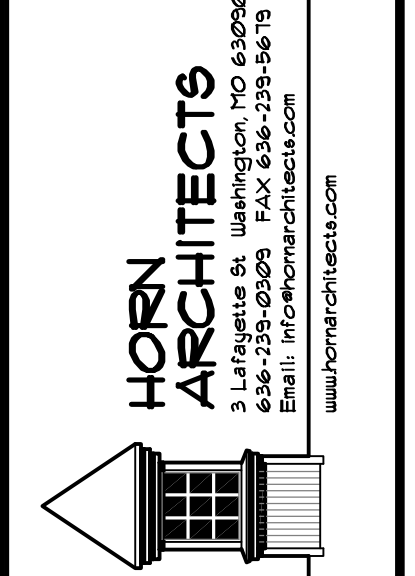
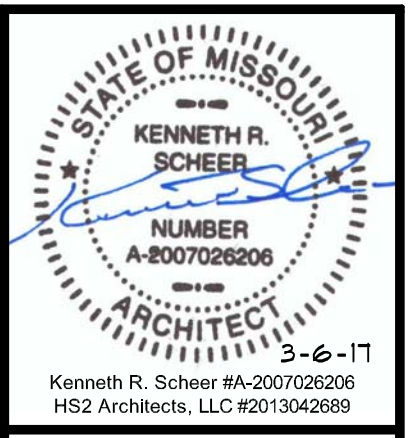
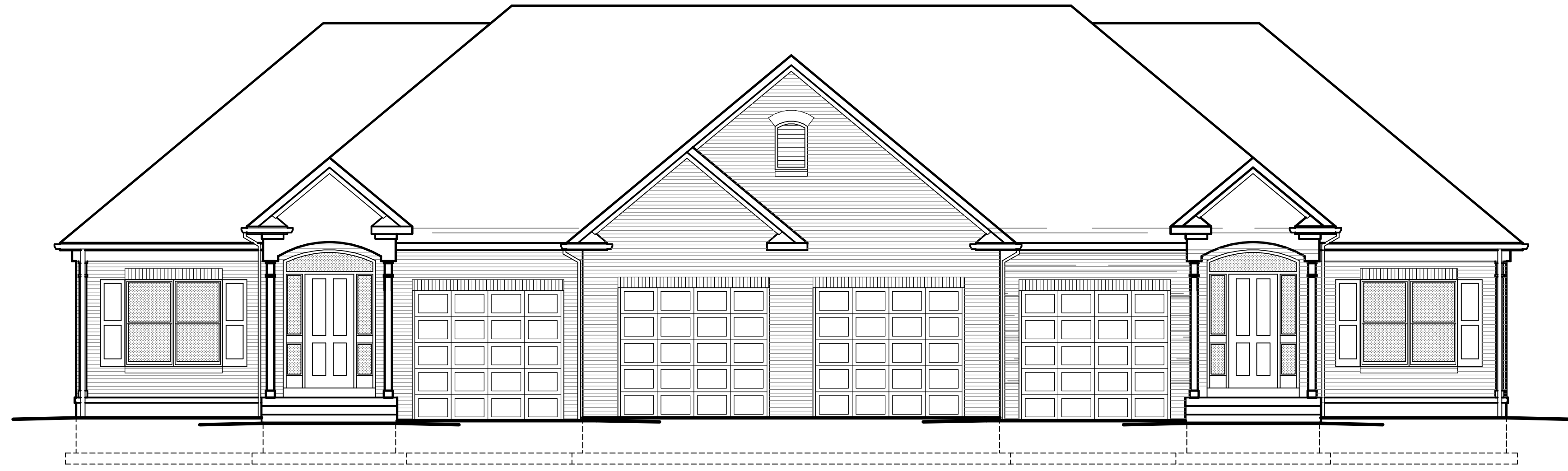


New Duplex Residence for:
WEST 5TH STREET VILLAS
UNERSTALL CONSTRUCTION CO
 West Fifth Street, Washington, Missouri 63090

NOTE:
 THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL MEANS AND METHODS OF CONSTRUCTION, INCLUDING ALL SHORING AND BRACING, AND ALL REQUIRED SAFETY PRECAUTIONS



New Duplex Residence for:
WEST 5TH STREET VILLAS
UNERSTALL CONSTRUCTION CO
 West Fifth Street, Washington, Missouri 63090

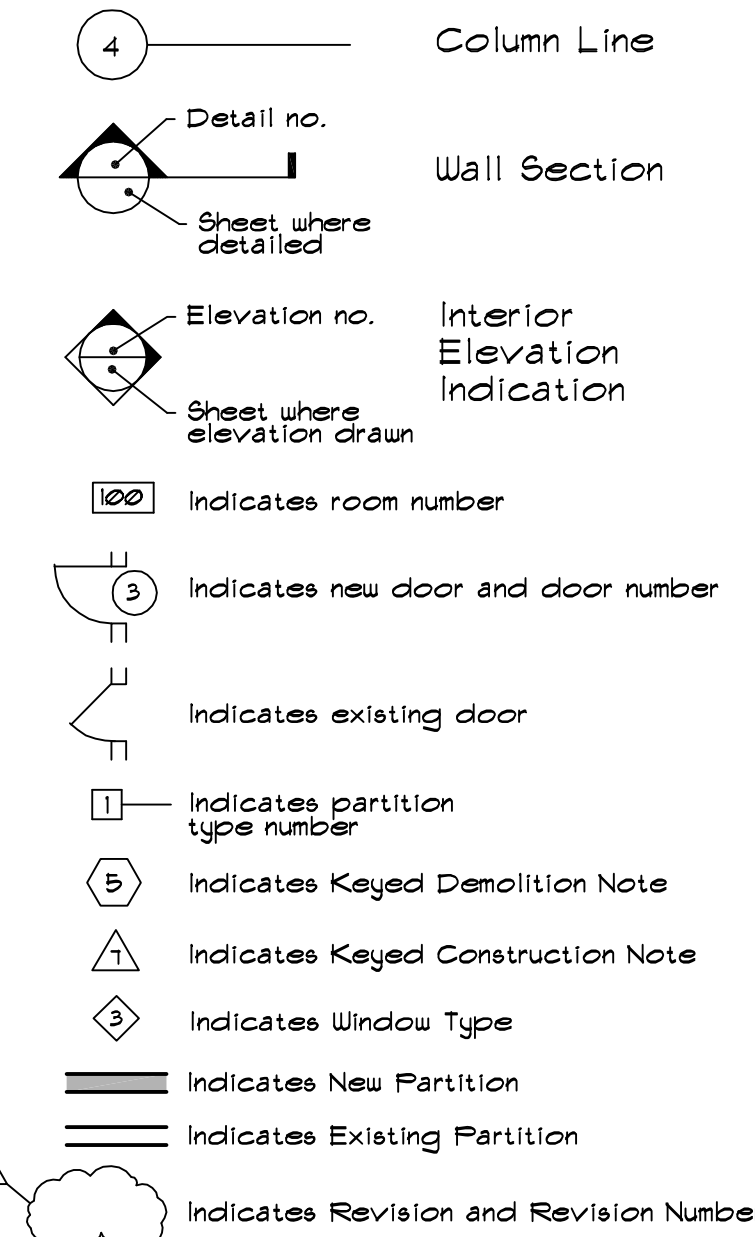
SHEET TITLE	
REVISIONS	
PROJECT NO.	1712
ISSUE DATE	MARCH 6, 2017
SHEET NO.	A0

ABBREVIATIONS

See MEP, Structural & Civil Drawings for additional abbreviations

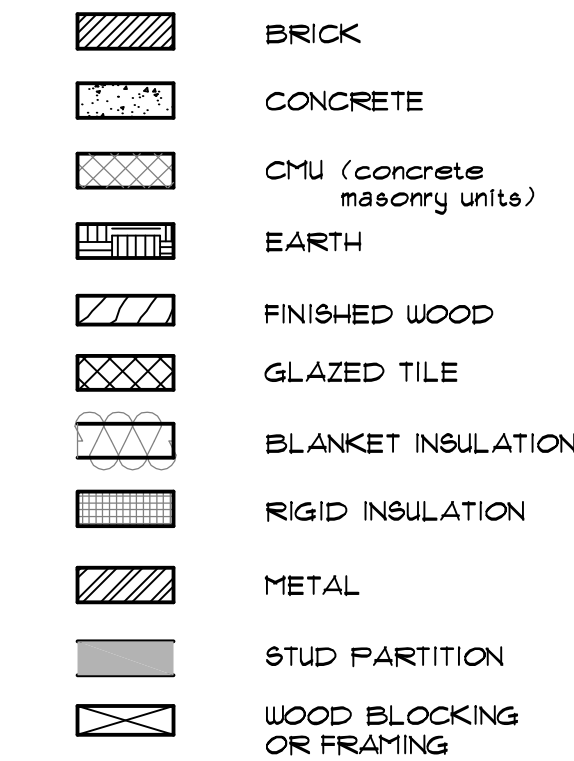
Ac	Acoustical	Insul	Insulation
Adj	Adjustable	Jt	Joint
Alum	Aluminum	KO	Knock out panel
e	at	Lav.	Lavatory
AP	Access Panel	LP	Liner Panel
B	Brick	Ma. T.	Marble Threshold
Bm	Beam	mbs	Masonry
BS	Brick Shelf	MC	Mechanical Contractor
Btm	Bottom	Mt.	Metal
By Owner	Furnished and delivered by Owner. Installed by Contractor (Shown with solid lines)	MBM	Metal Building Manufacturer
CEB	Carpet Edge Strip	mid	Molding
CG	Corner Guard	MO	Masonry Opening
CHBd	Chalk Board	MJR	Masonry Joint Reinforcing
CJ	Control Joint	MT	Metal Threshold
CMU, CM	Concrete Block Masonry Unit	MEB	Metal Edge Strip
Col	Column	NIC	Not In Contract, Installed & furnished by Owner (shown dotted)
Conc., C	Concrete	NR	Napkin Receptacle
Cont.	Continuous	N.T.S.	Not To Scale
Conv	Converter	oc	on center
CP, CPT	Carpet	opp	opposite
CR	Coat Rack	Pa, P	Paint
CL	Channel	PC	Plumbing Contractor
CW	Cold Water	PH	Paper Holder
CT	Ceramic tile	PL, plas. lam.	Plastic Laminate
DAS	Dovetail Anchor Slot	PLY	Plywood
DF	Drinking Fountain	PFD	Paper Towel Dispenser
DJ	Dummy Joint	Pl. Fig.	Point Figure
DP	Dampproofing	PL	Plate
DFH	Dual paper holder	Pres.	Present
DS	Downspout	R	Rubber
DW, D	Drywall	RAG	Return Air Grille
ea.	each	RD	Roof Drain
EC	Electrical Contractor	Recep.	Receptacle
Elect.	Electric	Ref.	Refrigerator
EP	Electric Panel	Reinf.	Reinforced, reinforcement
ES	Edge Strip	RM	Removable Mullion
exp	expansion	∅	Round
Extr	Extruded	SA	Shelf angle
Ex, Exist.	Existing	SAR	Supply Air Register
FAF	Fire Alarm Panel	SD	Soap Dispenser
FCL	Fan Coil Unit	sh	shelves
FD	Floor Drain	S 4 P	S 4 P
FDC	Fire Dept. Connection	SS	Stainless Steel
FE	Fire Extinguisher	St	Steel
FEC	Fire Extinguisher Cabinet	Susp	Suspended
FHC	Fire Hose Cabinet	Sq.	Square
FHEC	Fire Hose & Extinguisher Cabinet	Ta Bd.	Tackboard
FHCs	Flat Head Countersunk	TB	Towel Bar
Fin.	Finished	TC	Top of concrete typical
Fl, Fir.	Floor	TD	Towel Dispenser
FRT	Fire Retardant Treated	tel.	Telephones
Galv.	Galvanized	T.O.M.	Top of Masonry
GB	Grab Bar	TP	Tack Panel
GC	General Contractor	TUF	Through Wall Flashing
GI	Glass	Typ	Typical
GT	Structural Glazed Tile	UNO	Unless Noted Otherwise
HC	Handicapped	V	Vinyl
HVAC	Heating, Ventilating & Air Conditioning	Vac	Vacuum
HU	Hot Water	VAF	Visual Aid Panel
HCU	Hot & Cold Water	VCPB	Vinyl Coated Particle Board
HM	Hollow Metal	VCT	Vinyl Composition Tile
HR	Handrail	VB	Vapor Barrier
		w/	with
		Wd	Wood
		WDW, win	window
		WP	Waterproofing
		WUF	Welded Wire Fabric

SYMBOLS

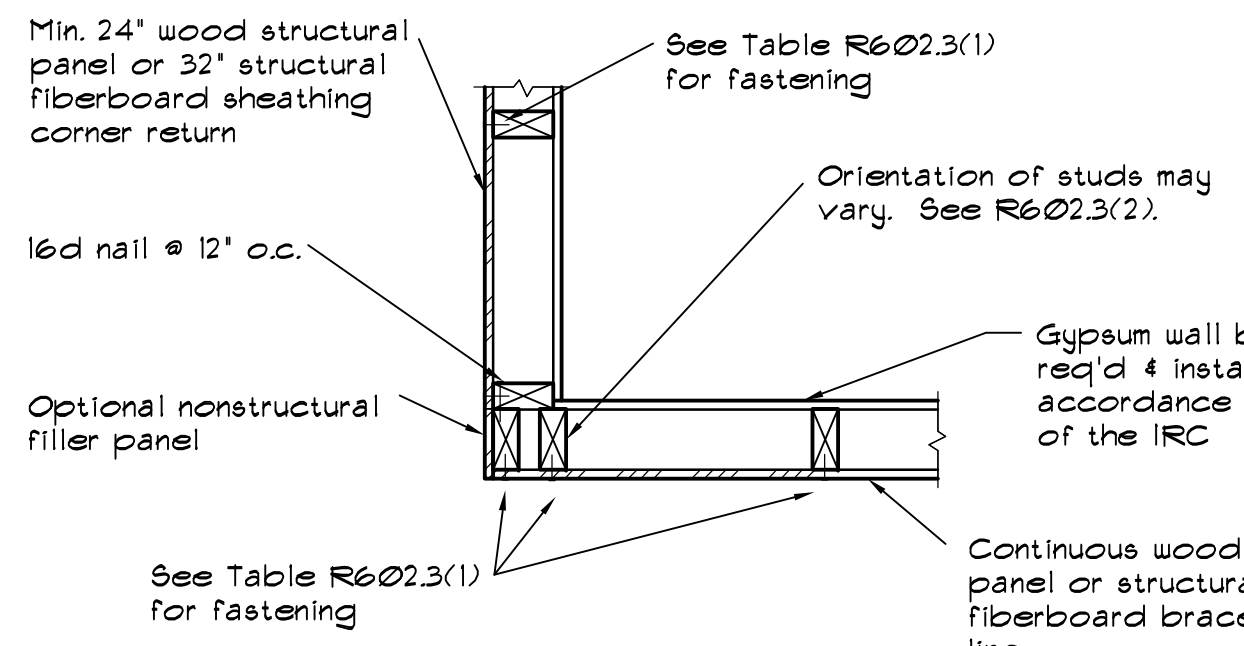


** See Demolition, Plumbing, Mechanical and Electrical Drawings for additional symbols

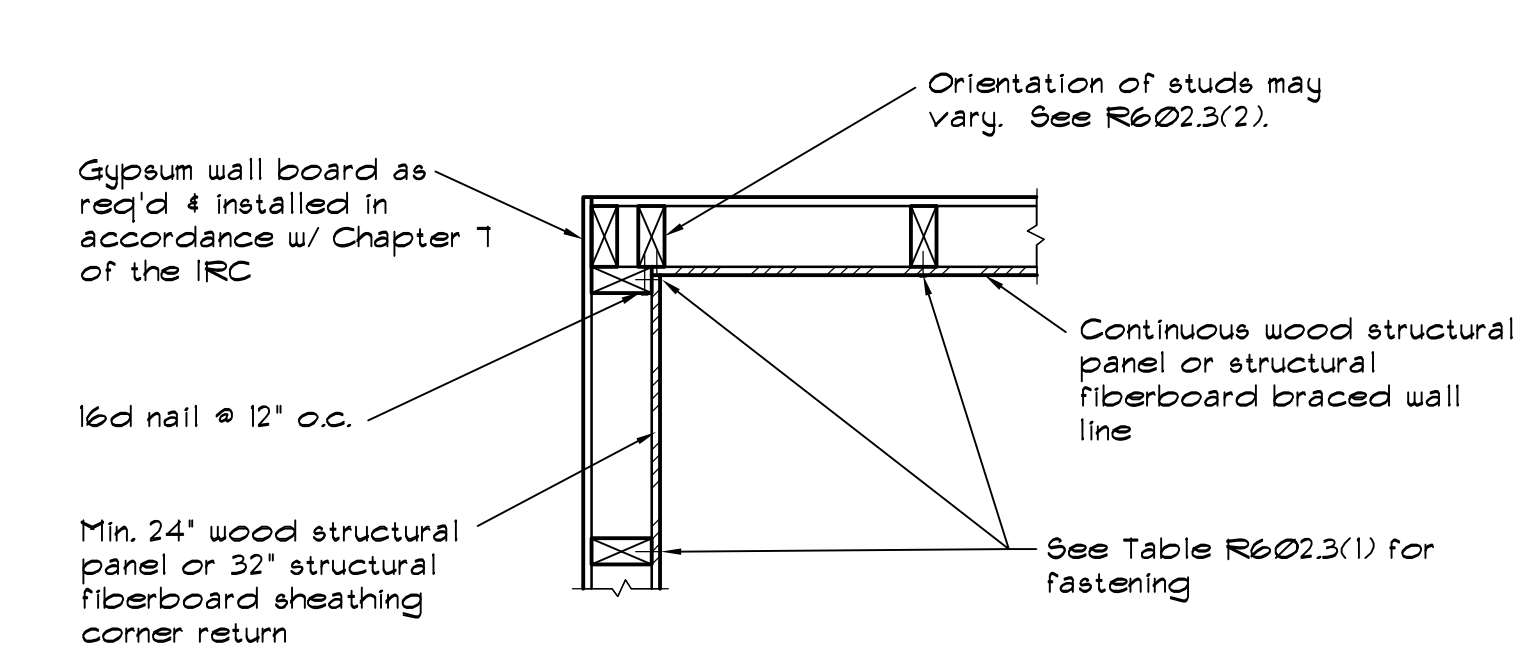
MATERIAL INDICATIONS



Missouri One Call System, Inc.
 Call Before You Dig!
 1-800-DIG-RITE
 (1-800-344-7483)



1 OUTSIDE CORNER DETAIL
 NOT TO SCALE



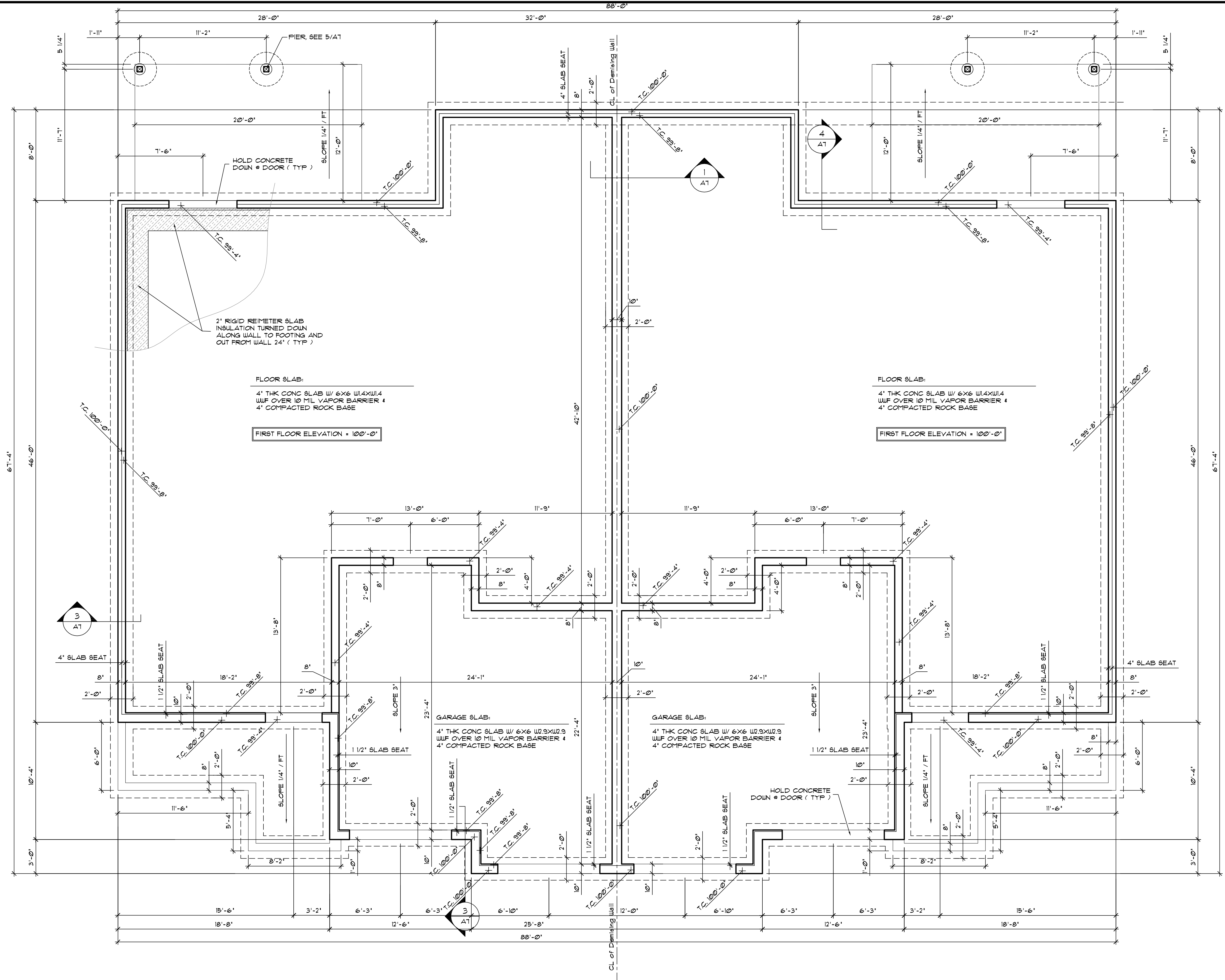
2 INSIDE CORNER DETAIL
 NOT TO SCALE

BUILDING DATA	
BUILDING CODE	2009 IRC
BUILDING DEPARTMENT	CITY OF WASHINGTON
FIRE DEPARTMENT	WASHINGTON FIRE PROTECTION DISTRICT
BUILDING TYPE	MULTI-FAMILY
NUMBER OF UNITS	2
GROSS AREA	5,207 SF
UNIT AREA	1,864 SF
NUMBER OF STORIES	1
BEDROOMS / UNIT	2
BATHS / UNIT	2
GARAGE SPACES / UNIT	2

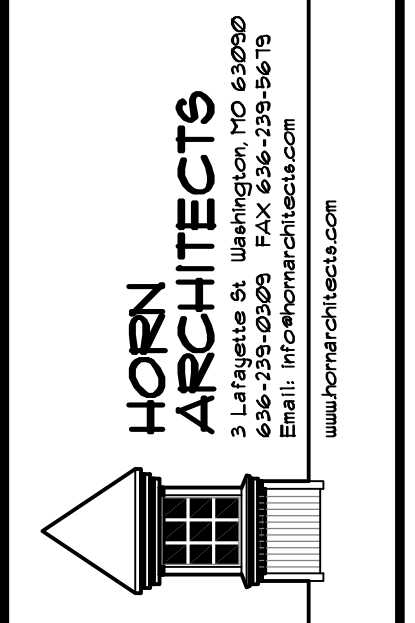
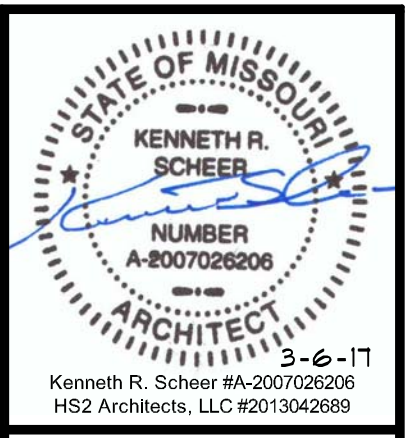
SHEET INDEX		
○	PRELIMINARY	
●	FOR CONSTRUCTION	
◐	CODE REVIEW / BIDDING	
△	REVISION	
SHEET #	SHEET DESCRIPTION	2-6-17
A0	Cover Sheet	●
A1	Foundation Plan	●
A2	Basement Floor Plan	●
A3	Roof Plan	●
A4	Electrical Plan	●
A5	Elevations	●
A6	Elevations	●
A7	Details	●
A8	Schedules	●
A9	Specifications	●

NOTE:
 THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL MEANS AND METHODS OF CONSTRUCTION, INCLUDING ALL SHORING AND BRACING, AND ALL REQUIRED SAFETY PRECAUTIONS

INSTRUCTIONS TO READERS
 1. DO NOT SCALE THE DRAWINGS as a means of obtaining exact dimensions.
 2. These documents are copyrighted by the Architect. Architect reserves all rights to these documents which are not to be reproduced, copied, assigned to any third party or used on any project in whole or in part without the written permission of Robert Horn Architects.
 3. The registered Architect's seal affixed to drawings, specifications, reports or other documents indicates that the Architect prepared or directed the preparation of these documents or worked directly with another registered Architect that prepared or directed the preparation of these documents. Documents not exhibiting the seal shall not be assumed to be authorized by the Architect.
 4. Changes to documents or other instructions -- written or otherwise -- not approved by the Architect will be the sole responsibility of the person's initiating the changes.
 5. The Architect's services contracted orally or in writing by the Owner determines, in part, the extent of the information shown in the documents. Lack of information about some aspect of the project is not necessarily the result of an error or omission on the part of the Architect.
 6. The Architect accepts no responsibility for the consequences of the use of these documents or any other written or oral instructions by persons inexperienced, unqualified or for any other reason unable to read, understand and comprehend them correctly.
 7. It is the Contractor's (installer, subcontractor, tradesman, material supplier, general contractor, etc.) responsibility to be familiar with any local, city, county, state or federal regulations, codes, ordinances, etc. that may apply to their work, materials, equipment or methods of construction.
 8. The Architect has not intended for these documents to describe each and every single component or method of construction needed to construct the project, but to develop documents -- that when used by competent tradesman and material suppliers -- will sufficiently describe explicitly or implicitly the appropriate materials and methods of assembly.
 9. The contents of these documents -- as well as any other written or oral communications issued by the Architect for this project -- are furnished to the party that contracts orally or in writing for the services on the condition that the Architect's total liability is limited now and forever to the party that contracted for the services, and to the fee paid for the services.
 10. The Architect shall not be held responsible for Contractor's construction means, methods, techniques, sequences, procedures, or safety precautions, or any programs incident thereto.
 11. The Architect shall not be held responsible for Contractor's failure to perform work in accordance with the Contract Documents.
 12. The Architect shall not be held responsible for acts or omissions of the Contractor or any subcontractor or their agents or employees or any other persons performing any of the work.

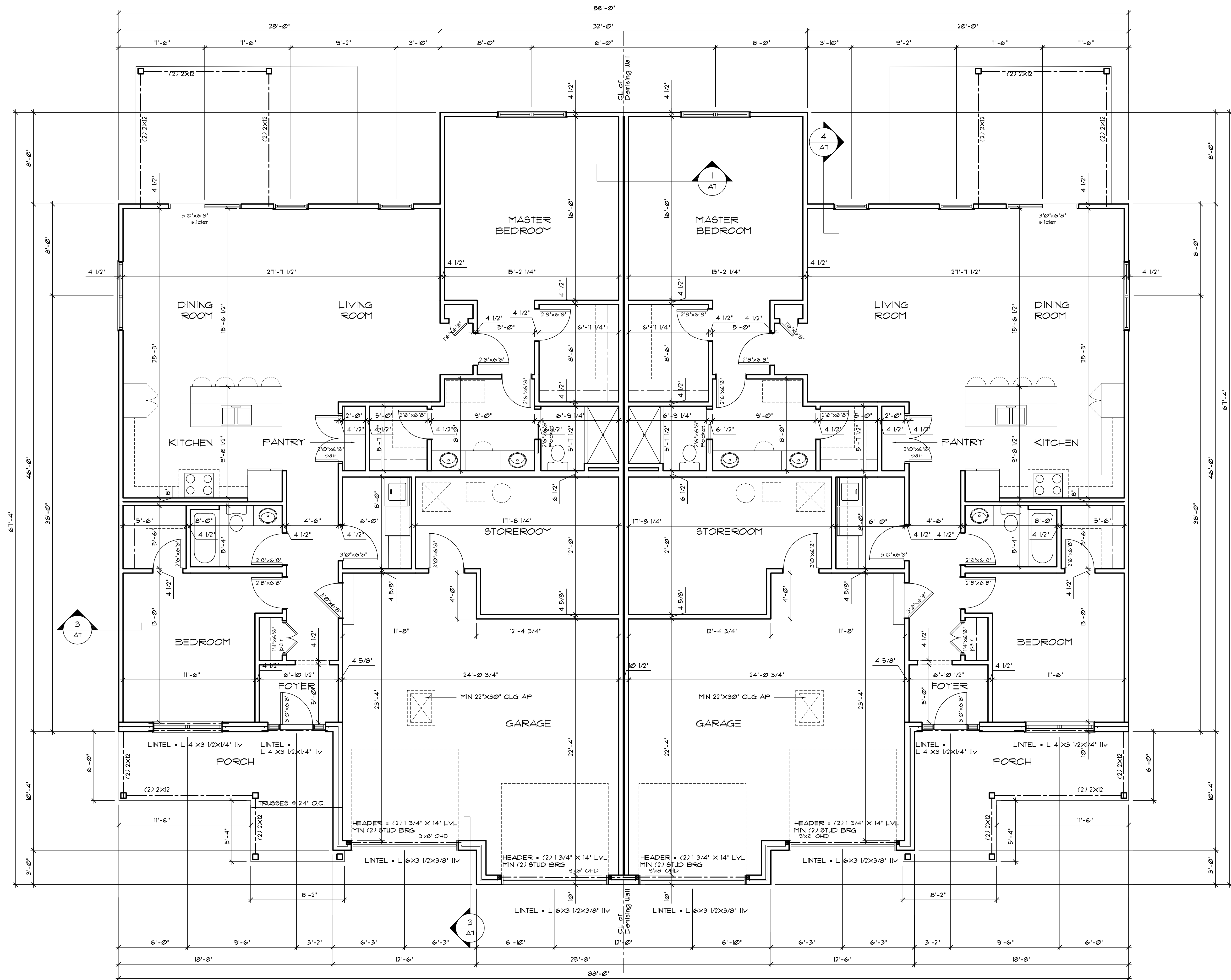


FOUNDATION PLAN
 Scale: 1/4" = 1'-0"



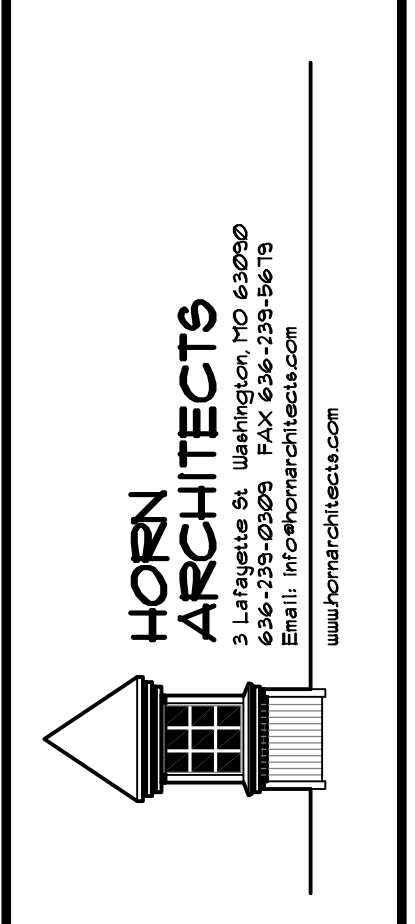
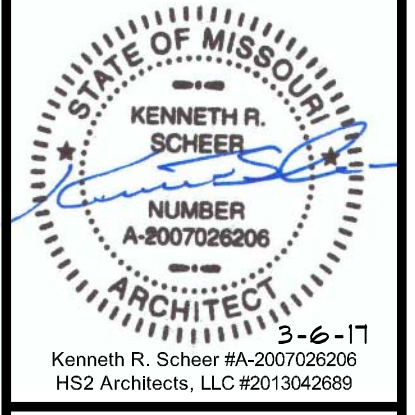
New Duplex Residence for:
WEST 5TH STREET VILLAS
UNERSTALL CONSTRUCTION CO
 West Fifth Street, Washington, Missouri 63090

SHEET TITLE	
REVISIONS	
PROJECT NO.	1712
ISSUE DATE	MARCH 6, 2017
SHEET NO.	A1



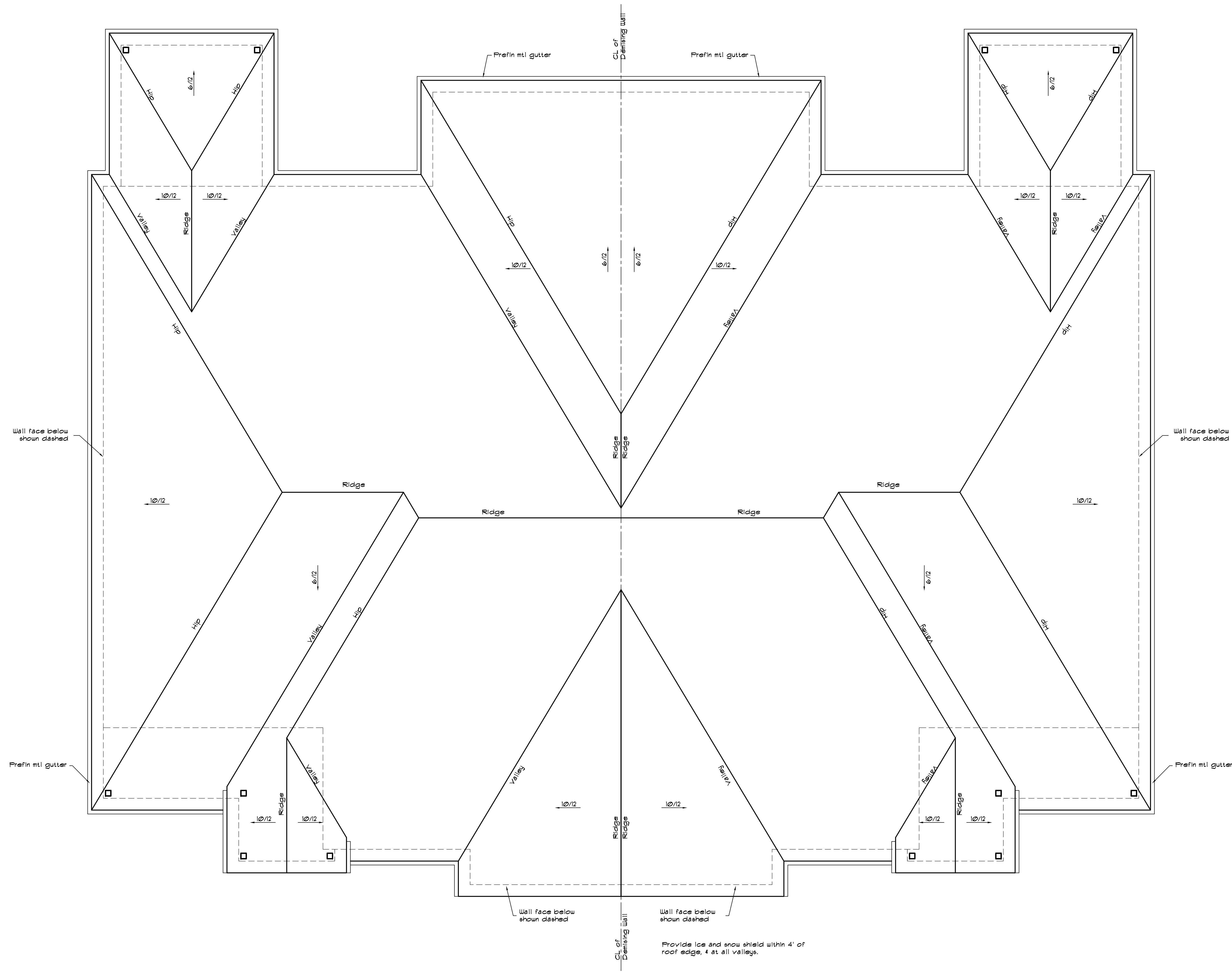
FIRST FLOOR PLAN
 UNIT = 1064 SF
 Scale: 1/4" = 1'-0"

NOTE: TYP HEADER (2) 2X10 UNO

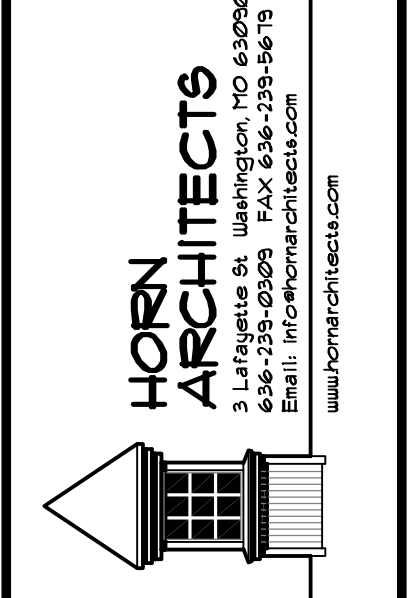


New Duplex Residence for:
WEST 5TH STREET VILLAS
UNERSTALL CONSTRUCTION CO
 West Fifth Street, Washington, Missouri 63090

SHEET TITLE	
REVISIONS	
PROJECT NO.	1712
ISSUE DATE	MARCH 6, 2017
SHEET NO.	A2



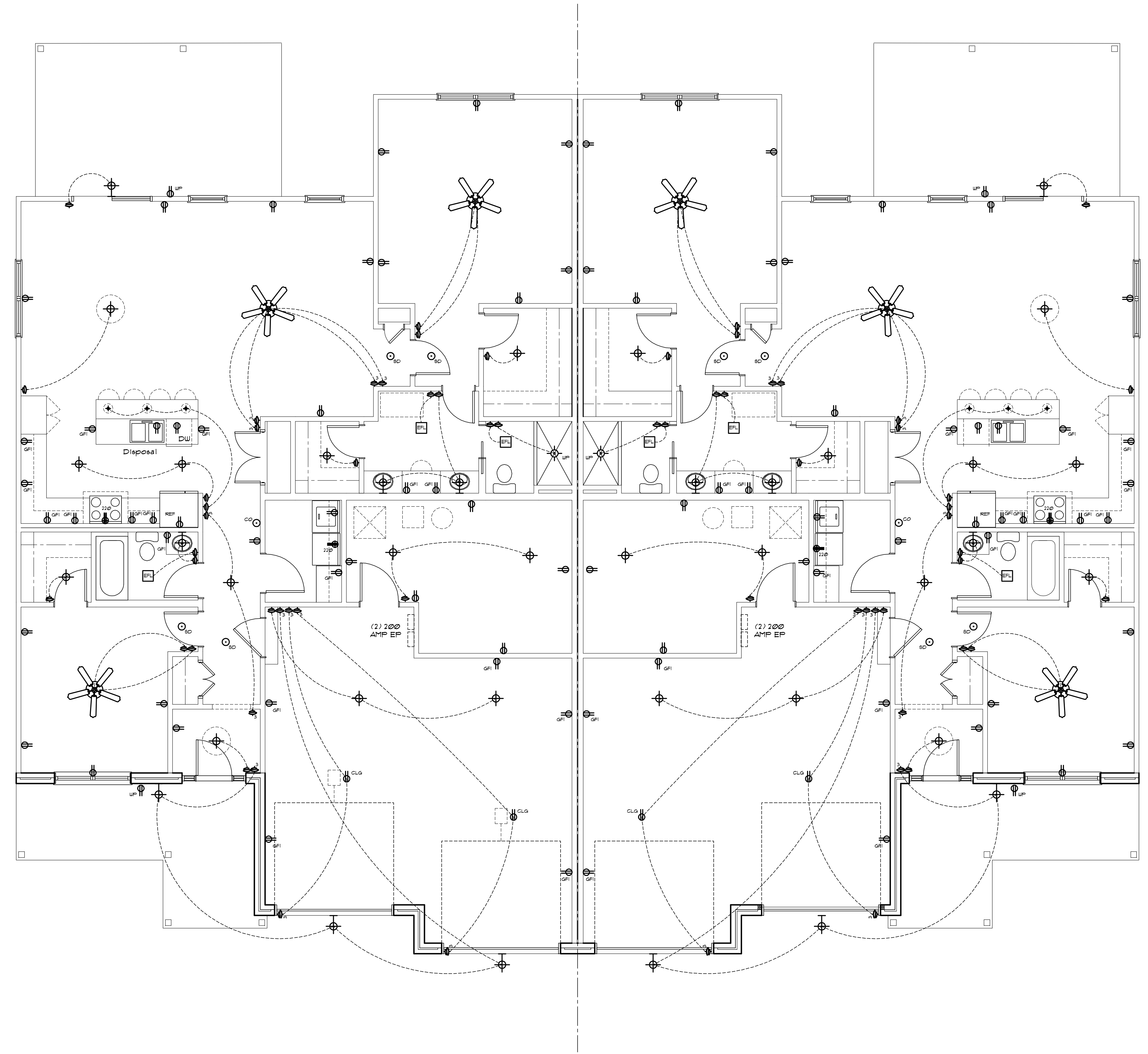
1
43 **ROOF PLAN**
Scale: 1/4" = 1'-0"
0 1' 2' 4' 8'



New Duplex Residence for:
WINDY HILLS SUBDIVISION CO
UNERSTALL CONSTRUCTION CO
West Fifth Street, Washington, Missouri 63090

SHEET TITLE	
REVISIONS	
PROJECT NO.	1712
ISSUE DATE	MARCH 6, 2017
SHEET NO.	A3

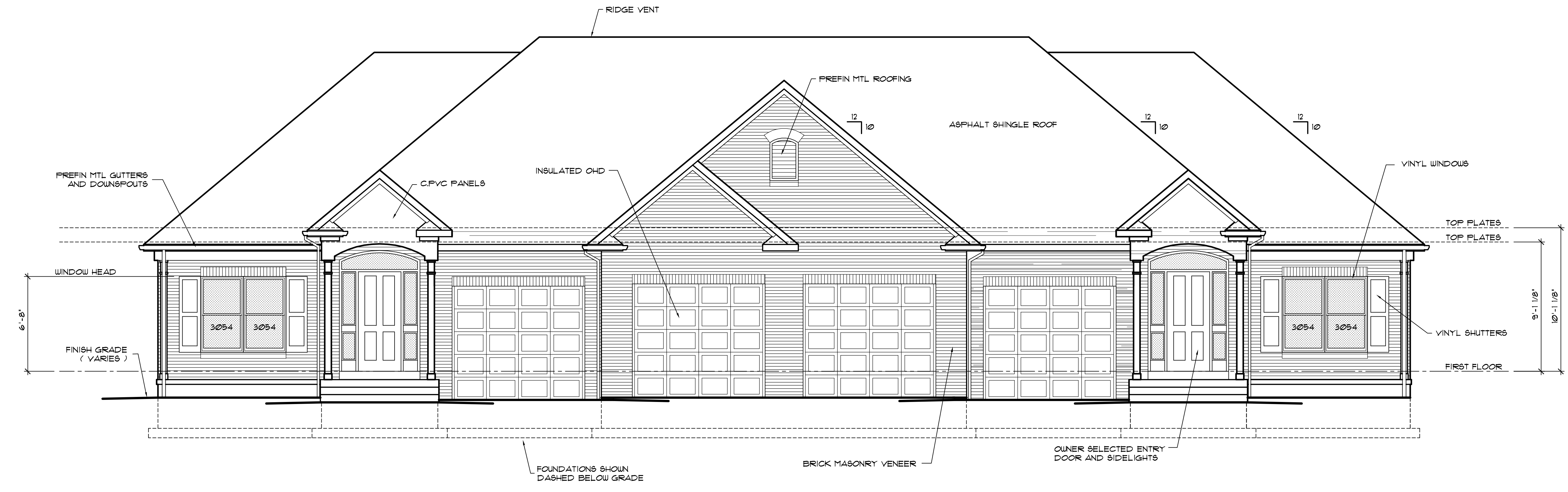
SHEET TITLE	ELECTRICAL PLAN
REVISIONS	
PROJECT NO.	1712
ISSUE DATE	MARCH 6, 2017
SHEET NO.	A4



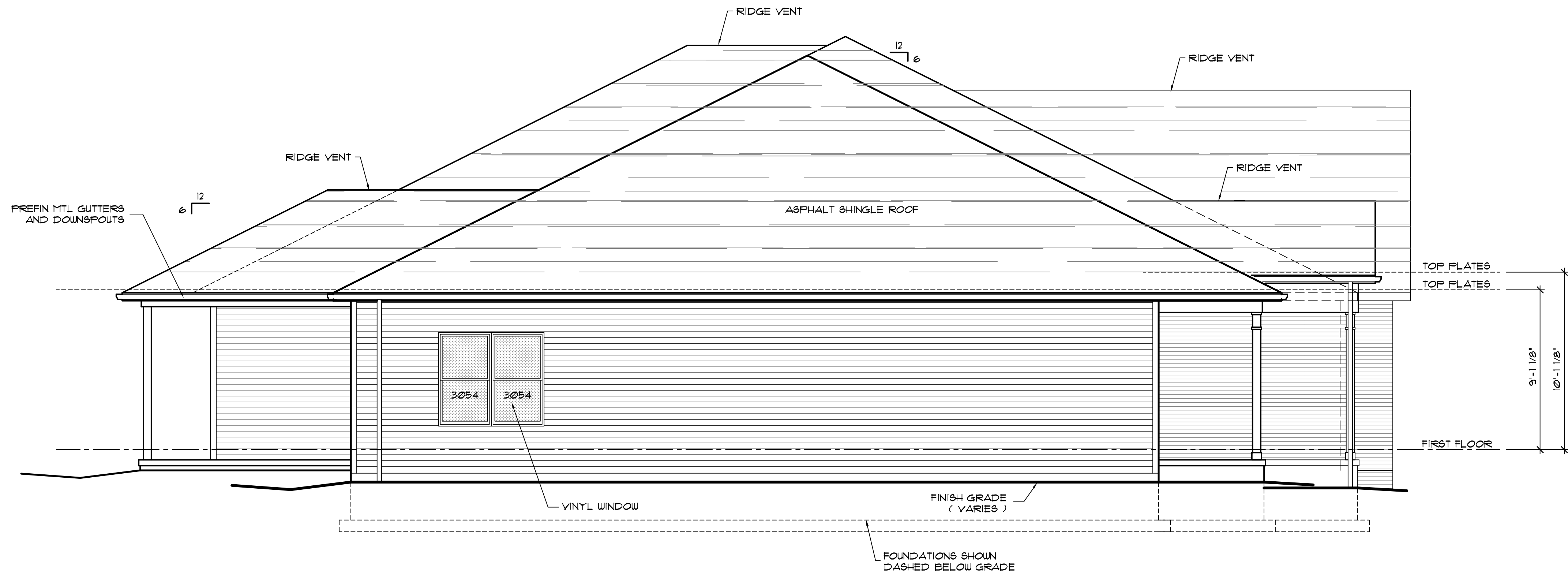
ELECTRICAL LEGEND

⬇	Switch	⊙	Recessed fixture
⬇ ₃	3-way Switch (4+4way)	⊙ _W	Recessed wall washer
⬇ _D	Dimmer switch	⊙ _{AE}	Recessed adjustable eye
⊙ _{OS}	Occupancy Sensor	⊙	Surface mounted light
⊙	Duplex receptacle	⊙ _{PC}	Surface mounted light, Full Chain
⊙	Duplex, split wired	⊙	Pendant hung light
⊙	Quadruplex	⊙	Wall mounted light
⊙	Floor Duplex	⊙	Flood light
⊙ _{CLG}	Ceiling mounted duplex	⊙	Exhaust Fan
⊙ _{GFI}	Ground Fault Interrupt Duplex	⊙	Exhaust Fan/Light
⊙ _{WP}	Weatherproof Duplex	⊙	Heat Lamp
⊙ ₋₄₈	Duplex, * = location above flr	⊙	Heat Lamp/Fan
⊙ ₂₂₀	220 volt outlet	⊙	CF = Ceiling Fan
⊙ _T	Telephone outlet	⊙	CFL = Ceiling Fan w/ Light
⊙ _D	Data outlet	⊙	Strip fluorescent
⊙ _{TV}	Television	⊙	Track light
⊙	Junction box	⊙	
⊙	Speaker	⊙	
⊙ _{SD}	Smoke Detector	⊙	
⊙ _{CO}	Carbon Monoxide Detector	⊙	
⊙	Thermostat	⊙	
⊙	Doorbell	⊙	
⊙	Intercom	⊙	
⊙	Central Vac.	⊙	

FIRST FLOOR ELECTRICAL PLAN
Scale: 1/4" = 1'-0"
0 1' 2' 4' 8'



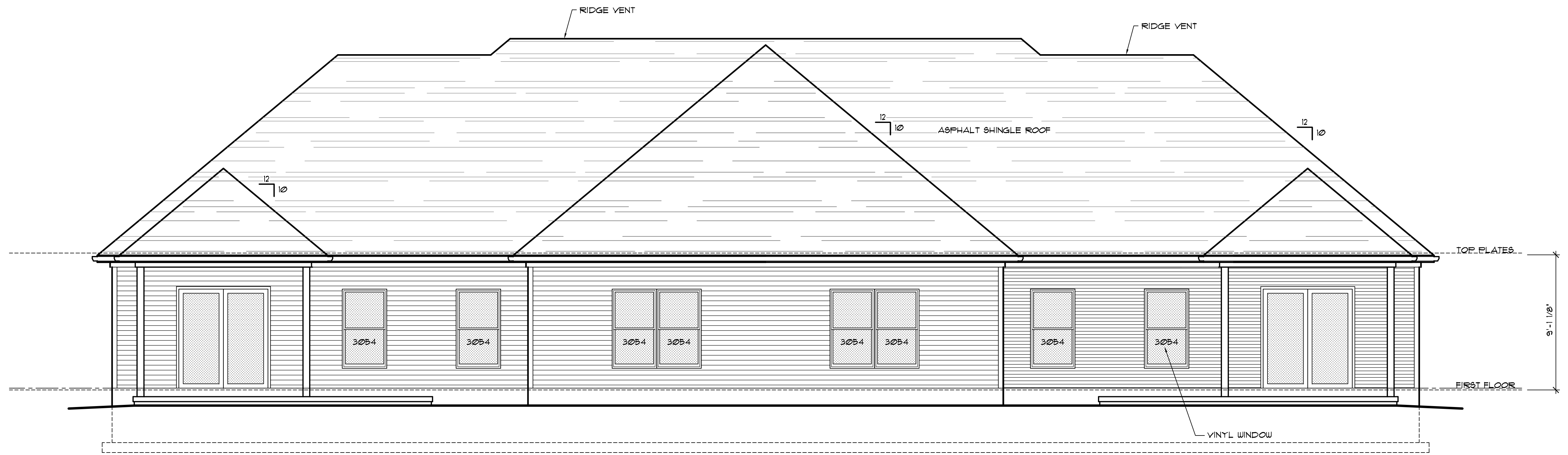
1
 A5
 ** WINDOWS SHALL BE EGRESS COMPLIANT **
SOUTH ELEVATION
 Scale: 1/4" = 1'-0"



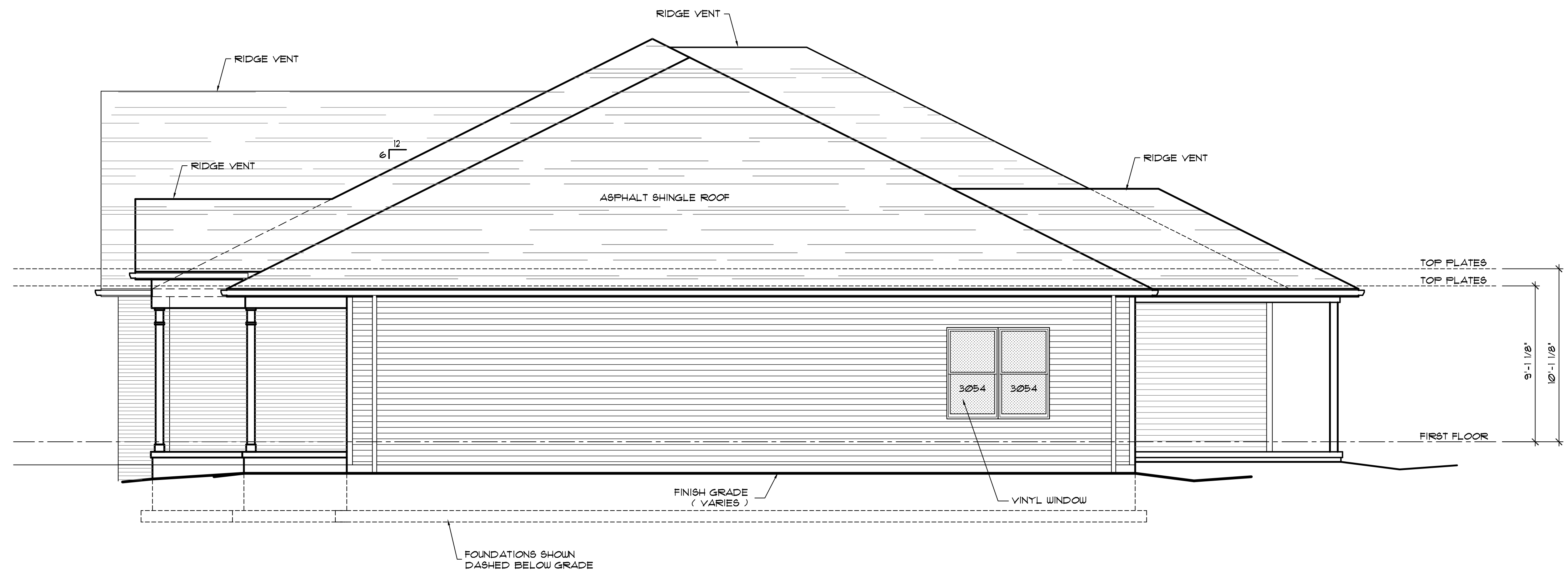
2
 A5
 ** WINDOWS SHALL BE EGRESS COMPLIANT **
WEST ELEVATION
 Scale: 1/4" = 1'-0"

New Duplex Residence for:
WEST 5TH STREET VILLAS
UNERSTALL CONSTRUCTION CO
 West Fifth Street, Washington, Missouri 63090

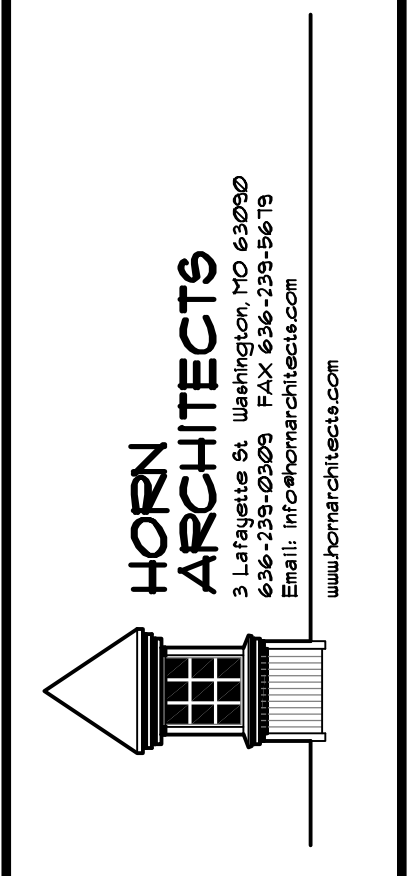
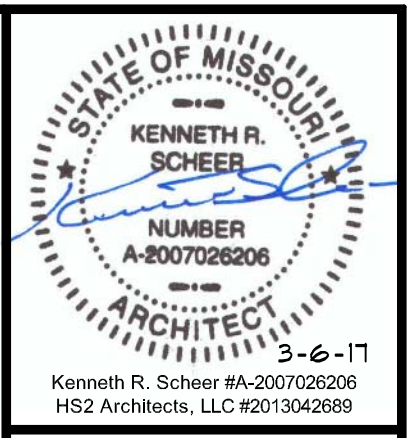
SHEET TITLE	
REVISIONS	
PROJECT NO.	1712
ISSUE DATE	MARCH 6, 2017
SHEET NO.	A5



1
A6
** WINDOWS SHALL BE EGRESS COMPLIANT **
NORTH ELEVATION
Scale: 1/4" = 1'-0"
0 1' 2' 4' 8'

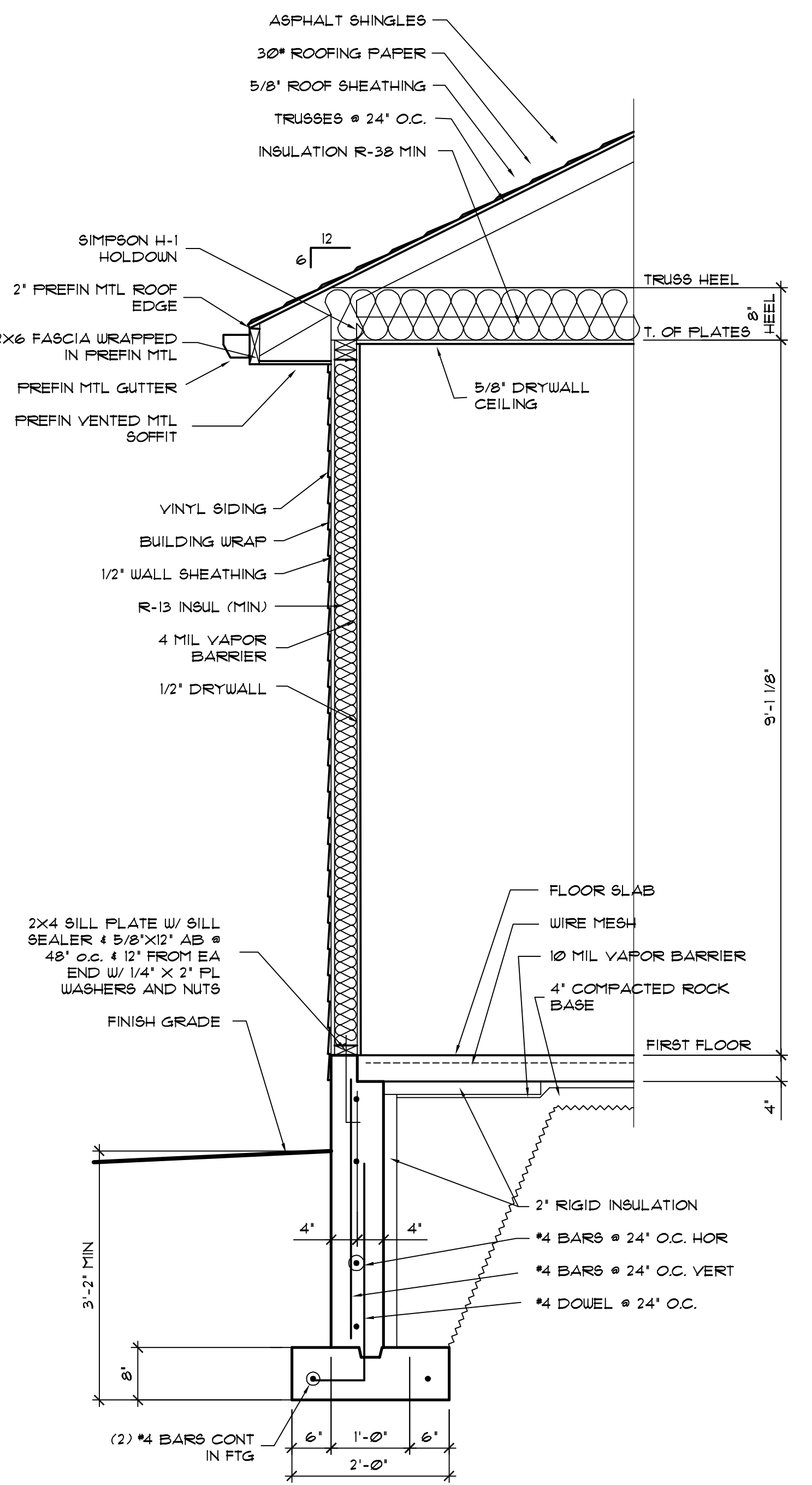
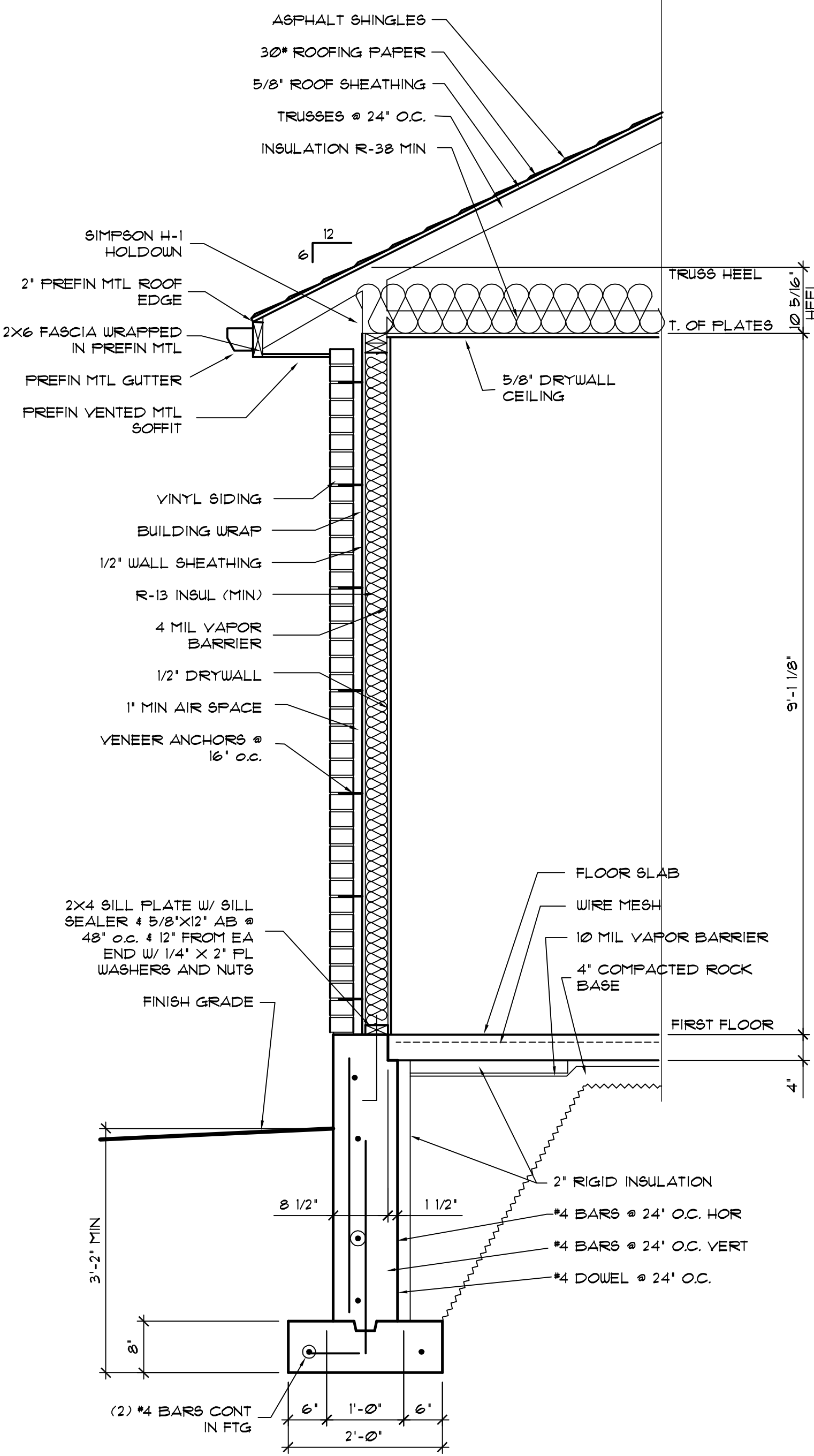
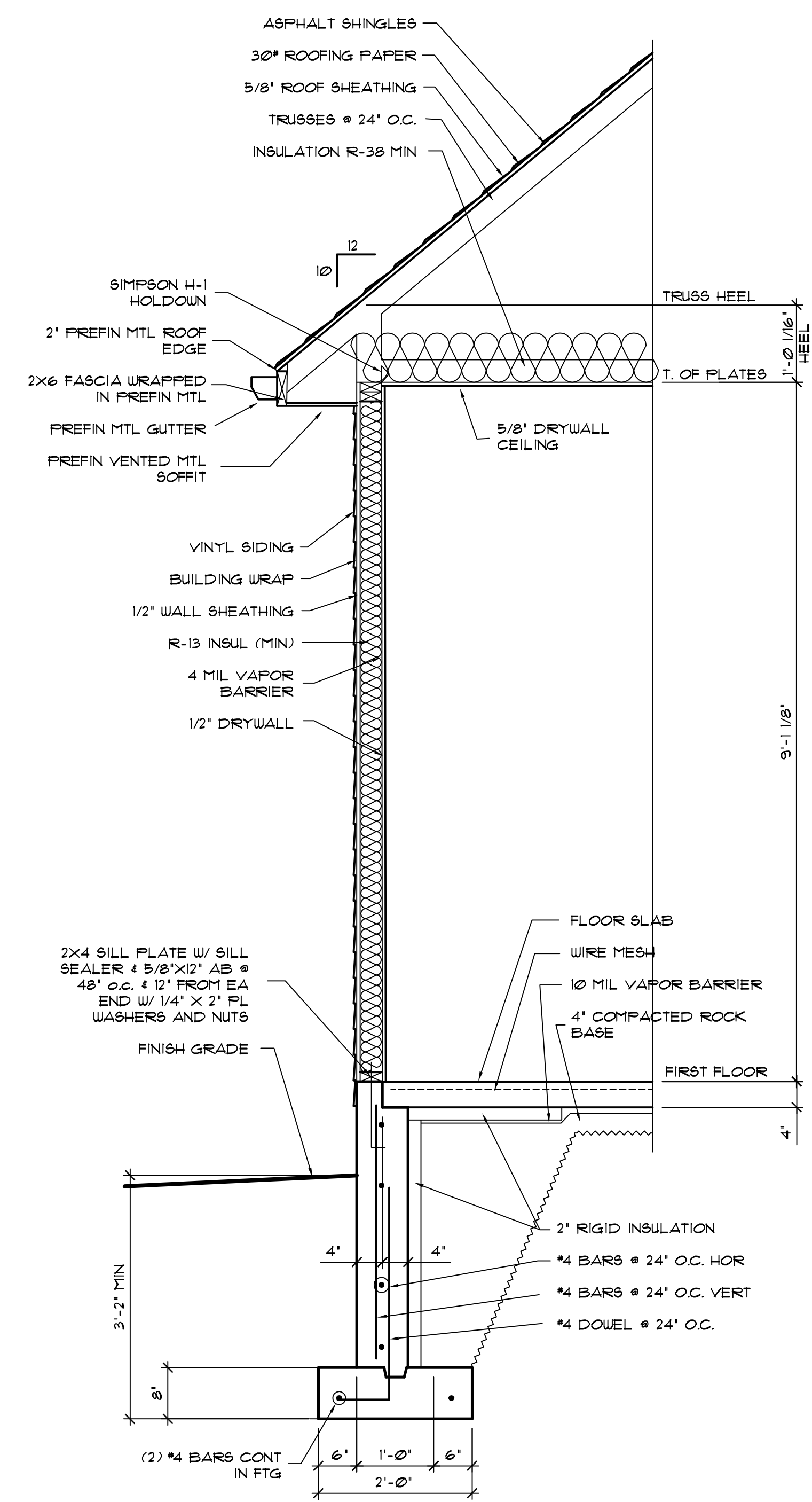
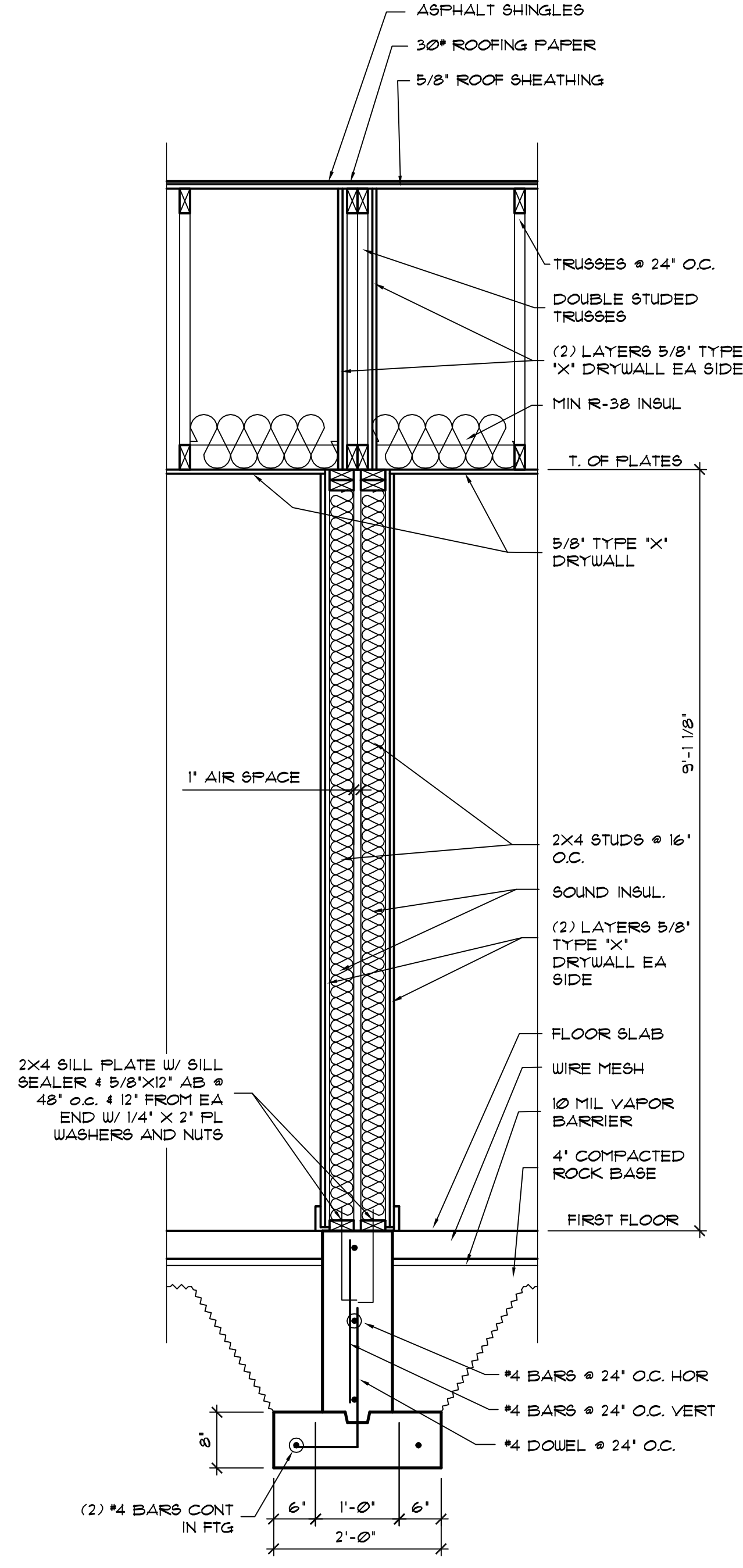
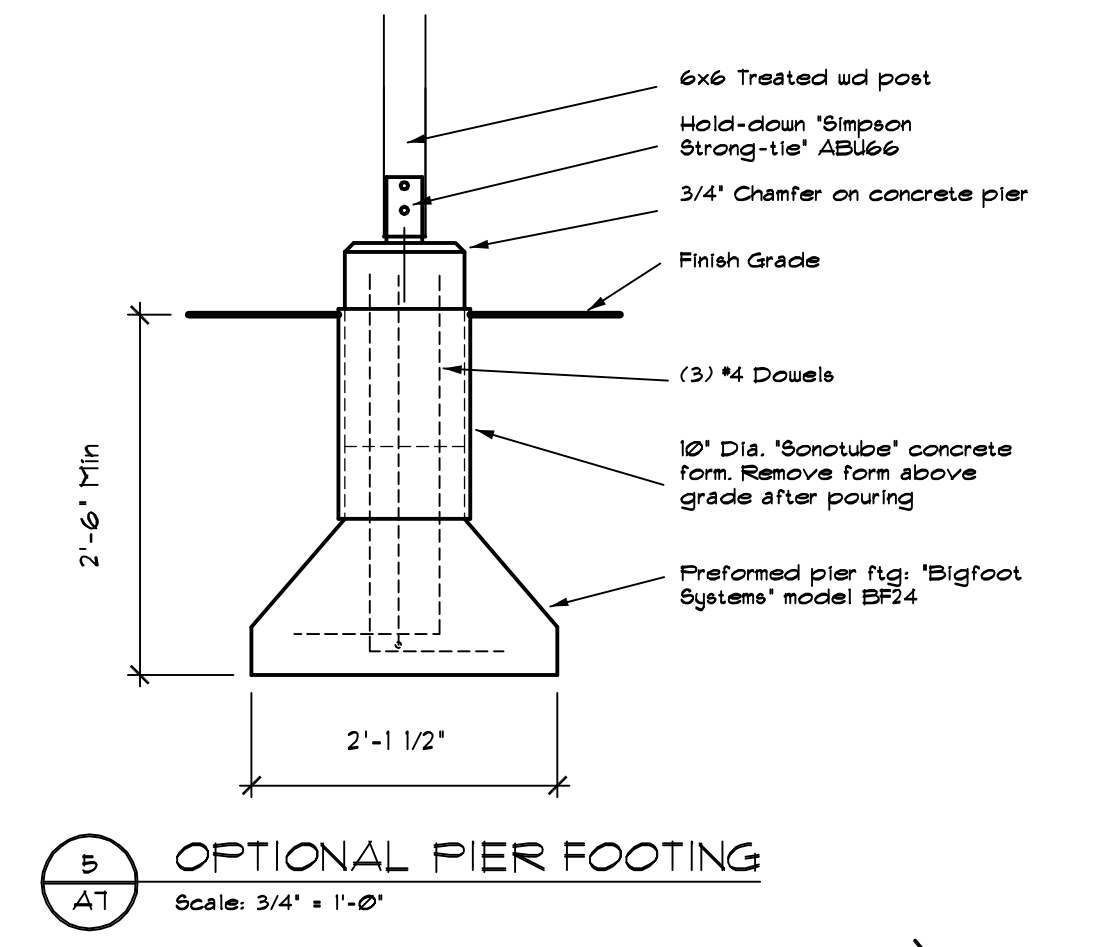


1
A6
** WINDOWS SHALL BE EGRESS COMPLIANT **
EAST ELEVATION
Scale: 1/4" = 1'-0"
0 1' 2' 4' 8'



New Duplex Residence for:
WEST 5TH STREET VILLAS
UNERSTALL CONSTRUCTION CO
 West Fifth Street, Washington, Missouri 63090

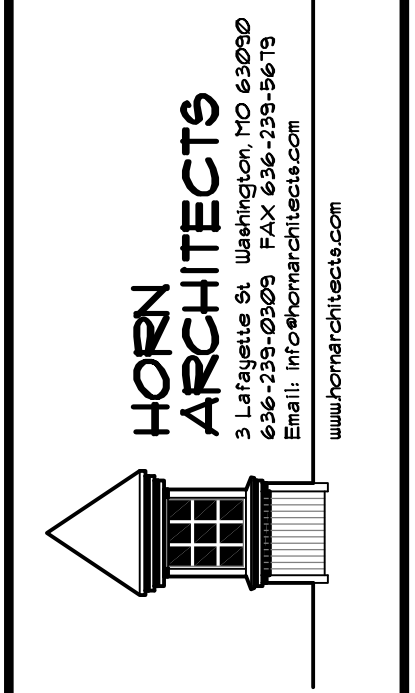
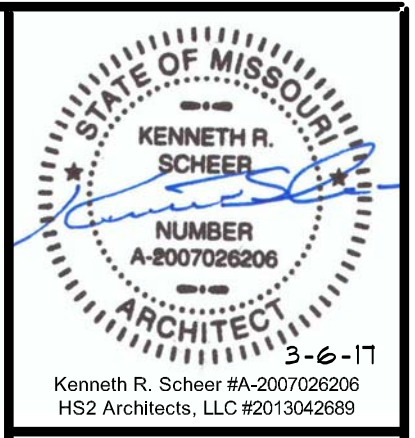
SHEET TITLE	
REVISIONS	
△	
△	
△	
PROJECT NO.	1712
ISSUE DATE	MARCH 6, 2017
SHEET NO.	A6



SHEET TITLE	
REVISIONS	
PROJECT NO.	2015
ISSUE DATE	MARCH 6, 2017
SHEET NO.	A1

TABLE R602.3(1) 2009 IRC FASTENER SCHEDULE FOR STRUCTURAL MEMBERS			
ITEM	DESCRIPTION OF BUILDING ELEMENTS	Number & Type of Fastener (e.g.)	SPACING OF FASTENERS
ROOF			
1	Blocking between joists or rafters to top plate, toe nail	3 - 8d	
2	Ceiling joists to plate, toe nail	3 - 8d	
3	Ceiling joists not attached to parallel rafter, laps over partitions, face nail	3 - 10d	
4	Collar tie rafter, face nail or 1/4" x 20 ga ridge strap	3 - 10d	
5	Rafter to plate, toe nail	2 - 16d	
6	Roof rafters to ridge, valley or hip rafters: Toe nail Face nail	4 - 16d 3-16d	
WALL			
7	Built-up corner studs	10d	24' o.c.
8	Built-up header, 2 pieces with 1/2" spacer	16d	16' o.c. along ea. edge
9	Continued header, two pieces	16d	16' o.c. along ea. edge
10	Continuous header to stud, toe nail	4 - 8d	-
11	Double studs, face nail	10d	24' o.c.
12	Double top plates, face nail	10d	24' o.c.
13	Double top plates, minimum 24" offset of end joints, face nail in lepped area	8 - 16d	-
14	Sole plate to joist or blocking, face nail	16d	16' o.c.
15	Sole plate to joist or blocking & braced wall panels	3 - 16d	16' o.c.
16	Stud to sole plate, toe nail	3 - 8d or 2 - 16d	-
17	Top or sole plate to stud, end nail	2 - 16d	-
18	Top plates, laps at corners & intersections, face nail	2 - 10d	-
19	1" brace to each stud & plate, face nail	2 - 8d 2 staples 1 3/4"	-
20	1' x 6" sheathing to each bearing, face nail	2 - 8d 2 staples 1 3/4"	-
21	1' x 8" sheathing to each bearing, face nail	2 - 8d 3 staples 1 3/4"	-
22	Wider than 1' x 8" sheathing to each bearing, face nail	3 - 8d 4 staples 1 3/4"	-
FLOOR			
23	Joist to sill or girder, toe nail	3 - 8d	
24	1' x 6" subfloor or less to each joist, face nail	2 - 8d 2 staples 1 3/4"	
25	2" subfloor to joist or girder, blind and face nail	2 - 16d	
26	Rim joist to top plate, toe nail (roof applications also)	8d	6' o.c.
27	2" planks (plank & beam - floor & roof)	2 - 16d	at each bearing
28	Built-up girders and beams, 2" lumber layers	10d	Nail each layer as follows: 32" o.c. @ top & bot & 4 staggered, 2 nails @ ends & 1 at ea. plate
29	Ledger strip supporting joists or rafters	3 - 16d	At each joist or rafter

TABLE R602.3(1) 2009 IRC - CONTINUED FASTENER SCHEDULE FOR STRUCTURAL MEMBERS				
ITEM	DESCRIPTION OF BUILDING MATERIALS	DESCRIPTION OF FASTENER (e.g.)	SPACING OF FASTENERS	
			Edges (inches)	Intermediates (inches) (Supports (e.g.) (inches))
Wood structural panels, subfloor, roof & interior wall sheathing to framing & particleboard wall sheathing to framing				
30	3/8" - 1/2"	6d common nail (subfloor wall) 8d common nail (roof)	6	12(g)
31	19/32" - 1"	8d common nail	6	12(g)
32	1 1/8" - 1 1/4"	10d common nail or 8d deformed nail	6	12
Other Wall Sheathing, h				
33	1/2" structural cellulose fiberboard sheathing	1 1/2" galvanized roofing nail, 7/16" crown or 1" crown staple legs, 1 1/4" long	3	6
34	25/32" structural cellulose fiberboard sheathing	1 3/4" galvanized roofing nail, 7/16" crown or 1" crown staple legs, 1 1/2" long	3	6
35	1/2" gypsum sheathing (c)	1 1/2" galvanized roofing nails: staples galvanized, 1 1/2" long; 1 1/4" screws, Type W or	7	7
36	5/8" gypsum sheathing, (c)	1 3/4" galvanized roofing nails: staple galv., 1 5/8" long; 1 5/8" screws, Type W or S	7	7
Wood structural panels, combination subfloor underlayment to framing				
37	3/4" and less	6d deformed nail or 8d common nail	6	12
38	7/8" and 1"	8d common nail or 8d deformed nail	6	12
39	1 1/8" and 1 1/4"	10d common nail or 8d deformed nail	6	12
<p>a. All nails are smooth-common, box or deformed shanks except where otherwise stated. Nails used for framing and sheathing connections shall have minimum average bending yield strength as shown: 80 ksi for shank diameter of 3/32 inch (20d common nail), 90 ksi for shank diameters larger than 3/32 inch but not larger than 3/16 inch, and 100 ksi for shank diameters of 1/4 inch or less.</p> <p>b. Staples are 16 gage wire and have a minimum 7/16 inch on diameter crown width.</p> <p>c. Nails shall be spaced at not more than 6 inches on center at all supports where spans are 48" or greater.</p> <p>d. Four-foot by 8-foot or 4-foot by 9-foot panels shall be applied vertically.</p> <p>e. Spacing of fasteners not included in this table shall be based on Table R602.3(2).</p> <p>f. For regions having basic wind speed of 100 mph or greater, 8d deformed nails shall be used for attaching plywood and wood structural panel roof sheathing to framing within minimum 48-inch distance from gable end walls, if main roof height is more than 25 feet, up to 35 feet maximum.</p> <p>g. For regions having basic wind speed of 100 mph or less, nails for attaching wood structural panel roof sheathing to gable end wall framing shall be spaced 6 inches on center, when basic wind speed is greater than 100 mph, nails for attaching panel roof sheathing to intermediate supports shall be spaced 6 inches on center for minimum 48-inch distance from ridges, eaves, and gable end walls and 4 inches on center to gable end wall framing.</p> <p>h. Gypsum sheathing shall conform to ASTM C1396 and shall be installed in accordance with GA 253. Fiberboard sheathing shall conform to ASTM C208.</p> <p>i. Spacing of fasteners on floor sheathing panel edges applies to panel edges supported by framing members and required blocking at all floor perimeters only. Spacing of fasteners on roof sheathing panel edges applies to panel edges supported by framing members and required blocking. Blocking of roof or floor sheathing panel edges perpendicular to the framing members need not be provided except as required by other provisions of this code. Floor perimeter shall be supported by framing members or solid blocking.</p>				



New Duplex Residence for:
WEST 5TH STREET VILLAS
UNERSTALL CONSTRUCTION CO
 West Fifth Street, Washington, Missouri 63090

SHEET TITLE	
REVISIONS	
PROJECT NO.	1712
ISSUE DATE	MARCH 6, 2017
SHEET NO.	A8

