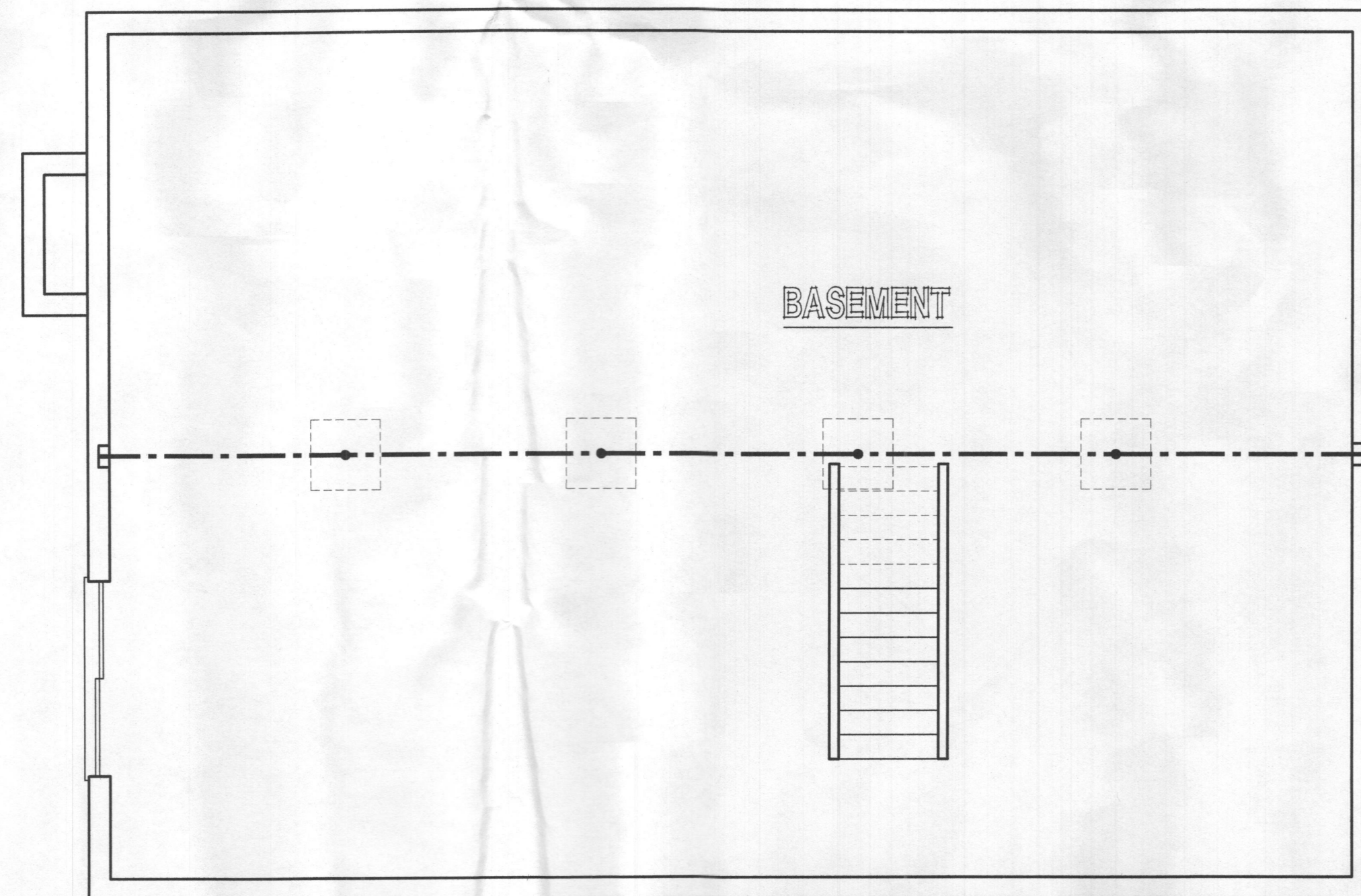
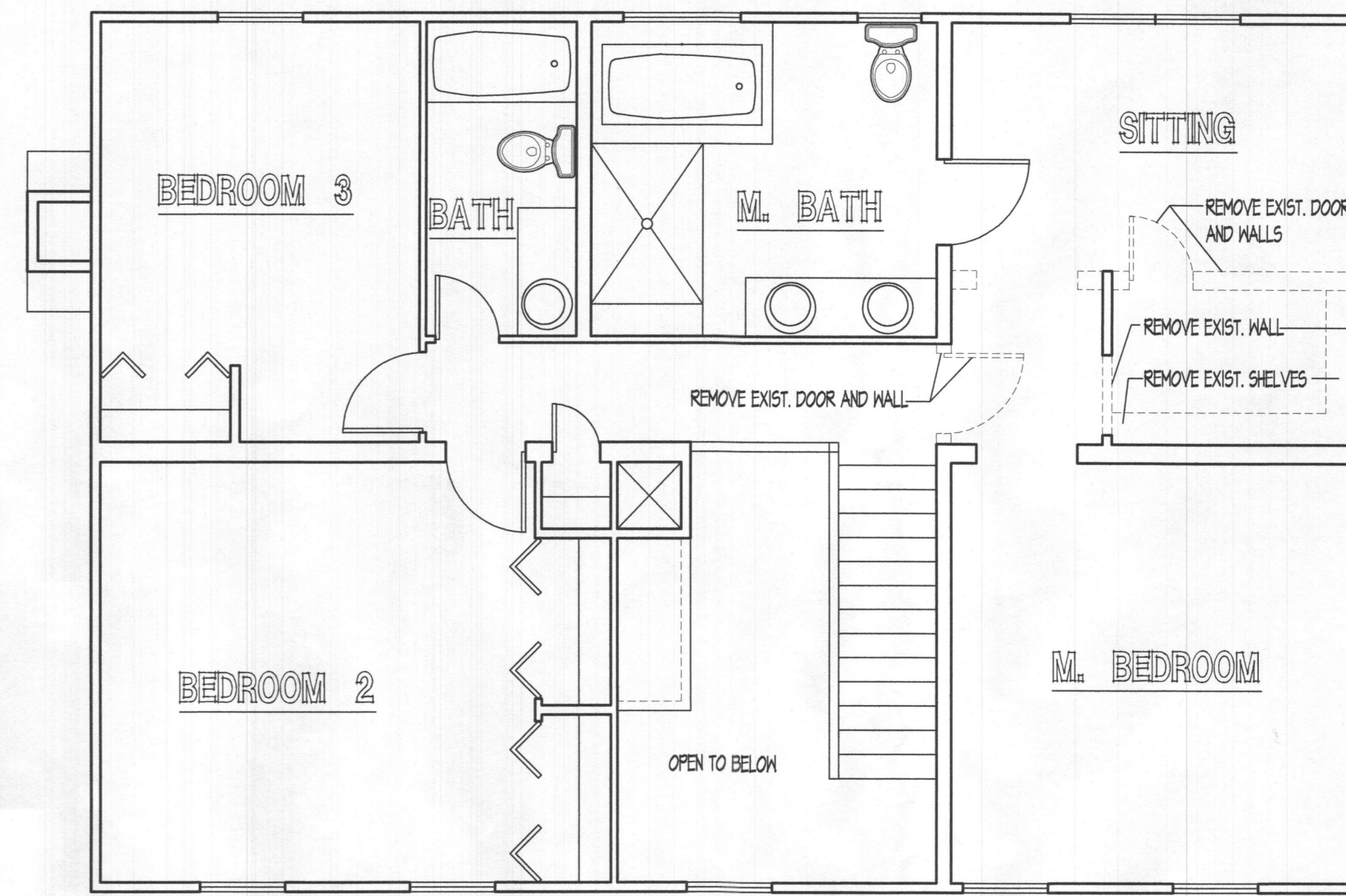


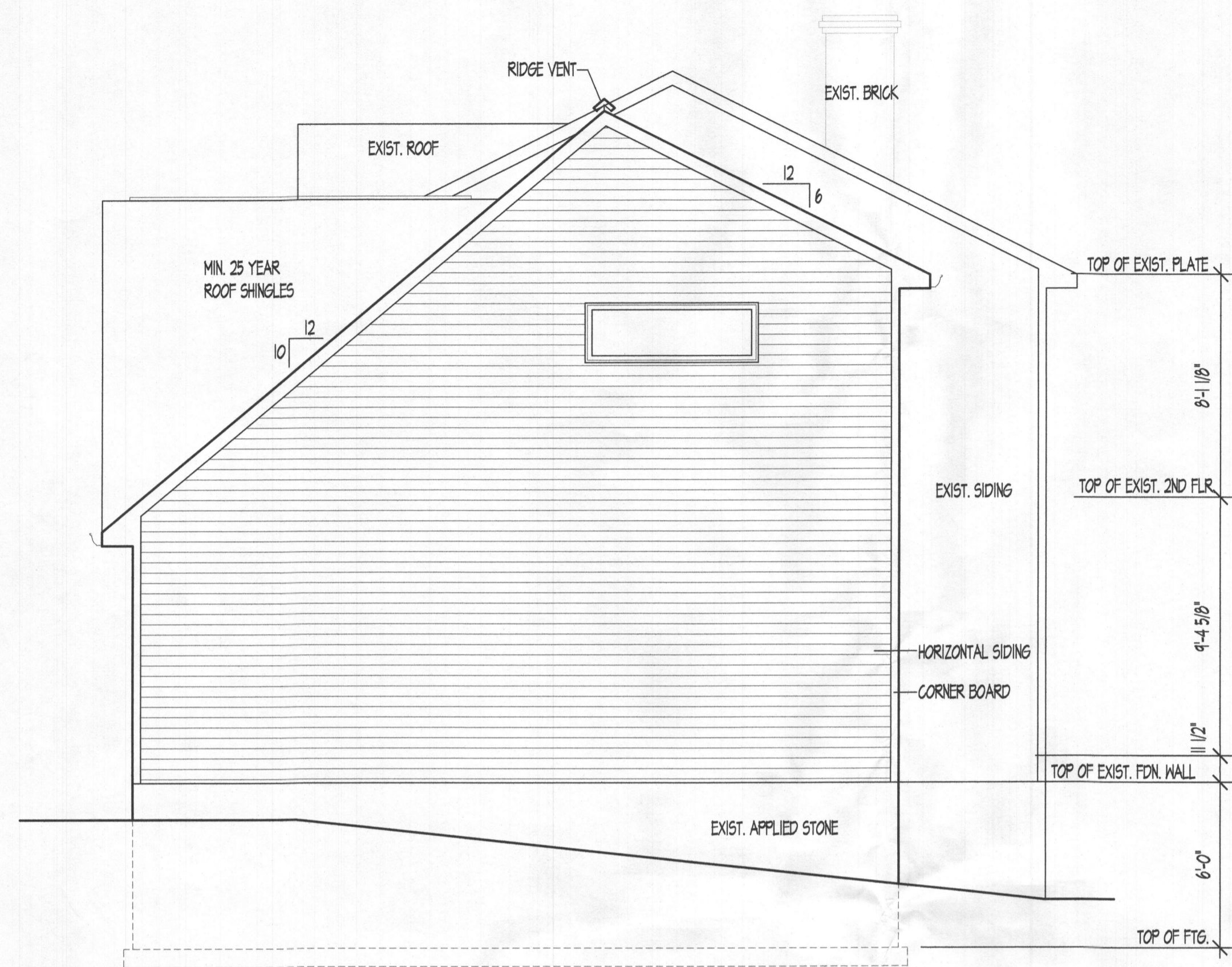
FIRST FLOOR DEMO PLAN
SCALE: 1/4"=1'-0"



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

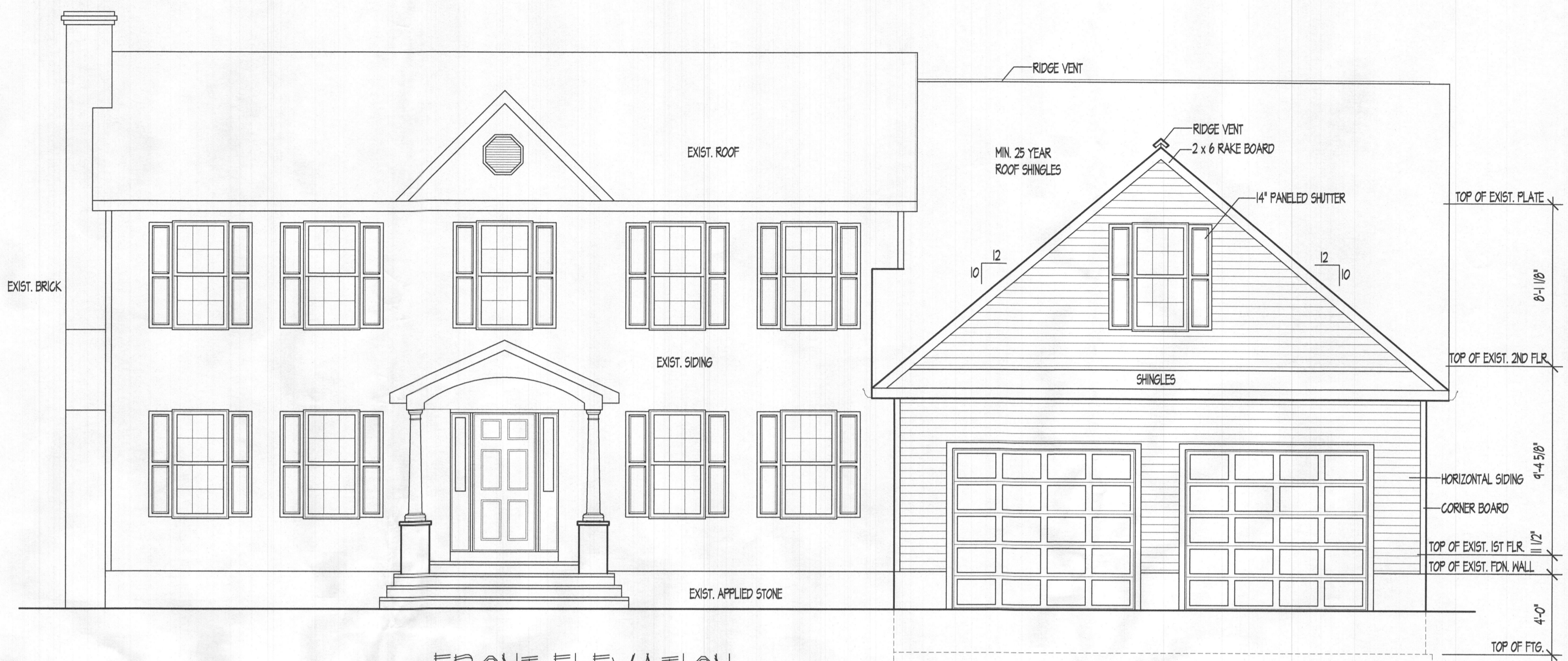


SECOND FLOOR PLAN DEMO
SCALE: 1/4"=1'-0"



RIGHT SIDE ELEVATION

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



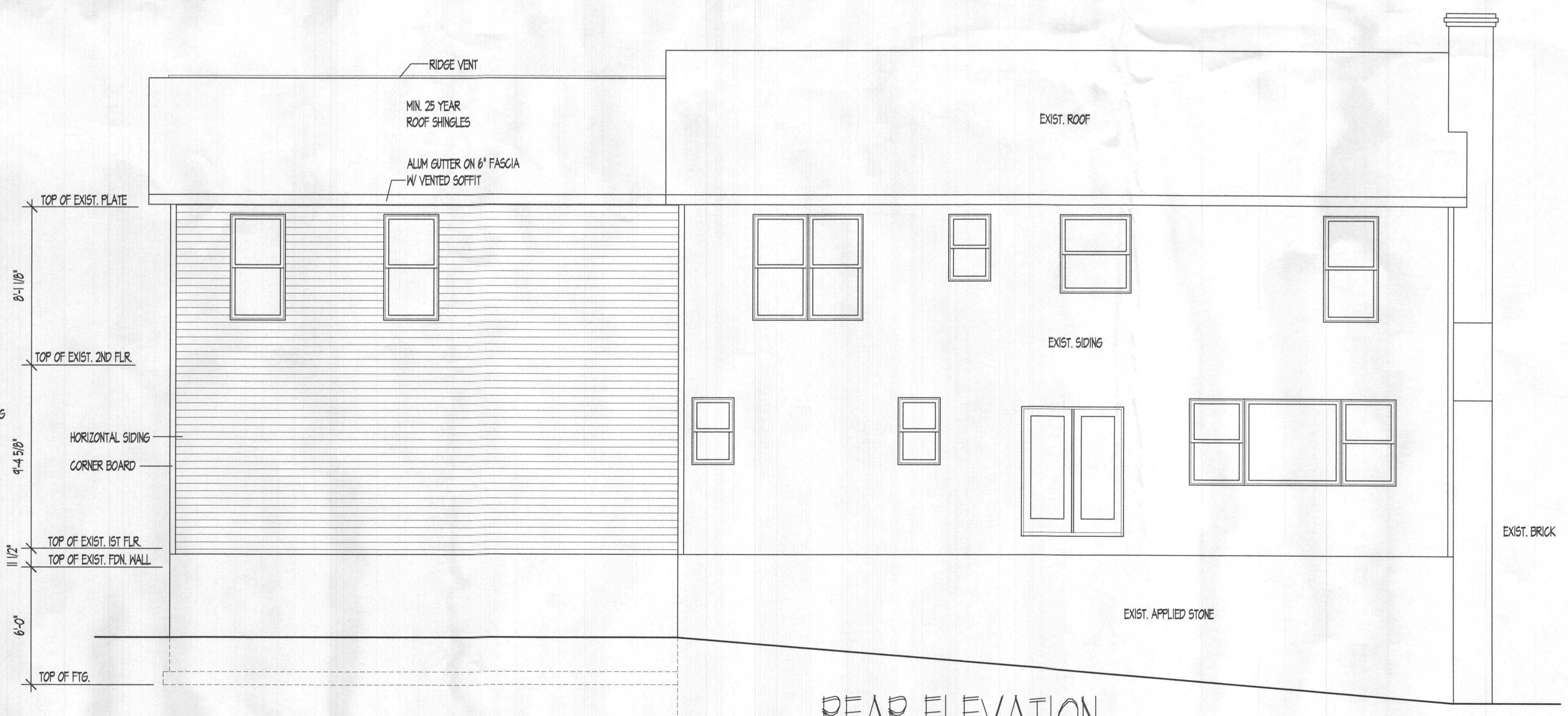
FRONT ELEVATION

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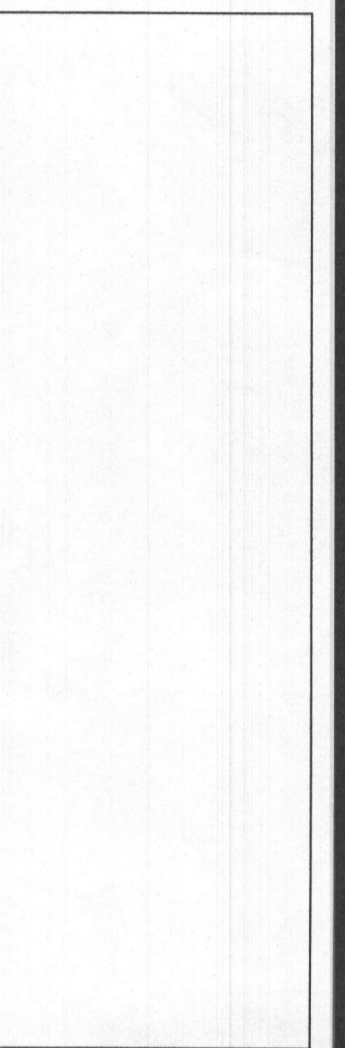
LEFT SIDE ELEVATION

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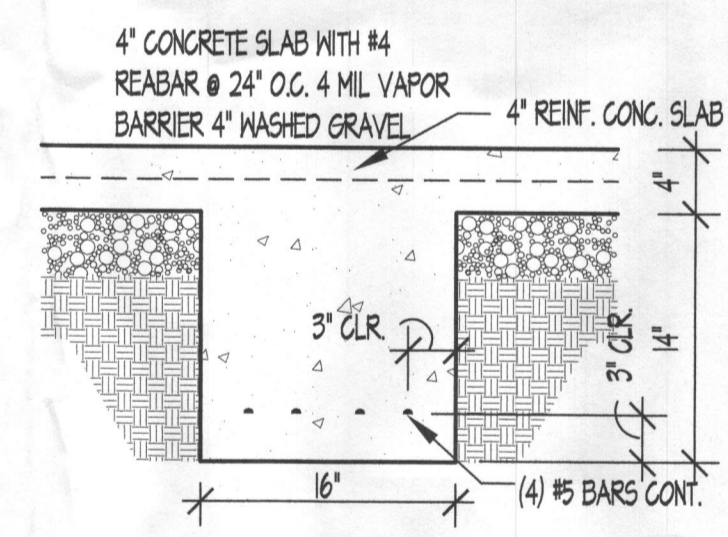
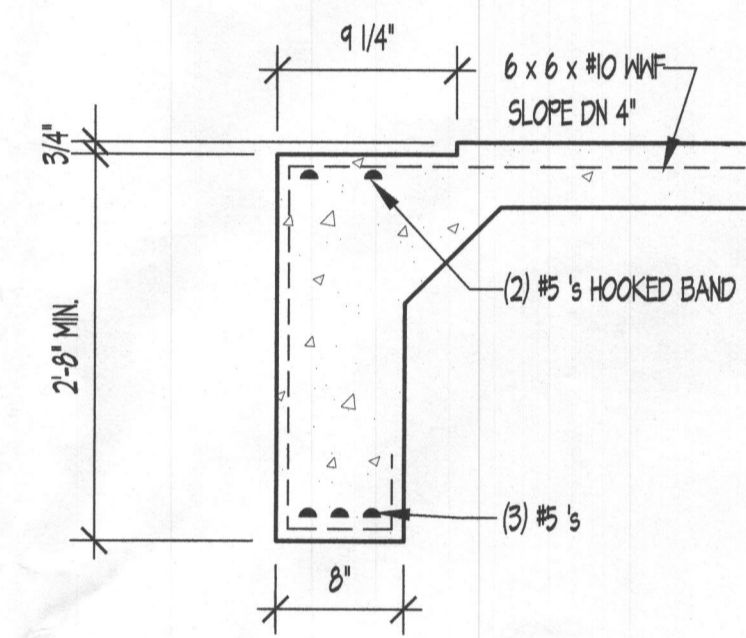
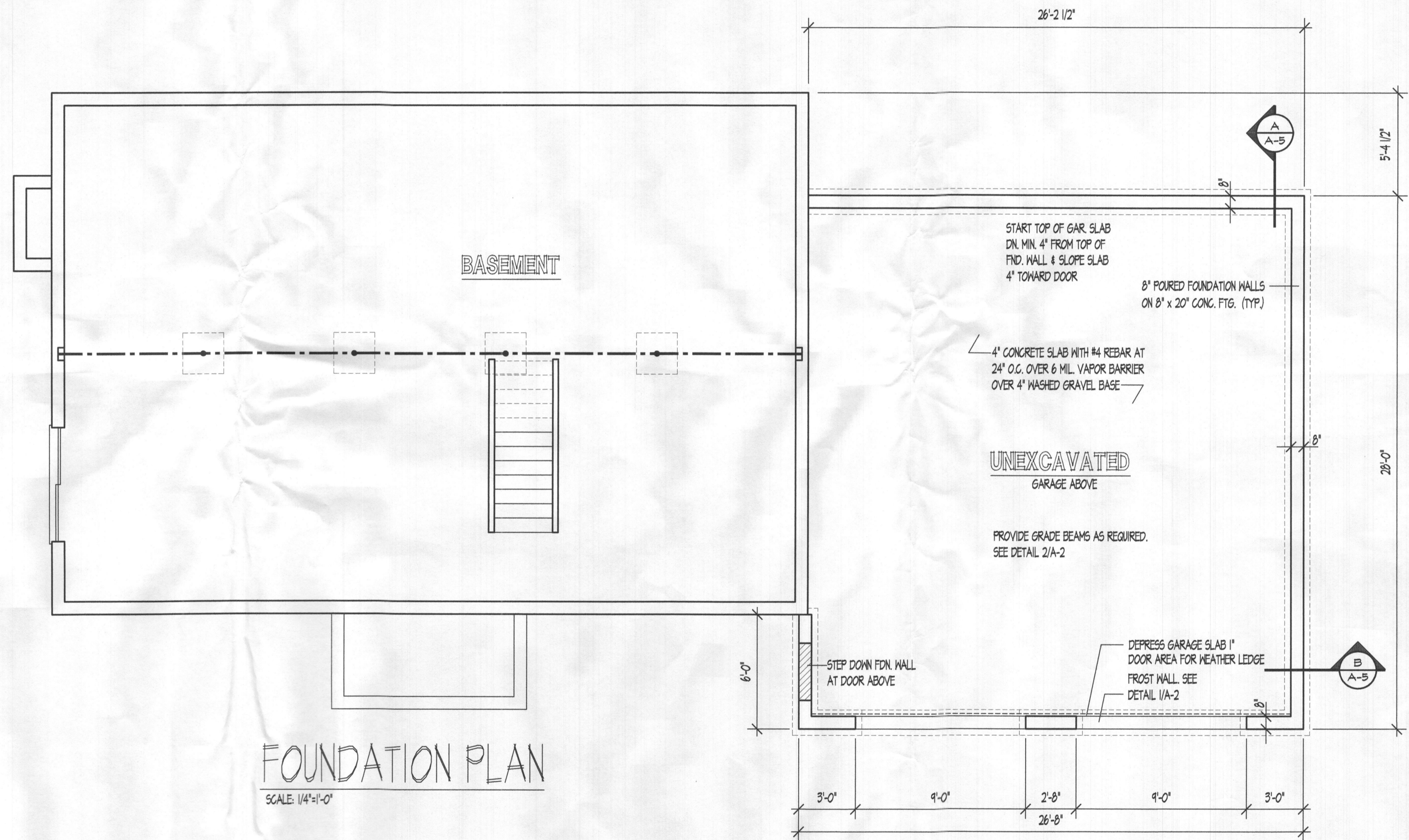
REAR ELEVATION

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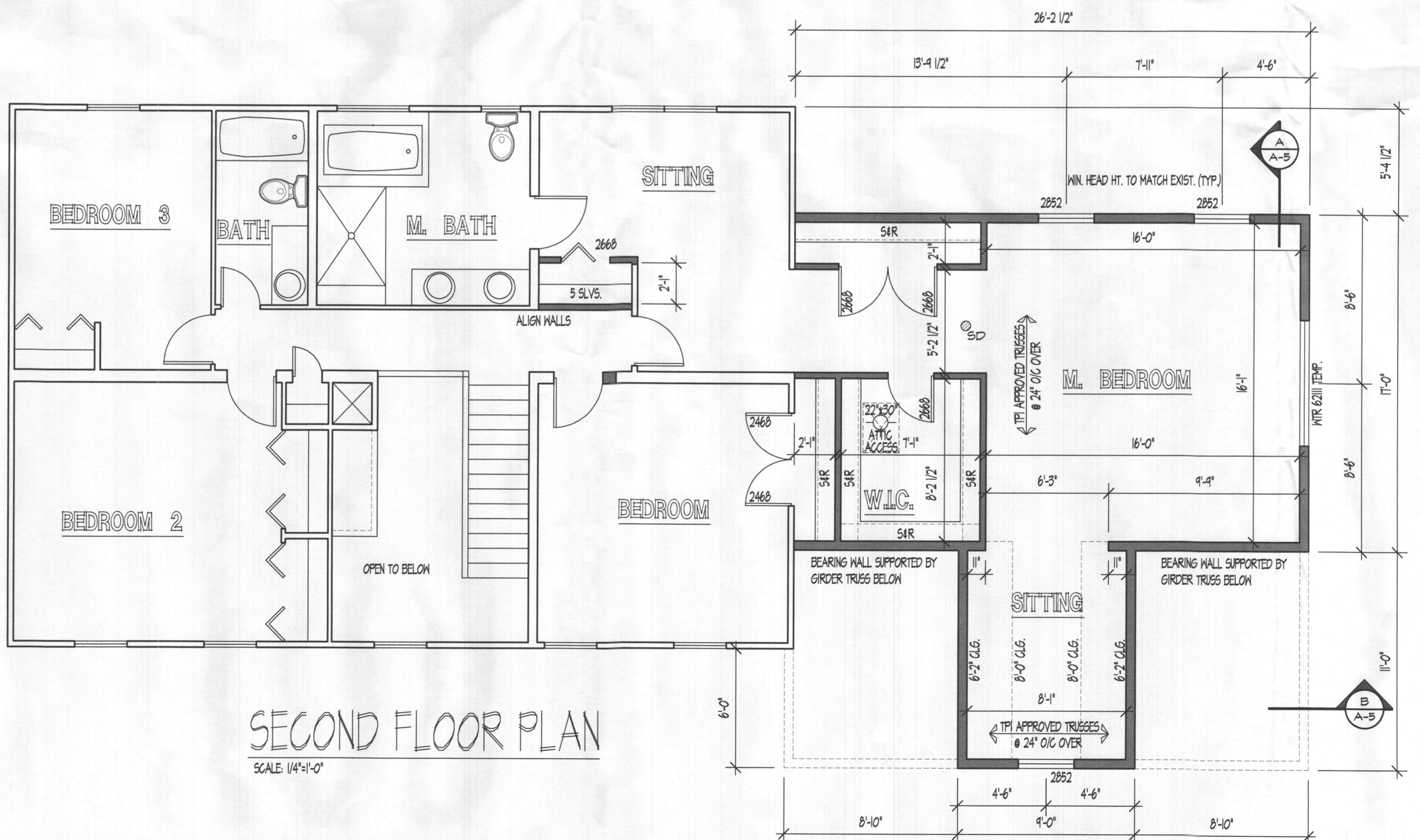
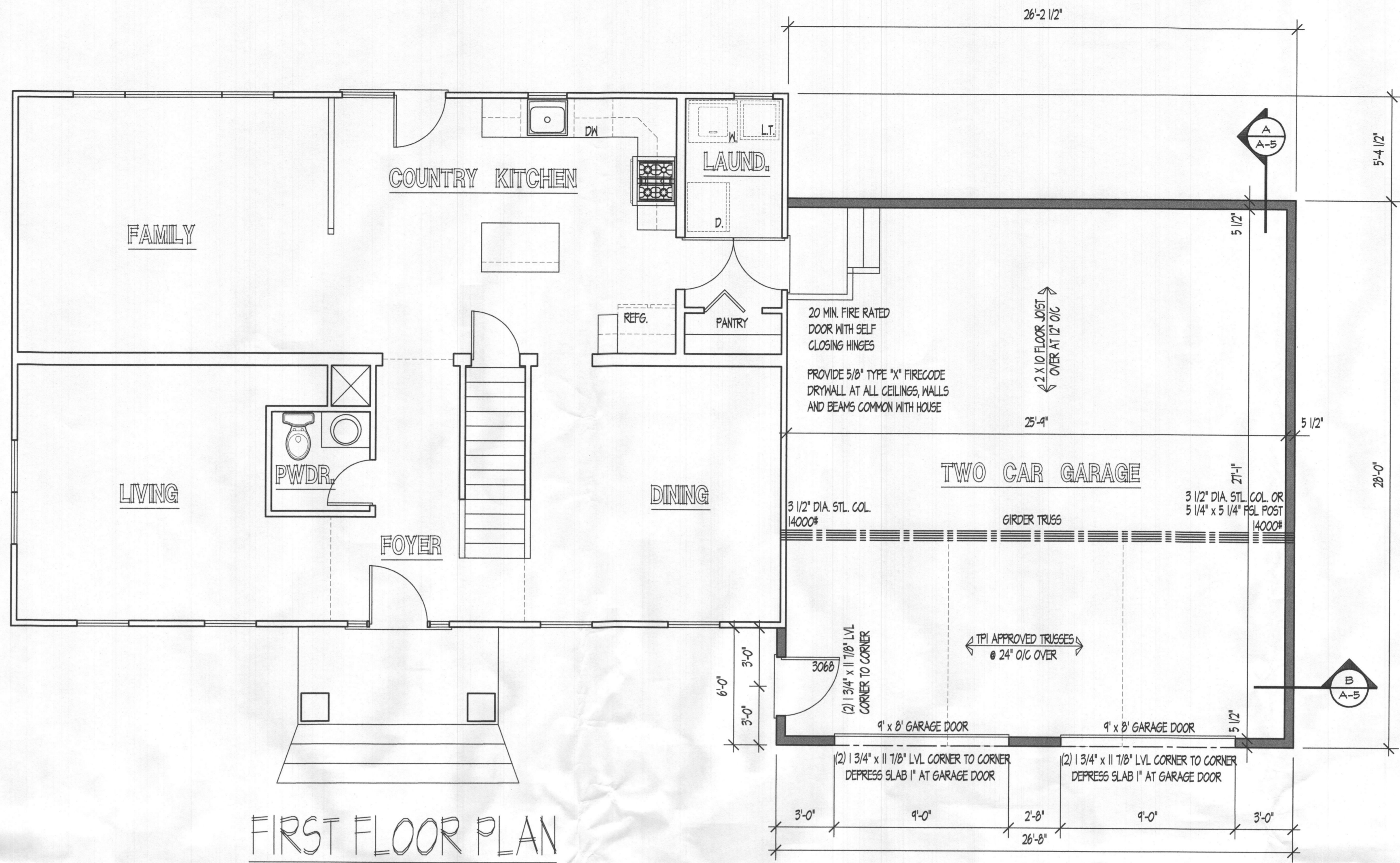
ELEVATIONS AND SECTION		PR. JT. NO.
DePASQUALE ADDITION		DATE:
CONTENTS	SCALE: 1/4" = 1'-0"	BRVN.
ISSUE		
07/14/20	CONSTRUCTION SET	
SHEET NO.		

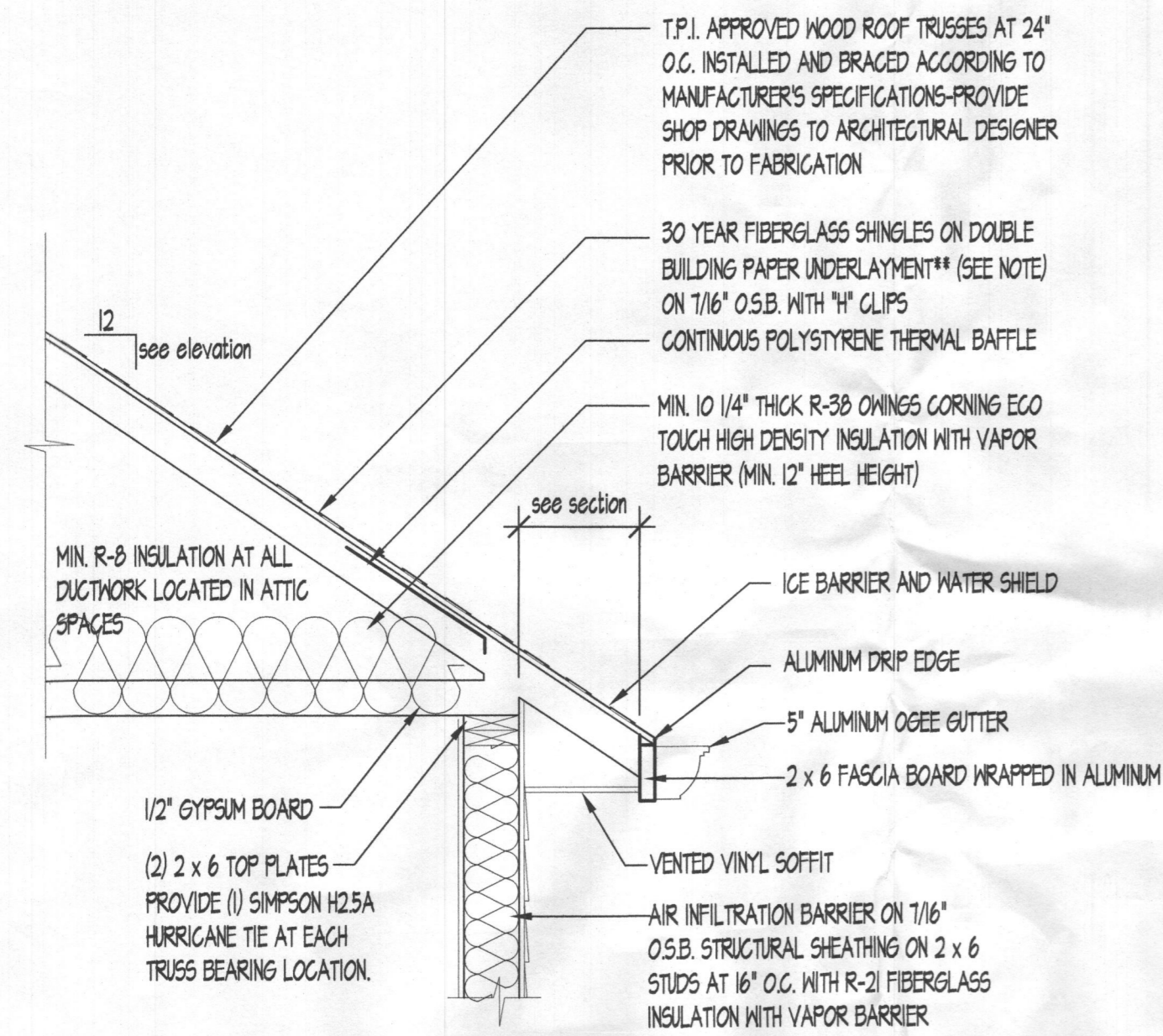
A-1



ISSUE

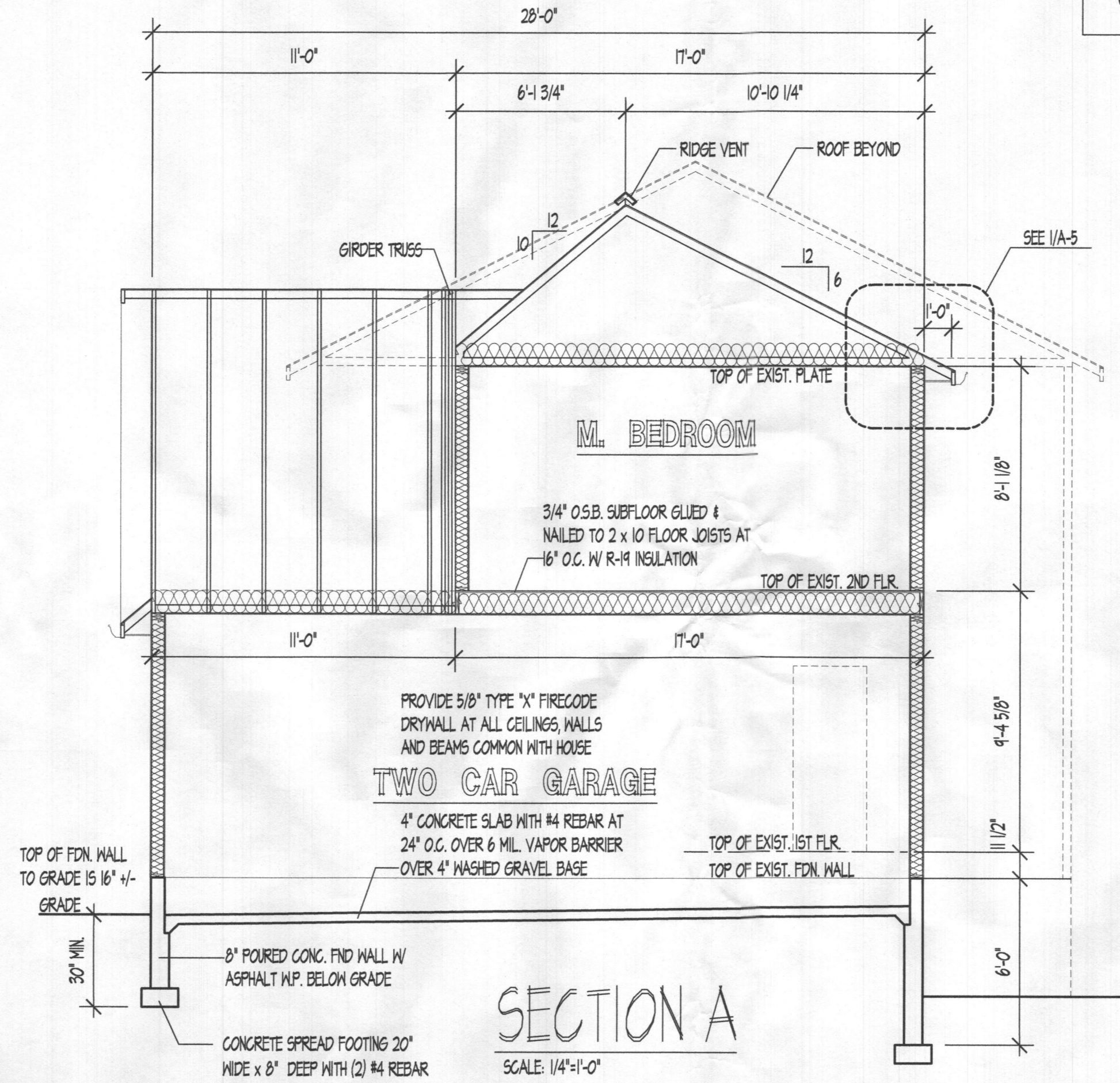
NO.	DESCRIPTION





I. TYP. EAVE DETAIL

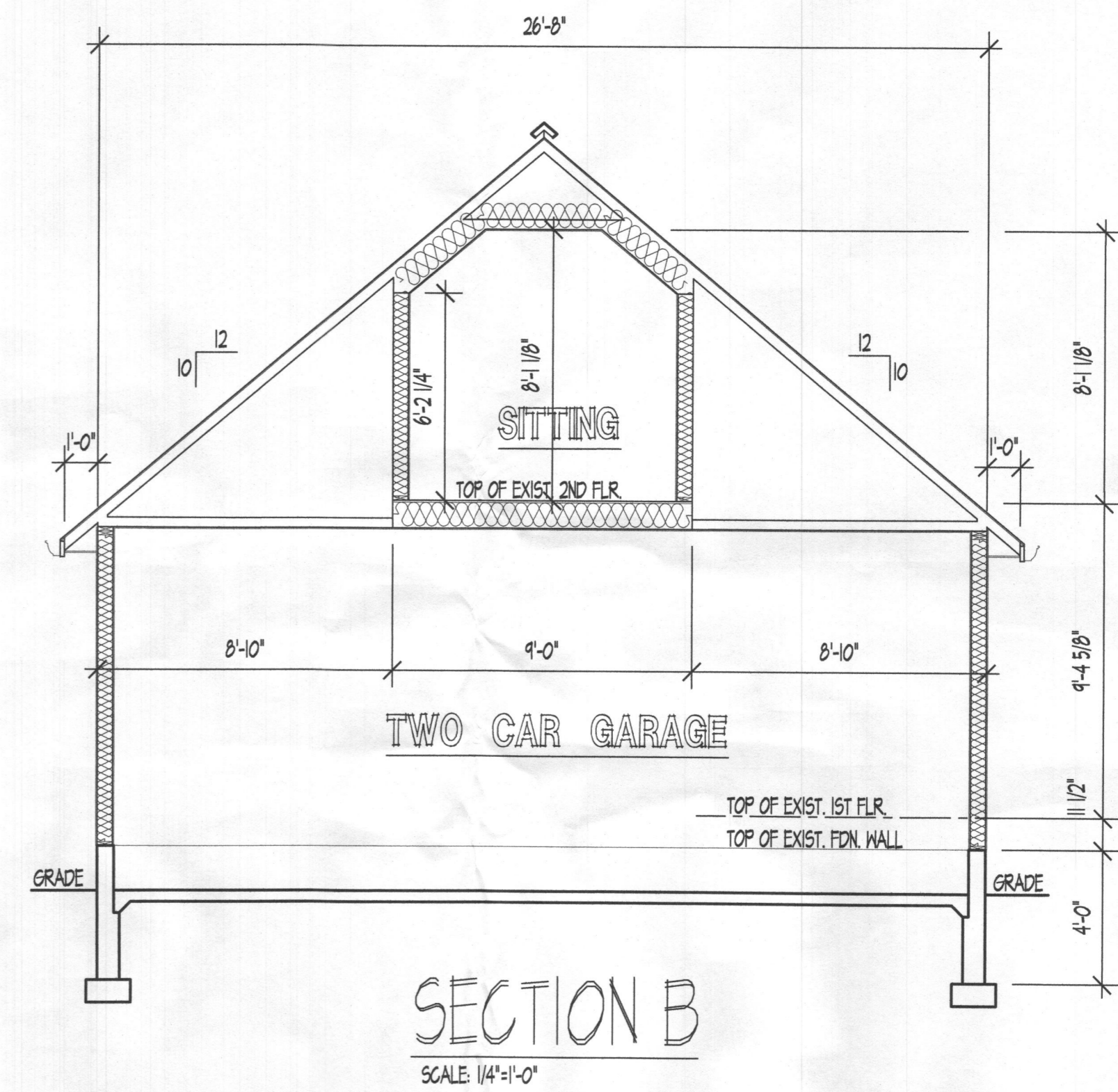
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SECTION A

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

SEE SECTION A FOR TYPICAL CONSTRUCTION NOTES



SECTION B

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



ISSUE	DATE	BY
01/17/20		
CONSTRUCTION SET		

SHEET NO.

A=5

TABLE R602.10.4
INTERMITTENT BRACING METHODS

METHOD	MATERIAL	MINIMUM THICKNESS	FIGURE	CONNECTION CRITERIA	
				Fasteners	Spacing
LIB	Let-in bracing	1 x 4 wood or approved metal straps at 45° to 60° angles for maximum 16" stud spacing		Wood: 2-8d common nails or 3-8d (2 1/2" long x .113 dia.) nails Metal strap: per manufacturer	Wood: per stud and top and bottom plates Metal: per manufacturer
DWB	Diagonal wood boards	3/4" (1" nominal) for maximum 24" stud spacing		2-8d (2 1/2" long x .113 dia.) nails or 2-1 3/4" long staples	Per stud
MEP	Wood structural panel (See Section R604)	3/8"		Exterior sheathing per Table R602.3(3) Interior sheathing per Table R602.3(1) or R602.3(2)	6' edges 12" field Varies by fastener
BV-MEP (e)	Wood structural panels with stone or masonry veneer (See Section R602.10.6.5)	7/16"	See Figure R602.10.6.5	8d (2 1/2" long x .113 dia.) common nails	4" at panel edges 12" at intermediate supports 4" at braced wall panel end posts
SFP	Structural fiberboard sheathing	1/2" or 25/32" for maximum 16" stud spacing		1 1/2" long x 12" dia. (for 1/2" thick sheathing) 1 3/4" long x 12" dia. (for 25/32" sheathing) galvanized roofing nails or 8d common (2 1/2" long x .131" dia.) nails	3' edges 6' field
GB	Gypsum board	1/2"		Nails or screws per Table R602.3(1) for exterior locations Nails or screws per Table R102.3.5 for interior locations	For all braced wall panel locations: 1" edges (including top and bottom plates) 7" field
PBS	Particleboard sheathing (See Section R605)	3/8" or 1/2" for maximum 16" stud spacing		For 3/8" 6d common (2" long x .113 dia.) nails For 1/2" 8d common (2 1/2" long x .113 dia.) nails	3' edges 6' field
PCP	Portland cement plaster	See Section R103.6 For maximum 16" stud spacing		1 1/2" long, 11 gage, 7/16" dia. head nails or 7/8" long, 16 gage staples	6" o.c. on all framing members
HPS	Hardboard panel siding	7/16" For maximum 16" stud spacing		.042" dia., 225" dia. nails with length to accommodate 1 1/2" penetration into studs	4' edges 8" field
AMB	Alternate braced wall	See Section R602.10.3.2		See section R602.10.6.1	See section R602.10.6.1
PFH	Intermittent portal frame	See Section R602.10.3.3		See section R602.10.6.2	See section R602.10.6.2
FFG	Intermittent portal frame at garage	See Section R602.10.3.4		See section R602.10.6.3	See section R602.10.6.3

TABLE R602.10.4
CONTINUOUS SHEATHING METHODS

METHOD	MATERIAL	MINIMUM THICKNESS	FIGURE	CONNECTION CRITERIA	
				Fasteners	Spacing
CS-MEP	Wood structural panel	3/8"		Exterior sheathing per Table R602.3(3) Interior sheathing per Table R602.3(1) or R602.3(2)	6' edges 12" field Varies by fastener
CS-G (bc)	Wood structural panel adjacent to garage openings and supporting roof load only	3/8"		See method CS-MEP	See method CS-MEP
CS-PF	portal frame	7/16"		See Section R602.10.6.4	See Section R602.10.6.4
CS-SFP (d)	Structural fiberboard	1/2" or 25/32" for maximum 16" stud spacing		1 1/2" long x 12" dia. (for 1/2" thick sheathing) 1 3/4" long x 12" dia. (for 25/32" sheathing) galvanized roofing nails or 8d common (2 1/2" long x .131" dia.) nails	3' edges 6' field

- a. Adhesive attachment of wall sheathing including Method GB, shall not be permitted in Seismic Design Categories C, D0, D1 and D2.
 b. Applies to panels next to garage door opening when supporting gable end wall and roof load only. May only be used on one wall of the garage. In Seismic Design Categories D0, D1 and D2, roof covering dead load may not exceed 3 psf.
 c. Garage openings adjacent to a Method CS-G panel shall be provided with a header in accordance with Table R502.5(1). A full height clear opening shall not be permitted adjacent to a Method CS-G panel.
 d. Method CS-SFB does not apply in Seismic Design Categories D0, D1 and D2 and in areas where the wind speed exceeds 100 mph.
 e. Method applies to detached one- and two-family dwellings in Seismic Design Categories D0 through D2 only.

R602.10.1 Braced wall lines. For the purpose of determining the amount and location of bracing required in each story level of a building, braced wall lines shall be designated as straight lines in the building plan placed in accordance with this section.

R602.10.1.1 Length of a braced wall line. The length of a braced wall line shall be the distance between its ends. The end of a braced wall line shall be the intersection with a perpendicular braced wall line, an angled braced wall line as permitted in Section R602.10.1.4 or an exterior wall as shown in Figure R602.10.1.1.

R602.10.1.2 Offsets along a braced wall line. All exterior walls parallel to a braced wall line shall be offset not more than 4 feet (1219 mm) from the designated braced wall line location as shown in Figure R602.10.1.1. Interior walls used as bracing shall be offset not more than 4 feet (1219 mm) from a braced wall line through the interior of the building as shown in Figure R602.10.1.1.

R602.10.1.3 Spacing of braced wall lines. The spacing between parallel braced wall lines shall be in accordance with Table R602.10.1.3. Intermediate braced wall lines through the interior of the building shall be permitted.

R602.10.1.4 Angled walls. Any portion of a wall along a braced wall line shall be permitted to angle out of plane for a maximum diagonal length of 8 feet (2438 mm). Where the angled wall occurs at a corner, the length of the braced wall line shall be measured from the projected corner as shown in Figure R602.10.1.4. Where the diagonal length is greater than 8 feet (2438 mm), it shall be considered a separate braced wall line and shall be braced in accordance with Section R602.10.1.

R602.10.2 Braced wall panels. Braced wall panels shall be full-height sections of wall that shall have no vertical or horizontal offsets. Braced wall panels shall be constructed and placed along a braced wall line in accordance with this section and the bracing methods specified in Section R602.10.4.

R602.10.2.1 Braced wall panel uplift load path. The bracing lengths in Table R602.10.3(1) apply only when uplift loads are resisted in accordance with Section R602.3.5.

R602.10.2.2 Locations of braced wall panels. A braced wall panel shall begin within 10 feet (3048 mm) from each end of a braced wall line as determined in Section R602.10.1.1. The distance between adjacent edges of braced wall panels along a braced wall line shall be no greater than 20 feet (6096 mm) as shown in Figure R602.10.2.2.

R602.10.2.3 Minimum number of braced wall panels. Braced wall lines with a length of 16 feet (4877 mm) or less shall have a minimum of two braced wall panels of any length or one braced wall panel equal to 48 inches (1219 mm) or more. Braced wall lines greater than 16 feet (4877 mm) shall have a minimum of two braced wall panels.

R602.10.3 Required length of bracing. The required length of bracing along each braced wall line shall be determined as follows:

- All buildings in Seismic Design Categories A and B shall use Table R602.10.3(1) and the applicable adjustment factors in Table R602.10.3(2).
- Detached buildings in Seismic Design Category C shall use Table R602.10.3(1) and the applicable adjustment factors in Table R602.10.3(2).
- Townhouses in Seismic Design Category C shall use the greater value determined from Table R602.10.3(1) or R602.10.3(3) and the applicable adjustment factors in Table R602.10.3(2) or R602.10.3(4) respectively.
- All buildings in Seismic Design Categories D0, D1 and D2 shall use the greater value determined from Table R602.10.3(1) or R602.10.3(5) and the applicable adjustment factors in Table R602.10.3(2) or R602.10.3(4) respectively. Only braced wall panels parallel to the braced wall line shall contribute toward the required length of bracing of that braced wall line. Braced wall panels along an angled wall meeting the minimum length requirements of Tables R602.10.4.5 and R602.10.5.2 shall be permitted to contribute its projected length toward the minimum required length of bracing for the braced wall line as shown in Figure R602.10.1.4. Any braced wall panel on an angled wall at the end of a braced wall line shall contribute its projected length for only one of the braced wall lines at the projected corner. Exception: The length of wall bracing for dwellings in Seismic Design Categories D0, D1 and D2 with stone or masonry veneer installed per Section R103.1 and exceeding the first-story height shall be in accordance with Section R602.10.6.5.

R602.10.4 Construction methods for braced wall panels. Intermittent and continuously sheathed braced wall panels shall be constructed in accordance with this section and the methods listed in Table R602.10.4.

R602.10.4.1 Mixing methods. Mixing of bracing methods shall be permitted as follows:

- Mixing intermittent bracing and continuous sheathing methods from story to story shall be permitted.
- Mixing intermittent bracing methods from braced wall line to braced wall line within a story shall be permitted. Within Seismic Design Categories A, B and C or in regions where the basic wind speed is less than or equal to 100 mph (45 m/s), mixing of intermittent bracing and continuous sheathing methods from braced wall line to braced wall line within a story shall be permitted.
- Mixing intermittent bracing methods along a braced wall line shall be permitted in Seismic Design Categories A and B, and detached dwellings in Seismic Design Category C provided the length of required bracing in accordance with Table R602.10.3(1) or R602.10.3(5) is the highest value of all intermittent bracing methods used.
- Mixing of continuous sheathing methods CS-MEP, CS-G and CS-PF along a braced wall line shall be permitted.
- In Seismic Design Categories A and B, and for detached one- and two-family dwellings in Seismic Design Category C, mixing of intermittent bracing methods along the interior portion of a braced wall line with continuous sheathing methods CS-MEP, CS-G and CS-PF along the exterior portion of the same braced wall line shall be permitted. The length of required bracing shall be the highest value of all intermittent bracing methods used in accordance with Table R602.10.3(1) or R602.10.3(5) as adjusted by Tables R602.10.3(2) and R602.10.3(4), respectively. The requirements of Section R602.10.1 shall apply to each end of the continuously sheathed portion of the braced wall line.

R602.10.4.2 Continuous sheathing methods. Continuous sheathing methods require structural panel sheathing to be used on all sheathable surfaces on one side of a braced wall line including areas above and below openings and gable end walls and shall meet the requirements of Section R602.10.1.

R602.10.6.4 Method CS-PF. Continuously sheathed portal frame. Continuously sheathed portal frame braced wall panels shall be constructed in accordance with Figure R602.10.6.4 and Table R602.10.6.4. The number of continuously sheathed portal frame panels in a single braced wall line shall not exceed four.

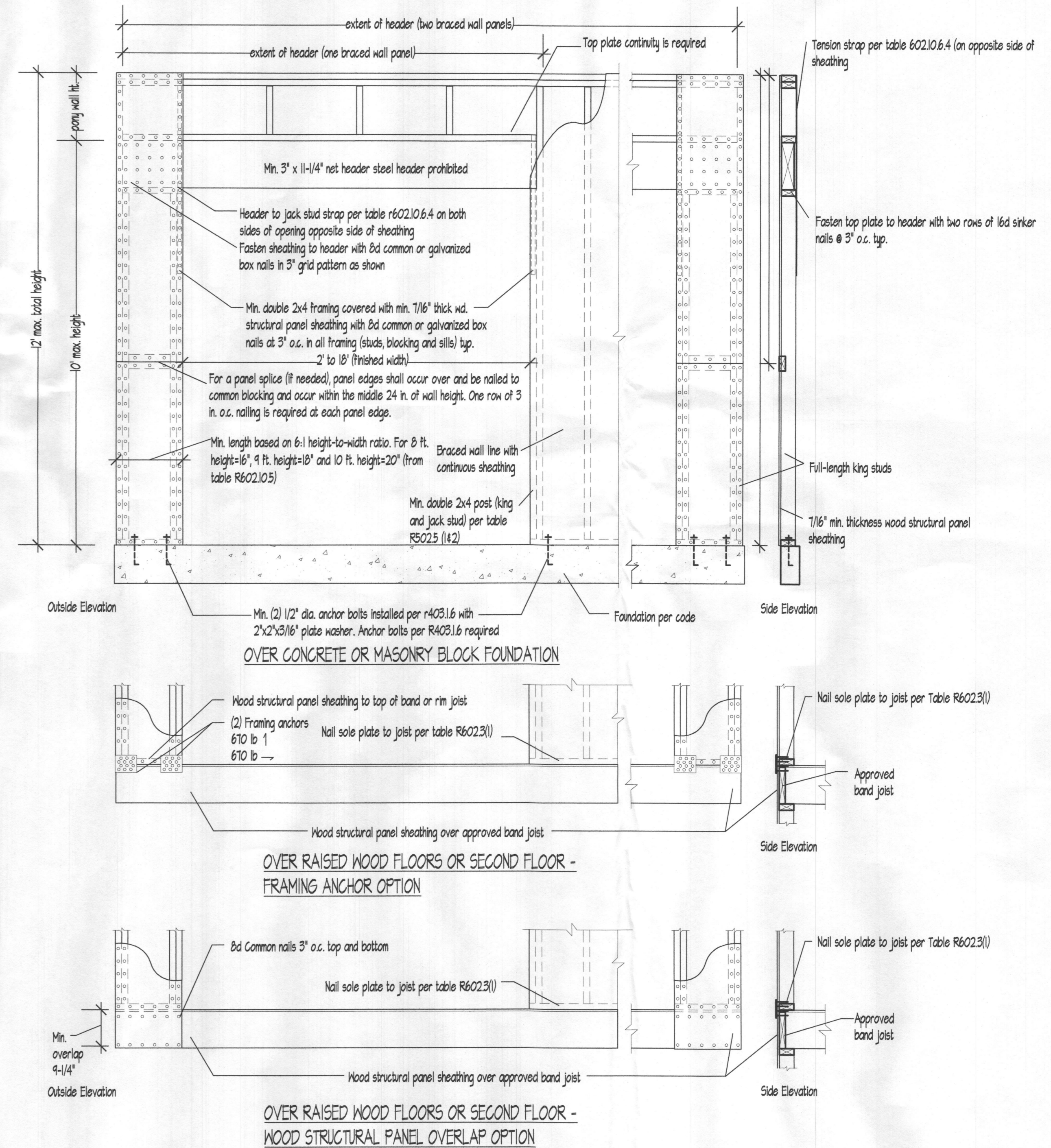
R602.10.7 Ends of braced wall lines with continuous sheathing. Each end of a braced wall line with continuous sheathing shall have one of the conditions shown in Figure R602.10.7.

R602.10.8 Braced wall panel connections. Braced wall panels shall be connected to floor framing or foundations as follows:

- Where joists are perpendicular to a braced wall panel above or below, a rim joist, band joist or blocking shall be provided along the entire length of the braced wall panel in accordance with Figure R602.10.8(1). Fastening of top and bottom wall plates to framing, rim joist, band joist and/or blocking shall be in accordance with Table R602.3(1).

- Where joists are parallel to a braced wall panel above or below, a rim joist, end joist or other parallel framing member shall be provided directly above and below the braced wall panel in accordance with Figure R602.10.8(2). Where a parallel framing member cannot be located directly above and below the panel, full-depth blocking at 16-inch (406 mm) spacing shall be provided between the parallel framing members to each side of the braced wall panel in accordance with Figure R602.10.8(2). Fastening of blocking and wall plates shall be in accordance with Table R602.3(1) and Figure R602.10.8(2).

- Connections of braced wall panels to concrete or masonry shall be in accordance with Section R403.1.6.



1 METHOD CS-PF:CONT. PORTAL FRAME PANEL CONSTRUCTION
PER IRC 2018 figure R602.10.6.4.

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BALTIMORE, MARYLAND 21284
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APA NARROW WALL DETAILS
PR. JT. IND.
BRVN.
DATE

DePASQUALE ADDITION

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

ISSUE
07/20/20
CONSTRUCTION SET

SHEET NO.

A-8A

TABLE R602.10.5
LENGTH REQUIREMENTS FOR BRACED WALL PANELS WITH CONTINUOUS SHEATHING

METHOD	ADJACENT CLEAR OPENING HEIGHT	WALL HEIGHT				
		8'	9'	10'	11'	12'
CS-WSP CS-SFB	64"	24"	27"	30"	33"	36"
	68"	26"	27"	30"	33"	36"
	72"	27"	27"	30"	33"	36"
	76"	30"	29"	30"	33"	36"
	80"	32"	30"	30"	33"	36"
	84"	35"	32"	32"	33"	36"
	88"	38"	35"	33"	33"	36"
	92"	43"	37"	35"	35"	36"
	96"	48"	41"	38"	36"	36"
	100"		44"	40"	38"	38"
	104"		49"	43"	40"	39"
	108"		54"	46"	43"	41"
	112"			50"	45"	43"
	116"			55"	48"	45"
	120"			60"	52"	48"
	124"				56"	51"
	128"				61"	54"
132"				66"	58"	
136"					62"	
140"					66"	
144"					72"	
CS-G	<120"	24"	27"	30"	33"	36"
CS-PF	<120"	16"	18"	20"	22"	24"

TABLE R602.10.3 (I)
BRACING REQUIREMENTS BASED ON WIND SPEED

EXPOSURE CATEGORY B, 30 FT MEAN ROOF HEIGHT, 10 FT EAVE TO RIDGE HEIGHT, 10 FT WALL HEIGHT, 2 BRACED WALL LINES		MINIMUM TOTAL LENGTH (feet) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINES				
BASIC WIND SPEED (mph)	STORY LOCATION	BRACED WALL LINE SPACING (feet)	METHOD LB	METHOD GB (double sided)	METHODS DWB, WSP, SFB, PCF, HPS, DWB, PFS, CS-SFB	CONTINUOUS SHEATHING
< 115 MPH		10	35	35	2.0	2.0
		20	65	65	3.5	3.5
		30	95	95	5.5	4.5
		40	125	125	7.0	6.0
		50	150	150	9.0	7.5
		60	18.0	18.0	10.5	9.0
		10	7.0	7.0	4.0	3.5
		20	12.5	12.5	7.5	6.5
		30	18.0	18.0	10.5	9.0
		40	23.5	23.5	13.5	11.5
		50	29.0	29.0	16.5	14.0
		60	34.5	34.5	20.0	17.0
	10	NP	10.0	6.0	5.0	
	20	NP	18.5	11.0	9.0	
	30	NP	27.0	15.5	13.0	
	40	NP	36.0	20.0	17.0	
	50	NP	45.0	24.5	21.0	
	60	NP	54.0	29.0	25.0	

TABLE R602.10.3 (2)
WIND ADJUSTMENT FACTORS TO THE REQUIRED LENGTH OF WALL BRACING

ITEM NUMBER	ADJUSTMENT BASED ON	STORY/SUPPORTING	CONDITION	ADJUSTMENT FACTOR MULTIPLY BY LENGTH IN TABLE R602.10.3(1)	APPLICABLE METHODS
1	EXPOSURE CATEGORY	ONE STORY STRUCTURE	B	1.00	ALL METHODS
			C	1.20	
			D	1.50	
		TWO STORY STRUCTURE	B	1.00	
			C	1.30	
			D	1.60	
		THREE STORY STRUCTURE	B	1.00	
			C	1.40	
			D	1.70	
2	ROOF EAVE-TO-RIDGE HEIGHT	ROOF ONLY	5 FEET	.70	ALL METHODS
			10 FEET	1.00	
			15 FEET	1.30	
			20 FEET	1.60	
			25 FEET	1.90	
			30 FEET	2.20	
		ROOF + 1 FLOOR	5 FEET	.85	
			10 FEET	1.00	
			15 FEET	1.15	
		ROOF + 2 FLOORS	5 FEET	.90	
			10 FEET	1.00	
			15 FEET	1.10	
3	WALL HEIGHT ADJUSTMENT	ANY STORY	8 FEET	.90	
			9 FEET	.95	
			10 FEET	1.00	
			11 FEET	1.05	
			12 FEET	1.10	
			13 FEET	1.15	
4	NUMBER OF BRACED WALL LINES	ANY STORY	2	1.00	
			3	1.30	
			4	1.45	
			5	1.60	
5	ADDITIONAL 800# HOLD DOWN DEVICE	TOP STORY ONLY	fastened to the end studs of each braced wall panel and to the foundation or framing below.	.80	DWB, HEP, SFB, PFS, PCF, HPS
			Omitted from inside face of braced wall panels.	1.40	DWB, HEP, SFB, PFS, PCF, HPS, CS-WSP, CS-G, CS-SFB
7	GYPSUM BOARD FASTENING	ANY STORY	4" o.c. at panel edges, including top and bottom plates, and all horizontal joints blocked.	.70	GB

2018 IRC/2018 IECC BUILDING THERMAL ENVELOPE R402/NI102	2018 IRC/2018 IECC ALTERATIONS R503/NI109
R402.1 General (Prescriptive). The building thermal envelope shall meet the requirements of Sections R402.1.1 through R402.1.5.	All alterations requirements shall meet the requirements of Sections R503.1 through R503.2.
R402.2 Specific insulation requirements (Prescriptive). In addition to the requirements of Section R402.1, insulation shall meet the specific requirements of Sections R402.2.1 through R402.2.3.	2018 IRC/2018 IECC REPAIRS R504/NI110
R402.3 Fenestration (Prescriptive). In addition to the requirements of Section R402.1, fenestration shall comply with Sections R402.3.1 through R402.3.5.	All repairs requirements shall meet the requirements of Sections R504.1 through R504.2.
R402.4 Air leakage (Mandatory). The building thermal envelope shall be constructed to limit air leakage in accordance with the requirements of Sections R402.4.1 through R402.4.5.	2018 IRC/2018 IECC CHANGE OF OCCUPANCY OR USE R505/NI111
R402.5 Maximum fenestration U-factor and SHGC (Mandatory). The area-weighted average maximum fenestration U-factor permitted using tradeoffs from Section R402.5.4 or R402.5.5 shall be 0.48 in Climate Zones 4 and 5 and 0.40 in Climate Zones 6 through 8 for vertical fenestration, and 0.75 in Climate Zones 4 through 8 for skylights. The area-weighted average maximum fenestration SHGC permitted using tradeoffs from Section R402.5.4 or R402.5.5 shall be 0.50.	All change of occupancy or use requirements shall meet the requirements of Sections R505.1 through R505.2.
2018 IRC/2018 IECC SYSTEMS R403/NI103	
All system requirements shall meet the requirements of Sections R403.1 through R403.12.	
2018 IRC/2018 IECC ELECTRICAL POWER AND LIGHTING SYSTEMS R404/NI104	
All electrical power and lighting systems requirements shall meet the requirements of Sections R404.1.	
2018 IRC/2018 IECC SIMULATED PERFORMANCE ALTERNATIVE R405/NI105	
simulated performance alternative requirements shall meet the requirements of Sections R405.1 through R405.6.	
2018 IRC/2018 IECC ENERGY RATING INDEX COMPLIANCE ALT. R406/NI106	
All energy rating index compliance alternative requirements shall meet the requirements of Sections R406.1 through R406.6.	
2018 IRC/2018 IECC EXISTING BUILDING-GENERAL R501/NI107	
All existing buildings-general requirements shall meet the requirements of Sections R501.1 through R501.6.	
2018 IRC/2018 IECC ADDITIONS R502/NI108	
All additions requirements shall meet the requirements of Sections R502.1.	

2018 IRC/2018 IECC ALTERATIONS R503/NI109	2018 IRC/2018 IECC REPAIRS R504/NI110	2018 IRC/2018 IECC CHANGE OF OCCUPANCY OR USE R505/NI111
All alterations requirements shall meet the requirements of Sections R503.1 through R503.2.	All repairs requirements shall meet the requirements of Sections R504.1 through R504.2.	All change of occupancy or use requirements shall meet the requirements of Sections R505.1 through R505.2.

2018 IRC/IECC TABLE R402.1.2/NI102.1.2 INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT

CLIMATE ZONE	FENESTRATION U-FACTOR (b)	SKYLIGHT U-FACTOR	GLAZED FENESTRATION SHGC (b _g)	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE (j)	FLOOR R-VALUE	BASEMENT WALL R-VALUE (c)	SLAB R-VALUE & DEPTH (d)	CRAWL SPACE WALL R-VALUE (c)
1	NR	0.75	0.25	30	B	3/4	B	0	0	0
2	0.40	0.65	0.25	38	B	4/6	B	0	0	0
3	0.32	0.55	0.25	38	20 OR 13-5 (h)	8/13	14	5/13 (f)	0	5/13
4 EXCEPT MARINE	0.32	0.55	0.40	44	20 OR 13-5 (h)	8/13	14	10/13	10, 2 FT.	10/13
5 AND MARINE 4	0.30	0.55	NR	44	20 OR 13-5 (h)	13/11	30 (g)	15/14	10, 2 FT.	15/14
6	0.30	0.55	NR	44	20-5 OR 13-10 (h)	15/20	30 (g)	15/14	10, 4 FT.	15/14
7 & 8	0.30	0.55	NR	44	20-5 OR 13-10 (h)	14/21	38 (g)	15/14	10, 4 FT.	15/14

For SI: 1 foot = 304.8 mm.
a. R-values are minimum. U-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the installed R-value of the insulation shall not be less than the R-value specified in the table.
b. The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.
c. Exception: Skylights may be excluded from glazed fenestration SHGC requirements in Climate Zones 1 through 5 where the SHGC for such skylights does not exceed 0.50.
d. 2015 means R-5 continuous insulation on the interior or exterior of the home or R-5 cavity insulation at the interior of the basement wall. 15/14 shall be permitted to be met with R-4 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the home.
e. R-5 shall be provided under the full slab area of a heated slab in addition to the required slab edge insulation R-value for slabs. The slab edge insulation for heated slabs shall not be required to extend below the slab.
f. There are no SHGC requirements in the Marine Zone.
g. Basement wall insulation is not required in warm-humid locations as defined by Figure NI101.1 and Table NI101.1.
h. Alternatively, insulation sufficient to fill the framing cavity and providing not less than an R-value of R-4.
i. The first value is cavity insulation, the second value is continuous insulation. Therefore, as an example, 13-5 means R-13 cavity insulation plus R-5 continuous insulation.
j. Mass walls shall be in accordance with Section NI102.2.5. The second R-value applies where more than half of the insulation is on the interior of the wall.

IRC 2018/IECC2018 TABLE R402.1.4/NI102.1.4 EQUIVALENT U-FACTORS

CLIMATE ZONE	FENESTRATION U-FACTOR	SKYLIGHT U-FACTOR	CEILING U-FACTOR	FRAME WALL U-FACTOR	MASS WALL U-FACTOR (b)	FLOOR U-FACTOR	BASEMENT WALL U-FACTOR	CRAWL SPACE WALL R-VALUE (c)	NOTES
1	0.50	0.75	0.035	0.084	0.141	0.064	0.360	0.471	a. Nonfenestration U-factors shall be obtained from measurement, calculation or an approved source. b. Mass walls shall be in accordance with Section NI102.2.5. When more than half the insulation is on the interior, the mass wall U-factors shall not exceed 0.11 in Zone 1, 0.14 in Zone 2, 0.12 in Zone 3, 0.081 in Zone 4 except Marine, 0.065 in Zone 5 and Marine 4, and 0.057 in Zones 6 through 8. c. In warm-humid locations as defined by Figure NI101.1 and Table NI101.1, the basement wall U-factor shall not exceed 0.360.
2	0.40	0.65	0.030	0.084	0.165	0.064	0.360	0.471	
3	0.32	0.55	0.030	0.060	0.048	0.041	0.091 (c)	0.136	
4 EXCEPT MARINE	0.32	0.55	0.026	0.060	0.048	0.041	0.091	0.065	
5 AND MARINE 4	0.30	0.55	0.026	0.060	0.062	0.033	0.050	0.055	
6	0.30	0.55	0.026	0.045	0.060	0.033	0.050	0.055	
7 & 8	0.30	0.55	0.026	0.045	0.051	0.028	0.050	0.055	

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home design

WALL BRACING/IECC NOTES AND CHARTS

PR. JT, JD
DATE: _____
SCALE: 1/4" = 1'-0"

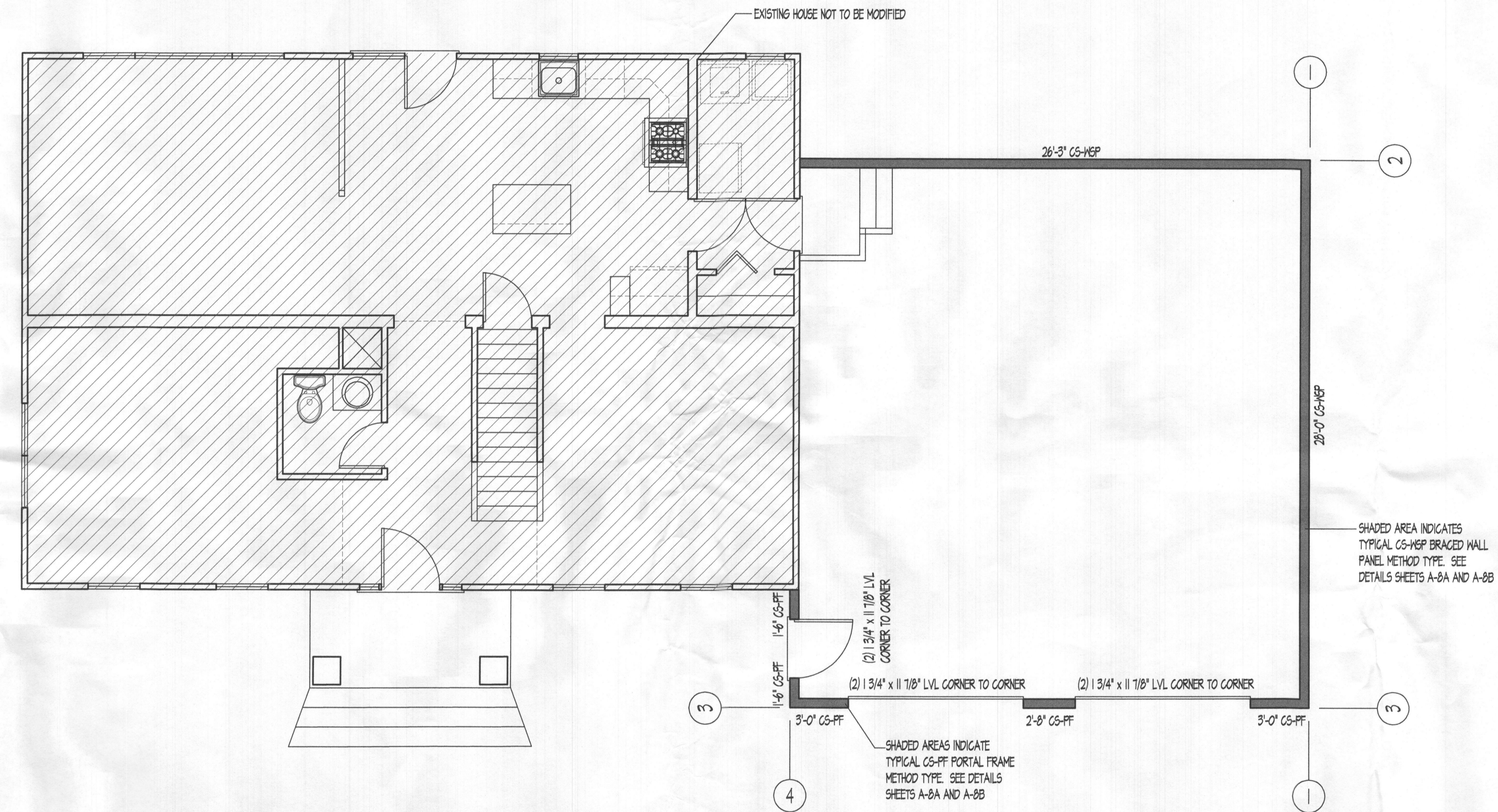
DePASQUALE ADDITION

PROJECT TITLE:

ISSUE
DATE
CONSTRUCTION SET

SHEET NO.

A-8B



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

- NOTES:**
1. PROVIDE MIN. 7/16" O.S.B. SHEATHING AT ALL PORTAL FRAME WALLS.
 2. 800# CAPACITY HOLD DOWN DEVICE TO BE SIMPSON HDL2 OR DITZL HOLDINGS. INSTALL TO MANUFACTURER'S SPECIFICATIONS USING ANCHOR BOLT CONNECTIONS AT CONCRETE AND ALL-THREAD ROD CONNECTIONS AT WOOD FLOORS.
 3. ALL NEW EXTERIOR WALLS (UNLESS NOTED OTHERWISE) SHALL BE CONSTRUCTED IN ACCORDANCE TO THE CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANEL (CS-WEP) METHOD. FASTEN 7/16" O.S.B. STRUCTURAL SHEATHING WITH 8d COMMON OR GALVANIZED BOX NAILS 6" O.C. AT PANEL EDGES AND 12" O.C. IN THE FIELD.
 4. IF WALL IS IDENTIFIED AS A PORTAL FRAME WALL THAN IT SHALL BE CONSTRUCTED IN ACCORDANCE TO THE CONTINUOUSLY SHEATHED PORTAL FRAME METHOD. FASTEN 7/16" O.S.B. STRUCTURAL SHEATHING WITH 8d COMMON OR GALVANIZED BOX NAILS AT 3' O.C. IN ALL FRAMING (STUDS, BLOCKING AND SILLS). FASTEN 7/16" O.S.B. STRUCTURAL SHEATHING TO HEADER WITH 8d COMMON OR GALVANIZED BOX NAILS IN 3' GRID PATTERN (SEE DETAIL (A-8A)).

Braced Wall Line Length Calculations 1st Floor

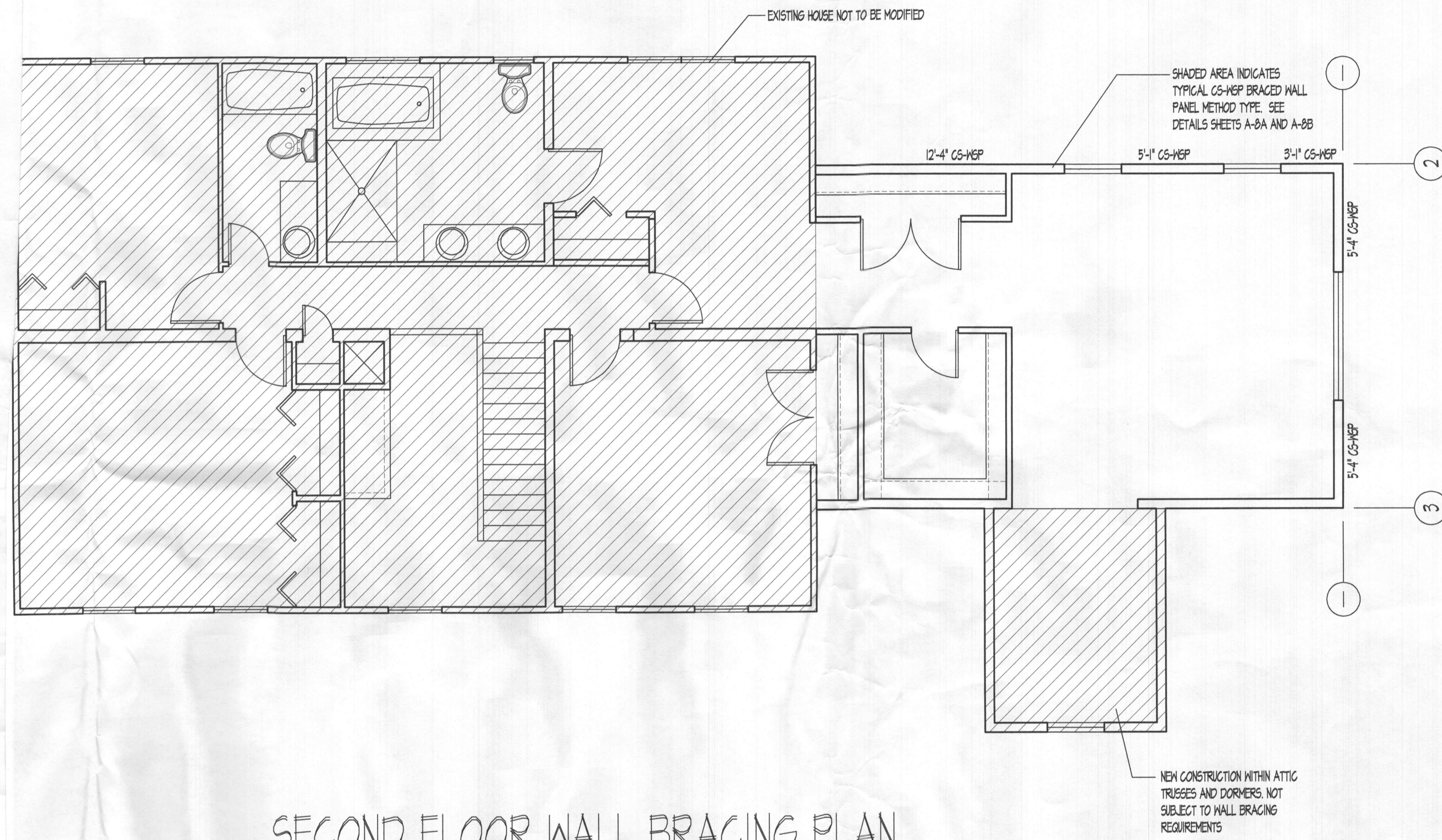
INPUTS												
Wall Line	Braced Wall Line Location	Wall Height	Bracing Method	Gypsum Wall Board Inside	Tabulated Wind Bracing Amount	Exposure Height Factor	Eave-To-Ridge Height Factor	Wall Height Factor	Number of B/WL Factor	Required Wall Bracing	Provided Wall Bracing	
1	1st of 2-story	8 feet	CS-WSP	Yes	8.5'	1	1.15	0.9	1	8.8'	28'-0"	
2	1st of 2-story	8 feet	CS-WSP	Yes	8.0625'	1	1.15	0.9	1	8.34'	26'-3"	
3	1st of 1-story	8 feet	CS-PF	Yes	1'-4"						2'-8"/3'-0"	
4	1st of 1-story	8 feet	CS-PF	Yes	1'-4"						1'-6"	
5												

FIRST FLOOR WALL BRACING PLAN

DePASQUALE ADDITION

ISSUE: 07/2020 CONSTRUCTION SET

SHEET NO. **A-8C**



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

- NOTES:**
1. PROVIDE MIN. 7/16" OSB SHEATHING AT ALL PORTAL FRAME WALLS.
 2. BOOM CAPACITY HOLD DOWN DEVICE TO BE SIMPSON HDZ OR DITZ HOLDING. INSTALL TO MANUFACTURER'S SPECIFICATIONS USING ANCHOR BOLT CONNECTIONS AT CONCRETE AND ALL-THREAD ROD CONNECTIONS AT WOOD FLOORS.
 3. ALL NEW EXTERIOR WALLS (UNLESS NOTED OTHERWISE) SHALL BE CONSTRUCTED IN ACCORDANCE TO THE CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANEL (CS-WSP) METHOD. FASTEN 7/16" OSB STRUCTURAL SHEATHING WITH 8d COMMON OR GALVANIZED BOX NAILS 6" O.C. AT PANEL EDGES AND 12" O.C. IN THE FIELD.
 4. IF WALL IS IDENTIFIED AS A PORTAL FRAME WALL THEN IT SHALL BE CONSTRUCTED IN ACCORDANCE TO THE CONTINUOUSLY SHEATHED PORTAL FRAME METHOD. FASTEN 7/16" OSB STRUCTURAL SHEATHING WITH 8d COMMON OR GALVANIZED BOX NAILS AT 3" O.C. IN ALL FRAMING (STUDS, BLOCKING AND SILLS). FASTEN 7/16" OSB STRUCTURAL SHEATHING TO HEADER WITH 8d COMMON OR GALVANIZED BOX NAILS IN 3" GRID PATTERN (SEE DETAIL 1/A-8A)

SEISMIC DESIGN CATEGORY		A									
ULTIMATE DESIGN SPEED		115									
WIND EXPOSURE CATEGORY		B									
INPUTS											
Wall Line	Braced Wall Line Location	Wall Height	Bracing Method	Gypsum Wall Board Inside	Tabulated Wind Bracing Amount	Exposure Height Factor	Eave-To-Ridge Height Factor	Wall Height Factor	Number of B.W.L. Factor	Required Wall Bracing	Provided Wall Bracing
1	2nd of 2-story	8 feet	CS-WSP	Yes	3.05'	1	0.76	0.9	1	2.09'	10'-4"
2	2nd of 2-story	8 feet	CS-WSP	Yes	4.125'	1	0.76	0.9	1	2.82'	20'-6"
3	2nd of 2-story	8 feet	CS-WSP	Yes	4.125'	1	0.76	0.9	1	2.82'	26'-3"
4											

Braced Wall Line Length Calculations Second Floor