

## GENERAL NOTES

GOVERNING CODE: The "2015 International Building Code" shall govern design and construction except the "2015 International Residential Code" may be used where applicable.

REFERENCE STANDARDS: Standards, referred to herein, shall be incorporated in these documents in their entirety. The latest edition of the standard shall be used unless a specific date is indicated.

NOTE PRIORITIES: Drawing notes shall govern over these requirements.

CONTRACTOR RESPONSIBILITIES: The contractor is responsible for the means and methods of construction, job related safety standards, and the strength and stability of the structure during construction. He shall provide temporary shoring, bracing and other elements required to maintain stability until the structure is complete. He shall be familiar with the work required in these documents and the requirements for executing it properly.

DISCREPANCIES: Discrepancies in these documents shall be brought to the attention of Stone River Engineering Co. prior to beginning the work in question.

SITE VERIFICATION: The contractor shall verify all dimensions and conditions at the site.

CONSTRUCTION LOADS: Loads on the structure during construction shall not exceed the capacity of partially completed construction.

ADJACENT UTILITIES: The contractor shall determine the location of all adjacent underground utilities prior to excavation and drilling. In Washington call 1-800-424-5555 for locate services.

## TEST & INSPECTIONS

INSPECTIONS: Construction is subject to inspection by the Building Official in accordance with IRC section R109 or IBC section 110 as applicable. The contractor shall make arrangements for these inspections.

REPORT SUBMITTALS: The contractor shall forward copies of inspection reports to Stone River Engineering Company.

STRUCTURAL OBSERVATION: When required by the building official, Structural Observation as defined by IBC chapter 2 shall be provided in accordance with IBC 1704.6. The owner shall employ Stone River Engineering Company to perform the structural observation.

## SOILS, FOUNDATIONS, AND SLABS

REFERENCE STANDARDS: Design and construction shall conform to IBC Chapter 18 "Soils and Foundations"

SOILS INSPECTION: The Building Official or a licensed Geotechnical Engineer shall inspect all prepared soil bearing surfaces prior to placement of concrete and reinforcing steel and shall verify the following DESIGN SOIL VALUES.

Allowable bearing pressure	1500PSF
Passive lateral pressure	250PCF e.f.p.
Active lateral pressure - unrestrained	35PCF e.f.p.
Active lateral pressure - restrained	50PCF e.f.p.
Coefficient of sliding friction	0.35

FOOTING DEPTH: Exterior footings shall bear at least (24") below finish grade. Interior footings shall bear at least (12") below grade.

FOOTING CONSTRUCTION: Concrete footings shall be constructed as follows: Footings shall be cast on firm, unfrozen soil. Footings shall be reinforced with #4 bars spaced at 8" oc located between the bottom third and mid-depth of footings. Strip (continuous) footings require reinforcement in the long direction only. Spread footing shall be reinforced in both directions. Reinforcement shall be supported to remain in place during construction and curing. Vertical reinforcement for stem walls shall be cast in place extending to within 3" of footing bottom. Cast-in-place hardware such as threaded rods with nuts and washer may be required in footings - see plans.

CONCRETE STEM WALLS: Concrete stem walls shall be 8" wide and reinforced with #4 bars spaced at 12" oc in the vertical and horizontal direction. One horizontal bar shall be located 4" from the top of wall with the hook end of anchor bolts held below this bar. Vertical reinforcement shall be cast into the footing below extending to 3" from bottom of footing. See plan for spacing of anchor bolts and other hardware to be cast in stem walls such as holdown anchors.

WALL ANCHORAGE: Sill plates shall be anchored to the concrete foundation with L-shaped, A-307 anchor bolts embedded at least 7" and spaced per the shearwall schedule but not less than 1/2" diameter at 60" oc with 3" square x 1/4" thick steel plate washers and hex nuts. Washers shall extend to within 1/2" of the wall sheathing. MASA or MASAP mudsill anchors by Simpson Strong Ties may be used in lieu of anchor bolts.

CONCRETE SLABS-ON-GRADE: Concrete floor slabs shall be no less than 4" thick and shall be reinforced with W1.4 x W1.4 6x6 welded wire fabric (or #3 bars spaced at 18" oc in each orthogonal direction) supported to remain in place between mid-depth of the slab and the upper third. Slabs shall be cast on a 6 mil polyethylene vapor retarder with lapped joints at least 6" wide, over a prepared compacted sub-base of 4" thick clean gravel, or crushed stone passing a 2" sieve but < 10% passing a #4 sieve. For insulated slabs the vapor retarder shall be placed between the rigid foam and the slab. (A vapor retarder is not required for exterior slabs or slabs in unheated structures. A base course is not required over well-drained gravel or gravel/sand mixtures having a percolation rate not less than 4" per hour. (Refer to IRC section R506.2.2 exception, and IRC Table R405.1 Group I and footnote "a".)

## CONCRETE

REFERENCE STANDARDS:  
· ACI 318-14 "Building Code Requirements for Concrete"  
· IBC Chapter 19

MIX DESIGN:  
2500 psi - concrete protected from weather  
3000 psi - vertical concrete exposed to weather  
3500 psi - flat concrete exposed to weather including garage floors

· Strength: 28-day strength - Fc' design strength (psi)  
· Maximum Aggregate Size shall be 1"  
· W/C: Water/Cement Ratio shall not exceed .48 based on the total weight of cementitious materials  
· Air content of concrete exposed to weather shall be 6% measured at point of placement for severe exposure with 1" maximum aggregate size. See ACI for other conditions.  
· Pozzolans may be used in accordance with ACI.  
· Chloride content shall conform to ACI.

CONSTRUCTION JOINTS: See the plan for location and details.

SHRINKAGE: Concrete will shrink after initial placement. The contractor shall coordinate jointing and finishes to provide adequate tolerance for shrinkage.

## TESTING FOR CONCRETE STRENGTH:

When required by the building official obtain samples and conduct tests in accordance with ACI. For each test mold and cure 3 cylinders. Test (1) at 7 days and (2) at 28 days. The strength is satisfactory if the averages of all sets of 3 consecutive tests equal or exceed the specified strength and no individual test falls below the specified strength by more than 500 psi.

## REINFORCING STEEL:

Reinforcing Bars - deformed ASTM A615, Grade 40  
Smooth Welded Wire Fabric ASTM A185  
Deformed Welded Wire Fabric ASTM A497  
Bar Supports CRSI MSP-1, Chapter 3  
Tie Wire - black annealed 16.5 gage or heavier

## CONCRETE COVER: Conform to ACI

Concrete cast against earth 3"  
Concrete exposed to earth or weather 2"  
Bars in slabs and walls 3/4"

BAR SPLICES: Conform to ACI for class "B" splices or 40 bar diameters, whichever is greater.

## WOOD

GRADING: All sawn lumber products shall be identified by a grade mark or a certificate of inspection by an approved agency complying with DOC PS20 or equivalent.

LUMBER and TIMBER: Except where noted otherwise the species and grade of lumber and timber shall be as follows:  
Hem Fir No. 2 - Preservative-treated lumber and timber  
Douglas Fir No. 2 - All other lumber and timber

WOOD I-JOISTS: Conform to ASTM D 5055

## STRUCTURAL GLUE-LAMINATED TIMBER:

Conform to AITC 190.1 & ASTM D3737  
Glulam - simple span 2400F-V4  
Glulam - cantilever or continuous 2400F-V8  
Glulam - column 2 (DF-L2)  
Camber simple span beams to 2000' radius unless noted otherwise.

## RECTANGULAR ENGINEERED WOOD: Conform to ASTM 5456

PSL - parallel strand lumber 2.0 E  
LSL - laminated strand lumber 1.5 E  
LVL - laminated veneer lumber 1.8 E

WOOD STRUCTURAL PANELS (Sheathing): Conforming to DOC PS-1 or PS-2 according to type and shall be identified by the trademarks of an approved testing & inspection agency.

Exterior rating: for permanent exterior exposure (type CC).  
Exposure 1 rating: for temporary exterior exposure (type CDX).  
Exposure 2 rating: for areas subject to high humidity or short term leaks.  
Interior rating: for continuously dry interior applications only.

Unless noted otherwise horizontal panels shall be installed with the long dimension perpendicular to supporting framing with panels continuous over two or more spans with adjacent rows of sheathing having staggered joints.

## Floor - APA-rated Sturd-I-Floor

3/4" 24" span rating  
7/8" 32" span rating  
1-1/8" 48" span rating

## Roof - APA-rated sheathing

3/8" 24/0 span rating 30 psf @ 24" oc 100 psf @ 16" oc  
7/16" 24/16 span rating 40 psf @ 24" oc 100 psf @ 16" oc  
15/32" 32/16 span rating 70 psf @ 24" oc 180 psf @ 16" oc  
19/32" 40/20 span rating 130 psf @ 24" oc 305 psf @ 16" oc  
23/32" 48/24 span rating 175 psf @ 24" oc  
7/8" 60/32 span rating 305 psf @ 24" oc

## Shearwall - APA-rated sheathing

7/16" minimum thickness

CONNECTORS: Prefabricated connectors shall be by the Simpson Strong-Tie Company as specified in their catalog No. C-C-2015. Connectors shall be installed per the manufacturer's instructions. Where connector straps connect two members, place one-half of the nails or bolts in each member. Provide washers under the heads and nuts of all bolts and lag screws bearing on wood. Unless noted otherwise all nails shall be common. For exterior applications connectors shall be protected with Z-max coating per ASTM A653, hot dipped galvanized (HDG) per ASTM A123, or type 316L stainless steel and fastened with "double-barrier coating" SDS screws or HDG nails as required for that connector.

GALVANIZED FASTENERS: Conform to ASTM A653 designation G185.

FASTENERS MINIMUM REQUIREMENTS: The number and size of fasteners connecting wood members shall not be less than table 2304.10.1 IBC

LAG and MACHINE BOLTS: Conform to ASTM A307.

GENERAL WOOD CONSTRUCTION: Conform to IBC 2304. Unless noted otherwise, studs shall be spaced at 16" oc, exterior studs shall be 2x6, and interior studs shall be 2x4, interior headers shall be 4x8, exterior headers shall be 4x12. Provide two studs minimum at the end of all walls and at each side of all openings. Attach sill plates to concrete per "WALL ANCHORAGE" described under these general notes. 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 1/2" gypsum wallboard on interior surfaces.

PRESERVATIVE TREATMENT: Wood materials specified as "pressure treated" shall be "treated wood". "Decay and Termite Protection" shall conform to the appropriate standards of the American Wood-Preservers Association (AWPA) for sawn lumber, glued laminated timber, round poles, wood piles and marine piles. Follow American Lumber Standards Committee (ALSC) quality assurance procedures. Use hot dipped galvanized or stainless steel fasteners and connectors for preservative treated wood products.

NAILS: 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. Nail sizes specified on the drawings are based on the following specifications:  
Size Length Common Sinker Box  
6d 2" .113" .099  
8d 2 1/2" .131" .113  
10d 3" .148" .120 .128  
12d 3 1/2" .148" .135  
16d 3 1/2" .162" .148 .135  
20d 4" .192" .177 .148  
14g stpl = 14 gage staple with 7/16" minimum crown

## SAFETY

EMERGENCY ESCAPE AND RESCUE OPENINGS: Basements with habitable space and every sleeping room shall have at least one operable emergency escape and rescue opening with a sill height of no more than 44" above the floor. The opening size shall be at least 5.7 square feet (5.0 at grade floors) with minimum height of 24" and minimum width of 20" and shall be operable without keys or tools from the inside.

TEMPERED GLAZING: Except as noted in IRC R308.4 tempered glass shall be required when installed in doors, within 24" of a door, in windows panes having an exposed area of more than 9 s.f. with a bottom edge < 18" above the floor, a top edge more than 36" above the floor and within 36" horizontal of a walking surface, guards and railing, enclosures for tubs, showers, pools, etc., adjacent to stairs and ramps, and adjacent to bottom stair landings when the bottom edge is less than 36" from the floor and within 60" horizontal from the bottom stair tread.

STAIRWAYS: Stairways serving an occupant load of 50 or less shall be at least 36" wide. Stair riser heights shall be between 4" and 7" and stair tread widths shall be at least 11" except that for one and two-family dwellings and town homes not more than 3-stories, maximum riser height shall be 7.75" and minimum tread width shall be 10". The greatest riser height in a single flight shall not exceed the least by more than 3/8". A single flight of stairs shall not have a total vertical rise of more than 147". Landings shall occur at the top and bottom of each flight with the minimum length equal to the stair width. Note: landing length need not exceed 48" for a straight run. Headroom shall not be less than 6'-8" in all parts of the stairway measured vertically from a line connecting the edges of nosings. Nosings shall be 3/4" - 1-1/4" thick with a radius of curvature not exceeding 9/16" or a chamfer not exceeding 1/2". Nosings are not required when the tread depth is at least 11". Enclosed accessible under stair spaces shall be sheathed with 1/2" gypsum board.

STAIR HANDRAILS: At least one handrail shall be installed on every flight with 4 or more risers. The top of handrails shall be 34" - 38" above a line connecting tread nosings. Handrails shall be continuous for the entire flight and terminate in newel posts or safety terminals. Handrails with a circular cross-section shall be 1.25" minimum to 2" maximum diameter. Other cross-sectional shapes are permitted in accordance with R311.7.8.3.

GUARDS: Porches, balconies or raised floors located more than 30" above the adjacent floor or grade shall be fitted with guards at least 36" tall. Opening in guards shall be such that a 4" diameter sphere cannot pass through.

WINDOW FALL PROTECTION per R312.2: Required when operable window openings in dwelling units are located less than 24" above the finished floor and more than 6' above finished grade or surface below and when the lowest edge of the clear opening is less than 24" above the floor.

SMOKE ALARMS: Smoke alarms shall be listed in accordance with UL 217 and installed per IRC and NFPA 72 in dwelling units. Alarms shall be interconnected and shall be located in and just outside each bedroom, within 3' of bathroom doors when bathrooms contain a tub or shower, with no less than one on each dwelling story.

CARBON MONOXIDE ALARMS: In dwellings of new construction and where work requiring a permit occurs in existing buildings, when those buildings contain fuel-fired appliances or have an attached garage, carbon monoxide alarms shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms and within bedrooms that contain a fuel-burning appliance. Single station carbon monoxide alarms shall comply with UL2034.

## MECHANICAL EXHAUST SYSTEMS

Local Exhaust - Mechanical exhaust systems shall be installed in the following areas with the noted minimum exhaust rates.

Toilet, Laundry, Spa, Pool 50 cfm intermittent or 20 continuous  
Kitchens 100 cfm intermittent or 25 continuous

Whole House Ventilation - Every dwelling unit or guest room shall be equipped with one of the following whole-house ventilation systems complying with the noted code section of the Washington State amendments to the 2015 IRC section 1507

1. exhaust fan
2. integrated with forced-air system
3. supply fan
4. heat recovery

FLOOR AREA [SQUARE FEET]	BEDROOMS				
	0-1	2-3	4-5	6-7	>7
<1500	30	45	60	75	90
1501-3000	45	60	75	90	105
3001-4500	60	75	90	105	120
4501-6000	75	90	105	120	135
6001-7500	90	105	120	135	150
>7500	105	120	135	150	165

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- 7 DETAILS
- 8 DETAILS

## ROOF COVERINGS

METAL ROOF COVERINGS

MINIMUM REQUIREMENTS: Install per manufacturer's written instructions. See also IRC section R905 or IBC section 1507 for flashing and other requirements.

DECKING: Metal roofing material shall be applied over solid roof sheathing per plan

MINIMUM SLOPE:  
25% for lapped, non-soldered seam without sealant  
4% for lapped, non-soldered seams with sealant  
2% for standing seam roof systems

MATERIALS: Materials shall be naturally corrosion-resistant or treated to be so per Table R905.10.3 (1)

ATTACHMENT: Attach to supports per manufacturer's instruction with galvanized fasteners for steel roofing and 300-series stainless steel for copper and other metal roofing

FLASHING: Install base, cap, valley, and sidewall flashing per manufacturer's written instructions.

CRICKETS AND SADDLES: Install on uphill side of chimneys and other similar protrusions.

## ABBREVIATIONS

UNO Unless Noted Otherwise  
OC center-to-center spacing or frequency  
GLB Glulam Beam  
GLP Glulam Post  
PSL Parallel Strand Lumber  
LVL Laminated Veneer Lumber  
LSL Laminated Strand Lumber  
TYP Typical

## PROJECT SUMMARY

Description: Remodel / Addition / Demo  
unheated sleeping room and laundry  
Municipality: Kittitas County  
Design Professional: Stone River Engineering Co.  
Deferred Submittals: none  
Special Inspections: none  
Heating: none  
Water: existing private well  
Sewage Disposal: existing on site septic  
Occupancy Class: Residential R3  
Type of Construction V-B wood - not rated

## BUILDING AREAS

Remodeled Bedroom: 327 sf  
Entry Porch: 80 sf  
Laundry addition: 91 sf

## APPLICABLE CODES

Building: 2015 IBC and/or 2012 IRC  
Mechanical: 2015 IMC (International Mech. Code)  
Plumbing: 2015 UPC (Uniform Plumbing Code)  
Fuel Gas: 2015 IFGC (International Fuel Gas Code)  
Fire: 2015 IFC and NFPA 54 & 58  
Energy: 2015 WSEC (Washington State Energy Code)

## DESIGN PARAMETERS

LIVE LOADS:  
Snow - Pg 133 psf  
Snow - Pf 123 psf - heated  
Snow - Pf 134 psf - non heated  
Snow - Pub 168 psf unbalanced load  
Floor 40 psf

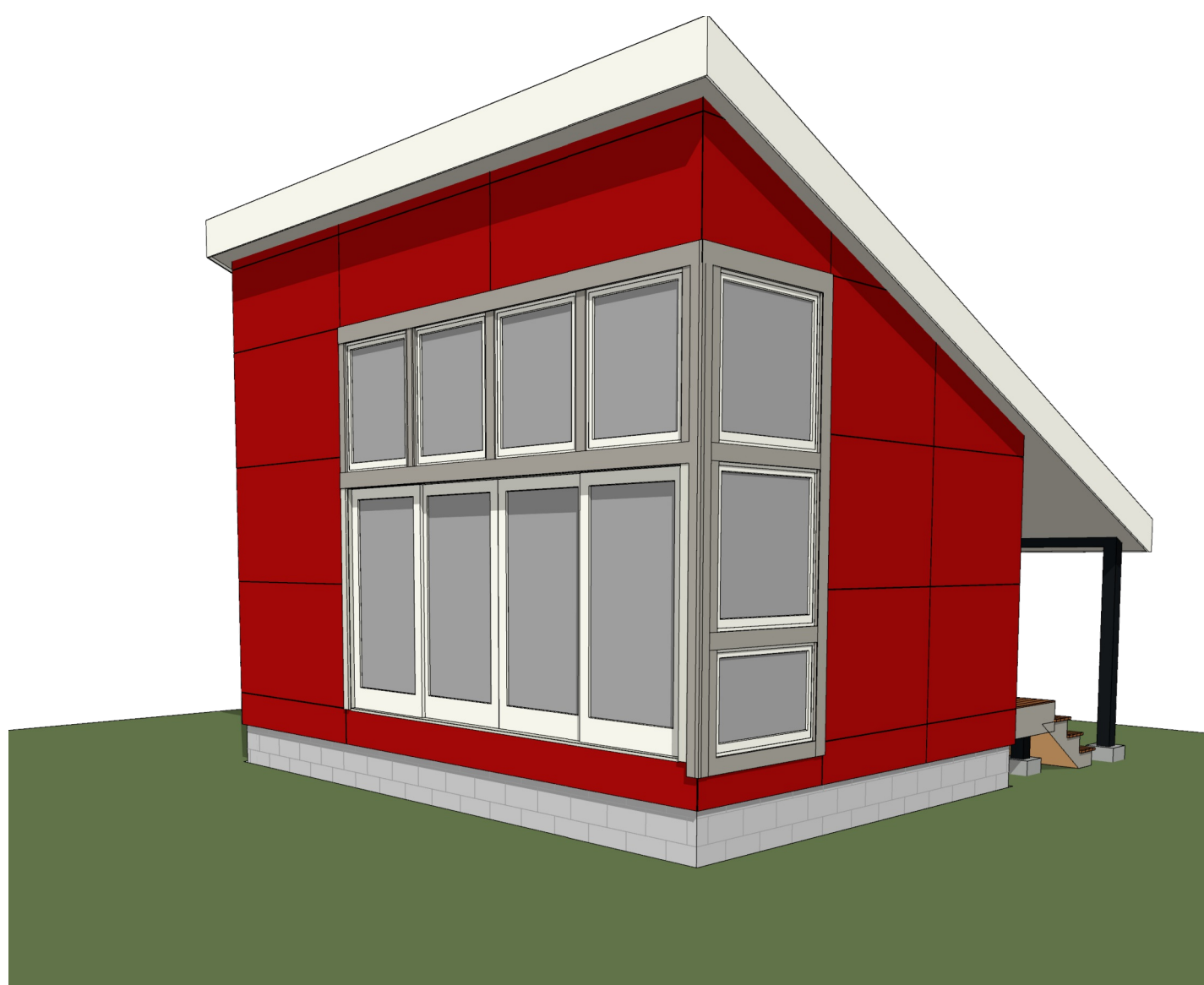
WIND DESIGN:  
Basic wind speed 110 mph  
Exposure B  
Importance factor 1.0

## SEISMIC DESIGN:

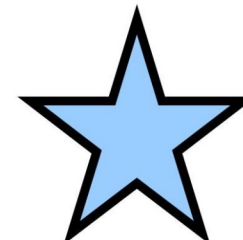
Site classification D  
Ss .650  
S1 .260  
Importance factor 1.0  
Response modification 6.5

## DEFLECTION LIMITS:

Total load L/240  
Live L/360



STONE RIVER  
ENGINEERING CO.



BUILDING DESIGN SERVICES  
CLE ELLUM, WA 98922  
509 674 5080 PHONE



# BLACKFORD REMODEL

150 North Fork Ranch Road, Washington 98922  
Tax Parcel #707635 - Tax Map #21-16-31040-0001

Issue Date Purpose  
2018-05-08 Flood Permit Appl.  
2018-07-19 Building Permit  
2018-07-27 Building Permit  
2018-08-11 removed future bldg

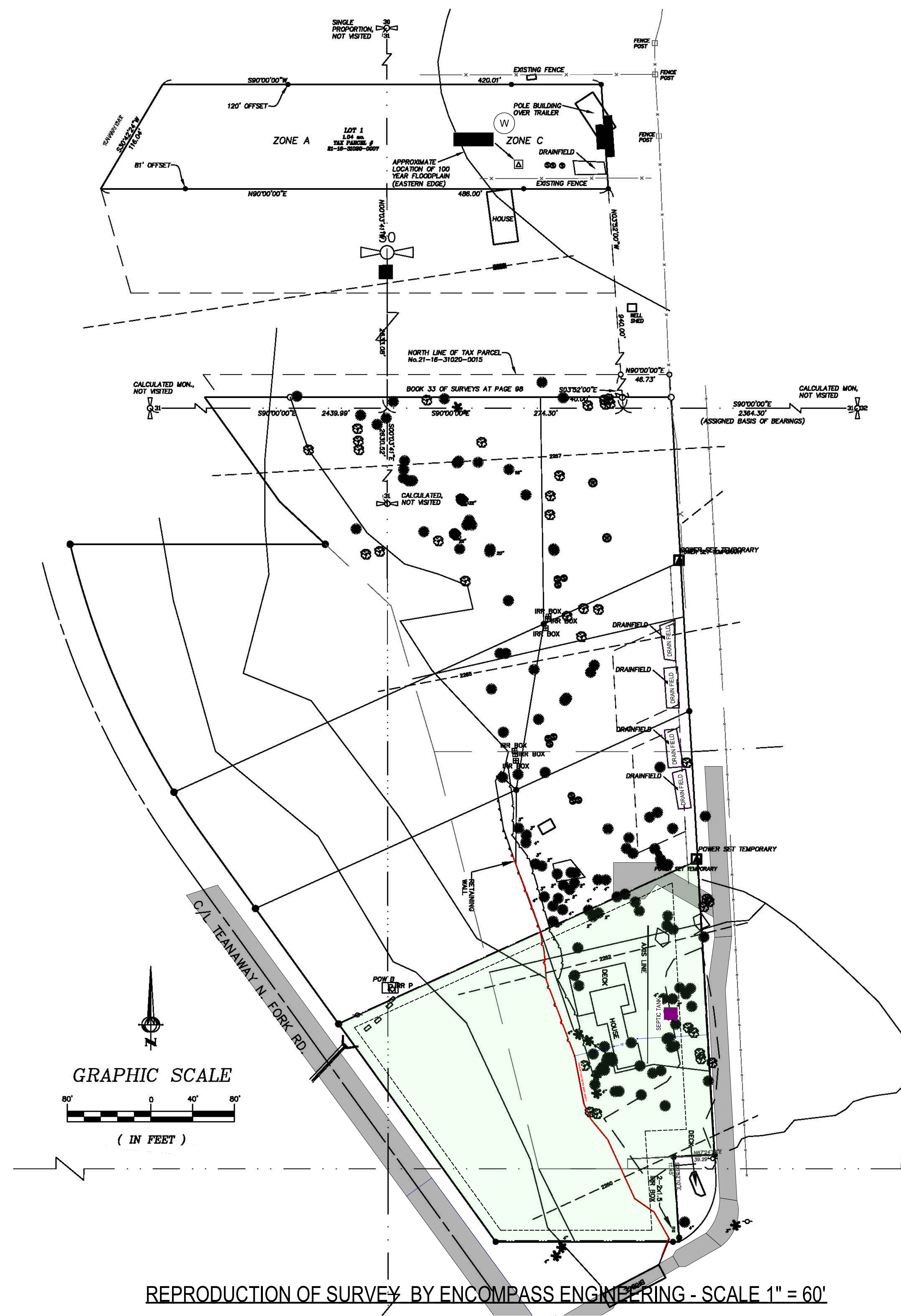
GENERAL NOTES  
PERSPECTIVE VIEW

2017-031

1



AERIAL VIEW - SCALE 1" ~ 50'



# BLACKFORD REMODEL

150 North Fork Ranch Road, Washington 98922  
 Tax Parcel #707635 - Tax Map #21-16-31040-0001

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 2018-05-08 Flood Permit Appl.  
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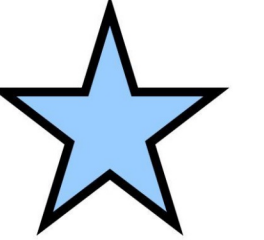
SITE PLAN

2017-031

2



SITE PLAN - SCALE 1" = 20'

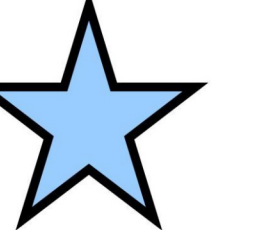


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2017-031



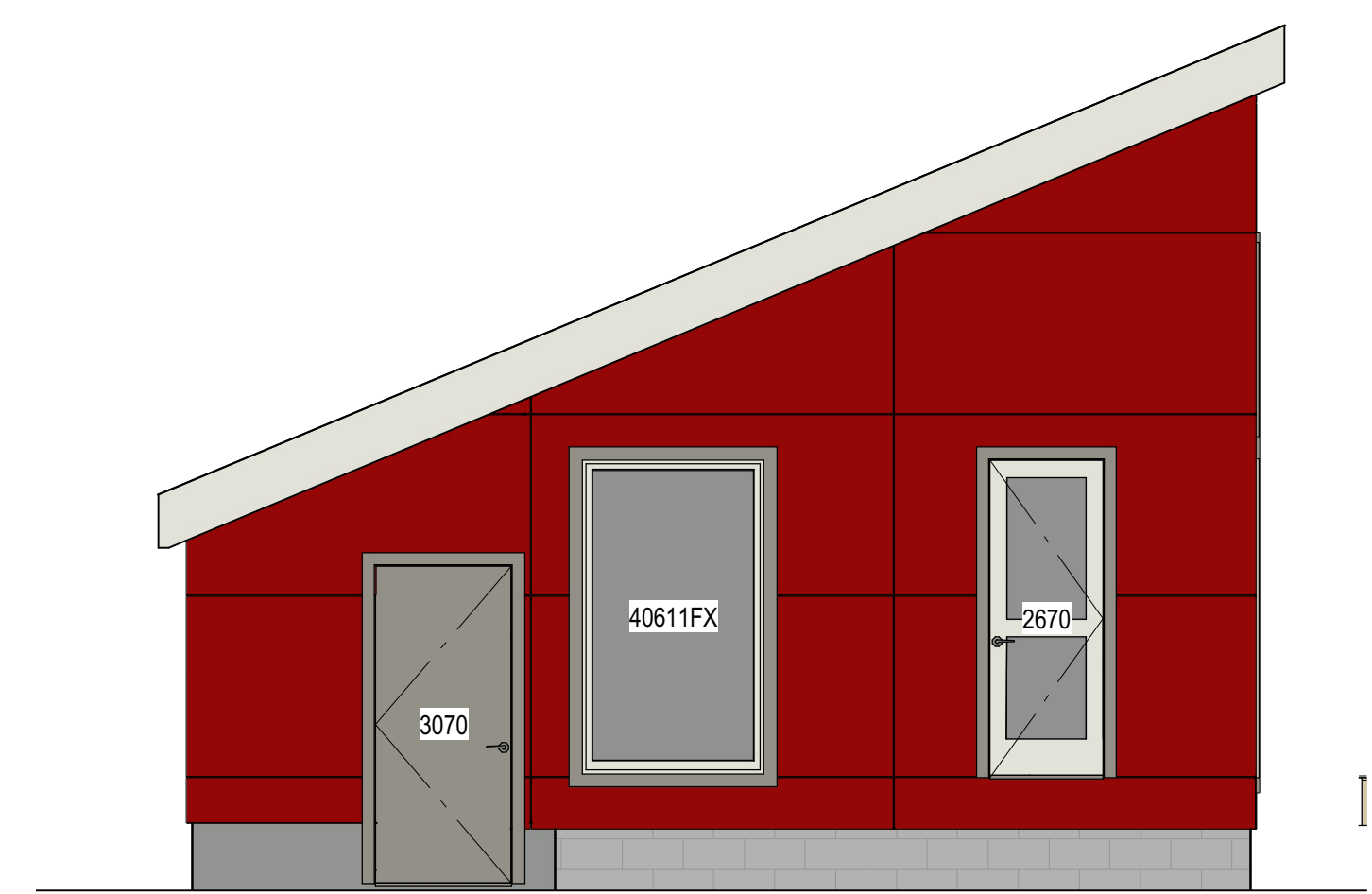
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Tax Parcel #707635 - Tax Map #21-16-31040-0001

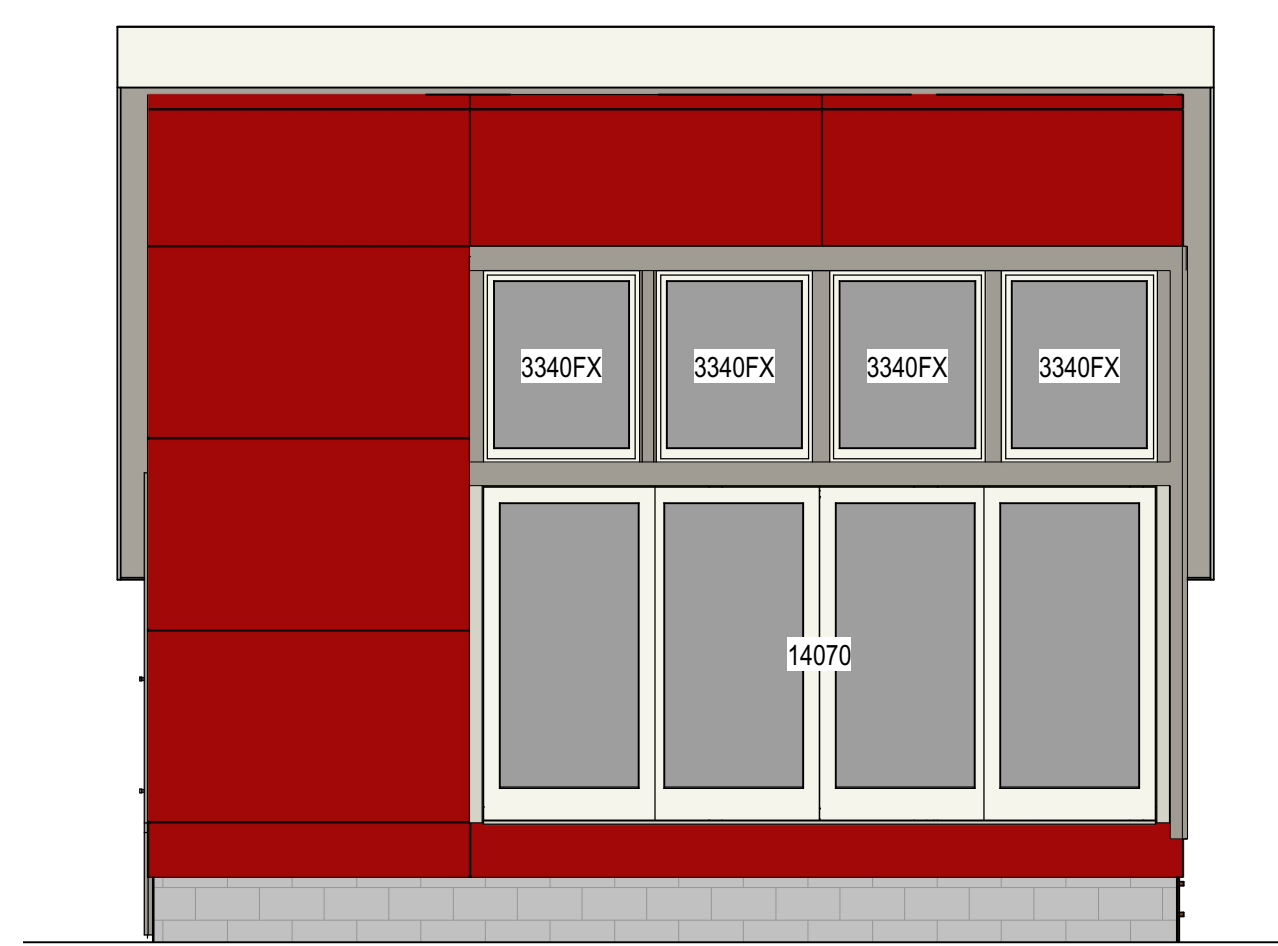
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ELEVATIONS

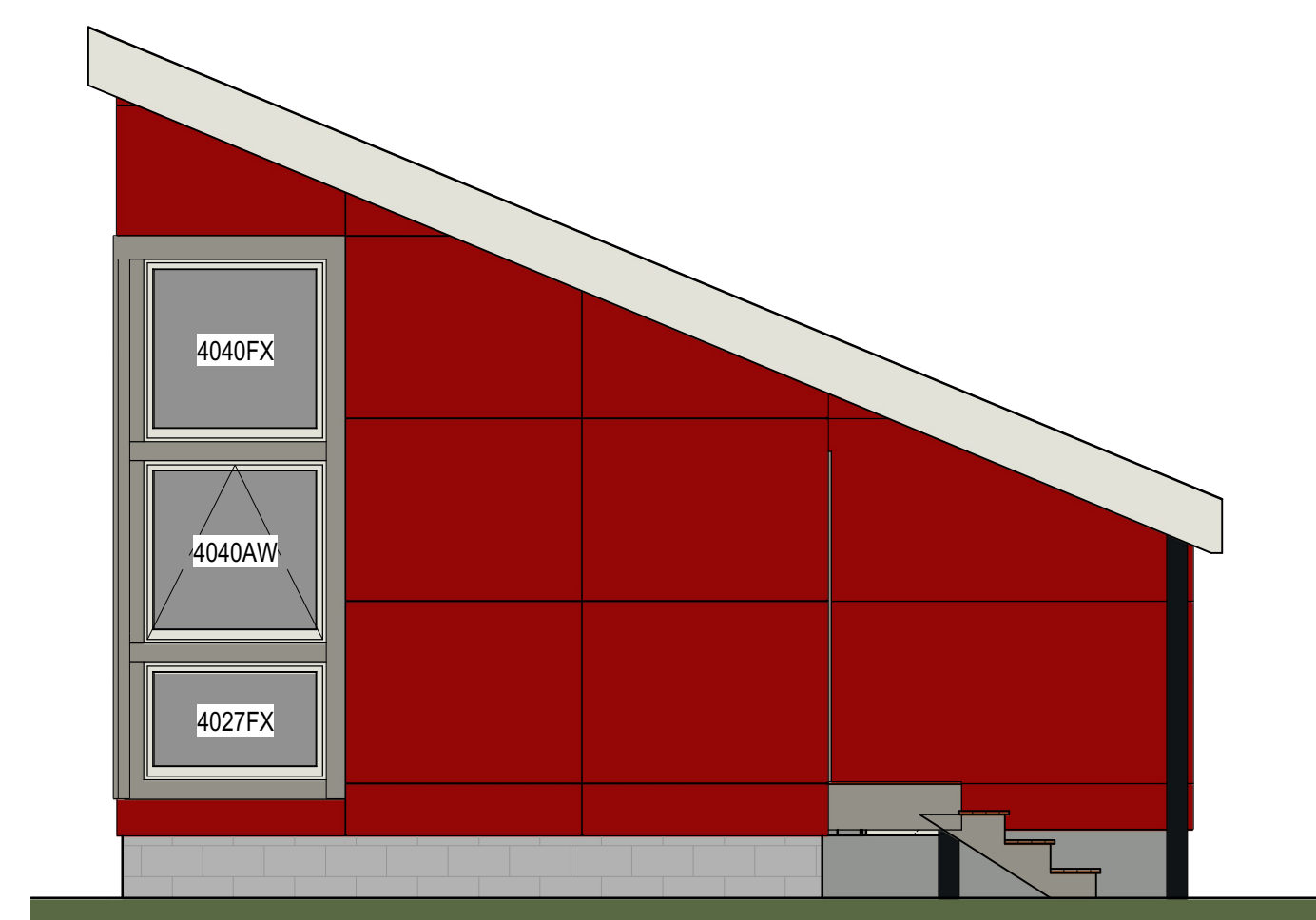
2017-031



NORTH ELEVATION - SCALE 1/4" = 1'-0"



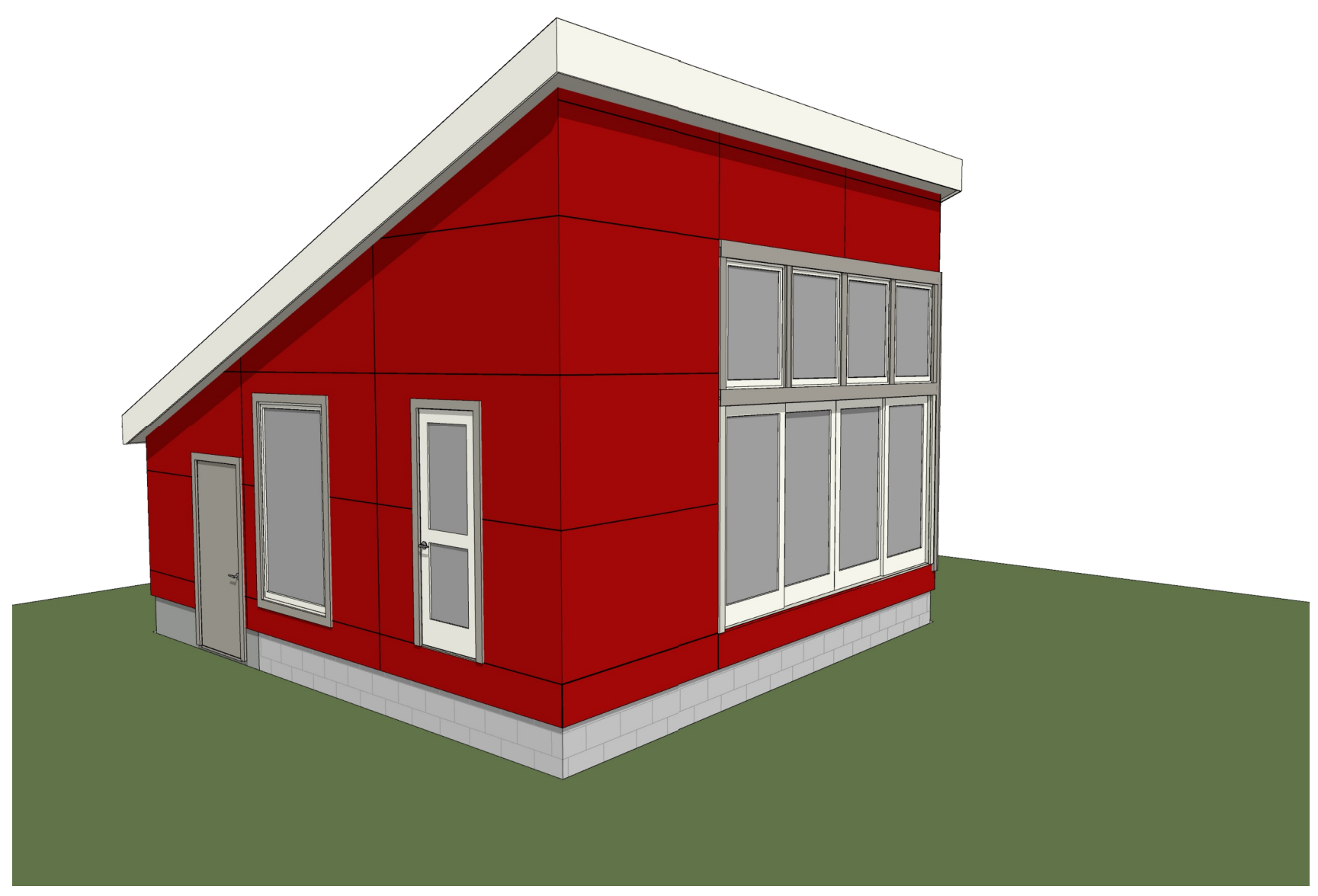
WEST ELEVATION - SCALE 1/4" = 1'-0"



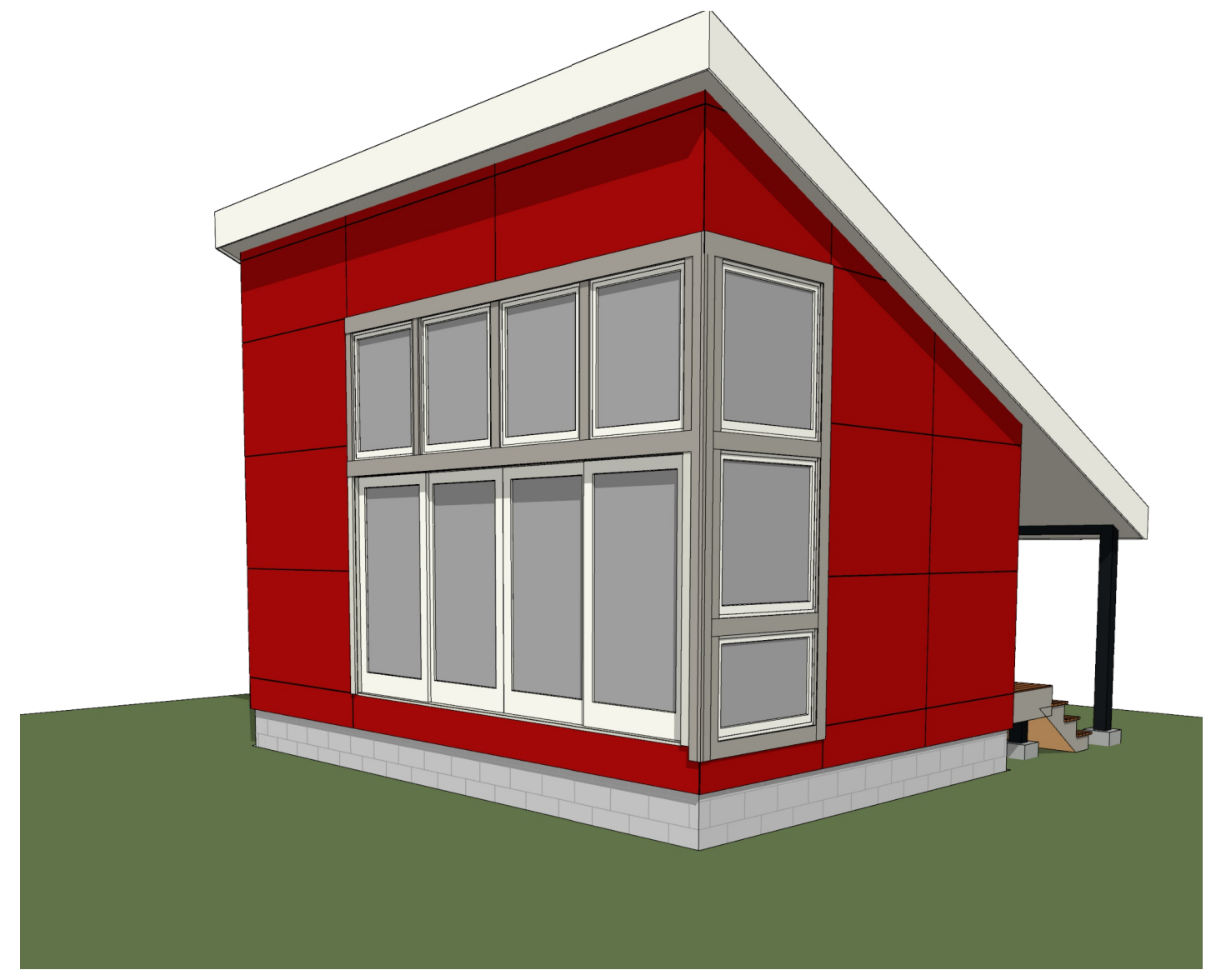
SOUTH ELEVATION - SCALE 1/4" = 1'-0"



EAST ELEVATION - SCALE 1/4" = 1'-0"



NORTHWEST PERSPECTIVE

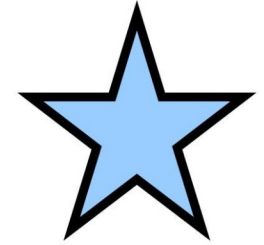


SOUTHWEST PERSPECTIVE



SOUTHEAST PERSPECTIVE





# BLACKFORD REMODEL

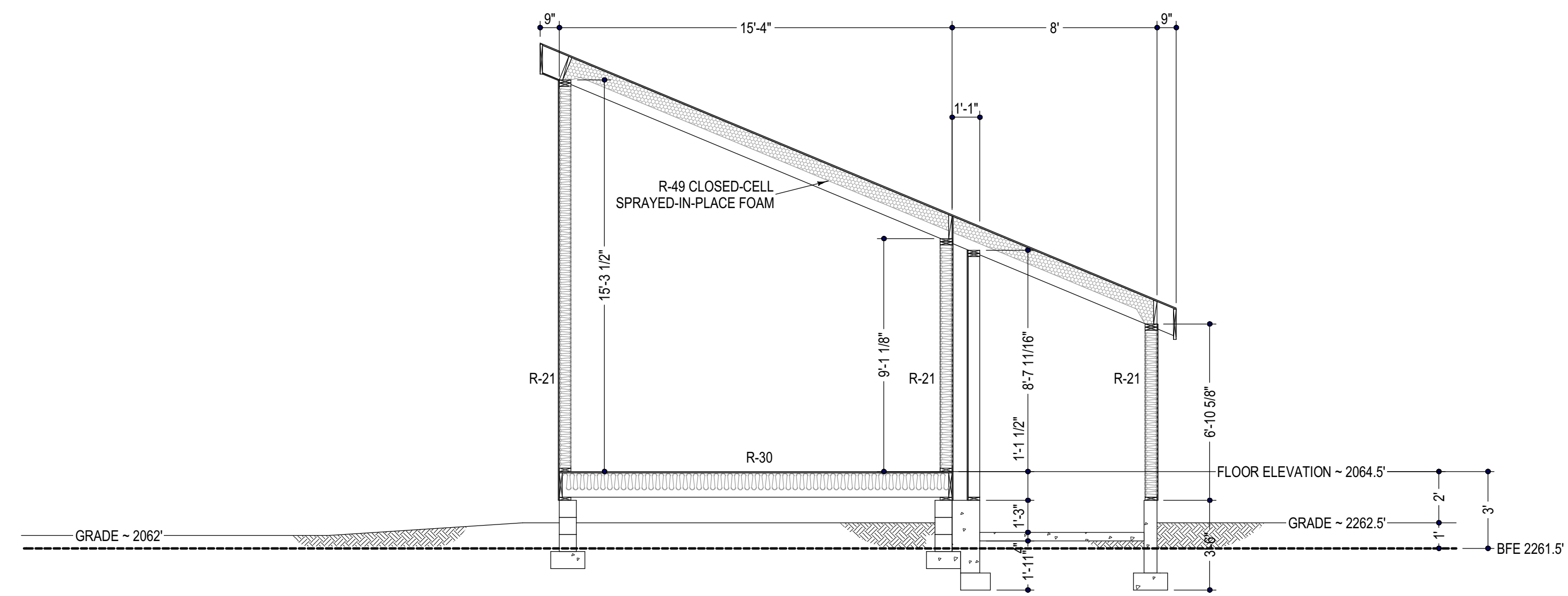
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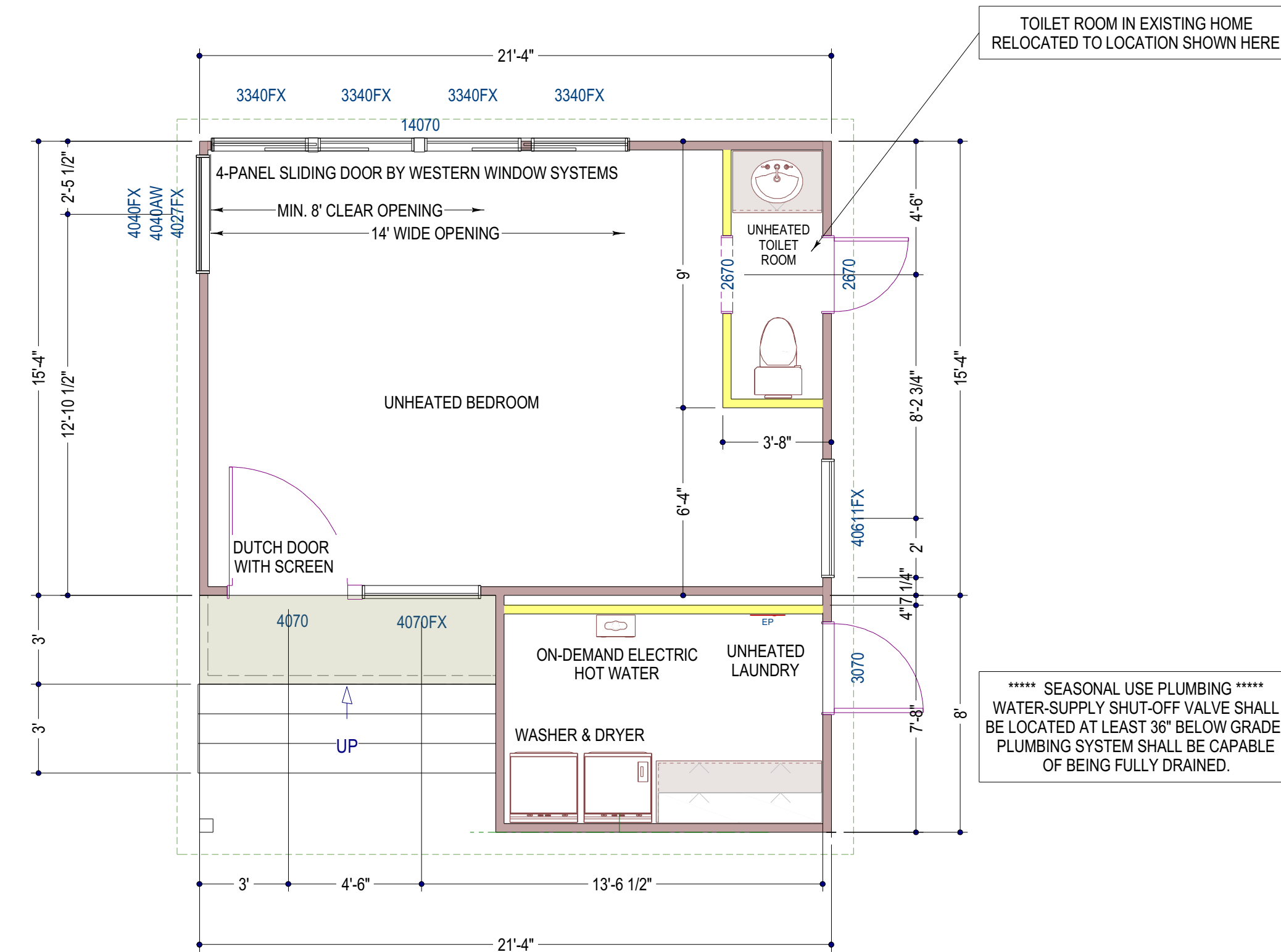
FLOOR PLAN  
ROOF FRAMING  
BUILDING SECTION

2017-031

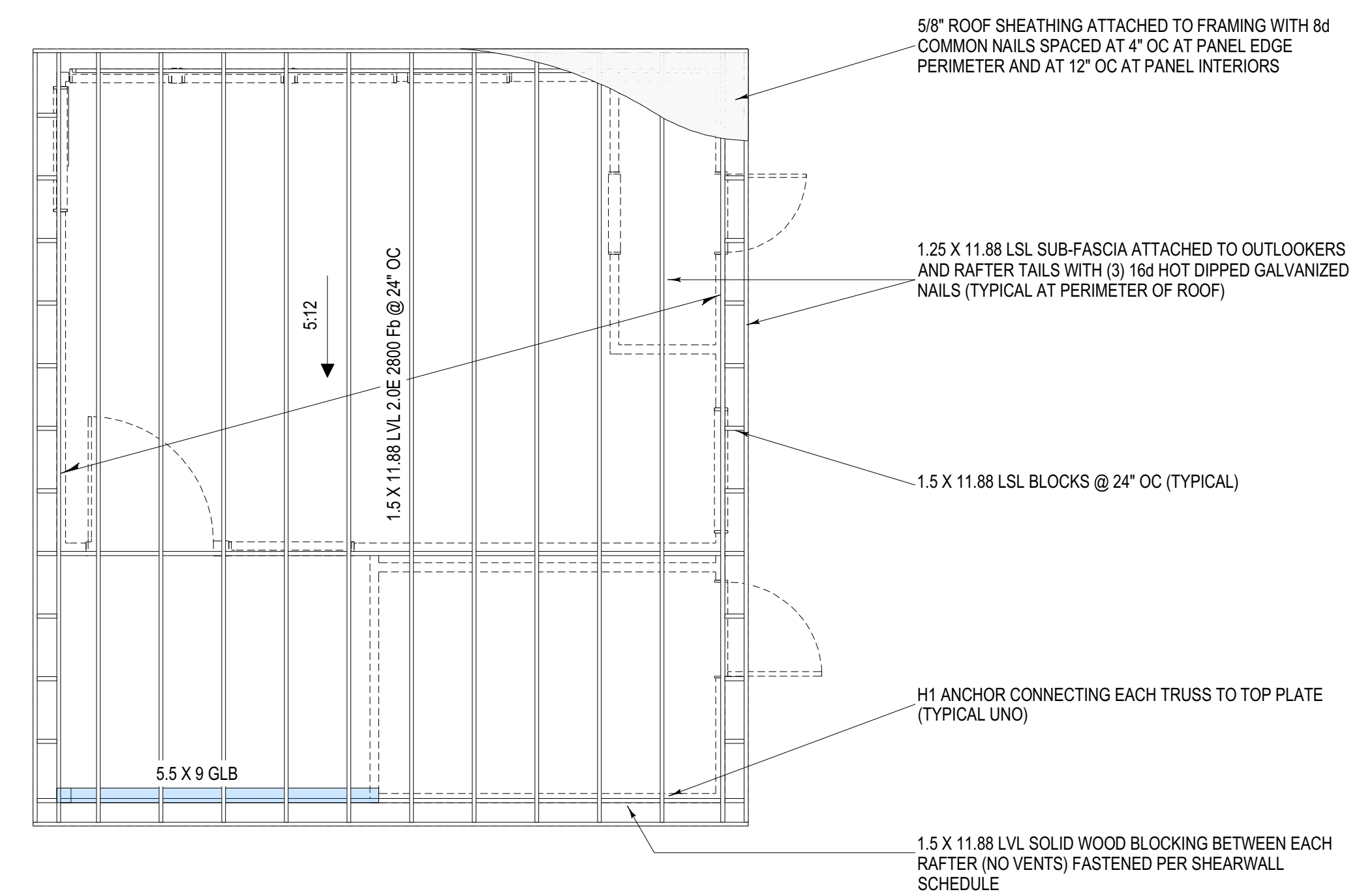
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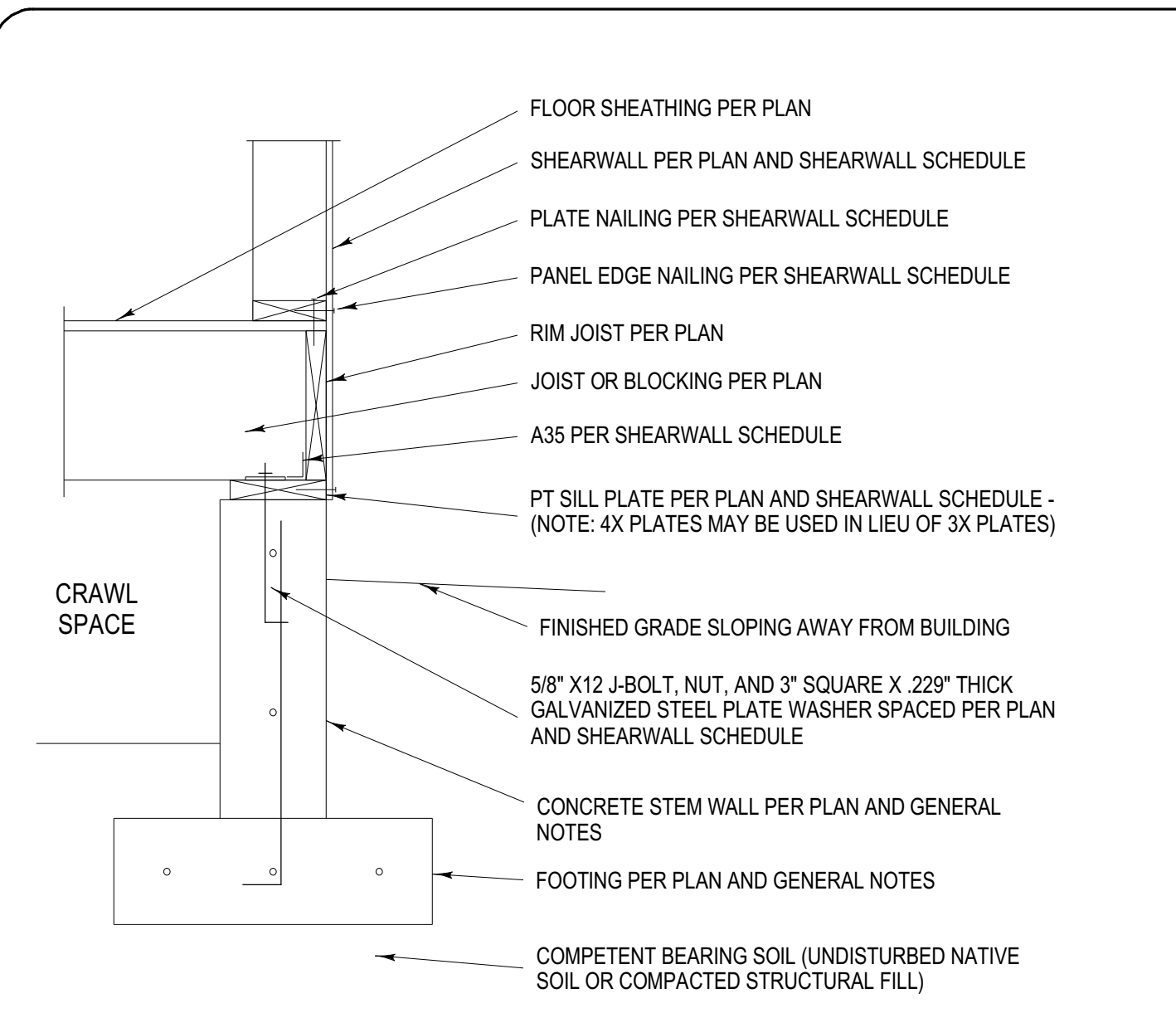
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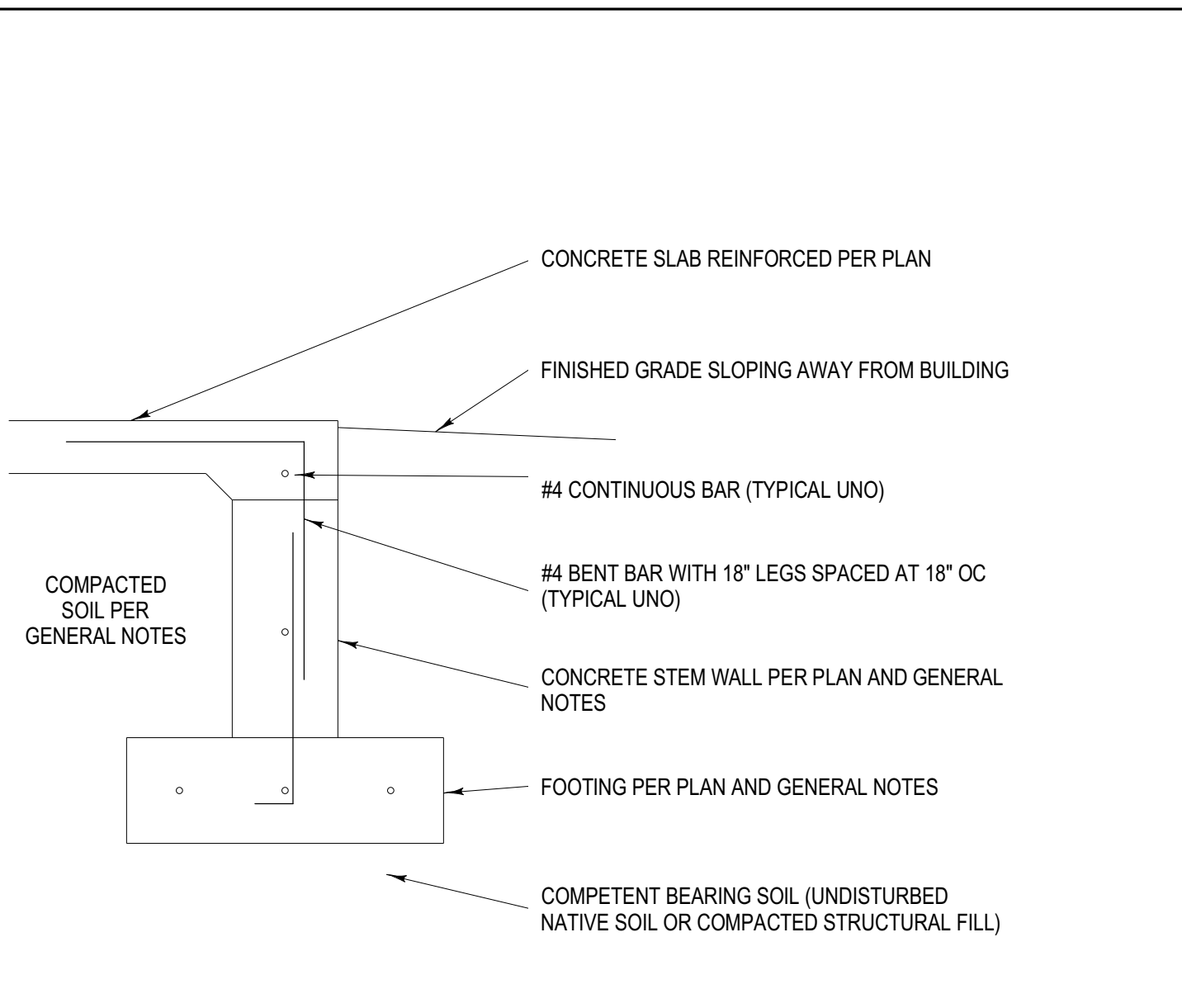
FLOOR PLAN - SCALE 1/4" = 1'-0"



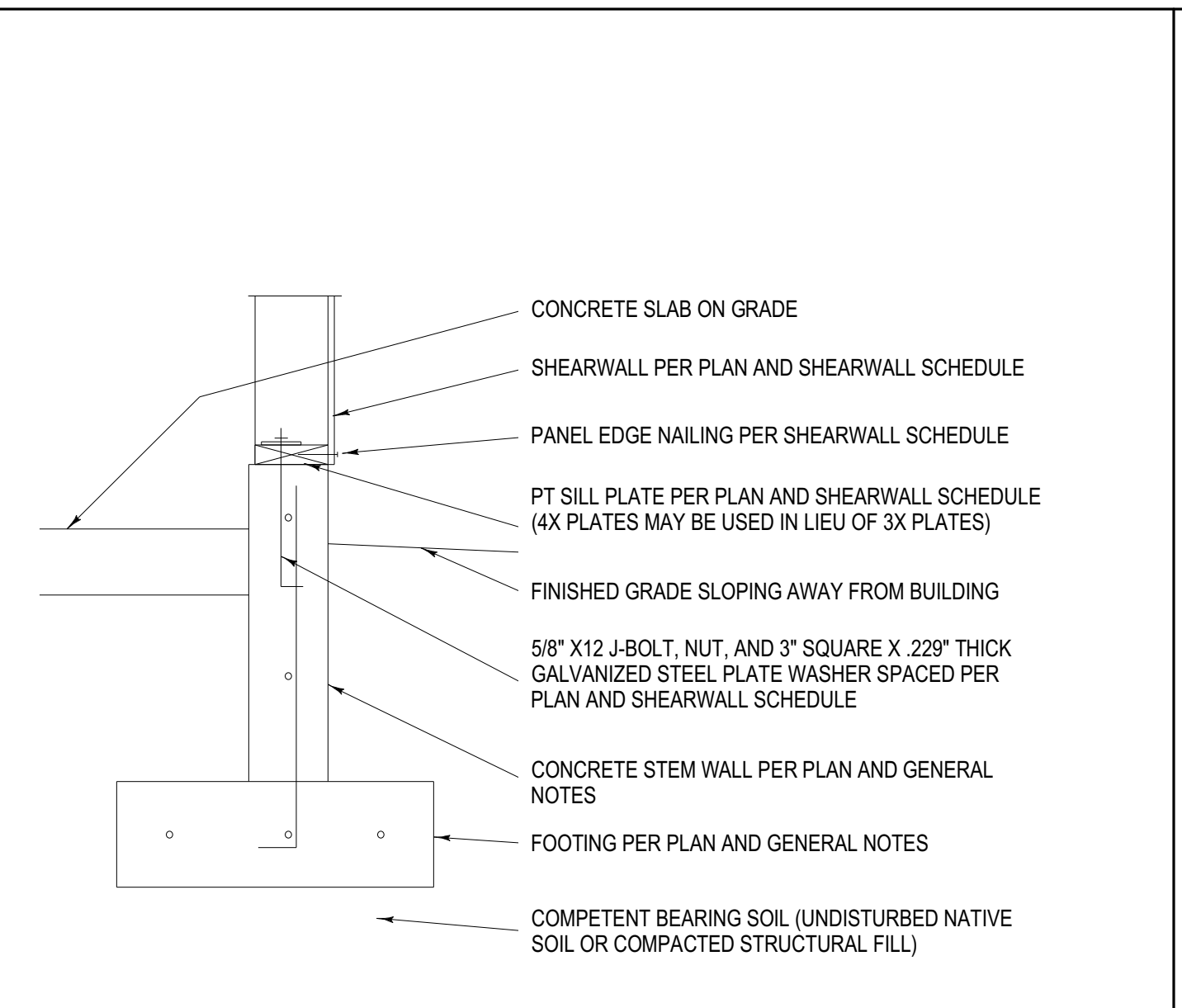
ROOF FRAMING PLAN - SCALE 1/4" = 1'-0"



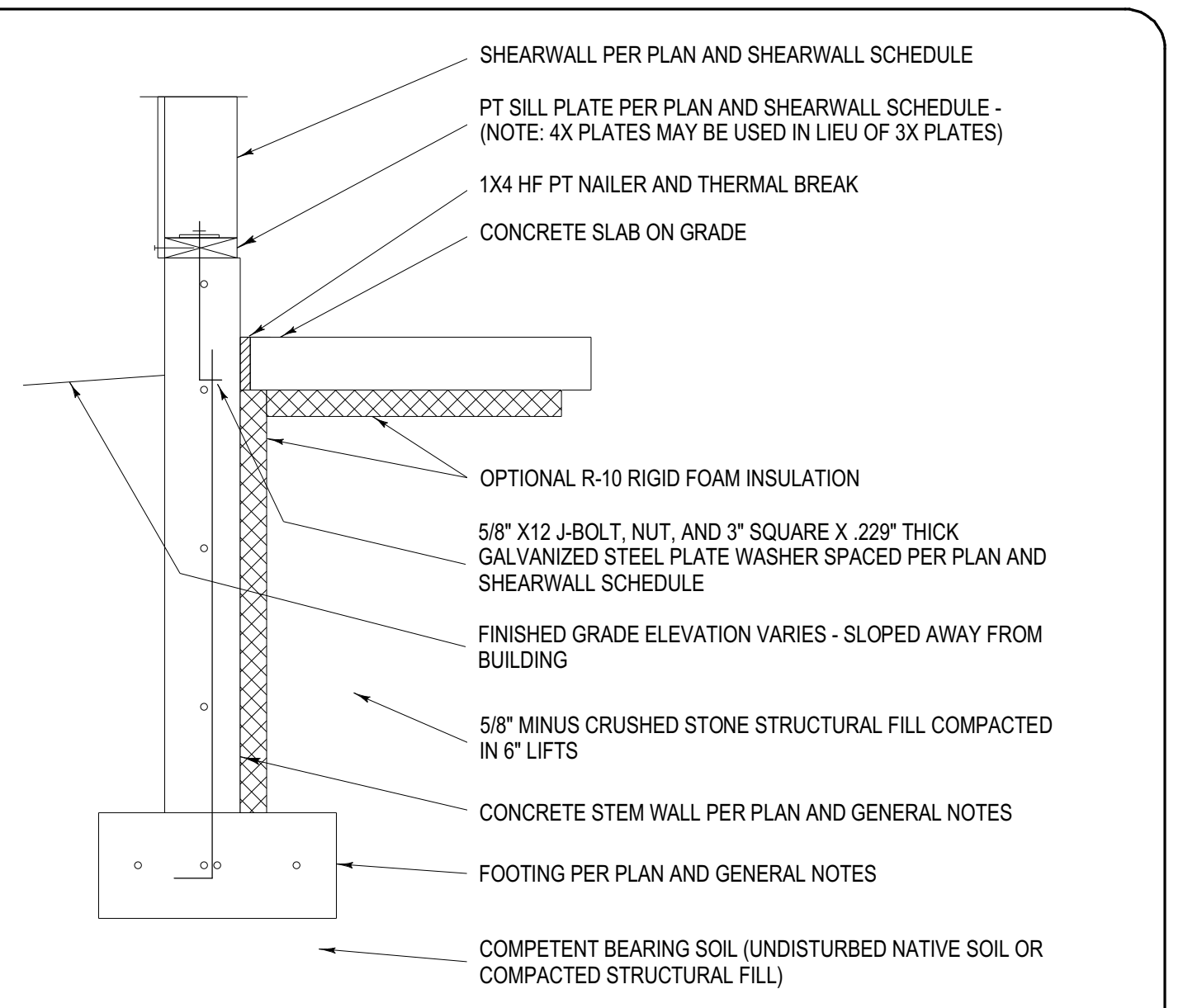
**C001 - STEM WALL TO WOOD FLOOR**



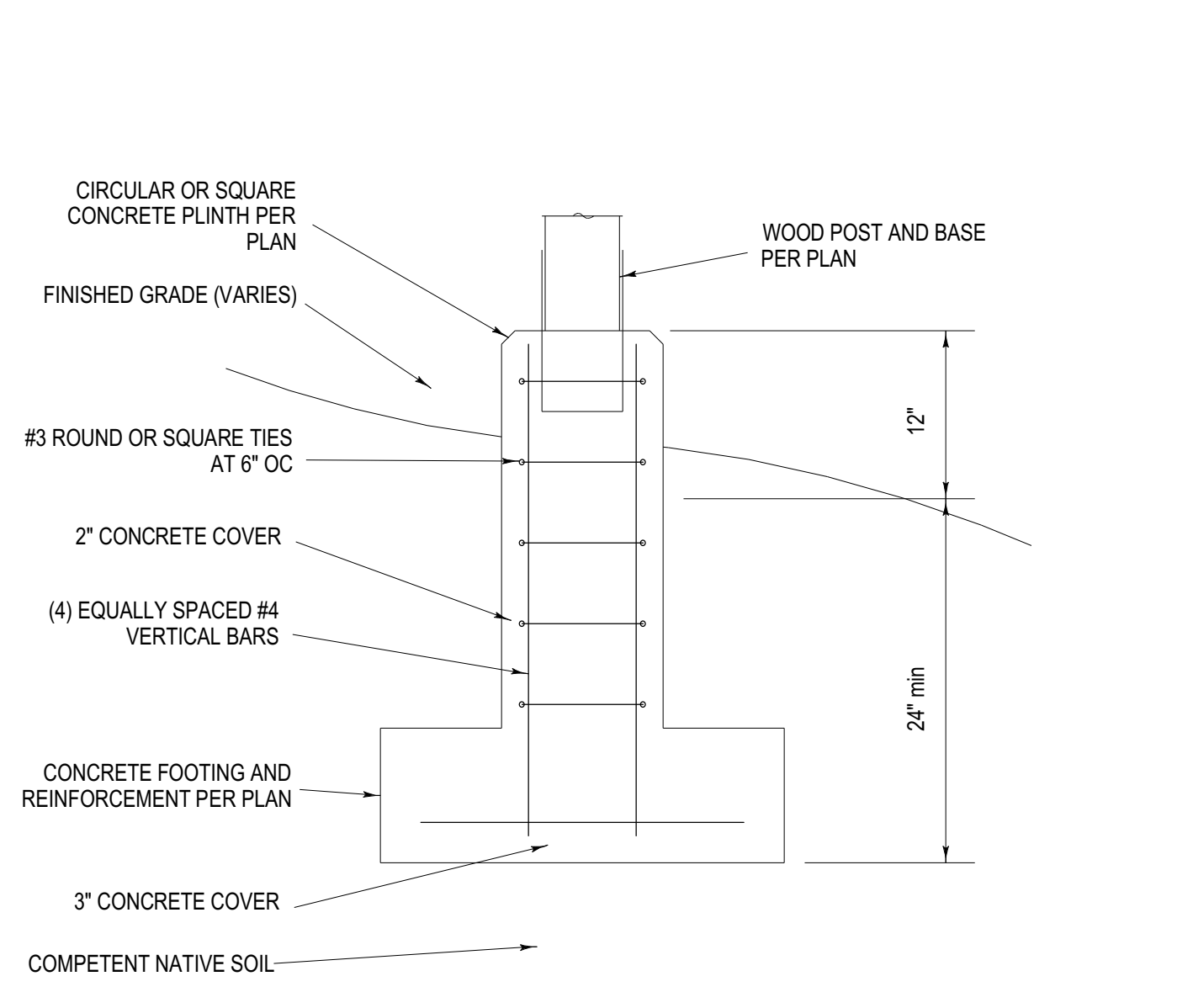
**C003 - STEM TO SLAB AT DOOR**



**C005 - RAISED STEM AT SLAB**



**C006 b - INSULATED SLAB TO STEM**



**C013 - EXTERIOR POST FOOTING**

**PROPERTIES OF SOILS CLASSIFIED ACCORDING TO THE UNIFIED SOIL CLASSIFICATION SYSTEM [IRC TABLE R405.1]**

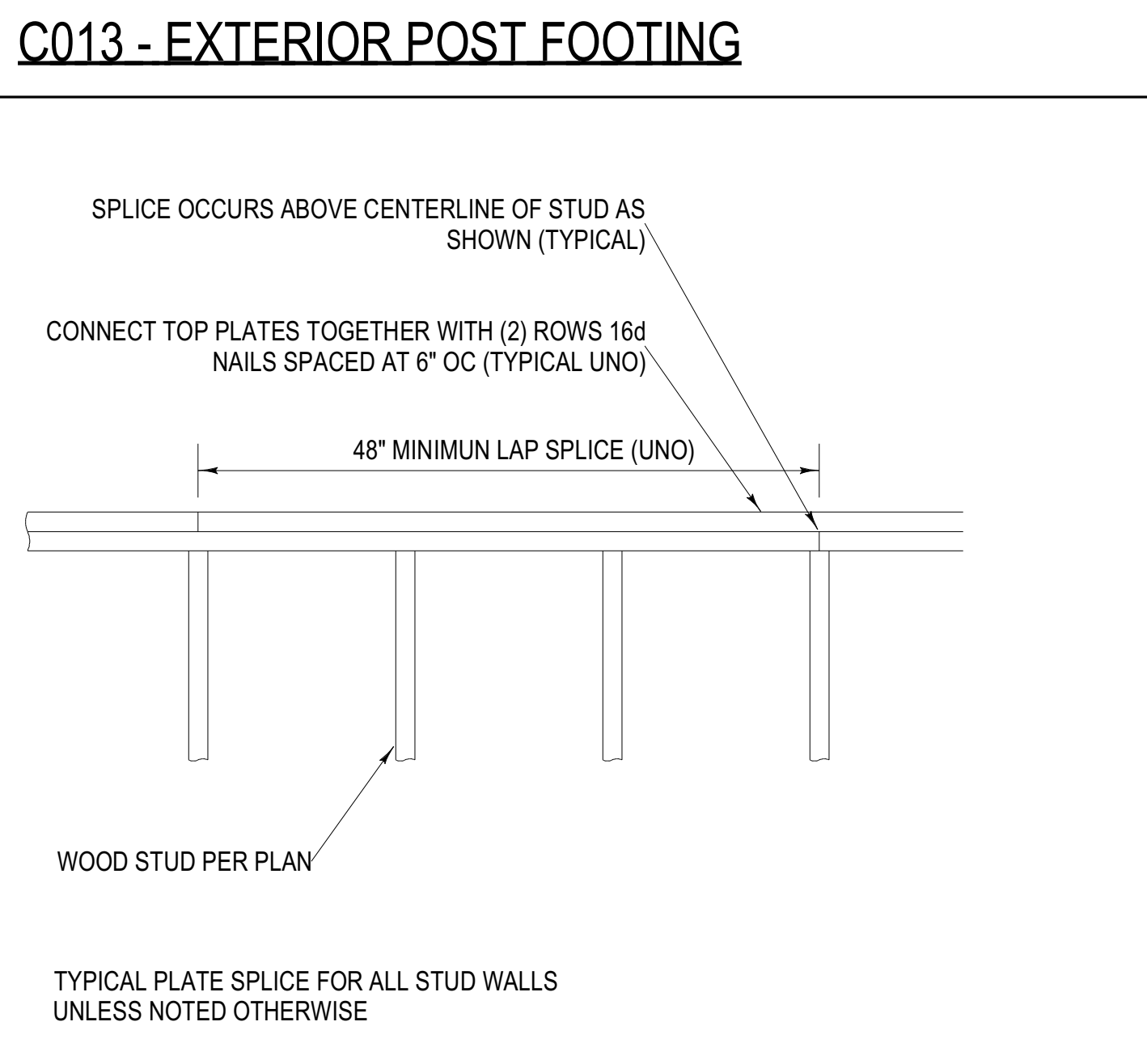
SOIL GROUP	USCS SYMBOL	SOIL DESCRIPTION	DRAINAGE CHARACTERISTICS	FROST HEAVE POTENTIAL	VOLUME CHANGE POTENTIAL
Group I	GW	Well-graded gravels, gravel sand mixtures, little or no fines	GOOD	LOW	LOW
	GP	Poorly-graded gravels or gravel sand mixtures, little or no fines	GOOD	LOW	LOW
	SW	Well-graded sands, gravelly sands, little or no fines	GOOD	LOW	LOW
	SP	Well-graded sands, gravel sand mixtures, little or no fines	GOOD	LOW	LOW
	GM	Silty gravels, gravel-sand-silt mixtures	GOOD	MEDIUM	LOW
Group II	SM	Silty sand, sand-silt mixtures	GOOD	MEDIUM	LOW
	GC	Clayey gravels, gravel-sand-clay mixtures	MEDIUM	MEDIUM	LOW
	SC	Clayey sands, sand-clay mixture	MEDIUM	MEDIUM	LOW
	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity	MEDIUM	HIGH	LOW
	CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays	MEDIUM	MEDIUM	MEDIUM TO LOW
Group III	CH	Inorganic clays of high plasticity, fat clays	POOR	MEDIUM	HIGH
	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts	POOR	HIGH	HIGH
Group IV	OL	Organic silts and organic silty clays of low plasticity	POOR	MEDIUM	MEDIUM
	OH	Organic clays of medium to high plasticity, organic silts	unsatisfactory	MEDIUM	HIGH
	Pt	Peat and other highly organic soils	unsatisfactory	MEDIUM	HIGH

**PRESUMPTIVE LOAD-BEARING VALUES [IBC TABLE 1608.2]**

CLASS OF MATERIALS	S <sub>v</sub>	S	mu	cohesion
Crystalline bedrock	12,000	1,200	.70	-
Sedimentary and foliated rock	4,000	400	.35	-
Sandy gravel and/or gravel (GW and GP)	3,000	200	.35	-
Sand, silty and clayey sand, silty and clayey gravels (SW, SP, SM, SC, GM and GC)	2,000	150	.25	-
Clay, sandy clay, silty clay, clayey silts, silt, and sandy silt (CL, ML, MH and CH)	1,500	100	-	130

S<sub>v</sub> = vertical foundation pressure (psf)  
 S = lateral bearing pressure (psf/ft below natural grade)  
 mu = coefficient of friction

**C023 - SOIL CHARACTERISTICS**



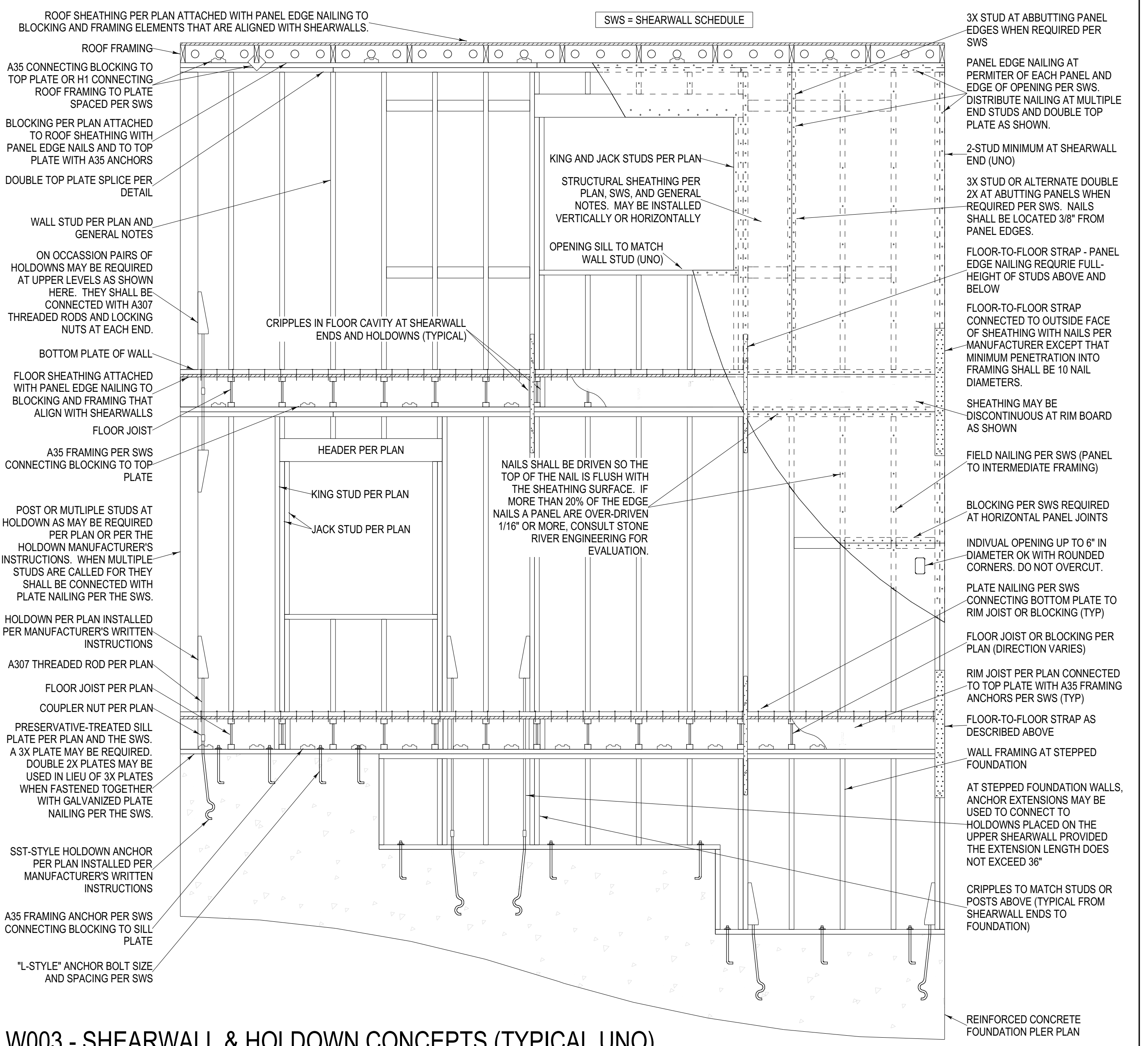
**W002 - DOUBLE TOP PLATE SPLICE**

**SHEARWALL TYPE - refer to plans for locations**

	1	2	3	4	5
PANEL THICKNESS (minimum conforming to DOC PS 1 or DOC PS 2 (note 1))	7/16" (note 2)	7/16" (note 2)	7/16" (note 2)	7/16" (note 2)	7/16" (note 14)
PANEL EDGE NAILING - to framing nail size and maximum spacing (notes 3, 13 & 15)	.131 x 2.5 = 8d .148 x 3.0 = 10d	8d @ 6"	8d @ 4"	8d @ 3"	8d @ 2"
PANEL FIELD NAILING - to intermediate framing nail size & spacing (notes 4 & 15)	.131 x 2.5 = 8d .148 x 3.0 = 10d	8d @ 6" staple @ 3" staple @ 1.5"	8d @ 6" staple @ 3" staple @ 1.5"	8d @ 6" staple @ 3" staple @ 1.5"	8d @ 6" staple @ 3" staple @ 1.5"
PLATE NAILING - to blocking nail options & spacing (note 5)	.162 x 3.5 = 16d .148 x 3.0 = 10d	16d @ 13" 10d @ 11"	16d @ 9" 10d @ 7"	16d @ 7" 10d @ 6"	16d @ 5" 10d @ 4"
DIAPHRAGM BOUNDARY CONNECTORS clip options and maximum spacing (note 6) or A35 600F ea.	H1 415F ea. 24"	16"	12"	8"	6"
FRAMING THICKNESS - minimum nominal (notes 7 & 13) studs and panel edge blocking at abutting panel edges	2x	2x	2x	3x	3x
ANCHOR BOLTS maximum spacing in inches (notes 8, 9, 10, 11 & 12)	2x plate 1/2" Ø 3x plate 1/2" Ø 3x plate 3/8" Ø	51 60 60	35 51 43	27 39 33	21 30 26
<b>CAPACITY (PLF)</b>	<b>223</b>	<b>326</b>	<b>419</b>	<b>544</b>	<b>716</b>

1 Panels shall not be less than 4" x 8" except at boundaries and changes in framing. Framing or blocking is required at all panel edges.  
 2 3/8" Thick sheathing OK when studs are 16" or less or when the panels are placed with long direction perpendicular to studs.  
 3 Edge nails shall be located at least 3/8" from panel edges.  
 4 Interior panel nail spacing may be increased to 12" when studs are spaced < 24" or when panels are thicker than 7/16"  
 5 If 3x plates are used replace 16d plate nails with 6" spikes and increase spacing by 1.5x  
 6 Hardware by Simpson Strong Tie - see catalog C-C-2015  
 7 Sheathing shall not be used to splice boundary elements.  
 8 Anchor bolts shall be embedded in concrete at least 6" below any cold joint.  
 9 Preservative-treated sill plates shall fasten to the foundation with anchor bolts and 3" x 3" x 1/4" thick steel plate washers.  
 10 Plate washers shall extend to within 1/2" of the edge of the sill plate on the sheathed side.  
 11 Locate one anchor bolt between 6" and 12" from each end of each sill plate.  
 12 For double-sided shear walls, decrease spacing of anchor bolts and diaphragm boundary connectors by half.  
 13 2" Nominal or wider framing shall be used at all adjoining panels edges except that 3x nominal or wider framing and staggered nailing are required when edge nails are spaced at 2", where 10d edge nails penetrate framing more than 1.5" and are spaced 3" or less, or where the shear capacity exceeds 700 plf in seismic design category D,E,F.  
 14 At shearwall type 5 use (2) rows of blocking/parallel joists & distribute blocking nails evenly.  
 15 Staples crowns shall be 7/16" minimum and shall be installed parallel to framing members.

**W001 HF/SPF - SHEARWALL SCHEDULE**



**W003 - SHEARWALL & HOLDOWN CONCEPTS (TYPICAL UNO)**



**BLACKFORD REMODEL**

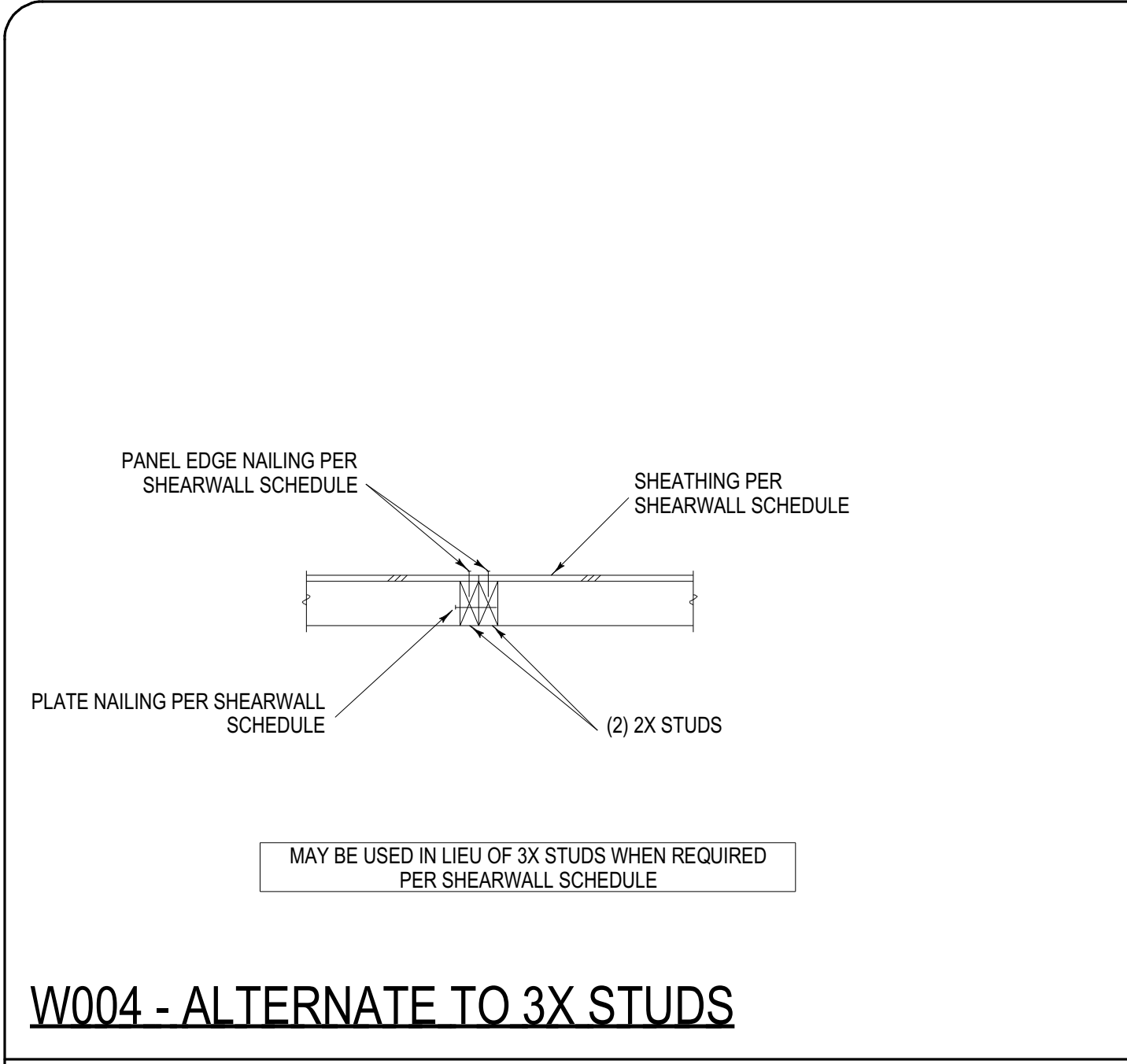
150 North Fork Ranch Road, Washington 98922  
 Tax Parcel #707635 - Tax Map #21-16-31040-0001

Issue Date Purpose  
 2018-05-08 Flood Permit Appl.  
 2018-07-19 Building Permit  
 2018-07-27 Building Permit  
 2018-08-11 removed future bldg

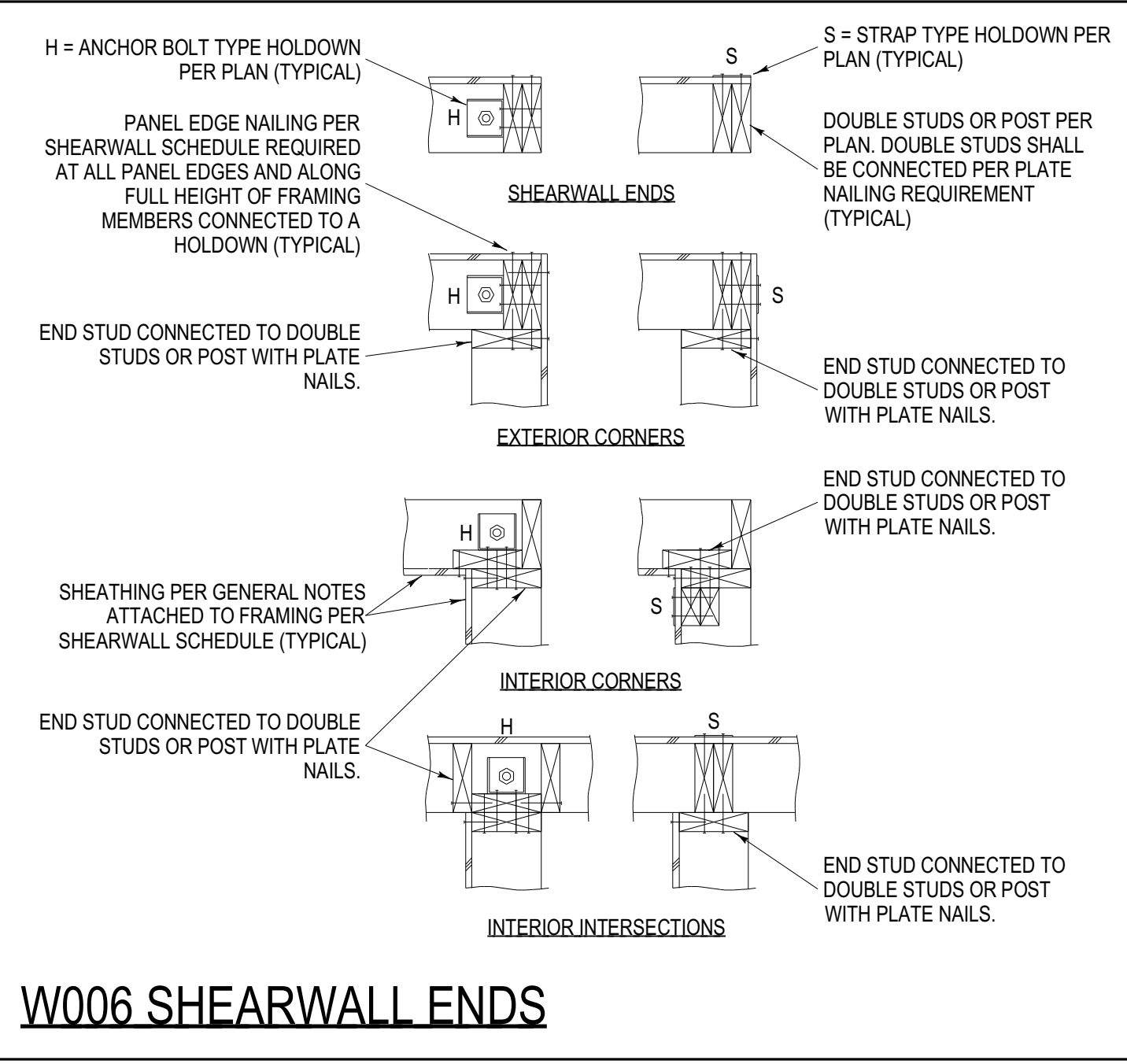
DETAILS

2017-031

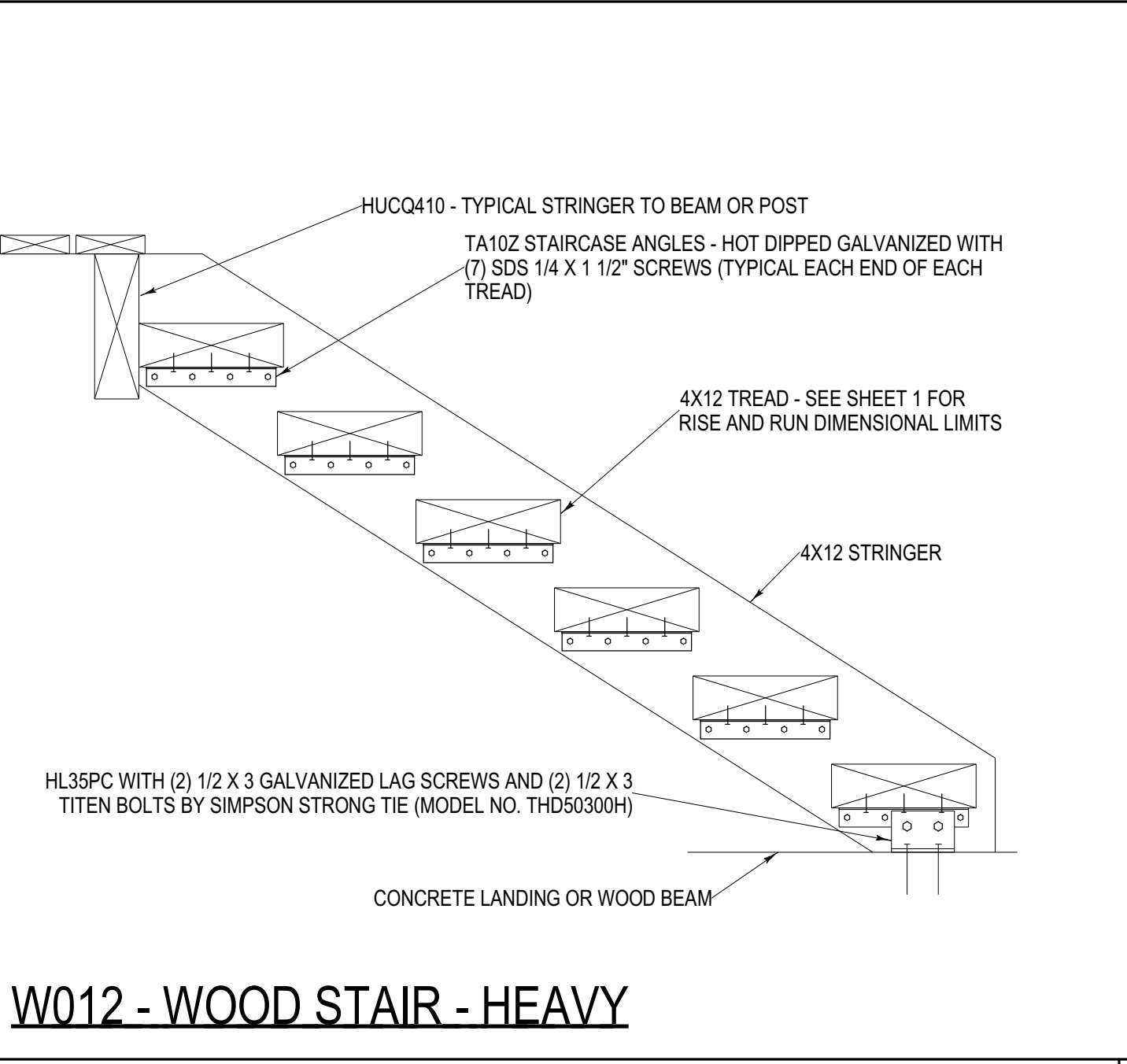
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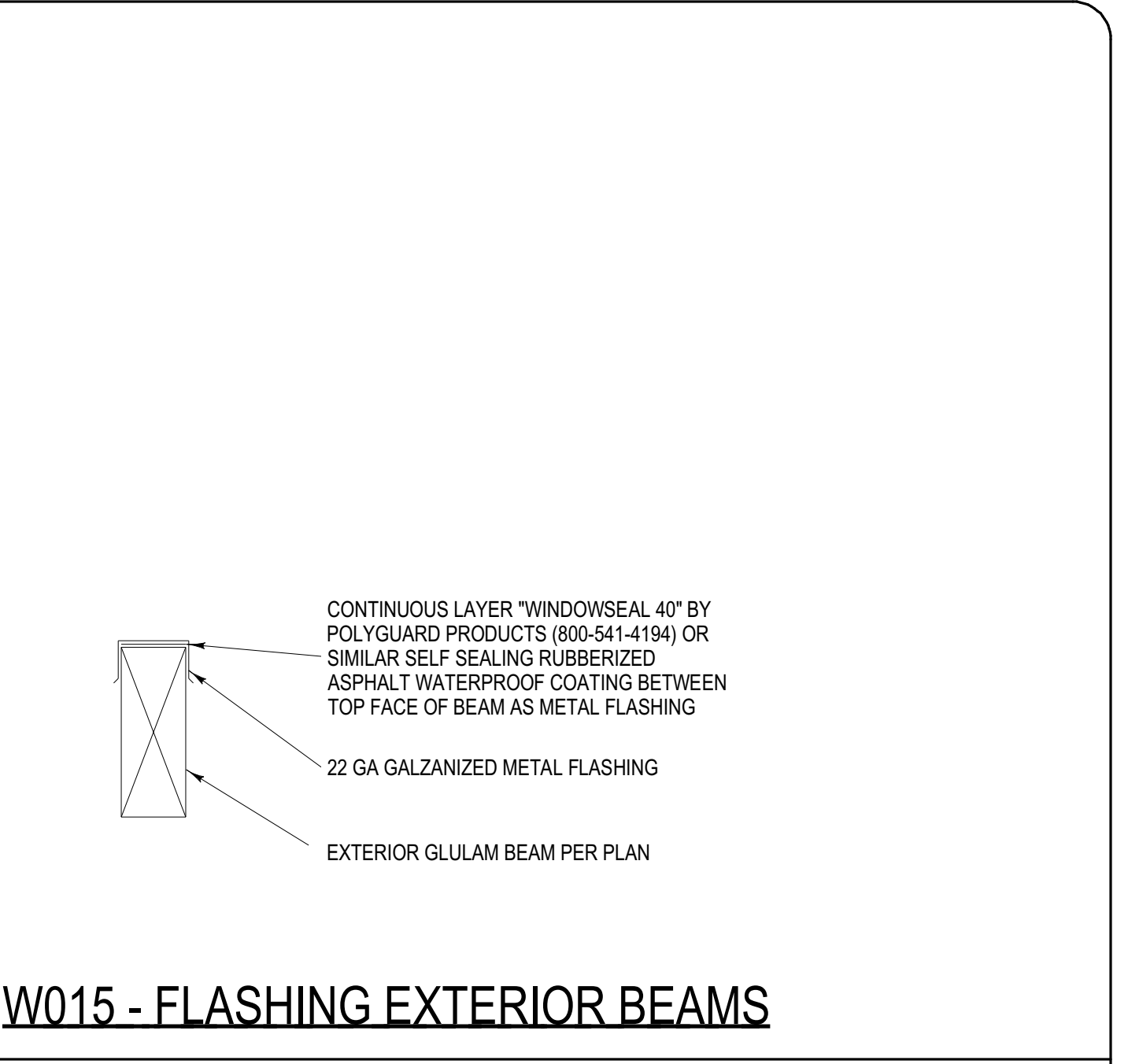
**W004 - ALTERNATE TO 3X STUDS**



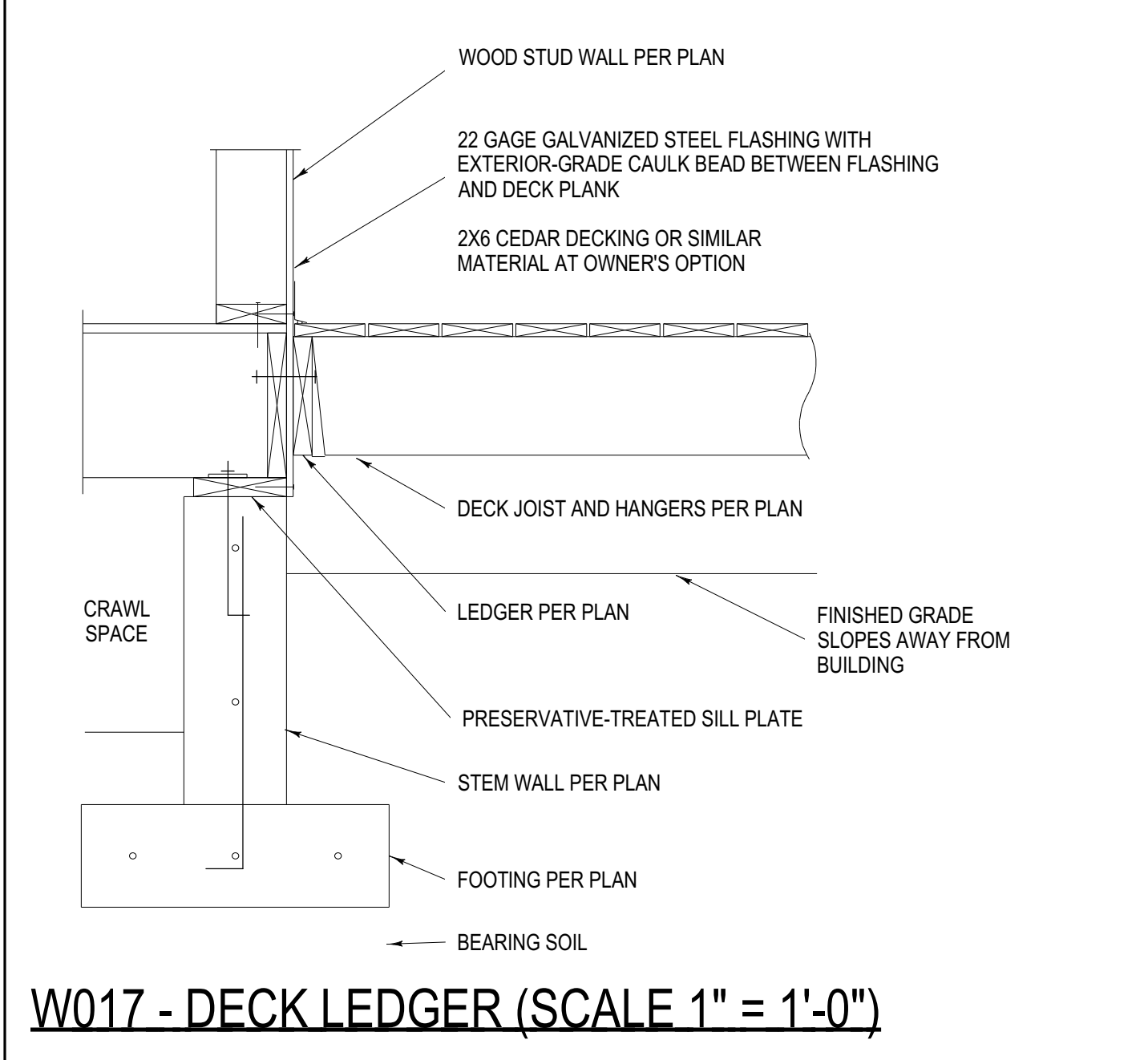
**W006 SHEARWALL ENDS**



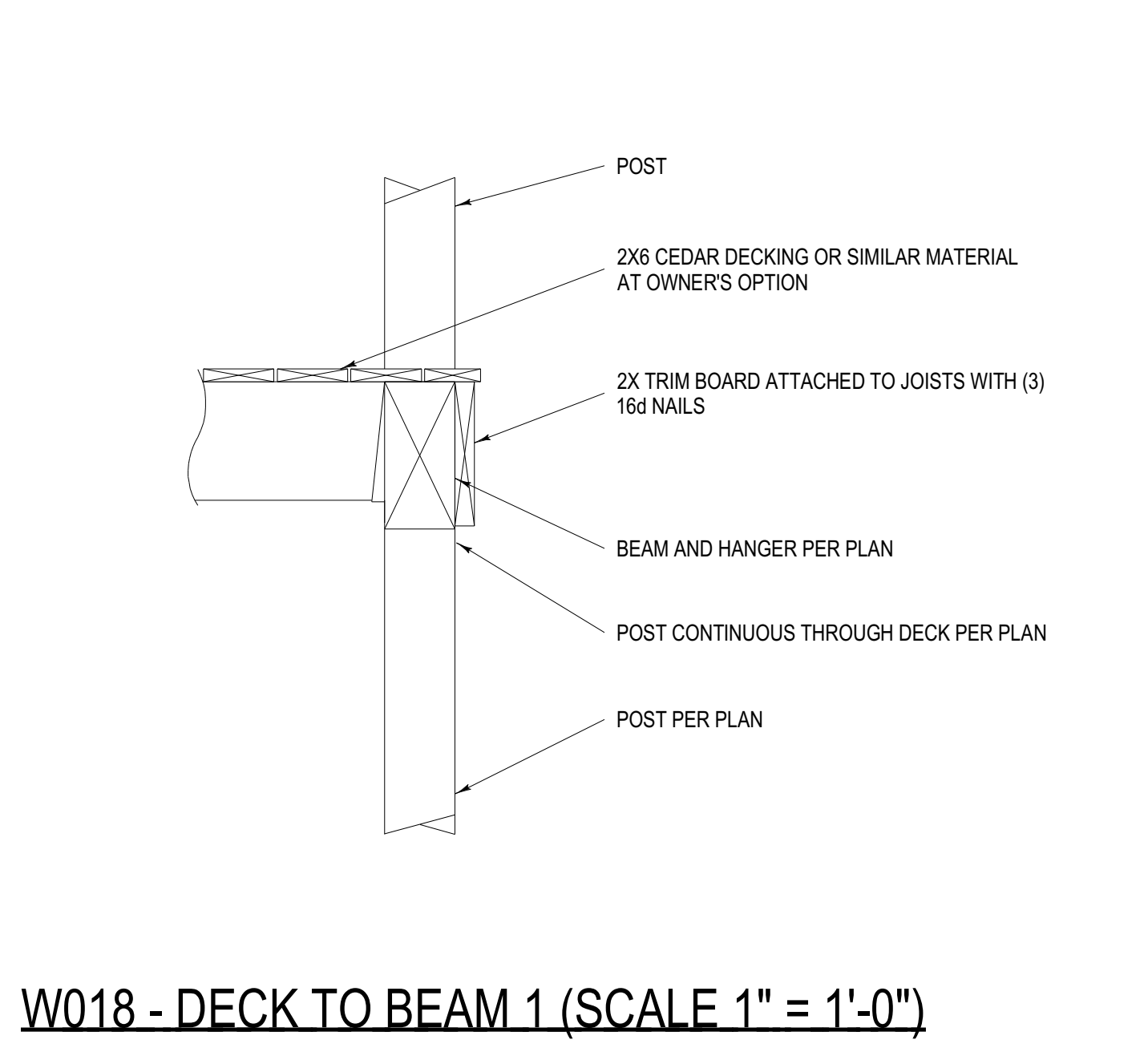
**W012 - WOOD STAIR - HEAVY**



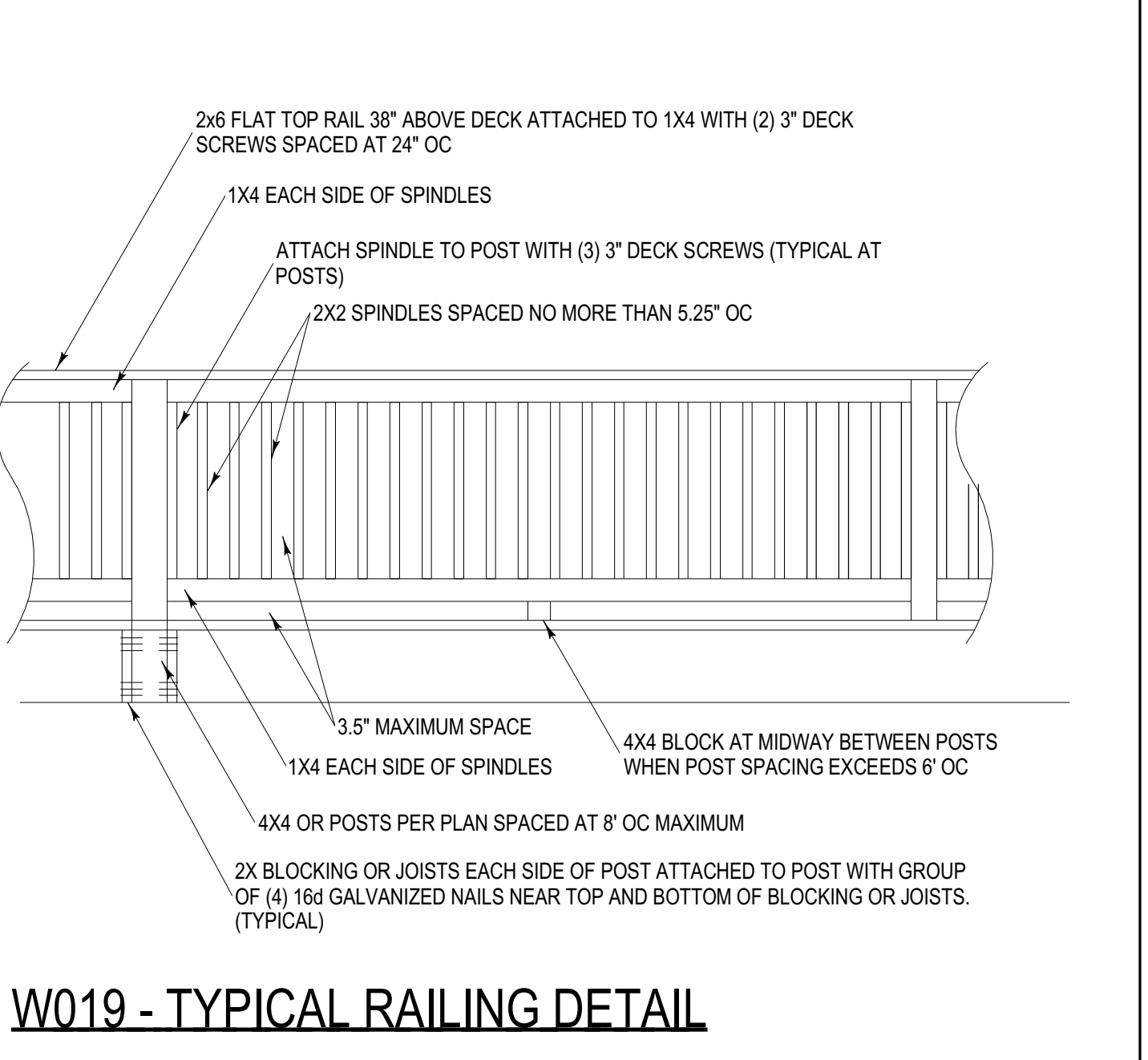
**W015 - FLASHING EXTERIOR BEAMS**



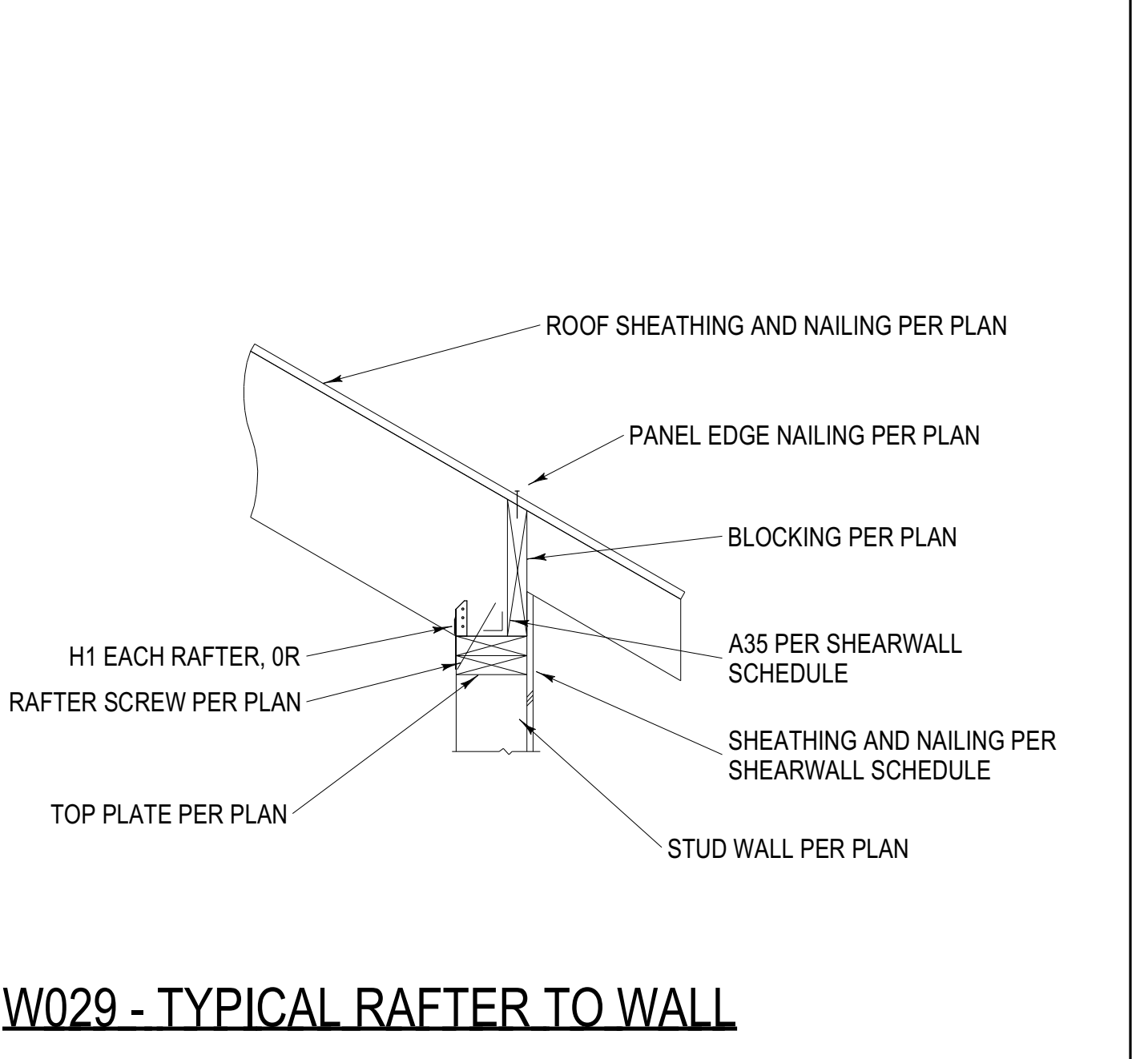
**W017 - DECK LEDGER (SCALE 1" = 1'-0")**



**W018 - DECK TO BEAM 1 (SCALE 1" = 1'-0")**



**W019 - TYPICAL RAILING DETAIL**



**W029 - TYPICAL RAFTER TO WALL**



**BLACKFORD REMODEL**

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DETAILS

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