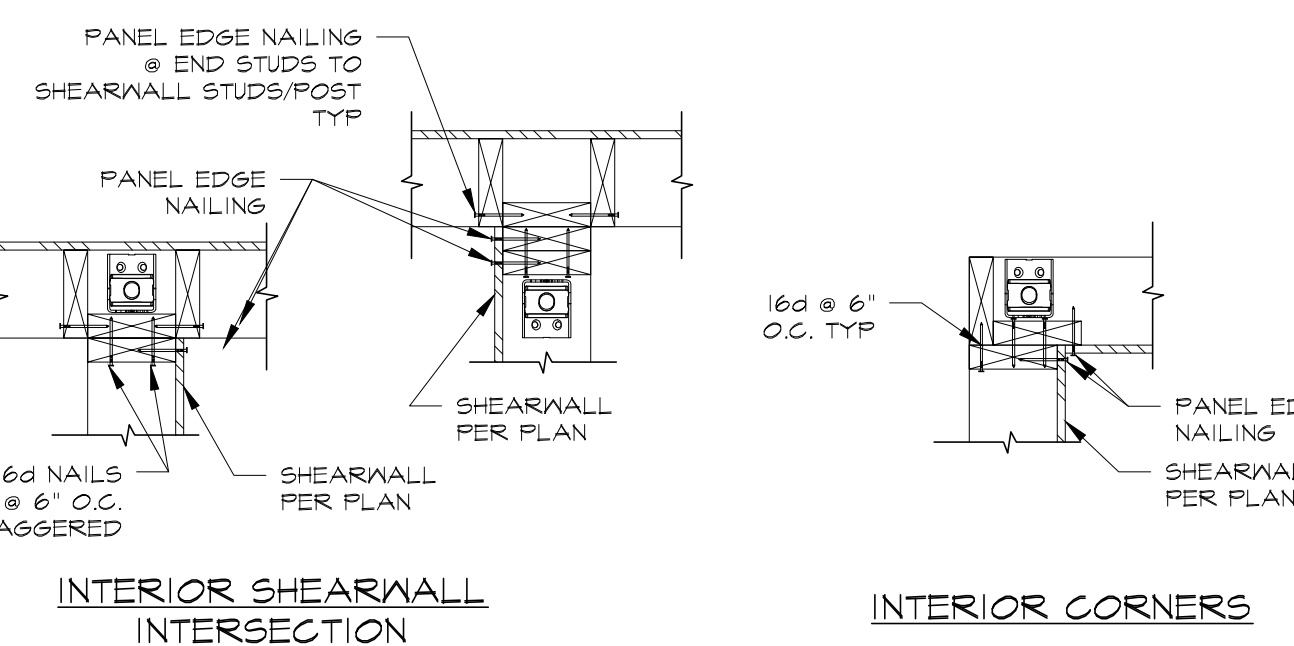
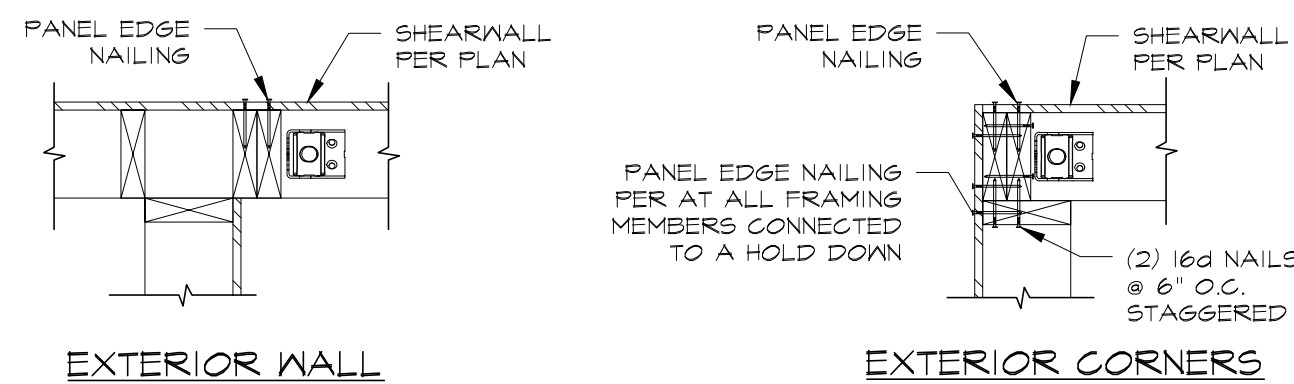
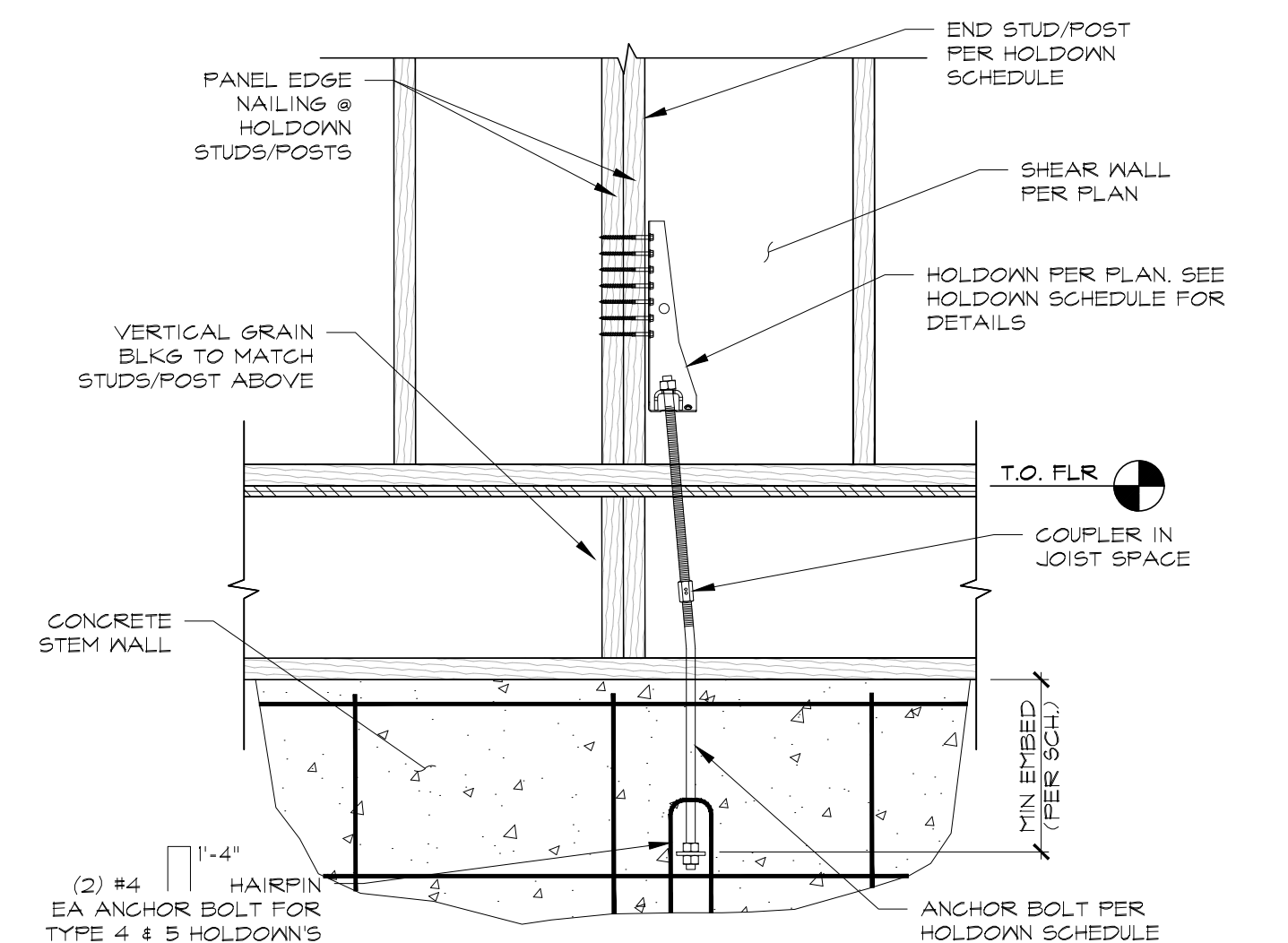
**HEADER FRAMING & SCHEDULE** SCALE N.T.S. **4**



**TOP PLATE SPLICE** SCALE N.T.S. **1**

**TYPICAL LOAD BEARING WALL FRAMING** SCALE N.T.S. **7**    **HEADER FRAMING & SCHEDULE** SCALE N.T.S. **4**    **TOP PLATE SPLICE** SCALE N.T.S. **1**

PLAN MARK	HOLDOWN TYPE	ANCHOR SIZE	MINIMUM EMBEDMENT	MIN END STUD OR POST	QTY/SIZE OF FASTENERS TO STUD/POST	ALLOWABLE UPLIFT CAPACITY (K)
HD 1	HDUS-SDS2.5	3/8"Ø	12"	(2) 2x6 HF	(14) 1/4"x2-1/2" SDS	4.065K
HD 2	HDUS-SDS2.5	3/8"Ø	12"	(2) 2x6 HF	(20) 1/4"x2-1/2" SDS	4.810K
HD 3	HDUS-SDS2.5	3/8"Ø	14"	6x6 DFL #1	(20) 1/4"x2-1/2" SDS	7.810K
HD 4	HDUI-SDS2.5	1"Ø	16"	6x6 DFL #1	(30) 1/4"x2-1/2" SDS	9.535K
HD 5	HDUI-SDS2.5	1"Ø	18"	6x6 DFL #1	(36) 1/4"x2-1/2" SDS	14.445K



PLAN MARK	APA RATED SHEATHING	PANEL EDGE NAILING (COMMON OR GALV BOX)	MIN PANEL EDGE STUD #BLKG SIZE	ALLOWABLE SHEAR (LB/FT)		MUDSILL (ANCHOR BOLT CONN.)	RIM JOIST/BLKG CONNECTION	
				EQ	WIND		TO SILL PLATE	TO TOP PLATE
				▽	SINGLE-SIDED 1/2"		10d @ 6" O.C.	2x
▽	SINGLE-SIDED 1/2"	10d @ 4" O.C.	2x	428	600	1/2"Ø @ 48" O.C.	16d @ 5" O.C.	RBC @ 8" O.C. OR A35 @ 10" O.C.
▽	SINGLE-SIDED 1/2"	10d @ 3" O.C.	3x	558	781	1/2"Ø @ 36" O.C.	16d @ 4" O.C.	RBC @ 6" O.C. OR A35 @ 8" O.C.
▽	SINGLE-SIDED 1/2"	10d @ 2" O.C.	3x	716	1002	1/2"Ø @ 32" O.C.	16d @ 3" O.C.	A35 @ 6" O.C.
▽	DOUBLE-SIDED 1/2"	10d @ 4" O.C.	3x	856	1200	3/8"Ø @ 40" O.C.	(2 ROWS) 16d @ 4" O.C.	A35 @ 6" O.C.
▽	DOUBLE-SIDED 1/2"	10d @ 3" O.C.	3x	1116	1562	3/8"Ø @ 32" O.C.	(2 ROWS) 16d @ 3" O.C.	RBC AND A35 @ 6" O.C.
▽	DOUBLE-SIDED 1/2"	10d @ 2" O.C.	3x	1432	2004	3/8"Ø @ 24" O.C.	(2 ROWS) 16d @ 2" O.C.	RBC AND A35 @ 6" O.C.

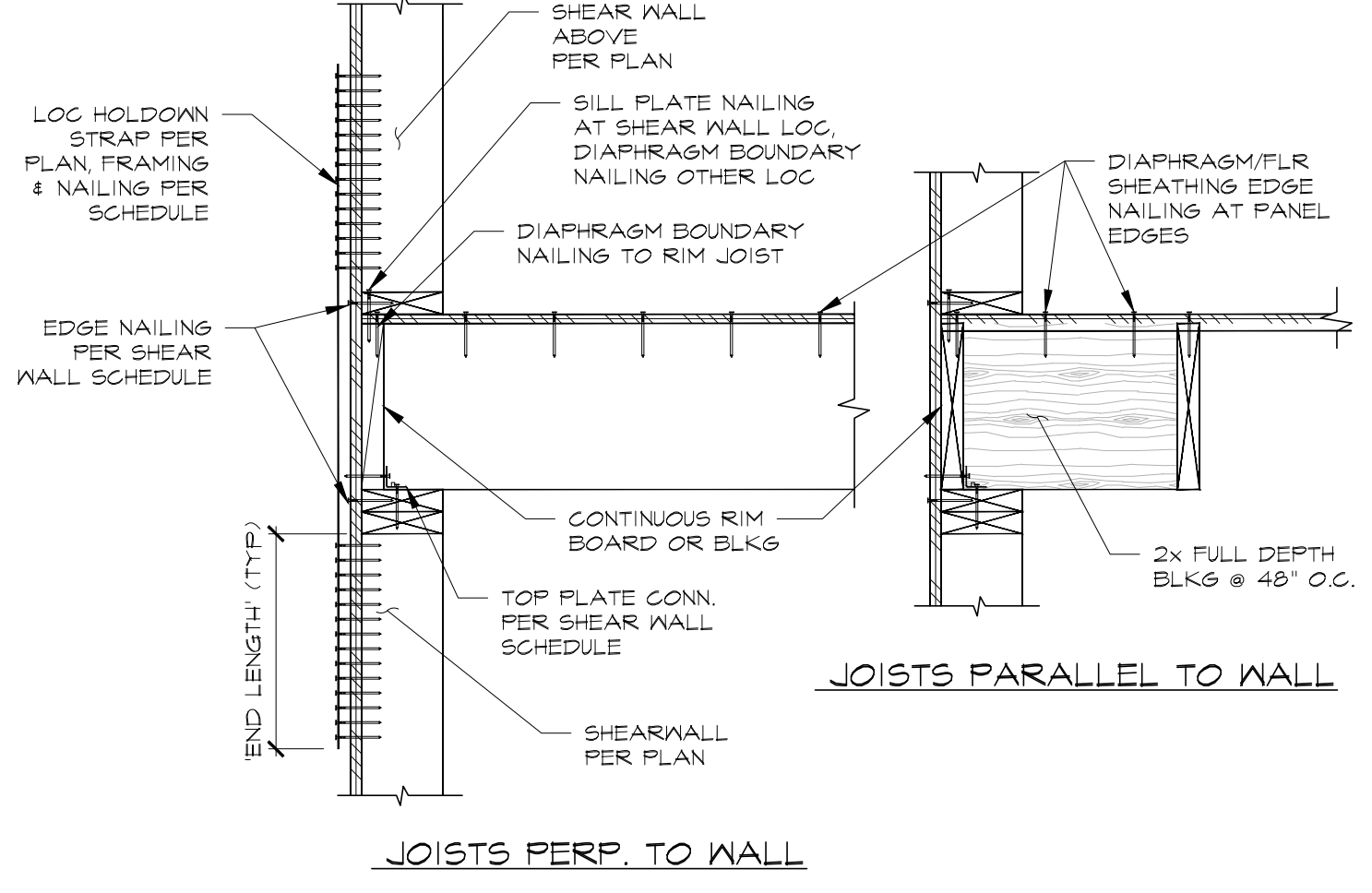
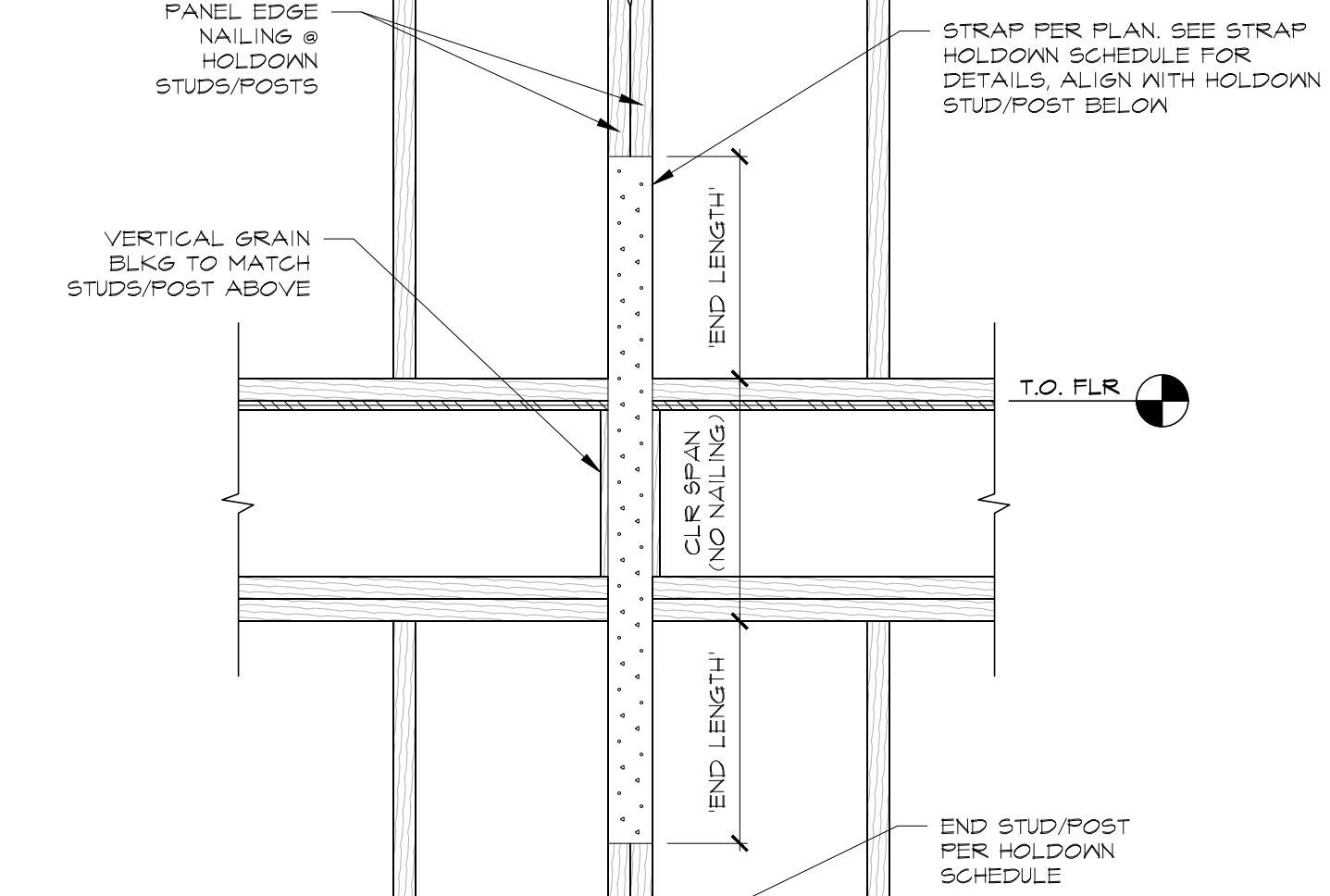
- NOTES:
- INSTALL SINGLE-SIDED SHEAR WALLS ON FACE INDICATED BY # ON PLAN
  - ALL SHEAR WALLS TO BE FRAMED IN 2x6 WALLS, MIN
  - ENSURE MINIMUM 1-1/2" NAIL PENETRATION
  - PANELS SHALL BE 4'x8', MIN, EXCEPT AT BOUNDARIES AND CHANGES IN FRAMING
  - PROVIDE FULL DEPTH BLOCKING AT ALL UNSUPPORTED SHEATHING EDGES
  - EDGE NAILS SHALL BE LOCATED AT LEAST 3/8" FROM PANEL EDGES
  - SHEATHING SHALL NOT BE USED TO SPLICE BOUNDARY ELEMENTS
  - LOCATE (1) ANCHOR BOLT 6" - 12" FROM EA END OF WALL AND EA SIDE OF SILL PL SPLICES
  - PROVIDE ANCHOR BOLT WASHER PER GENERAL NOTES, WALL ANCHORAGE
  - STAGGER NAILS IN SILL PLATE CONNECTION
  - SEE GENERAL NOTES FOR ADDITIONAL CONCRETE CONNECTION INFORMATION

**EMBED HOLDOWN SCHEDULE** SCALE N.T.S. **12**

**SHEAR WALL END FRAMING** SCALE N.T.S. **9**

**SHEAR WALL SCHEDULE** SCALE N.T.S. **3**

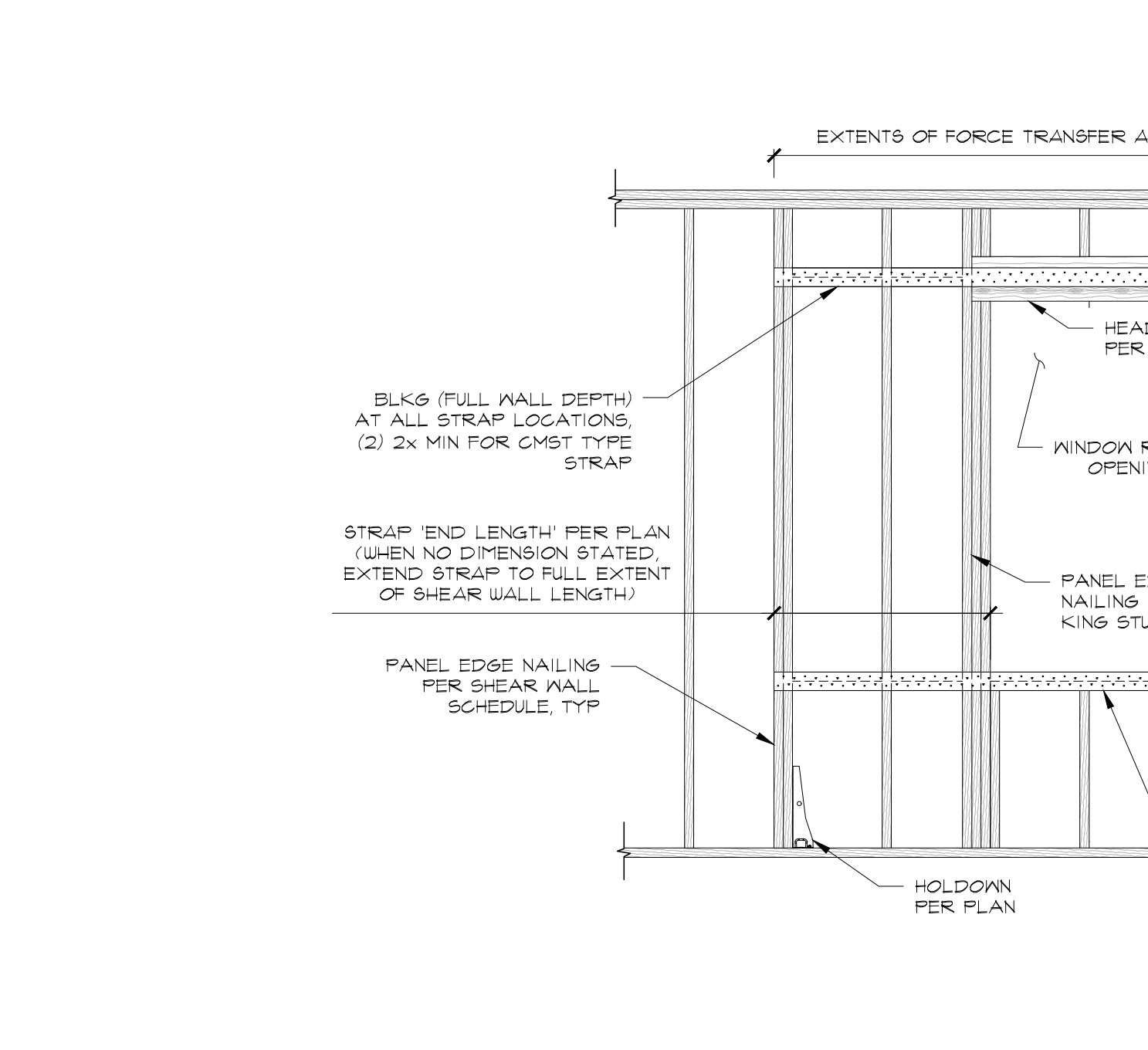
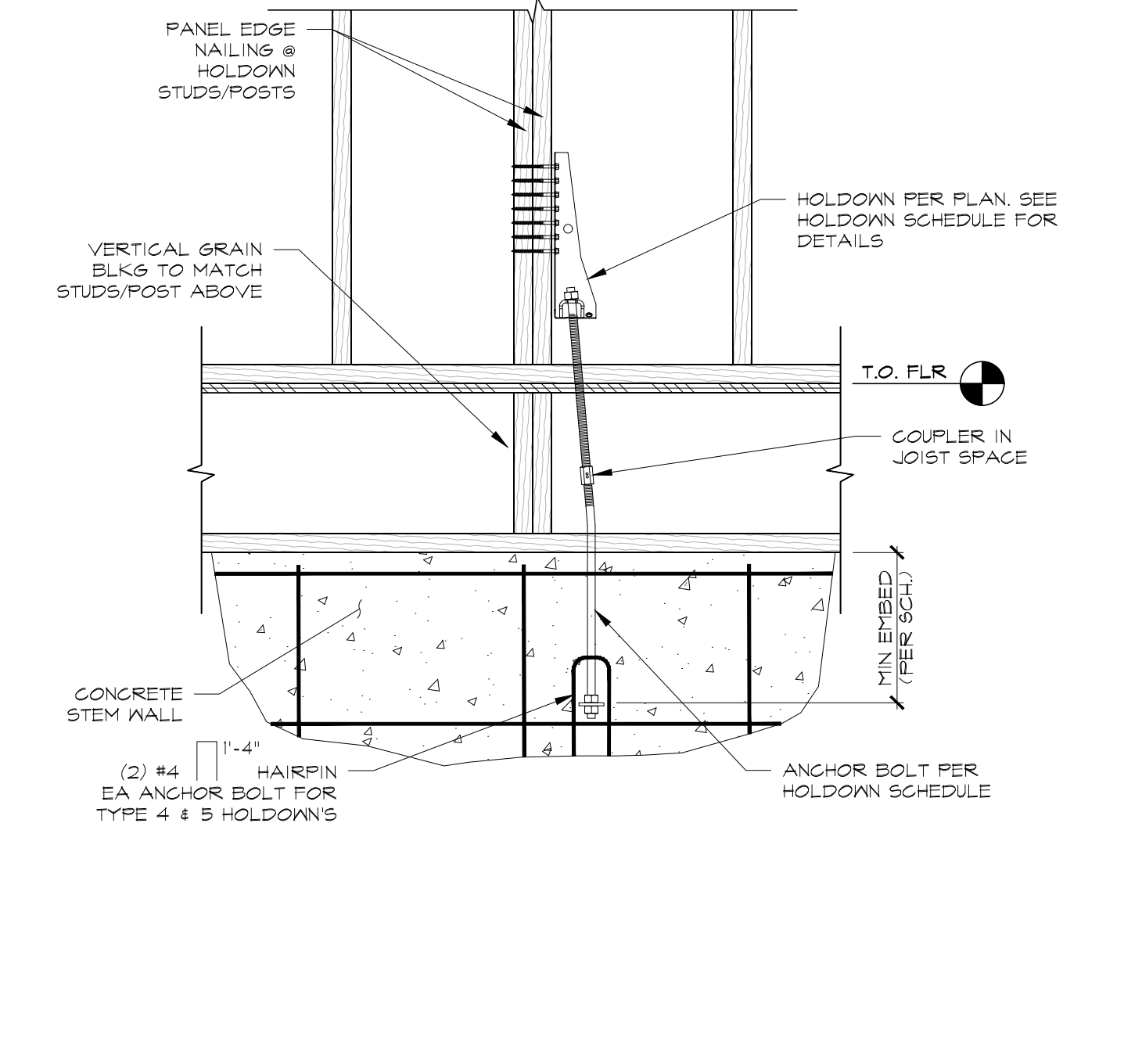
PLAN MARK	HOLDOWN TYPE	MIN. FRAMING MEMBER WIDTH	MIN. END LENGTH	QTY OF FASTENERS IN END LENGTH	ALLOWABLE UPLIFT CAPACITY (K)
CS20	COILED STRAP (20 GA.)	2x	9"	(14) 10d (COMMON)	1.090K
CS16	COILED STRAP (16 GA.)	2x	13"	(22) 10d (COMMON)	1.705K
CS14	COILED STRAP (14 GA.)	2x	16"	(30) 10d (COMMON)	2.490K
CMST4	COILED STRAP (14 GA.)	(2) 2x	24"	(54) 10d (COMMON)	4.601K
CMST4	COILED STRAP (14 GA.)	(2) 2x	34"	(76) 10d (COMMON)	6.475K
CMST2	COILED STRAP (12 GA.)	(2) 2x	44"	(98) 10d (COMMON)	9.215K



**STRAP HOLDOWN SCHEDULE** SCALE N.T.S. **8**

**NOT USED** SCALE N.T.S. **5**

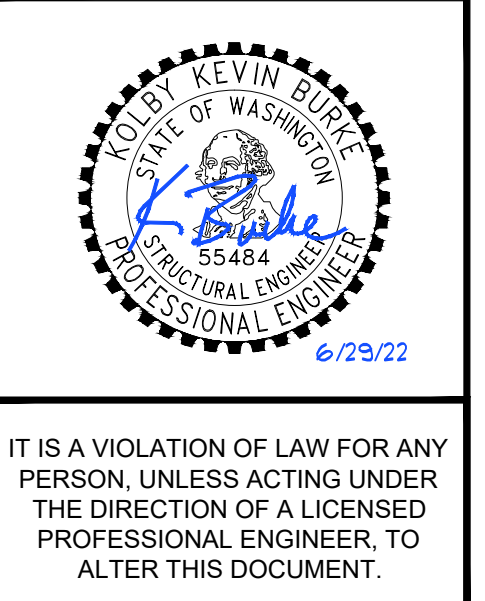
**NOT USED** SCALE N.T.S. **2**



**STRAPPING @ WINDOW (FORCE TRANSFER SHEAR WALL)** SCALE N.T.S. **4**

**NOT USED** SCALE N.T.S. **1**

**HOLDOWN & STRAP ELEVATION** SCALE N.T.S. **10**



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

**BURKE CONSULTING ENGINEERS**  
 KOLBY BURKE  
 kolby.burke@burke-engineers.com  
 (925) 639-5512

REV	DATE	DESCRIPTION	BY
1			

PROJECT: MERCER ISLAND (NM) RESIDENCE  
 4311 85TH AVENUE SE  
 MERCER ISLAND, WA 98040  
 PROJECT NO: 22-014

SHEET TITLE  
**STRUCTURAL DETAILS**

SHEET  
**SD-3**