

# NEW SINGLE FAMILY - 1 UNIT PERMIT City of Newberg

PERMIT NUMBER  
**NDWL24-0029**

PERMIT TYPE: <b>NEW SINGLE FAMILY - 1 UNIT</b>	SUBDIVISION/COMM SITE:	TAX MAP NO: <b>R3208 02900</b>
PERMIT SUB TYPE : <b>WITH BACKFLOW</b>		BLDG USE GROUP:
JOB ADDRESS: <b>1015 E RORK CT</b>		
DESCRIPTION: <b>New Single Family Residence W/ NFPA 13R sprinkler system</b>		
ZONED AS:	TOTAL SQFT: <b>0</b>	SPRINKLERS:
TOTAL WORK VALUE: <b>\$345,994.11</b>	TYPE OF CONSTRUCTION:	BUILDING USE:

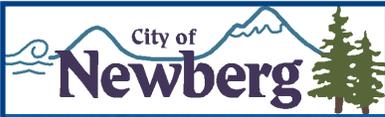
APPLICANT: <b>Corins Custom Homes LLC</b>	PHONE: <b>(971)235-0169</b>
MAILING ADDRESS: <b>10695 NE RENNE RD NEWBERG, OR 97132</b>	FAX:
ARCHITECT/DESIGNER/ENGINEER-WHO DREW THE PLANS: <b>Suntel Design Inc</b>	PHONE: <b>(503)624-0555</b>
MAILING ADDRESS: <b>16865 Boones Ferry Rd Lake Oswego, OR 97035</b>	FAX:
CONTRACTOR: <b>Corins Custom Homes LLC</b>	PHONE: <b>(971)235-0169</b>
MAILING ADDRESS: <b>10695 NE RENNE RD NEWBERG, OR 97132</b>	FAX:
CONTRACTOR: <b>Gramer Heating &amp; Cooling Inc</b>	PHONE: <b>(503)357-8458</b>
MAILING ADDRESS: <b>53725 NW Old Wilson River Road Gales Creek, OR 97117</b>	FAX: <b>(503)357-8458</b>
CONTRACTOR: <b>Jaybel Contractors LLC</b>	PHONE: <b>(714)235-9434</b>
MAILING ADDRESS: <b>710 S McLoughlin Blvd Oregon City, OR 97045</b>	FAX:
OWNER: <b>Scott Bontrager</b>	PHONE: <b>(503)899-5910</b>
MAILING ADDRESS: ,	FAX:

**COMMENTS**

FEES			
DESCRIPTION	ACCOUNT	QUANTITY	PAID AMOUNT
1 AND 2 FAMILY NEW - BATHROOMS	08-0000-322002	0	\$419.69
APPLIANCE VENTS/AIR DUCTS	08-0000-322002	4	\$57.56
BACKFLOW DEVICE	08-0000-322002	0	\$105.17
COMMUNITY DEVELOPMENT FEE .75 PERCENT	01-0000-322009	0	\$2594.96
CPRD SINGLE FAMILY FEE - CITY	01-0000-202002	0	\$187.78
CPRD SINGLE FAMILY FEE - PARKS	01-0000-202002	0	\$9201.22
FAU/GRAVITY FURNACE UP TO 100K	08-0000-322002	1	\$25.93
GAS PIPE OUTLETS	08-0000-322002	4	\$17.70
MECHANICAL PLAN REVIEW FEE 50 PERCENT	08-0000-322002	0	\$100.57
NEWBERG SCHOOL DISTRICT CET RESIDENTIAL FEE - CITY	01-0000-202003	0	\$19.11
NEWBERG SCHOOL DISTRICT CET RESIDENTIAL FEE - SCHOOL	01-0000-202003	0	\$1891.89
P WATER DEVELOPMENT 1" METER FEE	47-0000-349002	0	\$13338.40

General Questions: 503-537-1240 | Inspections: [trakit.newbergoregon.gov/etrakit](http://trakit.newbergoregon.gov/etrakit) or 503-554-7714 | Website: [newbergoregon.gov](http://newbergoregon.gov)





# NEW SINGLE FAMILY - 1 UNIT PERMIT

## City of Newberg

PERMIT NUMBER  
**NDWL24-0029**

SIDEWALK OR DRIVEWAY APPROACH PERMIT FEE	02-0000-332003	967	\$354.05
SINGLE FAMILY PLAN & STORMWATER REVIEW & FINAL	17-0000-332004	0	\$203.68
STATE SURCHARGE FEE 12 PERCENT - MECHANICAL	08-0000-202012	0	\$24.14
STATE SURCHARGE FEE 12 PERCENT - PLUMBING	08-0000-202012	0	\$62.98
STATE SURCHARGE FEE 12 PERCENT - STRUCTURAL	08-0000-202011	0	\$173.74
STORM SYSTEM DEVELOPMENT SINGLE FAMILY FEE	43-0000-349002	0	\$629.57
STRUCTURAL PERMIT FEE	08-0000-322001	0	\$1447.82
STRUCTURAL PLAN REVIEW FEE 85 PERCENT	08-0000-322001	0	\$1230.65
STRUCTURAL PLAN REVIEW-POST	08-0000-322001	0	\$0.00
TECHNOLOGY FEE - ENGINEERING 5%	36-8675-3090001	0	\$66.56
TECHNOLOGY FEE 5 PERCENT - MECHANICAL	08-0000-341006	0	\$10.06
TECHNOLOGY FEE 5 PERCENT - PLUMBING	08-0000-341006	0	\$26.24
TECHNOLOGY FEE 5 PERCENT - STRUCTURAL	08-0000-341006	0	\$72.39
TRANSPORTATION DEVELOPMENT SINGLE FAMILY / OTHER - PER UNIT	42-0000-349002	0	\$6266.08
VENTILATION SINGLE	08-0000-322002	4	\$57.56
WASTE WATER DEVELOPMENT 1-18 FIXTURES FEE	46-0000-349002	0	\$6039.00
WASTE WATER DEVELOPMENT EACH FIXTURE UNIT OVER 18 FEE	46-0000-349002	0	\$2684.00
WATER CONNECTION FEE	07-0000-349001	0	\$773.52
WOOD/FIREPLACE/MASONRY/FACTORY BUILT	08-0000-322002	1	\$42.39
<b>TOTAL:</b>			<b>\$48,124.41</b>

**ALL WORK TO CONFORM TO THE CURRENT EDITION OF THE ORSC AND OSCC.  
INSPECTIONS REQUESTED PRIOR TO 7AM WILL BE COMPLETED THE SAME BUSINESS DAY.  
INSPECTION RECEIVED AFTER 7AM WILL BE SCHEDULE FOR THE NEXT BUSINESS DAY.**

**8.15.150 UNNECESSARY NOISE – PERMITTED EXCEPTIONS.**

**A. UNREASONABLE NOISE AND EXCEPTIONS.**

**3. The following acts are declared to be per se violations of this section. This enumeration does not constitute an exclusive list:**

**j. Construction or Repair of Buildings, or Excavation of Streets and Highways. The construction, demolition, alteration or repair of any building or the excavation of streets and highways other than between the hours of 7:00 a.m. and 7:00 p.m. on weekdays. In cases of emergency, construction or repair noises are exempt from this provision. In nonemergency situations, the city may issue a permit, upon application, if the city determines that the public health and safety, as affected by loud and raucous noise caused by construction or repair of buildings or excavation of streets and highways between the hours of 7:00 p.m. and 7:00 a.m. will not be impaired, and if the city further determines that loss or inconvenience would otherwise result. The permit shall grant permission in nonemergency cases for a period of not more than three days. The permit may be renewed once for a period of three days or less.**

**Building Official: Brooks Bateman**

**Issued By: Fe Bates**

**Date: 9/11/2024**





155 B Ave Suite 105  
Lake Oswego, OR 97034  
Phone: 503 624-0555  
[www.SuntelDesign.com](http://www.SuntelDesign.com)

**Birch Beaudry Rourke Lot 12 6309**

Main Level

**Bracing Requirements Based on Wind Speed**

Wind Speed:

Exposure:

**Adjustment Factors (A, B, C...):**

No. of Stories	<u>1.00</u>
Eave to Ridge Height	<u>1.15</u>
Wall Height	<u>0.95</u>
No. of Braced Wall Lines	<u>1.30</u>
Gyp. Board faced interior	<u>1.00</u>

**Adjustment Factors (1, 2, 3...):**

No. of Stories	<u>1.00</u>
Eave to Ridge Height	<u>1.15</u>
Wall Height	<u>0.95</u>
No. of Braced Wall Lines	<u>1.30</u>
Gyp. Board faced interior	<u>1.00</u>

**Adjustment Factors (4):**

No. of Stories	<u>1.00</u>
Eave to Ridge Height	<u>1.15</u>
Wall Height	<u>0.95</u>
No. of Braced Wall Lines	<u>1.30</u>
Gyp. Board faced interior	<u>1.00</u>

Total Adjustment Factor: 1.42

Total Adjustment Factor: 1.42

Total Adjustment Factor: 1.42

Braced Wall Line	Method	BWL Spacing	Required Bracing	Adjustment Factor	HDs Added	Required Bracing	Provided Bracing
A	CS-WSP	28'	6.6	1.42	1.0	9.37	26.66
B	CS-WSP	19'	4.8	1.42	1.0	6.82	19.33
C	CS-WSP	28'	6.6	1.42	1.0	9.37	20
D	-			1.42	1.0	1.42	0

Braced Wall Line	Method	BWL Spacing	Required Bracing	Adjustment Factor	HDs Added	Required Bracing	Provided Bracing
1	CS-WSP	25'	6	1.42	1.0	8.52	10.75
2	CS-WSP	25'	6	1.42	1.0	8.52	17.67
3	See Eng			1.42	1.0	1.42	0
4	-			1.42	1.0	1.42	0

Designer:           KAK          

Date:           June 18, 2024          

Notes:



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**Birch Beaudry Rourke Lot 12 6309**

Main Level

**Bracing Requirements Based on Seismic Design Category**

SDC: D1

**Adjustment Factors:**

Story height	1.00
Wall dead load	1.00
Roof/ceiling dead load	1.00
B.W.L. Spacing in "D"	1.00
Total Factor	1.00

Brace Wall Line	Method	BWL Length	Required Bracing	Adj. Factors	BWL Spacing	Cripple Walls	Required Bracing	Provided Bracing
A	CS-WSP	39'6"	15.11	1.00	1.2	1.00	18.13	26.66
B	CS-WSP	20'4"	7.83	1.00	1.0	1.00	7.83	19.33
C	CS-WSP	41'6"	15.87	1.00	1.2	1.00	19.04	20
D	-			1.00	1.0	1.00	1.00	

Brace Wall Line	Method	BWL Length	Required Bracing	Adj. Factors	BWL Spacing	Cripple Walls	Required Bracing	Provided Bracing
1	CS-WSP	28'	10.74	1.00	1.0	1.00	10.74	10.75
2	CS-WSP	28'	10.74	1.00	1.0	1.00	10.74	17.67
3	See Eng			1.00	1.0	1.00	1.00	
4	-			1.00	1.0	1.00	1.00	

Designer:           KAK          

Date:           June 18, 2024          

Notes:



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**Birch Beaudry Rourke Lot 12 6309**

Upper Level

**Bracing Requirements Based on Wind Speed**

Wind Speed:

Exposure:

**Adjustment Factors (A, B, C...):**

No. of Stories	<u>1.00</u>
Eave to Ridge Height	<u>1.00</u>
Wall Height	<u>0.90</u>
No. of Braced Wall Lines	<u>1.30</u>
Gyp. Board faced interior	<u>1.00</u>

**Adjustment Factors (1, 2, 3...):**

No. of Stories	<u>1.00</u>
Eave to Ridge Height	<u>1.00</u>
Wall Height	<u>0.90</u>
No. of Braced Wall Lines	<u>1.30</u>
Gyp. Board faced interior	<u>1.00</u>

**Adjustment Factors (4):**

No. of Stories	<u>1.00</u>
Eave to Ridge Height	<u>1.00</u>
Wall Height	<u>0.90</u>
No. of Braced Wall Lines	<u>1.30</u>
Gyp. Board faced interior	<u>1.00</u>

Total Adjustment Factor: 1.17

Total Adjustment Factor: 1.17

Total Adjustment Factor: 1.17

Braced Wall Line	Method	BWL Spacing	Required Bracing	Adjustment Factor	HDs Added	Required Bracing	Provided Bracing
A	CS-WSP	28'	3.8	1.17	1.0	4.45	12
B	CS-WSP	14'	2.1	1.17	1.0	2.46	12.583
C	CS-WSP	28'	3.8	1.17	1.0	4.45	12
D	-			1.17	1.0	1.17	-

Braced Wall Line	Method	BWL Spacing	Required Bracing	Adjustment Factor	HDs Added	Required Bracing	Provided Bracing
1	CS-WSP	20'	3	1.17	1.0	3.51	9
2	CS-WSP	21'6"	3.15	1.17	1.0	3.69	23.66
3	See Eng			1.17	1.0	1.17	-
4	-			1.17	1.0	1.17	-

Designer:           KAK          

Date:           June 18, 2024          

Notes:



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**Birch Beaudry Rourke Lot 12 6309**

Upper Level

**Bracing Requirements Based on Seismic Design Category**

SDC: D1

**Adjustment Factors:**

Story height	1.00
Wall dead load	1.00
Roof/ceiling dead load	1.00
B.W.L. Spacing in "D"	1.0
Total Factor	1.00

Brace Wall Line	Method	BWL Length	Required Bracing	Adj. Factors	BWL Spacing	Cripple Walls	Required Bracing	Provided Bracing
A	CS-WSP	39'6"	6.72	1.00	1.2	1.00	8.06	12
B	CS-WSP	41'6"	7.06	1.00	1.0	1.00	7.06	12.583
C	CS-WSP	43'6"	7.40	1.00	1.2	1.00	8.87	12
D	-			1.00	1.0	1.00	1.00	-

Brace Wall Line	Method	BWL Length	Required Bracing	Adj. Factors	BWL Spacing	Cripple Walls	Required Bracing	Provided Bracing
1	CS-WSP	28'	4.76	1.00	1.0	1.00	4.76	9
2	CS-WSP	28'	4.76	1.00	1.0	1.00	4.76	23.66
3	See Eng			1.00	1.0	1.00	1.00	-
4	-			1.00	1.0	1.00	1.00	-

Designer:           KAK          

Date:           June 18, 2024          

Notes:



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**Birch Beaudry Rourke Lot 12 6309**

Lower Level

**Bracing Requirements Based on Wind Speed**

Wind Speed:

Exposure:

**Adjustment Factors (A, B, C...):**

No. of Stories	<u>1.00</u>
Eave to Ridge Height	<u>1.10</u>
Wall Height	<u>0.80</u>
No. of Braced Wall Lines	<u>1.00</u>
Gyp. Board faced interior	<u>1.40</u>

**Adjustment Factors (1, 2, 3...):**

No. of Stories	<u>1.00</u>
Eave to Ridge Height	<u>1.10</u>
Wall Height	<u>0.80</u>
No. of Braced Wall Lines	<u>1.00</u>
Gyp. Board faced interior	<u>1.40</u>

**Adjustment Factors (4):**

No. of Stories	<u>1.00</u>
Eave to Ridge Height	<u>1.10</u>
Wall Height	<u>0.80</u>
No. of Braced Wall Lines	<u>1.00</u>
Gyp. Board faced interior	<u>1.40</u>

Total Adjustment Factor: 1.23

Total Adjustment Factor: 1.23

Total Adjustment Factor: 1.23

Braced Wall Line	Method	BWL Spacing	Required Bracing	Adjustment Factor	HDs Added	Required Bracing	Provided Bracing
A	CS-WSP	28'	9.9	1.23	1.0	12.20	15
B	CS-WSP	28'	9.9	1.23	1.0	12.20	15
C	-			1.23	1.0	1.23	-
D	-			1.23	1.0	1.23	-

Braced Wall Line	Method	BWL Spacing	Required Bracing	Adjustment Factor	HDs Added	Required Bracing	Provided Bracing
1	CS-WSP	25'	9	1.23	1.0	11.09	25'
2	-			1.23	1.0	1.23	-
3	-			1.23	1.0	1.23	-
4	-			1.23	1.0	1.23	-

Designer:           KAK          

Date:           June 18, 2024          

Notes:



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**Birch Beaudry Rourke Lot 12 6309**

Lower Level

**Bracing Requirements Based on Seismic Design Category**

SDC: D1

**Adjustment Factors:**

Story height	1.00
Wall dead load	1.00
Roof/ceiling dead load	1.00
B.W.L. Spacing in "D"	1.0
Total Factor	1.00

Brace Wall Line	Method	BWL Length	Required Bracing	Adj. Factors	BWL Spacing	Cripple Walls	Required Bracing	Provided Bracing
A	CS-WSP	15'	7.65	1.00	1.2	1.00	9.18	15
B	CS-WSP	15'	7.65	1.00	1.2	1.00	9.18	15
C	-			1.00	1.0	1.00	1.00	-
D	-			1.00	1.0	1.00	1.00	-

Brace Wall Line	Method	BWL Length	Required Bracing	Adj. Factors	BWL Spacing	Cripple Walls	Required Bracing	Provided Bracing
1	CS-WSP	28'	14.28	1.00	1.0	1.00	14.28	25'
2	-			1.00	1.0	1.00	1.00	-
3	-			1.00	1.0	1.00	1.00	-
4	-			1.00	1.0	1.00	1.00	-

Designer:           KAK          

Date:           June 18, 2024          

Notes:

Project: Birch\_Beaudry\_Rourke\_Lot 12\_6309\_Vertical Calculations  
 Location: Beam Nr. 01 - Great Room Window Header  
 Multi-Loaded Multi-Span Beam  
 Multi-Loaded Multi-Span Beam [2021 International Building Code(2018 NDS)]  
 5.5 IN x 11.25 IN x 5.5 FT  
 #2 - Douglas-Fir-Larch - Dry Use  
 Section Adequate By: 38.9%  
 Controlling Factor: Moment

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 PO Box 1358  
 Fairview, OR. 97024

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<b>DEFLECTIONS</b>		Center
Live Load	0.02	IN L/3430
Dead Load	0.01	in
Total Load	0.03	IN L/1941
Live Load Deflection Criteria: L/360		Total Load Deflection Criteria: L/240

<b>REACTIONS</b>		A	B
Live Load	2439 lb	1327 lb	
Dead Load	1882 lb	1051 lb	
Total Load	4321 lb	2378 lb	
Bearing Length	1.26 in	0.69 in	

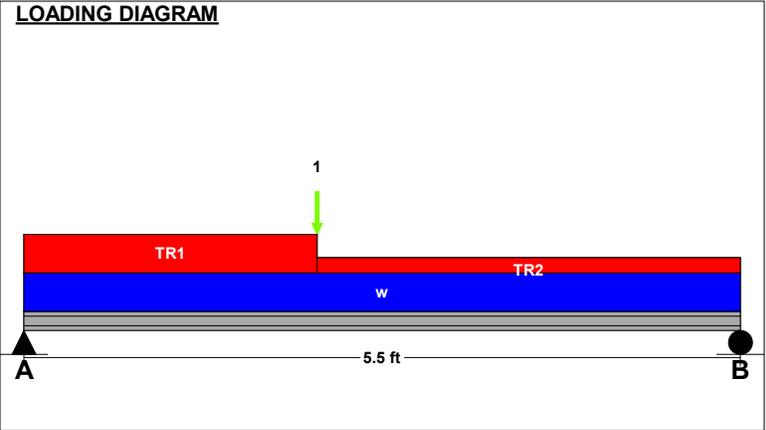
<b>BEAM DATA</b>		Center
Span Length	5.5	ft
Unbraced Length-Top	0	ft
Unbraced Length-Bottom	5.5	ft
Live Load Duration Factor	1.00	
Notch Depth	0.00	

<b>MATERIAL PROPERTIES</b>			
#2 - Douglas-Fir-Larch			
	Base Values	Adjusted	
Bending Stress:	Fb = 875 psi	Fb' = 875 psi	
	Cd=1.00 CF=1.00		
Shear Stress:	Fv = 170 psi	Fv' = 170 psi	
	Cd=1.00		
Modulus of Elasticity:	E = 1300 ksi	E' = 1300 ksi	
Comp. $\perp$ to Grain:	Fc $\perp$ = 625 psi	Fc $\perp$ ' = 625 psi	

**Controlling Moment:** 6091 ft-lb  
 2.26 Ft from left support of span 2 (Center Span)  
 Created by combining all dead loads and live loads on span(s) 2

**Controlling Shear:** 4321 lb  
 At left support of span 2 (Center Span)  
 Created by combining all dead loads and live loads on span(s) 2

Comparisons with required sections:	Req'd	Provided
Section Modulus:	83.53 in <sup>3</sup>	116.02 in <sup>3</sup>
Area (Shear):	38.12 in <sup>2</sup>	61.88 in <sup>2</sup>
Moment of Inertia (deflection):	80.69 in <sup>4</sup>	652.59 in <sup>4</sup>
Moment:	6091 ft-lb	8459 ft-lb
Shear:	4321 lb	7013 lb



<b>UNIFORM LOADS</b>		Center
Uniform Live Load	160	plf
Uniform Dead Load	95	plf
Beam Self Weight	13	plf
Total Uniform Load	268	plf

<b>POINT LOADS - CENTER SPAN</b>	
Load Number	One
Live Load	1450 lb
Dead Load	1025 lb
Location	2.25 ft

<b>TRAPEZOIDAL LOADS - CENTER SPAN</b>		
Load Number	One	Two
Left Live Load	638 plf	0 plf
Left Dead Load	525 plf	40 plf
Right Live Load	638 plf	0 plf
Right Dead Load	525 plf	40 plf
Load Start	0 ft	2.25 ft
Load End	2.25 ft	5.5 ft
Load Length	2.25 ft	3.25 ft

Project: Birch\_Beaudry\_Rourke\_Lot 12\_6309\_Vertical Calculations

Location: Beam Nr. 02 - Great Room Window Header

Multi-Loaded Multi-Span Beam

Multi-Loaded Multi-Span Beam [2021 International Building Code(2018 NDS)]

5.5 IN x 11.25 IN x 5.5 FT

#2 - Douglas-Fir-Larch - Dry Use

Section Adequate By: 31.9%

Controlling Factor: Moment

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Fairview, OR. 97024

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**DEFLECTIONS**

Center

Live Load 0.02 IN L/2807

Dead Load 0.02 in

Total Load 0.04 IN L/1581

Live Load Deflection Criteria: L/360 Total Load Deflection Criteria: L/240

**REACTIONS**

A

B

Live Load 2801 lb 2400 lb

Dead Load 2140 lb 1884 lb

Total Load 4941 lb 4284 lb

Bearing Length 1.44 in 1.25 in

**BEAM DATA**

Center

Span Length 5.5 ft

Unbraced Length-Top 0 ft

Unbraced Length-Bottom 5.5 ft

Live Load Duration Factor 1.00

Notch Depth 0.00

**MATERIAL PROPERTIES**

#2 - Douglas-Fir-Larch

Base Values

Adjusted

Bending Stress: Fb = 875 psi Fb' = 875 psi

Cd=1.00 CF=1.00

Shear Stress: Fv = 170 psi Fv' = 170 psi

Cd=1.00

Modulus of Elasticity: E = 1300 ksi E' = 1300 ksi

Comp.  $\perp$  to Grain: Fc -  $\perp$  = 625 psi Fc -  $\perp$ ' = 625 psi

**Controlling Moment:** 6411 ft-lb

2.53 Ft from left support of span 2 (Center Span)

Created by combining all dead loads and live loads on span(s) 2

**Controlling Shear:** 4940 lb

At left support of span 2 (Center Span)

Created by combining all dead loads and live loads on span(s) 2

**Comparisons with required sections:**

Req'd

Provided

Section Modulus: 87.92 in3 116.02 in3

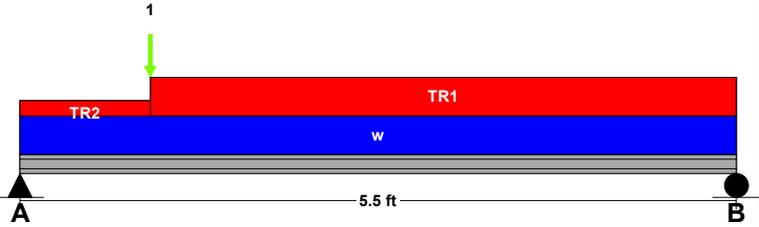
Area (Shear): 43.59 in2 61.88 in2

Moment of Inertia (deflection): 99.08 in4 652.59 in4

Moment: 6411 ft-lb 8459 ft-lb

Shear: 4940 lb 7013 lb

**LOADING DIAGRAM**



**UNIFORM LOADS**

Center

Uniform Live Load 160 plf

Uniform Dead Load 95 plf

Beam Self Weight 13 plf

Total Uniform Load 268 plf

**POINT LOADS - CENTER SPAN**

Load Number One

Live Load 1450 lb

Dead Load 1025 lb

Location 1 ft

**TRAPEZOIDAL LOADS - CENTER SPAN**

Load Number One Two

Left Live Load 638 plf 0 plf

Left Dead Load 525 plf 40 plf

Right Live Load 638 plf 0 plf

Right Dead Load 525 plf 40 plf

Load Start 1 ft 0 ft

Load End 5.5 ft 1 ft

Load Length 4.5 ft 1 ft

Project: Birch\_Beaudry\_Rourke\_Lot 12\_6309\_Vertical Calculations

Location: Beam Nr. 03 - Upper Level Floor Beam over Kitchen  
Uniformly Loaded Floor Beam  
Uniformly Loaded Floor Beam [2021 International Building Code(2018 NDS)]  
6.75 IN x 16.5 IN x 20.0 FT  
24F-V4 - Visually Graded Western Species - Dry Use  
Section Adequate By: 48.7%  
Controlling Factor: Moment

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<b>DEFLECTIONS</b>		Center
Live Load	0.44	IN L/551
Dead Load	0.18	in
Total Load	0.62	IN L/389
Live Load Deflection Criteria: L/360 Total Load Deflection Criteria: L/240		

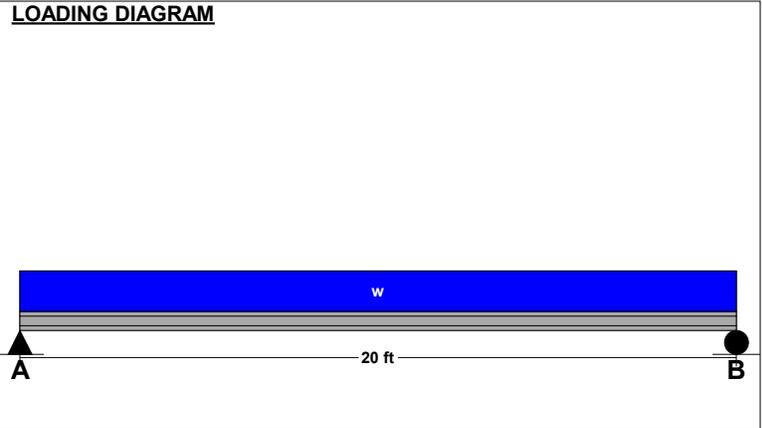
<b>REACTIONS</b>		A	B
Live Load	5500 lb	5500 lb	
Dead Load	2304 lb	2304 lb	
Total Load	7804 lb	7804 lb	
Bearing Length	1.78 in	1.78 in	

<b>BEAM DATA</b>		Center
Span Length	20	ft
Unbraced Length-Top	0	ft
Floor Duration Factor	1.00	
Camber Adj. Factor	1	
Camber Required	0.18	
Notch Depth	0.00	

<b>MATERIAL PROPERTIES</b>			
24F-V4 - Visually Graded Western Species			
	<u>Base Values</u>		<u>Adjusted</u>
Bending Stress:	Fb =	2400 psi	<i>Controlled by:</i>
	Fb_cmp =	1850 psi	Fb' = 2273 psi
	Cd=1.00 Cv=0.95		
Shear Stress:	Fv =	265 psi	Fv' = 265 psi
	Cd=1.00		
Modulus of Elasticity:	E =	1800 ksi	E' = 1800 ksi
Comp. $\perp$ to Grain:	Fc - $\perp$ =	650 psi	Fc - $\perp$ ' = 650 psi

**Controlling Moment:** 39020 ft-lb  
10.0 ft from left support  
Created by combining all dead and live loads.  
**Controlling Shear:** -7804 lb  
At support.  
Created by combining all dead and live loads.

Comparisons with required sections:	Req'd	Provided
Section Modulus:	206.03 in3	306.28 in3
Area (Shear):	44.17 in2	111.38 in2
Moment of Inertia (deflection):	1649.74 in4	2526.82 in4
Moment:	39020 ft-lb	58007 ft-lb
Shear:	-7804 lb	19676 lb



<b>FLOOR LOADING</b>			
		<u>Side 1</u>	<u>Side 2</u>
Floor Live Load	FLL =	40 psf	40 psf
Floor Dead Load	FDL =	15 psf	15 psf
Floor Tributary Width	FTW =	6.5 ft	7.3 ft
Wall Load	WALL =	0 plf	

<b>BEAM LOADING</b>			
Beam Total Live Load:	wL =	550	plf
Beam Total Dead Load:	wD =	206	plf
Beam Self Weight:	BSW =	24	plf
Total Maximum Load:	wT =	780	plf

Project: Birch\_Beaudry\_Rourke\_Lot 12\_6309\_Vertical Calculations

Location: Beam Nr. 04 - Upper Level Floor Beam over Garage  
Uniformly Loaded Floor Beam  
Uniformly Loaded Floor Beam [2021 International Building Code(2018 NDS)]  
5.5 IN x 10.5 IN x 19.0 FT  
24F-V4 - Visually Graded Western Species - Dry Use  
Section Adequate By: 28.9%  
Controlling Factor: Deflection

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<b>DEFLECTIONS</b>		Center
Live Load	0.49	IN L/464
Dead Load	0.22	in
Total Load	0.71	IN L/319
Live Load Deflection Criteria: L/360 Total Load Deflection Criteria: L/240		

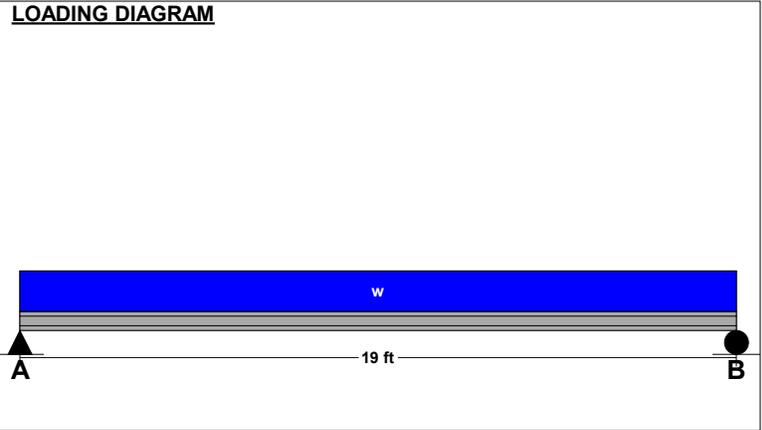
<b>REACTIONS</b>		A	B
Live Load	1520	lb	1520
Dead Load	689	lb	689
Total Load	2209	lb	2209
Bearing Length	0.62	in	0.62

<b>BEAM DATA</b>		Center
Span Length	19	ft
Unbraced Length-Top	0	ft
Floor Duration Factor	1.00	
Camber Adj. Factor	1	
Camber Required	0.22	
Notch Depth	0.00	

<b>MATERIAL PROPERTIES</b>			
24F-V4 - Visually Graded Western Species			
	<u>Base Values</u>		<u>Adjusted</u>
Bending Stress:	Fb =	2400 psi	<i>Controlled by:</i>
	Fb_cmpr =	1850 psi	Fb' = 2400 psi
	Cd=1.00		
Shear Stress:	Fv =	265 psi	Fv' = 265 psi
	Cd=1.00		
Modulus of Elasticity:	E =	1800 ksi	E' = 1800 ksi
Comp. ⊥ to Grain:	Fc - ⊥ =	650 psi	Fc - ⊥' = 650 psi

**Controlling Moment:** 10492 ft-lb  
9.5 ft from left support  
Created by combining all dead and live loads.  
**Controlling Shear:** 2209 lb  
At support.  
Created by combining all dead and live loads.

Comparisons with required sections:	Req'd	Provided
Section Modulus:	52.46 in3	101.06 in3
Area (Shear):	12.5 in2	57.75 in2
Moment of Inertia (deflection):	411.47 in4	530.58 in4
Moment:	10492 ft-lb	20213 ft-lb
Shear:	2209 lb	10203 lb



<b>FLOOR LOADING</b>			
		<u>Side 1</u>	<u>Side 2</u>
Floor Live Load	FLL =	40 psf	40 psf
Floor Dead Load	FDL =	15 psf	15 psf
Floor Tributary Width	FTW =	3 ft	1 ft
Wall Load	WALL =	0 plf	

<b>BEAM LOADING</b>			
Beam Total Live Load:	wL =	160	plf
Beam Total Dead Load:	wD =	60	plf
Beam Self Weight:	BSW =	13	plf
Total Maximum Load:	wT =	233	plf

Project: Birch\_Beaudry\_Rourke\_Lot 12\_6309\_Vertical Calculations

Location: Beam Nr. 05 - Upper Level Floor Beam in Front of Garage Door  
Combination Roof And Floor Beam

Combination Roof And Floor Beam [2021 International Building Code(2018 NDS)  
( 3 ) 1.5 IN x 11.25 IN x 13.66 FT

#2 - Douglas-Fir-Larch (North) - Dry Use

Section Adequate By: 1.9%

Controlling Factor: Moment

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**CAUTIONS**

\* Laminations are to be fully connected to provide uniform transfer of loads to all members

**DEFLECTIONS**

Center

Live Load 0.15 IN L/1115  
Dead Load 0.20 in  
Total Load 0.34 IN L/477  
Live Load Deflection Criteria: L/360 Total Load Deflection Criteria: L/240

**REACTIONS**

A B

Live Load 1038 lb 1038 lb  
Dead Load 1416 lb 1416 lb  
Total Load 2454 lb 2454 lb  
Bearing Length 0.87 in 0.87 in

**BEAM DATA**

Center

Span Length 13.66 ft  
Unbraced Length-Top 0 ft  
Roof Pitch 4 :12  
Floor Duration Factor 1.00  
Roof Duration Factor 1.15  
Notch Depth 0.00

**MATERIAL PROPERTIES**

#2 - Douglas-Fir-Larch (North)

	Base Values	Adjusted
Bending Stress:	Fb = 850 psi	Fb' = 1124 psi
	Cd=1.15 CF=1.00 Cr=1.15	
Shear Stress:	Fv = 180 psi	Fv' = 207 psi
	Cd=1.15	
Modulus of Elasticity:	E = 1600 ksi	E' = 1600 ksi
Comp. ⊥ to Grain:	Fc - ⊥ = 625 psi	Fc - ⊥' = 625 psi

**Controlling Moment:**

8722 ft-lb

6.83 ft from left support

Created by combining all dead and live loads.

**Controlling Shear:**

-2454 lb

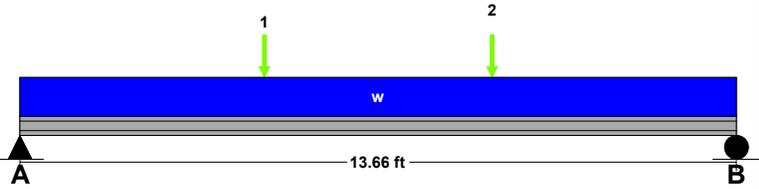
At support.

Created by combining all dead and live loads.

**Comparisons with required sections:**

	Req'd	Provided
Section Modulus:	93.11 in3	94.92 in3
Area (Shear):	17.78 in2	50.63 in2
Moment of Inertia (deflection):	268.57 in4	533.94 in4
Moment:	8722 ft-lb	8892 ft-lb
Shear:	-2454 lb	6986 lb

**LOADING DIAGRAM**



**ROOF LOADING**

	Side 1	Side 2
Roof Live Load	RLL = 30 psf	30 psf
Roof Dead Load	RDL = 20 psf	20 psf
Roof Tributary Width	RTW = 2 ft	1 ft

**FLOOR LOADING**

	Side 1	Side 2
Floor Live Load	FLL = 0 psf	40 psf
Floor Dead Load	FDL = 0 psf	15 psf
Floor Tributary Width	FTW = 0 ft	1 ft

Wall Load WALL = 100 plf

**BEAM LOADING**

Roof Uniform Live Load:	wL-roof = 90 plf
Roof Uniform Dead Load:	wD-roof = 63 plf
Floor Uniform Live Load:	wL-floor = 40 plf
Floor Uniform Dead Load:	wD-floor = 15 plf
Beam Self Weight:	BSW = 11 plf
Combined Uniform Live Load:	wL = 130 plf
Combined Uniform Dead Load:	wD = 189 plf
Combined Uniform Total Load:	wT = 319 plf

**POINT LOADS - CENTER SPAN**

Load Number	One	Two
Live Load	150 lb	150 lb
Dead Load	125 lb	125 lb
Location	4.66 ft	9 ft

Project: Birch\_Beaudry\_Rourke\_Lot 12\_6309\_Vertical Calculations

Location: Beam Nr. 06 - Upper Level Floor Beam at Dormer over Garage  
 Multi-Loaded Multi-Span Beam  
 Multi-Loaded Multi-Span Beam [2021 International Building Code(2018 NDS)]  
 3.5 IN x 11.25 IN x 3.5 FT  
 #2 - Douglas-Fir-Larch (North) - Dry Use  
 Section Adequate By: 118.3%  
 Controlling Factor: Shear

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<b>DEFLECTIONS</b>		Center
Live Load	0.00	IN L/MAX
Dead Load	0.00	in
Total Load	0.01	IN L/5513
Live Load Deflection Criteria: L/360		Total Load Deflection Criteria: L/240

<b>REACTIONS</b>		A	B
Live Load	972 lb	885 lb	
Dead Load	1192 lb	998 lb	
Total Load	2164 lb	1883 lb	
Bearing Length	0.99 in	0.86 in	

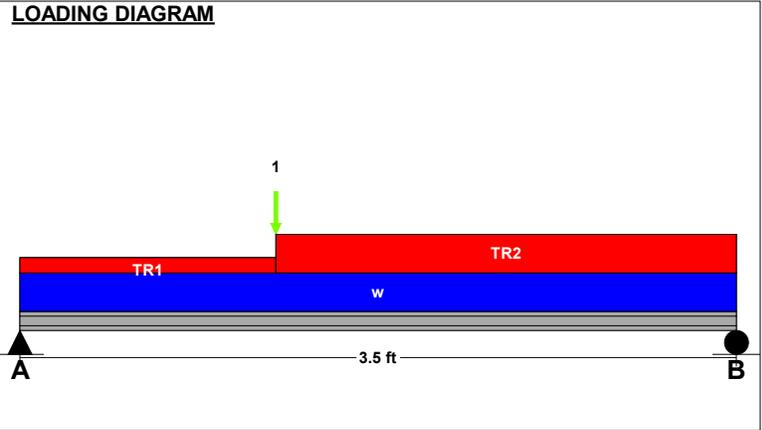
<b>BEAM DATA</b>		Center
Span Length	3.5	ft
Unbraced Length-Top	0	ft
Unbraced Length-Bottom	3.5	ft
Live Load Duration Factor	1.00	
Notch Depth	0.00	

<b>MATERIAL PROPERTIES</b>			
#2 - Douglas-Fir-Larch (North)			
	Base Values		Adjusted
Bending Stress:	Fb =	850 psi	Fb' = 935 psi
	Cd=1.00 CF=1.10		
Shear Stress:	Fv =	180 psi	Fv' = 180 psi
	Cd=1.00		
Modulus of Elasticity:	E =	1600 ksi	E' = 1600 ksi
Comp. $\perp$ to Grain:	Fc - $\perp$ =	625 psi	Fc - $\perp$ ' = 625 psi

**Controlling Moment:** 2616 ft-lb  
 1.26 Ft from left support of span 2 (Center Span)  
 Created by combining all dead loads and live loads on span(s) 2

**Controlling Shear:** 2164 lb  
 At left support of span 2 (Center Span)  
 Created by combining all dead loads and live loads on span(s) 2

Comparisons with required sections:	Req'd	Provided
Section Modulus:	33.57 in <sup>3</sup>	73.83 in <sup>3</sup>
Area (Shear):	18.03 in <sup>2</sup>	39.38 in <sup>2</sup>
Moment of Inertia (deflection):	18.08 in <sup>4</sup>	415.28 in <sup>4</sup>
Moment:	2616 ft-lb	5752 ft-lb
Shear:	2164 lb	4725 lb



<b>UNIFORM LOADS</b>		Center
Uniform Live Load	30	plf
Uniform Dead Load	20	plf
Beam Self Weight	8	plf
Total Uniform Load	58	plf

<b>POINT LOADS - CENTER SPAN</b>	
Load Number	One
Live Load	1050 lb
Dead Load	1425 lb
Location	1.25 ft

<b>TRAPEZOIDAL LOADS - CENTER SPAN</b>		
Load Number	One	Two
Left Live Load	30 plf	295 plf
Left Dead Load	20 plf	285 plf
Right Live Load	30 plf	295 plf
Right Dead Load	20 plf	285 plf
Load Start	0 ft	1.25 ft
Load End	1.25 ft	3.5 ft
Load Length	1.25 ft	2.25 ft

Project: Birch\_Beaudry\_Rourke\_Lot 12\_6309\_Vertical Calculations

Location: Beam Nr. 07 - Garage Door Header  
 Multi-Loaded Multi-Span Beam  
 Multi-Loaded Multi-Span Beam [2021 International Building Code(2018 NDS)]  
 3.5 IN x 13.5 IN x 16.5 FT  
 24F-V4 - Visually Graded Western Species - Dry Use  
 Section Adequate By: 76.4%  
 Controlling Factor: Moment

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<b>DEFLECTIONS</b>		Center
Live Load	0.25	IN L/794
Dead Load	0.19	in
Total Load	0.44	IN L/452
Live Load Deflection Criteria: L/360		Total Load Deflection Criteria: L/240

<b>REACTIONS</b>		
	A	B
Live Load	1918 lb	1263 lb
Dead Load	1682 lb	793 lb
Total Load	3600 lb	2056 lb
Bearing Length	1.58 in	0.90 in

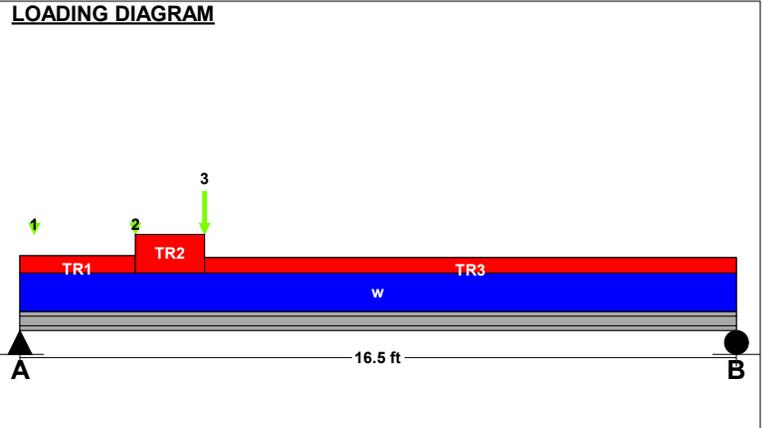
<b>BEAM DATA</b>		Center
Span Length	16.5	ft
Unbraced Length-Top	0	ft
Unbraced Length-Bottom	16.5	ft
Live Load Duration Factor	1.00	
Camber Adj. Factor	1	
Camber Required	0.19	
Notch Depth	0.00	

<b>MATERIAL PROPERTIES</b>			
24F-V4 - Visually Graded Western Species			
	Base Values	Adjusted	
Bending Stress:	Fb =	2400 psi	Controlled by:
	Fb_cmpr =	1850 psi	Fb' = 2400 psi
	Cd=	1.00	
Shear Stress:	Fv =	265 psi	Fv' = 265 psi
	Cd=	1.00	
	Modulus of Elasticity:	E =	1800 ksi
Comp. ⊥ to Grain:	Fc - ⊥ =	650 psi	Fc - ⊥' = 650 psi

**Controlling Moment:** 12054 ft-lb  
 4.79 Ft from left support of span 2 (Center Span)  
 Created by combining all dead loads and live loads on span(s) 2

**Controlling Shear:** 3601 lb  
 At left support of span 2 (Center Span)  
 Created by combining all dead loads and live loads on span(s) 2

Comparisons with required sections:	Req'd	Provided
Section Modulus:	60.27 in3	106.31 in3
Area (Shear):	20.38 in2	47.25 in2
Moment of Inertia (deflection):	381.28 in4	717.61 in4
Moment:	12054 ft-lb	21263 ft-lb
Shear:	3601 lb	8348 lb



<b>UNIFORM LOADS</b>		Center
Uniform Live Load	80	plf
Uniform Dead Load	30	plf
Beam Self Weight	10	plf
Total Uniform Load	120	plf

<b>POINT LOADS - CENTER SPAN</b>			
Load Number	One	Two	Three
Live Load	75 lb	75 lb	900 lb
Dead Load	75 lb	75 lb	1000 lb
Location	0.33 ft	2.66 ft	4.25 ft

<b>TRAPEZOIDAL LOADS - CENTER SPAN</b>			
Load Number	One	Two	Three
Left Live Load	53 plf	113 plf	40 plf
Left Dead Load	75 plf	175 plf	15 plf
Right Live Load	53 plf	113 plf	40 plf
Right Dead Load	75 plf	175 plf	15 plf
Load Start	0 ft	2.66 ft	4.25 ft
Load End	2.66 ft	4.25 ft	16.5 ft
Load Length	2.66 ft	1.59 ft	12.25 ft

Project: Birch\_Beaudry\_Rourke\_Lot 12\_6309\_Vertical Calculations

Location: Beam Nr. 08 - Roof Beam in Front of Garage

Multi-Loaded Multi-Span Beam

Multi-Loaded Multi-Span Beam [2021 International Building Code(2018 NDS)]

5.5 IN x 12.0 IN x 18.66 FT

24F-V4 - Visually Graded Western Species - Dry Use

Section Adequate By: 50.6%

Controlling Factor: Deflection

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**CAUTIONS**

The design dead load deflection exceeds the default maximum of 1/4" on spans (2).

**DEFLECTIONS**

Center

Live Load 0.32 IN L/710

Dead Load 0.30 in

Total Load 0.62 IN L/362

Live Load Deflection Criteria: L/360 Total Load Deflection Criteria: L/240

**REACTIONS**

A

B

Live Load 1913 lb 1157 lb

Dead Load 1810 lb 1052 lb

Total Load 3723 lb 2209 lb

Bearing Length 1.04 in 0.62 in

**BEAM DATA**

Center

Span Length 18.66 ft

Unbraced Length-Top 0 ft

Unbraced Length-Bottom 18.66 ft

Live Load Duration Factor 1.00

Camber Adj. Factor 1

Camber Required 0.3

Notch Depth 0.00

**MATERIAL PROPERTIES**

24F-V4 - Visually Graded Western Species

Base Values

Adjusted

Bending Stress: Fb = 2400 psi Controlled by:

Fb\_cmpr = 1850 psi Fb' = 2400 psi

Cd=1.00

Shear Stress: Fv = 265 psi Fv' = 265 psi

Cd=1.00

Modulus of Elasticity: E = 1800 ksi E' = 1800 ksi

Comp.  $\perp$  to Grain: Fc -  $\perp$  = 650 psi Fc -  $\perp$ ' = 650 psi

**Controlling Moment:** 14839 ft-lb

5.22 Ft from left support of span 2 (Center Span)

Created by combining all dead loads and live loads on span(s) 2

**Controlling Shear:** 3723 lb

At left support of span 2 (Center Span)

Created by combining all dead loads and live loads on span(s) 2

**Comparisons with required sections:**

Req'd

Provided

Section Modulus: 74.19 in3 132 in3

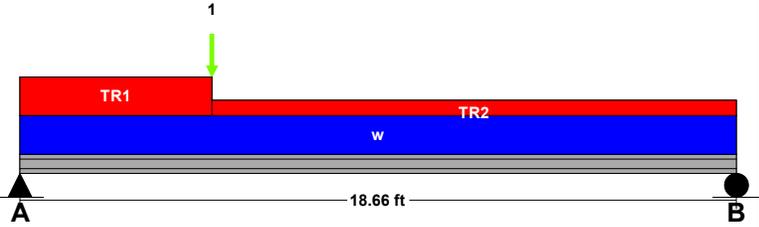
Area (Shear): 21.07 in2 66 in2

Moment of Inertia (deflection): 525.73 in4 792 in4

Moment: 14839 ft-lb 26400 ft-lb

Shear: 3723 lb 11660 lb

**LOADING DIAGRAM**



**UNIFORM LOADS**

Center

Uniform Live Load 60 plf

Uniform Dead Load 40 plf

Beam Self Weight 14 plf

Total Uniform Load 114 plf

**POINT LOADS - CENTER SPAN**

Load Number One

Live Load 975 lb

Dead Load 1200 lb

Location 5 ft

**TRAPEZOIDAL LOADS - CENTER SPAN**

Load Number One Two

Left Live Load 113 plf 30 plf

Left Dead Load 75 plf 20 plf

Right Live Load 113 plf 30 plf

Right Dead Load 75 plf 20 plf

Load Start 0 ft 5 ft

Load End 5 ft 18.66 ft

Load Length 5 ft 13.66 ft

Project: Birch\_Beaudry\_Rourke\_Lot 12\_6309\_Vertical Calculations

Location: Beam Nr. 09 - Front Porch Roof Beam next to Garage

Multi-Loaded Multi-Span Beam

Multi-Loaded Multi-Span Beam [2021 International Building Code(2018 NDS)]

5.5 IN x 11.25 IN x 5.5 FT

#2 - Douglas-Fir-Larch (North) - Dry Use

Section Adequate By: 44.3%

Controlling Factor: Moment

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**DEFLECTIONS**

Center

Live Load 0.02 IN L/3940  
Dead Load 0.01 in  
Total Load 0.03 IN L/2082  
Live Load Deflection Criteria: L/360 Total Load Deflection Criteria: L/240

**REACTIONS**

A B

Live Load 1745 lb 1200 lb  
Dead Load 1544 lb 1033 lb  
Total Load 3289 lb 2233 lb  
Bearing Length 0.96 in 0.65 in

**BEAM DATA**

Center

Span Length 5.5 ft  
Unbraced Length-Top 0 ft  
Unbraced Length-Bottom 5.5 ft  
Live Load Duration Factor 1.00  
Notch Depth 0.00

**MATERIAL PROPERTIES**

#2 - Douglas-Fir-Larch (North)

Base Values Adjusted  
Bending Stress: Fb = 875 psi Fb' = 875 psi  
Cd=1.00 CF=1.00  
Shear Stress: Fv = 170 psi Fv' = 170 psi  
Cd=1.00  
Modulus of Elasticity: E = 1300 ksi E' = 1300 ksi  
Comp. ⊥ to Grain: Fc - ⊥ = 625 psi Fc - ⊥' = 625 psi

**Controlling Moment:**

5860 ft-lb

2.04 Ft from left support of span 2 (Center Span)

Created by combining all dead loads and live loads on span(s) 2

**Controlling Shear:**

3288 lb

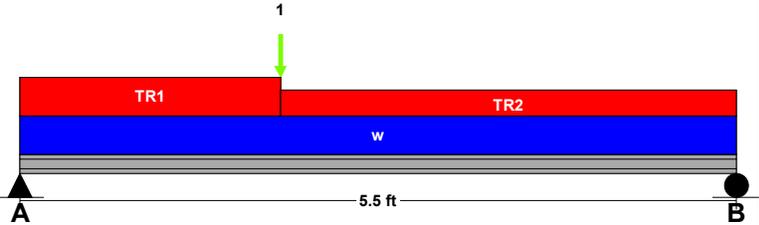
At left support of span 2 (Center Span)

Created by combining all dead loads and live loads on span(s) 2

**Comparisons with required sections:**

Req'd Provided  
Section Modulus: 80.37 in3 116.02 in3  
Area (Shear): 29.02 in2 61.88 in2  
Moment of Inertia (deflection): 75.21 in4 652.59 in4  
Moment: 5860 ft-lb 8459 ft-lb  
Shear: 3288 lb 7013 lb

**LOADING DIAGRAM**



**UNIFORM LOADS**

Center

Uniform Live Load 150 plf  
Uniform Dead Load 100 plf  
Beam Self Weight 13 plf  
Total Uniform Load 263 plf

**POINT LOADS - CENTER SPAN**

Load Number One  
Live Load 1925 lb  
Dead Load 1825 lb  
Location 2 ft

**TRAPEZOIDAL LOADS - CENTER SPAN**

Load Number One Two  
Left Live Load 45 plf 30 plf  
Left Dead Load 30 plf 20 plf  
Right Live Load 45 plf 30 plf  
Right Dead Load 30 plf 20 plf  
Load Start 0 ft 2 ft  
Load End 2 ft 5.5 ft  
Load Length 2 ft 3.5 ft

Location: Beam Nr. 10 - Entry Header  
 Combination Roof And Floor Beam  
 Combination Roof And Floor Beam [2021 International Building Code(2018 NDS)  
 3.5 IN x 11.25 IN x 5.5 FT  
 #2 - Douglas-Fir-Larch - Dry Use  
 Section Adequate By: 37.1%  
 Controlling Factor: Moment

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<b>DEFLECTIONS</b>		Center
Live Load	0.02	IN L/2889
Dead Load	0.02	in
Total Load	0.04	IN L/1577
Live Load Deflection Criteria: L/360		Total Load Deflection Criteria: L/240

<b>REACTIONS</b>		A	B
Live Load	2028 lb	2028 lb	
Dead Load	1688 lb	1688 lb	
Total Load	3716 lb	3716 lb	
Bearing Length	1.70 in	1.70 in	

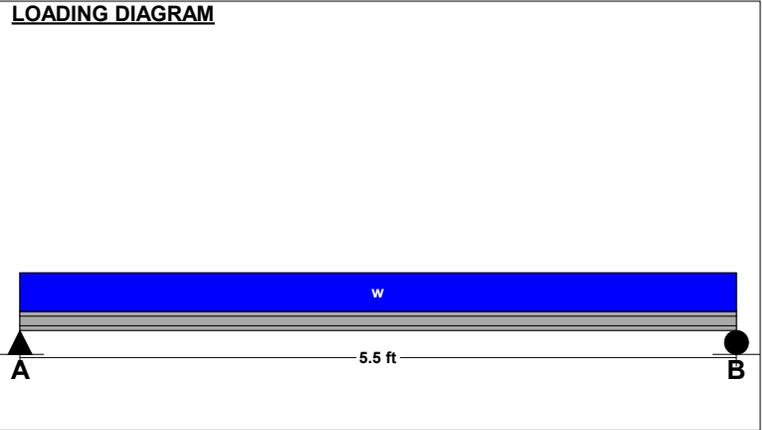
<b>BEAM DATA</b>		Center
Span Length	5.5	ft
Unbraced Length-Top	0	ft
Roof Pitch	4	:12
Floor Duration Factor	1.00	
Roof Duration Factor	1.15	
Notch Depth	0.00	

<b>MATERIAL PROPERTIES</b>			
#2 - Douglas-Fir-Larch			
	Base Values	Adjusted	
Bending Stress:	Fb = 900 psi Cd=1.15 CF=1.10	Fb' = 1139 psi	
Shear Stress:	Fv = 180 psi Cd=1.15	Fv' = 207 psi	
Modulus of Elasticity:	E = 1600 ksi	E' = 1600 ksi	
Comp. ⊥ to Grain:	Fc - ⊥ = 625 psi	Fc - ⊥' = 625 psi	

**Controlling Moment:** 5109 ft-lb  
 2.75 ft from left support  
 Created by combining all dead and live loads.

**Controlling Shear:** -3716 lb  
 At support.  
 Created by combining all dead and live loads.

Comparisons with required sections:	Req'd	Provided
Section Modulus:	53.85 in3	73.83 in3
Area (Shear):	26.93 in2	39.38 in2
Moment of Inertia (deflection):	63.22 in4	415.28 in4
Moment:	5109 ft-lb	7004 ft-lb
Shear:	-3716 lb	5434 lb



<b>ROOF LOADING</b>			
		Side 1	Side 2
Roof Live Load	RLL =	30 psf	30 psf
Roof Dead Load	RDL =	20 psf	20 psf
Roof Tributary Width	RTW =	3.5 ft	19.8 ft

<b>FLOOR LOADING</b>			
		Side 1	Side 2
Floor Live Load	FLL =	0 psf	40 psf
Floor Dead Load	FDL =	0 psf	15 psf
Floor Tributary Width	FTW =	0 ft	1 ft

Wall Load	WALL =	100 plf
-----------	--------	---------

<b>BEAM LOADING</b>			
Roof Uniform Live Load:	wL-roof =	698	plf
Roof Uniform Dead Load:	wD-roof =	490	plf
Floor Uniform Live Load:	wL-floor =	40	plf
Floor Uniform Dead Load:	wD-floor =	15	plf
Beam Self Weight:	BSW =	9	plf
Combined Uniform Live Load:	wL =	738	plf
Combined Uniform Dead Load:	wD =	614	plf
Combined Uniform Total Load:	wT =	1351	plf

Project: Birch\_Beaudry\_Rourke\_Lot 12\_6309\_Vertical Calculations

Location: Beam Nr. 11 - Rear Patio Roof Beam

Roof Beam

Roof Beam [2021 International Building Code(2018 NDS)]

3.5 IN x 12.0 IN x 19.0 FT

24F-V4 - Visually Graded Western Species - Dry Use

Section Adequate By: 35.1%

Controlling Factor: Deflection

Keith A Kudrna  
Suntel Design, Inc.  
PO Box 1358  
Fairview, OR. 97024

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**CAUTIONS**

The design dead load deflection exceeds the default maximum of 1/4" on spans (2).

**DEFLECTIONS**

Center

Live Load 0.53 IN L/428  
Dead Load 0.40 in  
Total Load 0.94 IN L/243  
Live Load Deflection Criteria: L/240 Total Load Deflection Criteria: L/180

**REACTIONS**

A B

Live Load 1568 lb 1568 lb  
Dead Load 1188 lb 1188 lb  
Total Load 2756 lb 2756 lb  
Bearing Length 1.21 in 1.21 in

**BEAM DATA**

Span Length 19 ft  
Unbraced Length-Top 0 ft  
Unbraced Length-Bottom 0 ft  
Roof Pitch 4 :12  
Roof Duration Factor 1.15  
Camber Adj. Factor 1.5  
Camber Required 0.61  
Notch Depth 0.00

**MATERIAL PROPERTIES**

24F-V4 - Visually Graded Western Species

Bending Stress: Fb = 2400 psi *Controlled by:*  
Fb\_cmpr = 1850 psi Fb' = 2760 psi  
Cd=1.15  
Shear Stress: Fv = 265 psi Fv' = 305 psi  
Cd=1.15  
Modulus of Elasticity: E = 1800 ksi E' = 1800 ksi  
Comp. ⊥ to Grain: Fc - ⊥ = 650 psi Fc - ⊥' = 650 psi

**Controlling Moment:** 13089 ft-lb

9.5 ft from left support

Created by combining all dead and live loads.

**Controlling Shear:** 2756 lb

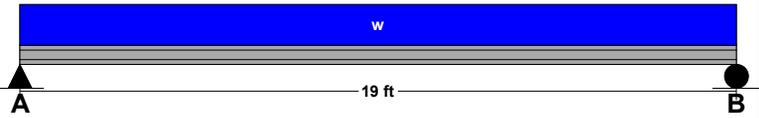
At support.

Created by combining all dead and live loads.

**Comparisons with required sections:**

Section Modulus: Req'd 56.91 in3 Provided 84 in3  
Area (Shear): 13.56 in2 42 in2  
Moment of Inertia (deflection): 372.97 in4 504 in4  
Moment: 13089 ft-lb 19320 ft-lb  
Shear: 2756 lb 8533 lb

**LOADING DIAGRAM**



**ROOF LOADING**

Side One:  
Roof Live Load: LL = 30 psf  
Roof Dead Load: DL = 20 psf  
Tributary Width: TW = 4 ft  
Side Two:  
Roof Live Load: LL = 30 psf  
Roof Dead Load: DL = 20 psf  
Tributary Width: TW = 1.5 ft  
Wall Load: WALL = 0 plf

**SLOPE/PITCH ADJUSTED LENGTHS AND LOADS**

Adjusted Beam Length: Ladj = 19 ft  
Beam Self Weight: BSW = 9 plf  
Beam Uniform Live Load: wL = 165 plf  
Beam Uniform Dead Load: wD\_adj = 125 plf  
Total Uniform Load: wT = 290 plf

Project: Birch\_Beaudry\_Rourke\_Lot 12\_6309\_Vertical Calculations

Location: Beam Nr. 12 - Rear Deck Beam

Uniformly Loaded Floor Beam

Uniformly Loaded Floor Beam [2021 International Building Code(2018 NDS)]

3.5 IN x 11.25 IN x 9.0 FT

#2 - Douglas-Fir-Larch - Wet Use

Section Adequate By: 108.5%

Controlling Factor: Moment

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Suntel Design, Inc.  
PO Box 1358  
Fairview, OR. 97024

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**DEFLECTIONS**

Center

Live Load 0.06 IN L/1823

Dead Load 0.01 in

Total Load 0.07 IN L/1517

Live Load Deflection Criteria: L/360 Total Load Deflection Criteria: L/240

**REACTIONS**

A

B

Live Load 1080 lb 1080 lb

Dead Load 218 lb 218 lb

Total Load 1298 lb 1298 lb

Bearing Length 0.89 in 0.89 in

**BEAM DATA**

Center

Span Length 9 ft

Unbraced Length-Top 0 ft

Floor Duration Factor 1.00

Notch Depth 0.00

**MATERIAL PROPERTIES**

#2 - Douglas-Fir-Larch

Base Values

Adjusted

Bending Stress: Fb = 900 psi Fb' = 990 psi

Cd=1.00 CF=1.10

Shear Stress: Fv = 180 psi Fv' = 175 psi

Cd=1.00 Cm=0.97

Modulus of Elasticity: E = 1600 ksi E' = 1440 ksi

Cm=0.90

Comp. ⊥ to Grain: Fc - ⊥ = 625 psi Fc - ⊥' = 419 psi

Cm=0.67

**Controlling Moment:** 2921 ft-lb

4.5 ft from left support

Created by combining all dead and live loads.

**Controlling Shear:** 1298 lb

At support.

Created by combining all dead and live loads.

**Comparisons with required sections:**

Req'd

Provided

Section Modulus: 35.41 in3 73.83 in3

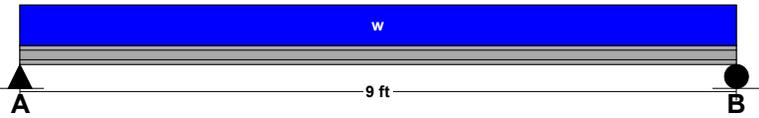
Area (Shear): 11.15 in2 39.38 in2

Moment of Inertia (deflection): 82 in4 415.28 in4

Moment: 2921 ft-lb 6091 ft-lb

Shear: 1298 lb 4583 lb

**LOADING DIAGRAM**



**FLOOR LOADING**

Side 1

Side 2

Floor Live Load FLL = 60 psf 0 psf

Floor Dead Load FDL = 10 psf 0 psf

Floor Tributary Width FTW = 4 ft 0 ft

Wall Load WALL = 0 plf

**BEAM LOADING**

Beam Total Live Load: wL = 240 plf

Beam Total Dead Load: wD = 40 plf

Beam Self Weight: BSW = 9 plf

Total Maximum Load: wT = 289 plf

Project: TYPICAL FOOTINGS

Location: Footing 'B'

Footing

Footing [2021 International Building Code(2018 NDS)]

Footing Size: 3.17 FT x 3.17 FT x 12.00 IN

Reinforcement: #4 Bars @ 7.00 IN. O.C. E/W / (5) min.

Section Footing Design Adequate

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155 B Ave, Suite 105  
Lake Oswego, OR 97034

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**FOOTING PROPERTIES**

Allowable Soil Bearing Pressure:  $Q_s = 1500$  psf  
Concrete Compressive Strength:  $F'_c = 2500$  psi  
Reinforcing Steel Yield Strength:  $F_y = 40000$  psi  
Concrete Reinforcement Cover:  $c = 5$  in

**FOOTING SIZE**

Width:  $W = 3.17$  ft  
Length:  $L = 3.17$  ft  
Depth:  $Depth = 12$  in  
Effective Depth to Top Layer of Steel:  $d = 6.25$  in

**COLUMN AND BASEPLATE SIZE**

Column Type: Steel  
Column Width:  $m = 4$  in  
Column Depth:  $n = 4$  in  
Baseplate Width:  $bsw = 4$  in  
Baseplate Length:  $bsl = 4$  in

**FOOTING CALCULATIONS**

**Bearing Calculations:**

Ultimate Bearing Pressure:  $Q_u = 1244$  psf  
Effective Allowable Soil Bearing Pressure:  $Q_e = 1350$  psf  
Required Footing Area:  $A_{req} = 9.26$  sf  
Area Provided:  $A = 10.05$  sf

**Baseplate Bearing:**

Bearing Required:  $Bear = 17500$  lb  
Allowable Bearing:  $Bear-A = 44200$  lb

**Beam Shear Calculations (One Way Shear):**

Beam Shear:  $V_{u1} = 4955$  lb  
Allowable Beam Shear:  $V_{c1} = 17831$  lb

**Punching Shear Calculations (Two Way Shear):**

Critical Perimeter:  $B_o = 41$  in  
Punching Shear:  $V_{u2} = 16229$  lb  
Allowable Punching Shear (ACI 11-35):  $vc2-a = 57656$  lb  
Allowable Punching Shear (ACI 11-36):  $vc2-b = 77813$  lb  
Allowable Punching Shear (ACI 11-37):  $vc2-c = 38438$  lb  
Controlling Allowable Punching Shear:  $vc2 = 38438$  lb

**Bending Calculations:**

Factored Moment:  $M_u = 66633$  in-lb  
Nominal Moment Strength:  $M_n = 212205$  in-lb

**Reinforcement Calculations:**

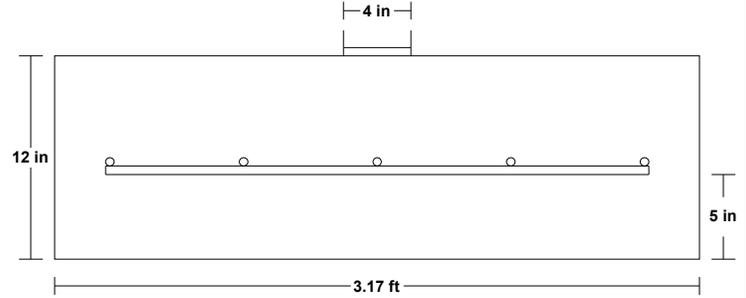
Concrete Compressive Block Depth:  $a = 0.49$  in  
Steel Required Based on Moment:  $A_s(1) = 0.30$  in<sup>2</sup>  
Min. Code Req'd Reinf. Flex. Members (ACI-150.1):  $A_s(2) = 0.91$  in<sup>2</sup>  
Controlling Reinforcing Steel:  $A_{s-reqd} = 0.91$  in<sup>2</sup>  
Selected Reinforcement: #4's @ 7.0 in. o.c. e/w (5) Min.  
Reinforcement Area Provided:  $A_s = 0.98$  in<sup>2</sup>

**Development Length Calculations:**

Development Length Required:  $L_d = 15$  in  
Development Length Supplied:  $L_{d-sup} = 14.02$  in

Note: Plain concrete adequate for bending, therefore adequate development length not required.

**LOADING DIAGRAM**



**FOOTING LOADING**

Live Load:  $PL = 0$  lb  
Dead Load:  $PD = 12500$  lb  
Total Load:  $PT = 12500$  lb  
Ultimate Factored Load:  $P_u = 17500$  lb  
Footing plus soil above footing weight:  $W_t = 971$  lb

**Moisture Content Acknowledgement Form**

I, Corin Beaudry, am the general contractor or the owner-builder at the following address:

1015 NE Park Ct.

Street Address

Newberg

City

Permit#

If applicable:

#12

Subdivision/Lot

and/or

Map and Tax Lot

To conform with the 2014 Oregon Residential Specialty Code (ORSC), Section R318.2, I am notifying the building official that I am aware of the moisture content requirement of ORSC Section R318.2 and have taken steps to meet this code requirement. [Section R318.2 is provided for reference.]

**Section R318.2 Moisture content.** Prior to issuance of the insulation/vapor barrier approval required by R109.1.5.2 of this code:

(A) All moisture-sensitive wood framing members used in construction shall have a moisture content of not more than 19 percent of the weight of dry wood framing members.

(B) The general contractor or the owner who was issued the structural permit shall notify the building official on a division approved form that the contractor or the owner who was issued the structural permit is aware of and has taken steps to meet the requirement in paragraph (A).

Signature

Corin Beaudry

Date

7/17/2024

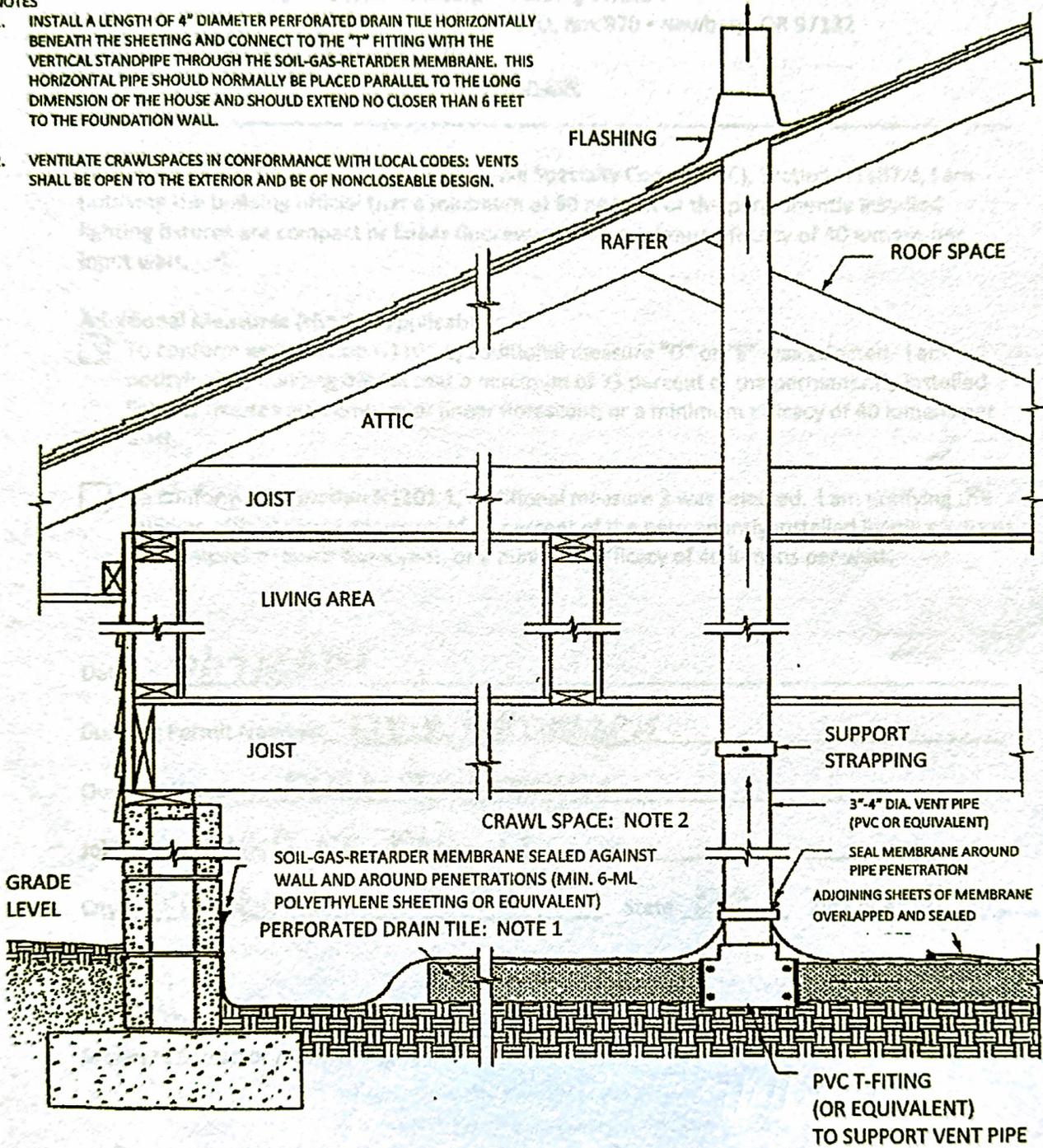
# RADON MITIGATION

PASSIVE RADON CONTROL SYSTEM IN CRAWL SPACE FOR NEW CONSTRUCTION.

EXHAUST (10' FROM OPENINGS INTO CONDITIONED SPACES OF BUILDING) 12" MIN. ABOVE ROOF

**NOTES**

1. INSTALL A LENGTH OF 4" DIAMETER PERFORATED DRAIN TILE HORIZONTALLY BENEATH THE SHEETING AND CONNECT TO THE "T" FITTING WITH THE VERTICAL STANDPIPE THROUGH THE SOIL-GAS-RETARDER MEMBRANE. THIS HORIZONTAL PIPE SHOULD NORMALLY BE PLACED PARALLEL TO THE LONG DIMENSION OF THE HOUSE AND SHOULD EXTEND NO CLOSER THAN 6 FEET TO THE FOUNDATION WALL.
2. VENTILATE CRAWLSPACES IN CONFORMANCE WITH LOCAL CODES: VENTS SHALL BE OPEN TO THE EXTERIOR AND BE OF NONCLOSEABLE DESIGN.



Appendix F: Radon mitigation AF103.4.8  
provide documentation that the ducts conform to performance standards.



## Residential Certificate of Lighting Fixtures

City of Newberg – Building Division  
414 E. First Street • P.O. Box 970 • Newberg, OR 97132  
503-537-1240  
[www.newbergoregon.gov](http://www.newbergoregon.gov)

To conform with the 2014 Oregon Residential Specialty Code (ORSC), Section N1107.2, I am notifying the building official that a minimum of 50 percent of the permanently installed lighting fixtures are compact or linear fluorescent, or a minimum efficacy of 40 lumens per input watt.

### Additional Measures (check if applicable):

- To conform with Section N1101.1, additional measure "D" or "E" was selected. I am notifying the building official that a minimum of 75 percent of the permanently installed lighting fixtures are compact or linear fluorescent, or a minimum efficacy of 40 lumens per watt.
- To conform with Section N1101.1, additional measure 2 was selected. I am notifying the building official that a minimum of 65 percent of the permanently installed lighting fixtures are compact or linear fluorescent, or a minimum efficacy of 40 lumens per watt.

Date: 7/17/2024

Building Permit Number: SCOTT BONTRAGER

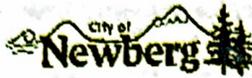
Owner's Name: SCOTT BONTRAGER

Job Address: 1015 NE Ronic Ct.

City: Newberg State: OR Zip Code: 97132

Corin Beaudry  
General Contractor / Owner Signature

Corin Beaudry  
Printed Name



## Residential Energy Additional Measure Selection

City of Newberg – Building Division  
414 E. First Street • P.O. Box 970 • Newberg, OR 97132  
503-537-1240  
[www.newbergoregon.gov](http://www.newbergoregon.gov)

Please select the type of construction

- New Construction.** All conditioned spaces within residential buildings must comply with Table N1101.1(1)  
• Select one numbered and one lettered measure from Table N1101.1(2) on page 2.

**Additions.** Additions to existing buildings or structures may be made without making the entire building or structure comply if the new additions comply with the requirements of this chapter. (N1101.3)

- Large Additions.** Additions that are equal to or more than 40 percent of the existing building heated floor area or 600 square feet (55 m<sup>2</sup>) in area, whichever is less. (N1101.3.1)  
• Select one numbered and one lettered measure from Table N1101.(2) on page 2
- Small Additions.** Additions that are less than 40 percent of the existing building heated floor area or less than 600 square feet in area, whichever is less. (N1101.3.2)  
• Select one measure from Table N1101.1(2) on page 2 or comply with Table N1101.3

- Exception.** Additions that are less than 15 percent of existing building heated floor area or 200 square feet (18.58 m<sup>2</sup>) is area, whichever is less, are not required to comply with Table N1101.1(2) or Table N1101.3.

Selected item number: \_\_\_\_\_ Selected item letter: \_\_\_\_\_  
• Depending on which additional measures you have selected, there may be sub-options to specify. Check the appropriate box if provided.

Date: \_\_\_\_\_

Building Permit Number: \_\_\_\_\_

Owner's Name: \_\_\_\_\_

Job Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Applicant's Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

### TABLE N1101.3 – Small Addition Additional Measures (select one)

- 1 – Increase the ceiling insulation of the existing portion of the home as specified in Table N1101.2.
- 2 – Replace all existing single-pane wood or aluminum windows to be U-value as specified in Table N1101.2.
- 3 – Insulate the floor system as specified in Table N1101.2 and install 50 percent of permanently installed lighting fixtures as CFL or linear fluorescent or minimum efficacy of 40 lumens per watt as specified in Section N1107.2.
- 4 – Test the entire dwelling with blower door and exhibit no more than 7.0 air changes per hour at 50 Pascals.
- 5 – Seal and performance test the duct system.
- 6 – Replace existing 78 percent AFUE or less gas furnace with a 92 percent AFUE or greater system.
- 7 – Replace existing electric radiant space heaters with a ductless mini-split system with a minimum HSPF of 8.5.
- 8 – Replace existing electric forced air furnace with an air source heat pump with a minimum HSPF of 8.5.
- 9 – Replace existing water heater for a natural gas/propane water heater with a minimum EF of 0.67.
- 10 – Install a solar water heating system with a minimum of 40 square feet of gross collector area.

**TABLE N1101.1(2) Additional Measures**

- 1 – High-Efficiency Walls and Windows**  
Exterior walls – U-0.047/R-19+5 (insulation sheathing)/SIPS, and one of the following options:
    - Windows – Max 15 percent of conditioned area, or
    - Windows – U-0.30
  - 2 – High-Efficiency Envelope**  
Exterior walls – U-0.058/R-21 Intermediate framing, and  
Vaulted ceilings – U-0.033/R-30A<sup>a</sup>, and  
Flat ceilings – U-0.25/R-49, and  
Framed Floors – U-0.025/R-38, and  
Windows – U-0.30; and
    - Doors – All doors U-0.20, or
    - Additional 15 percent of permanently installed lighting fixtures as high-efficacy lamps or
    - Conservation measure D and E
  - 3 – High-Efficiency Ceiling, Window and Duct Sealing (cannot be used with conservation measure E)**  
Vaulted ceilings – U-0.033/R-30A<sup>a</sup>, and  
Flat ceiling – U-0.025/R-49, and  
Windows – U-0.30, and performance tested duct systems<sup>b</sup>
  - 4 – High-Efficiency Thermal Envelope UA**  
Proposed UA is 15 percent lower than the Code UA when calculated in Table N1104.1(1)
  - 5 – Building Tightness Testing, Ventilation and Duct Sealing**  
A mechanical exhaust, supply, or combination system providing whole-building ventilation rates specified in Table N1101.1(3), or ASHRAE 62.2, and  
The dwelling must be tested with a blower door and found to exhibit no more than
    - 6.0 air changes per hour<sup>c</sup>, or
    - 5.0 air changes per hour<sup>c</sup> when used with conservation measure E, and performance tested duct systems<sup>b</sup>
  - 6 – Duct Tested HVAC Systems Within Conditioned Space: (cannot be used with conservation measure B or C)**  
All ducts and air handler are contained within building envelope<sup>d</sup>
- 
- A – High-Efficiency HVAC System**
    - Gas-fired furnace or boiler with minimum AFUE of 90 percent a, or
    - Air-source heat pump with minimum HSPF of 8.5 or
    - Closed-loop ground source heat pump with minimum COP of 3.0
  - B – Ducted HVAC Systems Within Conditioned Space**  
All ducts and air handler are contained within building envelope<sup>d</sup>
  - C – Ductless Heat Pump**  
Replace electric resistance heating in at least the primary zone of dwelling with at least one ductless mini-split heat pump having a minimum HSPF of 8.5. Unit must not have integrated backup resistance heat, and the unit (or units, if more than one is installed in the dwelling) must be sized to have capacity to meet the entire dwelling design heat loss rate at outdoor design temperature condition. Conventional electric resistance heating may be provided for any secondary zones in the dwelling. A packaged terminal heat pump (PTHP) with comparable efficiency ratings may be used when no supplemental zonal heaters are installed in the building and integrated backup resistance heat is allowed in a PTHP
  - D – High-Efficiency Water Heating and Lighting**  
Natural gas/propane, on-demand water heating with minimum EF of 0.80, and  
A minimum 75 percent of permanently installed lighting fixtures as CFL or linear fluorescent or a minimum efficacy of 40 lumens per watt as specified in Section N1107.2<sup>e</sup>
  - E – Energy Management Device and Duct Sealing**  
Whole building energy management device that is capable of monitoring or controlling energy consumption, and performance tested duct systems<sup>b</sup>, and A minimum 75 percent of permanently installed fixtures as high efficacy lamps
  - F – Solar Photovoltaic**  
Minimum 1 watt/square foot conditioned floor space<sup>a</sup>
  - G – Solar Water Heating**  
Minimum of 40 ft<sup>2</sup> of gross collector area<sup>a</sup>

For SI: 1 square foot = 0.093 m<sup>2</sup>, 1 watt per square foot = 10.8 W/m<sup>2</sup>.

- a. Furnaces located within the building envelope must have sealed combustion air installed. Combustion air must be ducted directly from the outdoors.
- b. Documentation of performance tested ductwork must be submitted to the building official upon completion of work. This work must be performed by a contractor certified by the Oregon Department of Energy's (ODOE) Residential Energy Tax Credit program and documentation must be provided that work demonstrates conformance to ODOE duct performance standards.
- c. Section N1107.2 requires 50 percent of permanently installed lighting fixtures to contain high efficacy lamps. Each of these additional measures adds an additional percent to the Section N1107.2 requirement.
- d. A = advanced frame construction, which must provide full required ceiling insulation value to the outside of exterior walls.
- e. The maximum vaulted ceiling surface area must not be greater than 50 percent of the total heated space floor area unless vaulted area has a U-factor no greater than U-0.026.
- f. Building tightness test must be conducted with a blower door depressurizing the dwelling 50 Pascal's from ambient conditions. Documentation of blower door test must be submitted to the building official upon completion of work.
- g. Solar electric system size must include documentation indicating that total solar resource fraction is not less than 75 percent.
- h. Solar water heating panels must be solar rating and certification corporation (SRCC) standard OG-300 certified and labeled, with documentation indicating that total solar resource fraction is not less than 75 percent.
- i. A total of 5 percent of an HVAC systems ductwork must be permitted to be located outside of the conditioned space. Ducts located outside the conditioned space must have insulation installed as required in this code.

**Rain Screen  
Acknowledgement Form**

I, Corin Blandy, am the general contractor  
or the owner-builder at the following address:

1015 NE Ronk Ct.  
*Street Address*

Newberg, OR 97132  
*City, State & Zip*

\_\_\_\_\_  
*Permit Number*

#12 and/or \_\_\_\_\_  
*Subdivision/Lot* *Map and Tax Lot*

To conform to the 2008 Oregon Residential specialty Code (ORSC), Section R703.1.1, I am notifying the Building Official that I am aware of the requirement of ORSC Section R703.1.1 and have taken steps to meet this code requirement. [Section R703 is provided for reference.]

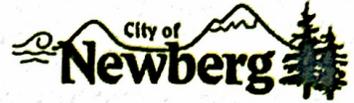
**Section R703.1.1 Exterior Wall Envelope.** To promote building durability, the exterior wall envelope shall be installed in a manner that water that enters the assembly can drain to the exterior. The envelope shall consist of an exterior veneer, a water-resistive barrier as required in R703.2, a minimum 1/8 inch (3 mm) space between the water-resistive barrier and the exterior veneer, and integrated flashings as required in R703.8. The required space shall be formed by the use of any non-corrodible furring strip, drainage mat or drainage board. The envelope shall provide proper integration of flashings with the water-resistive barrier, the space provided and the exterior veneer. These components, in conjunction, shall provide a means of draining in water that enters the assembly to the exterior.

**This form must be completed at "Submittal".**

Corin Blandy  
*Signature*

7/17/2024  
*Date*

# City of Newberg PUBLIC WORKS — ENGINEERING Erosion Control & Sedimentation Permit Application



**DESCRIPTION OF WORK (check one of the following options):**

- Sing Family Residence  Erosion Control (Disturbing under 1 acre)
- 1200CN (Disturbing between 1-5 acres)
- 1200C (Disturbing over 5 acres, DEQ required)

Project Name: \_\_\_\_\_  
 Project Address: \_\_\_\_\_  
 Project Tax Map & Lot Number: \_\_\_\_\_  
 Project Site Size: 5,000 S.F. acres Disturbed Work Area: 2,200 acres  
 Project Site Runoff Drains to (check one):  
 Catch Basin  Ditch  Pipe  Creek  Other: \_\_\_\_\_  
 Project is on (check one):  Private Property  Public Property

PERMIT INFORMATION	
PW Permit No:	_____
Bldg Permit No:	_____
Date Received:	_____
Date Paid:	_____
Receipt:	_____
Date Issued:	_____ By: _____

Property Owner Name: Scott Dontrager  
 Address: 33000 NE Kramien Rd.  
 City/state: Newberg, OR Zip: 97132  
 Phone: 503-899-5910 Email: scott@beaudrycabs.com  
 Signature: \_\_\_\_\_

Applicant Name: Conin Beaudry  
 Address: 11695 NE Kenne Rd.  
 City/state: Newberg, OR Zip: 97132  
 Phone: 771-235-0169 Email: Build@conincustomtimes.com  
 Signature: Conin Beaudry

**FOR STAFF USE ONLY**

General/Excavation Contractor Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City/state: \_\_\_\_\_ Zip: \_\_\_\_\_  
 24hr Phone: \_\_\_\_\_ Email: \_\_\_\_\_  
 CCB#: \_\_\_\_\_  
 Contact name & Title: \_\_\_\_\_

PERMIT FEE: \_\_\_\_\_  
 Application submittal fee: \$ \_\_\_\_\_  
 Additional fees: \$ \_\_\_\_\_  
 Application accepted:  
 By: \_\_\_\_\_ Date: \_\_\_\_\_  
 Application reviewed:  
 By: \_\_\_\_\_ Date: \_\_\_\_\_  
 Applicant notified:  
 By: \_\_\_\_\_ Date: \_\_\_\_\_

**ADDITIONAL INFORMATION**

Meter Size (Circle what applies):

½"  1"  1.5"  2"  3"  4"  6"  8"  10"

Number of backflow devices: 1

Wastewater Lateral Size (Circle what applies): 4"  6"  8"

Wastewater Class (check what applies):

- Residential;
- Multi-residential (BOD or 55 > 1 ½ lbs/100 cf);
- Nonstandard Discharge Strength. All nonresidential users with discharge strengths (ROD or 55) in excess of one and one-half pounds per 100 cubic feet (240 mg/liter) of discharge flow;
- Industrial (BOD or 55 > 1 ½ lbs/100 cf);
- Commercial 1 Discharge Strength (BOD or 55 > 1 ½ lbs/100 cf);
- Commercial 2 Discharge Strength;
- George Fox University; and
- Public agencies.

Corin Beaudry  
Applicant/Authorized Agent's signature

Corin Beaudry  
Print name

7/17/2024  
Date

**NOTE:** Person specified as "Applicant" shall be designated "Permittee" and shall provide financial assurance for work, if required by the city pursuant to Design and Construction Standards.

**\* BY SIGNING ABOVE, THE APPLICANT(S) SHALL CERTIFY THAT:**

- The above request does not violate any recorded deed restrictions that may be attached to or imposed upon the subject property.
- If the application is granted, the applicant will exercise the rights granted in accordance with the terms and subject to all the conditions and limitations of the approval.
- All of the above statements and the statements in any plan, attachments, and exhibits transmitted, are true; and the applicants so acknowledge that any permit issued, based on this application, may be revoked if it is found that any such statements are false.
- The applicant has read the entire contents of the application, including the policies and criteria, and understands the requirements for approving or denying the application.

## ENGINEERING FEES

### Public Improvement Application (PIA):

#### PLAN REVIEW FEE

**Part 1:** Required submittal fee 25% cost of public improvements

#### PERMIT FEE

**Part 2:** 33% cost of public improvements

#### REQUIREMENTS FOR ISSUANCE OF A PERMIT:

1. At the time of submittal of this application, the applicant shall submit a preliminary engineer's estimate.
2. A Public Improvement Development Permit will not be issued without an appropriate ESC Permit or any other required permit.
3. Contractor must be prequalified by the City and acquire a City of Newberg Business License prior to issuance of a Public Improvement Permit.
4. The contractor and any subcontractor shall not commence work until the contractor has obtained all insurance requirements including general liability insurance.
5. Applicant shall deliver to the City assurance such as a bond, bank credit or cash for the purpose of assuring full and faithful completion of all required improvements to existing public facilities within the public right-of-way, easements and of repair work to such public facilities which are damaged as a result of the development. All assurance shall be equivalent to the value of the improvements or repair work.
6. Applicant is to assure that all work performed in the public right-of-way results in the public right-of-way being restored to its original or better condition.

FOR STAFF USE ONLY

## DETAILED SUBMITTAL REQUIREMENTS

### FRANCHISE UTILITY AND SIDEWALK/ DRIVEWAY AND UTILITY CONNECTIONS, ETC. (work in the right of way)

#### Plans

(Including information below)

- Dimensions
- Street Name
- Site Address

### FULL SCALE DEVELOPMENT

(Subdivisions/Partitions and Street Improvements)

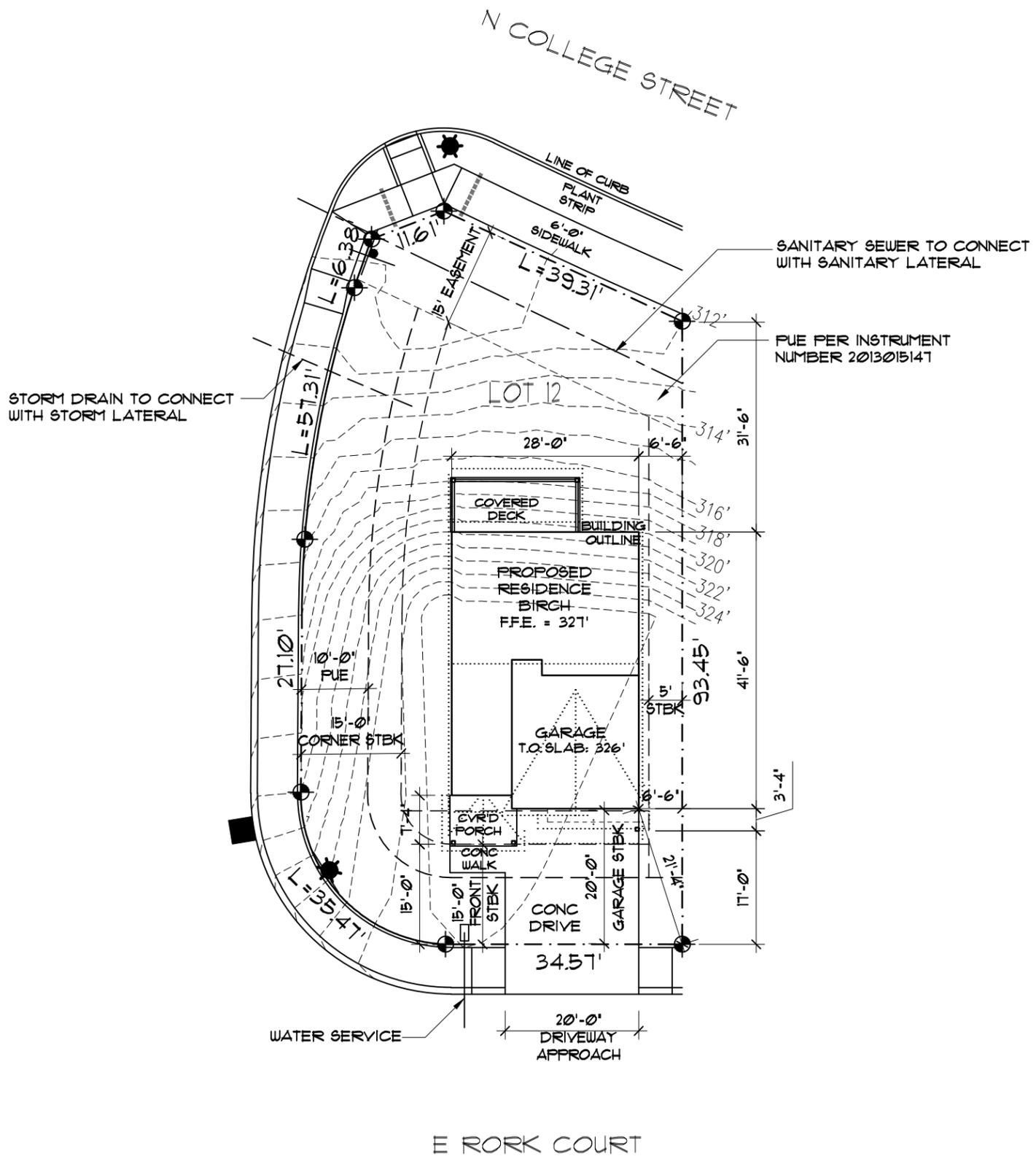
#### Design Plans

(3 sets, 24x36 or 22x34)

- Cover – Site, Vicinity, Abbreviation, Legend
- General Notes (City, Water, Sewer, etc.)
- Street (Plan, Profile)
- Water, Storm and Sanitary (Plan Profile)
- Stormwater Facilities
- Grading
- Landscaping/Tree Plan
- Composite Utility Plan (Electrical, Phone, Gas, Storm, Sanitary, Water, Signage, Street Lights, etc)
- Details
- Sight Distance Certification
- Signing and Striping
- Street Light Plan and Photometric
- Engineers seal/signature

#### Additional Submittals

- Traffic Report
- Storm water Drainage Calculations
- Geotechnical Report
- Preliminary Access Report (Sight Distance)
- Proposed Plat
- Pavement Section Design Report
- Water System Evaluation Report
- Wastewater Conveyance Report



<b>LOT AREA:</b>	<b>5,595 SQ FT</b>
<b>IMPERVIOUS AREA</b>	
DRIVEWAY	395 SQ. FT
COVERED PORCH	68 SQ. FT
COVERED DECK	152 SQ. FT
WALK WAY	31 SQ. FT
<b>TOTAL</b>	<b>652 SQ. FT</b>
BUILDING FOOTPRINT 1,143 SQ. FT (NOT INCLUDING OVERHANGS)	
BUILDING COVERAGE = 32% (MAX BUILDING COVERAGE: 40%)	

**LEGAL DESCRIPTION**  
 LOT 12 - ROURKE DEVELOPMENT  
 RORK COURT  
 NEWBERG, OREGON

SUNTEL DESIGN, INC. IS NOT  
 LIABLE FOR THE ACCURACY OF THE  
 TOPOGRAPHY INFORMATION. IT IS  
 THE SOLE RESPONSIBILITY OF THE  
 BUILDER TO VERIFY ALL SITE  
 CONDITIONS, INCLUDING ANY FILL  
 PLACED ON THE SITE, AND INFORM  
 OWNERS OF ANY POTENTIAL FIELD  
 MODIFICATIONS.



PLAN NAME: BIRCH  
 DATE: 1/2023  
**P**

**Suntel**  
 DESIGN • INC. •  
 155 B Ave, Suite 105, Lake Oswego, Oregon 97034  
 Tel: (503) 624 0555  
 www.suntel-design.com

BEAUDRY CONSTRUCTION      LOT 12, ROURKE DEVELOPMENT

# SITE PLAN

**BIRCH**

SCALE: 1"=20'-0"



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



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

NDWL24-0029 1015 E Rorik Ct Plan - Approved  
Reviewed & Approved for Code Compliance  
bradburyj

NEITHER THE APPROVAL OF PLANS AND SPECIFICATIONS OR THE ISSUANCE OF A  
BUILDING PERMIT SHALL BE CONSTRUED AS PERMISSION OR ENDORSEMENT TO  
VIOLATE THE CITIES ADOPTED BUILDING CODE OR ANY OTHER MUNICIPAL  
ORDINANCE PERMIT ISSUED IN ACCORD WITH THE BUILDING CODE SHALL BE VALID  
ONLY TO THE EXTENT THAT THE WORK OR USE WHICH IS AUTHORIZED IS LAWFUL  
DATE: 08/21/2024 PLANS EXAM: bradburyj

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BEAUDRY CONST. LOT 12 ROURKE DEVELOPMENT  
**BIRCH**  
PLAN NUMBER 80117 1,911 TOTAL SQUARE FEET

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DESIGN INC.  
PO Box 1358, Fairview, Oregon 97024  
Tel: (503) 624 0555  
www.suntecplans.com

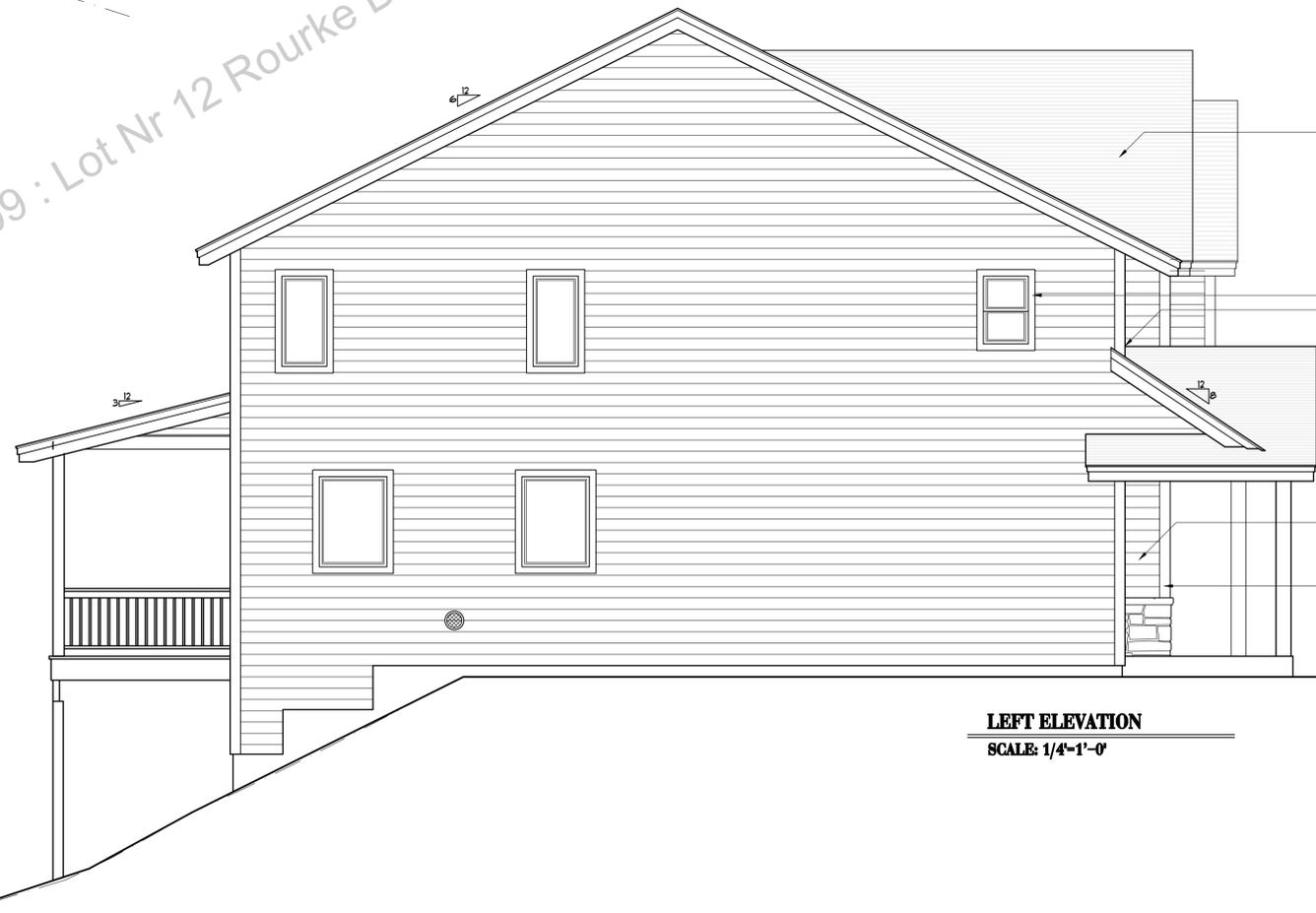
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CONSTRUCTION OF ONE BUILDING ONLY.  
UNAUTHORIZED USE OR COPYING OF THE  
PLANS, OR THE DESIGN THE DEPT, INFRINGES  
RIGHTS UNDER THE COPYRIGHT ACT THAT  
INCLUDE PENALTIES OF UP TO \$100,000 PER  
WORK WILLFULLY INFRINGED. THESE PLANS  
HAVE BEEN PREPARED TO MEET IRC BUILDING  
CODES AND MAY REQUIRE ADAPTATION TO  
MEET SPECIFIC SITE CONDITIONS AND LOCAL  
BUILDING REGULATIONS. IT IS THE  
CONTRACTOR'S SOLE RESPONSIBILITY TO VERIFY  
ALL DIMENSIONS AND DETAILS PRIOR TO  
CONSTRUCTION FOR ERRORS AND OMISSIONS.  
PLEASE SEE YOUR LICENSE AGREEMENT FOR  
FURTHER INFORMATION.

JOB  
NAME: \_\_\_\_\_  
DATE: 041024\_JDM



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

- T.O. RIDGE  
48'-1 5/8"
- TYP. TRUSSED ROOF CONST.  
ARCH COMPOSITION ROOFING  
OVER ONE LAYER 5/8" A.S.F.  
BASE OVER 24/16 APA RATED  
SHEATHING OVER TRUSSES
- T.O. TOP PLATE  
48'-2 1/4"
- T.O. WINDOW R.O.  
46'-9 1/8"
- 5/4x4 WINDOW SURROUND (OPT.)
- 5/4x6 CORNER BOARD, TYP.
- T.O. SUBFLOOR  
40'-1 1/8"
- T.O. TOP PLATE  
49'-1 1/8"
- T.O. WINDOW R.O.  
41'-10 1/2"
- TYP. WALL CONST. (LAP SIDING)  
HARDPLANK LAP SIDING OVER  
TYVEK OR EQUAL BLDG. WRAP  
OVER 1/8" OSB SHEATHING
- T.O. SUBFLOOR  
0'-0"



**LEFT ELEVATION**  
SCALE: 1/4"-1'-0"

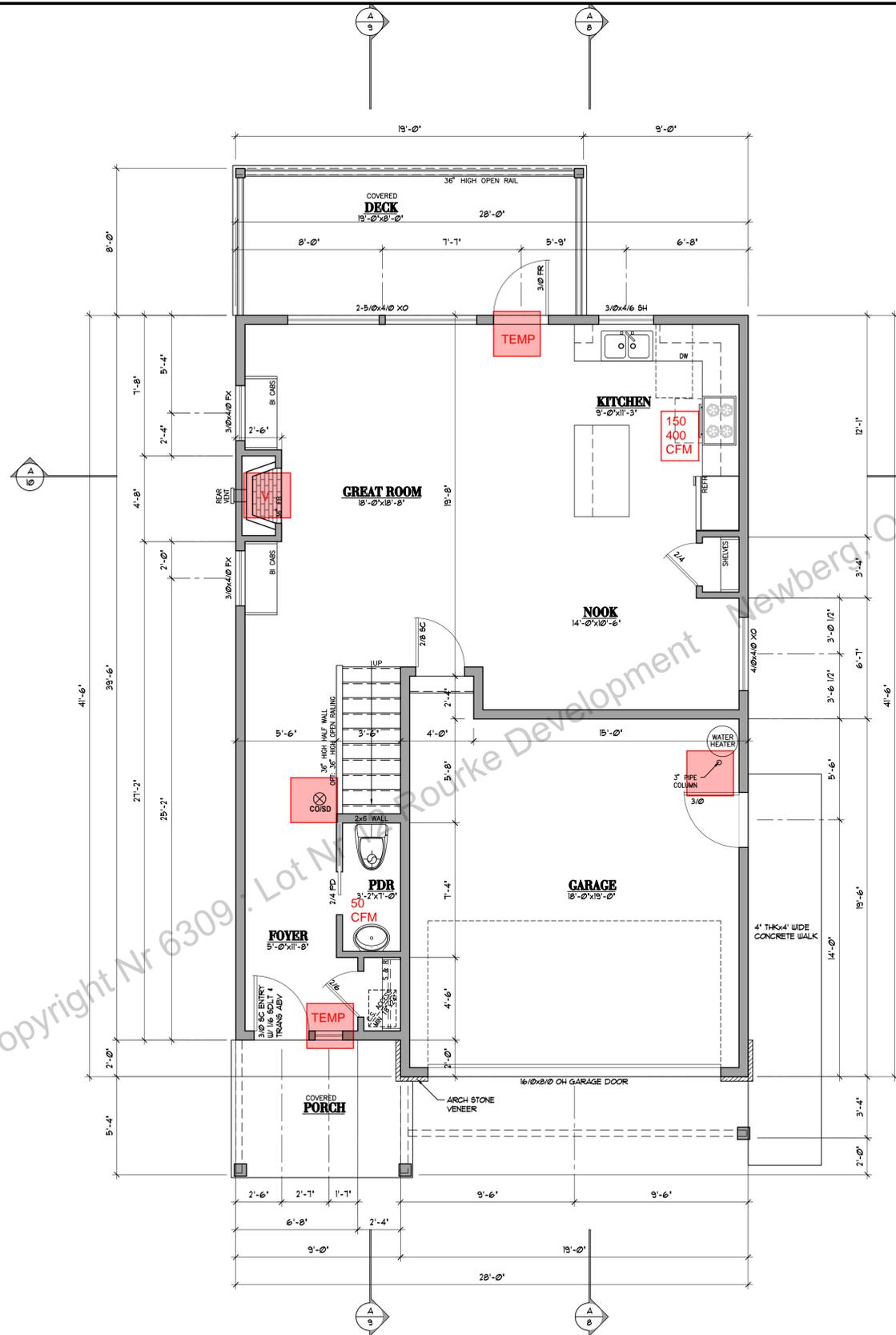
- T.O. RIDGE  
48'-1 5/8"
- T.O. RIDGE  
46'-9 1/4"
- T.O. RIDGE  
44'-6 1/2"
- TYP. TRUSSED ROOF CONST.  
ARCH COMPOSITION ROOFING  
OVER ONE LAYER 5/8" A.S.F.  
BASE OVER 24/16 APA RATED  
SHEATHING OVER TRUSSES
- T.O. TOP PLATE  
48'-2 1/4"
- T.O. WINDOW R.O.  
46'-9 1/8"
- 5/4x4 WINDOW SURROUND (OPT.)  
PROVIDE FLASHING AT ALL  
ROOF TO WALL CONNECTIONS
- T.O. RIDGE  
45'-1 3/4"
- T.O. SUBFLOOR  
40'-1 1/8"
- T.O. TOP PLATE  
49'-1 1/8"
- T.O. WINDOW R.O.  
41'-10 1/2"
- TYP. WALL CONST. (LAP SIDING)  
HARDPLANK LAP SIDING OVER  
TYVEK OR EQUAL BLDG. WRAP  
OVER 1/8" OSB SHEATHING
- 5/4x6 CORNER BOARD, TYP.
- T.O. SUBFLOOR  
0'-0"

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DATE: 041024\_JDM



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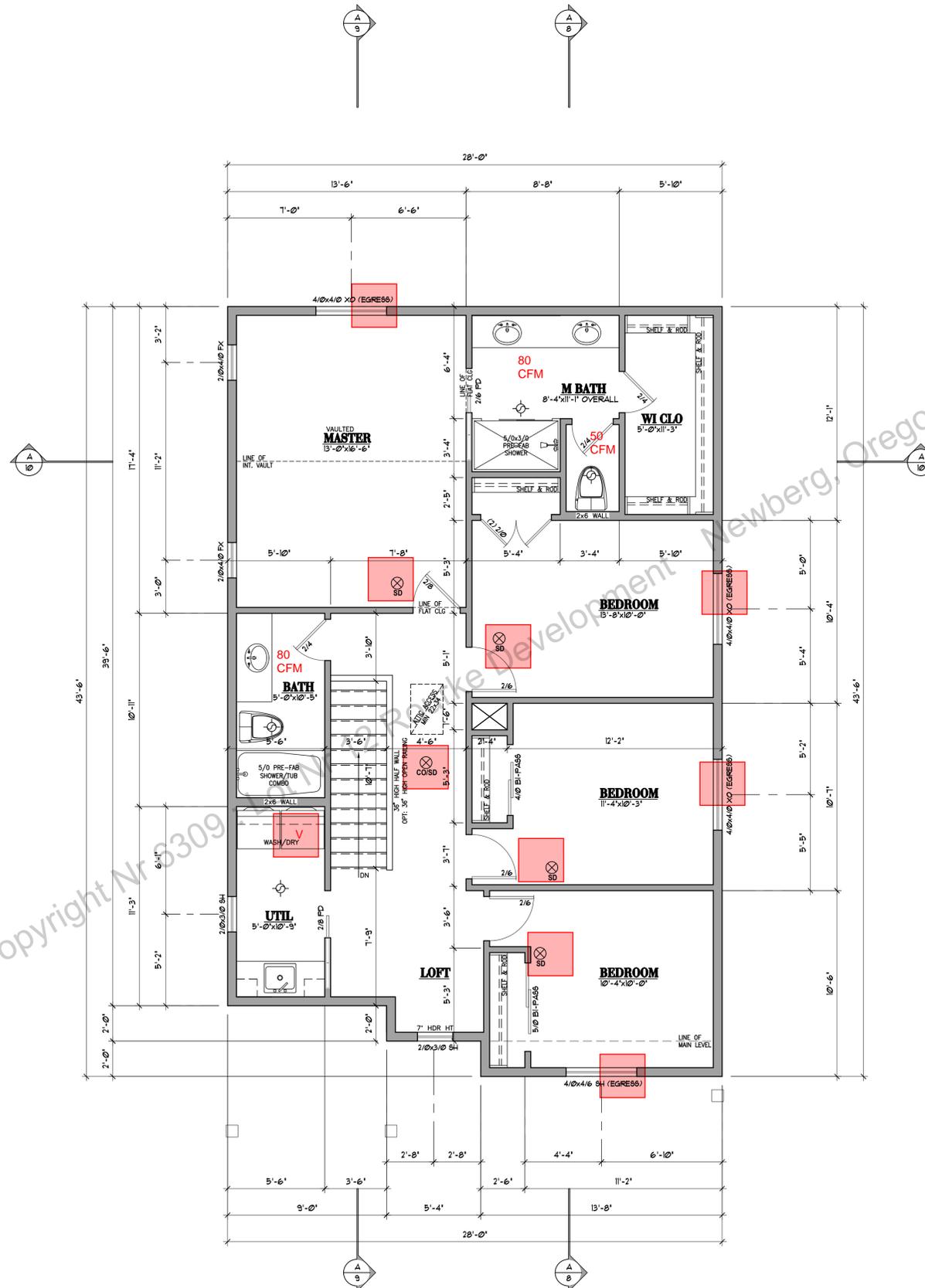
**MAIN LEVEL FLOOR PLAN**  
 SCALE: 1/4"=1'-0" 774 SQ. FT.

BEAUDRY CONST. LOT 12 ROURKE DEVELOPMENT  
**BIRCH**  
 PLAN NUMBER 80117 1,911 TOTAL SQUARE FEET



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JOB NAME: \_\_\_\_\_  
 DATE: 041024\_JDM



**UPPER LEVEL FLOOR PLAN**  
 SCALE: 1/4"=1'-0" 1,187 SQ. FT.

BEAUDRY CONST. LOT 12 ROURKE DEVELOPMENT  
**BIRCH**  
 PLAN NUMBER 80117 1,911 TOTAL SQUARE FEET



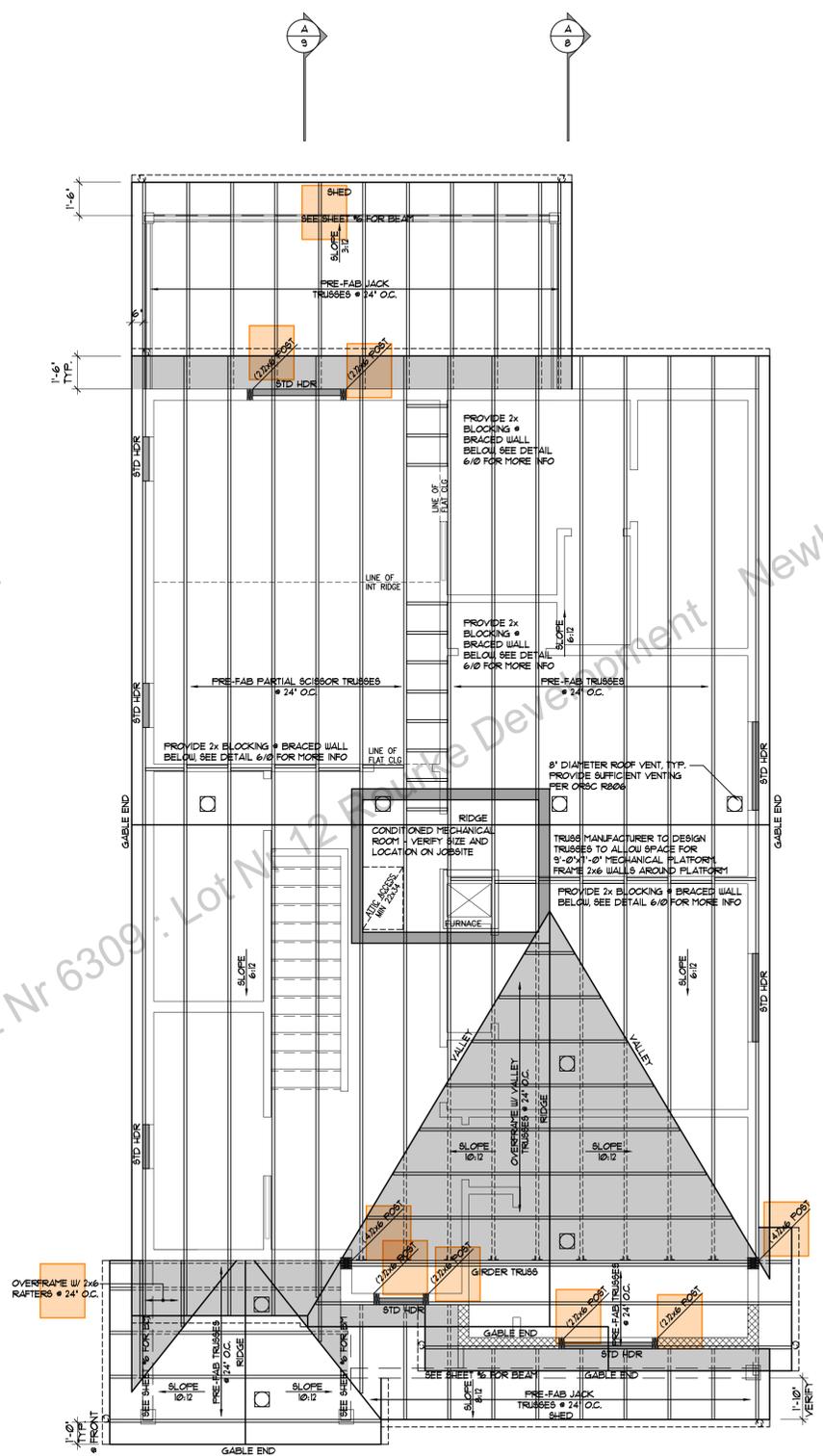
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NOTE:  
 Ⓞ DENOTES CONTINUOUS GUTTER DOWNSPOUT  
 - - - - DENOTES CONTINUOUS GUTTER  
 PROVIDE SUFFICIENT ROOF VENTILATION PER IRC-R806

ROOF VENT REQUIREMENTS  
 TOTAL ROOF AREA 1454 SQ. FT.  
 VENTILATION REQUIRED (1/2 AT EAVE) 476 SQ. FT.  
 1/2 VENTING \* RIDGE / 1/2 AT EAVE 238 SQ. FT. EA  
 8" DIA ROOF VENT 35 SQ. FT. EA  
 VENTILATION PROVIDED (8 x 35) 280 SQ. FT.  
 5"x12" EAVE VENT 45 SQ. FT. EA  
 VENTILATION PROVIDED (6 VENTS x 45) 270 SQ. FT.

TO UTILIZE BOTH RIDGE AND EAVE VENTS IN CALCULATIONS, A CLASS I OR II VAPOR RETARDER IS TO BE INSTALLED ON THE WARM IN WINTER SIDE OF THE CEILING.

**ROOF FRAMING PLAN**  
 SCALE: 1/4"-1'-0"

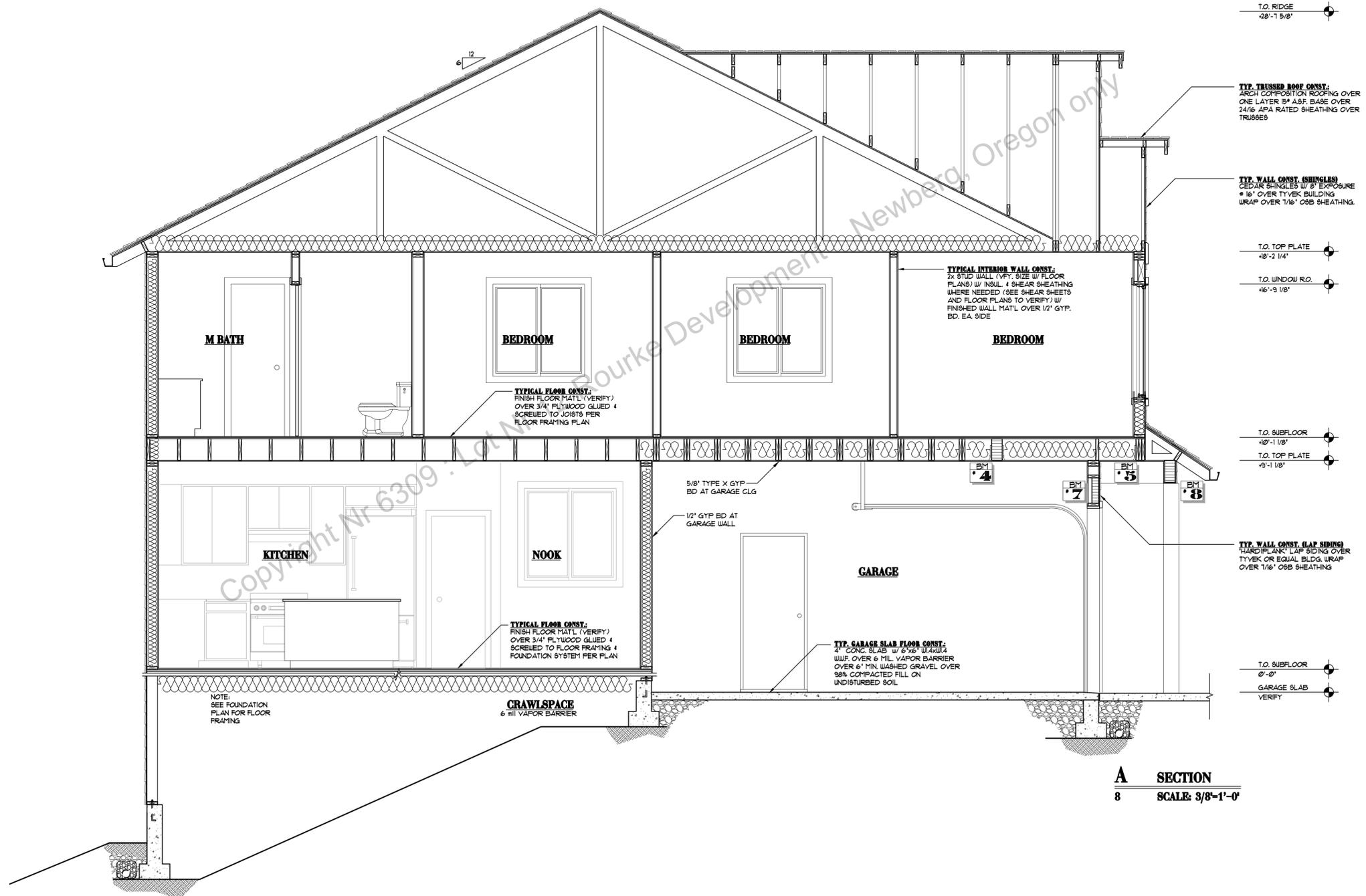
BEAUDRY CONST. LOT 12 ROURKE DEVELOPMENT  
**BIRCH**  
 PLAN NUMBER 80117 1,911 TOTAL SQUARE FEET

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JOB NAME: \_\_\_\_\_  
 DATE: 041024\_JDM





T.O. RIDGE  
+28'-1 5/8"

**TYP. TRUSSED ROOF CONST.:**  
ARCH COMPOSITION ROOFING OVER ONE LAYER 1/4" ASP. BASE OVER 24/16 APA RATED SHEATHING OVER TRUSSES

**TYP. WALL CONST. (SHINGLES)**  
CEDAR SHINGLES 1/2" EXPOSURE # 16' OVER TYVEK BUILDING WRAP OVER 1/2" OSB SHEATHING.

T.O. TOP PLATE  
+18'-2 1/4"

T.O. WINDOW SILL  
+16'-9 1/8"

**TYPICAL INTERIOR WALL CONST.:**  
2x STUD WALL (VERIFY SIZE W/ FLOOR PLANS) W/ INSUL. & SHEAR SHEATHING WHERE NEEDED (SEE SHEAR SHEETS AND FLOOR PLANS TO VERIFY) W/ FINISHED WALL MAT'L OVER 1/2" GYP. BD. EA. SIDE

**TYPICAL FLOOR CONST.:**  
FINISH FLOOR MAT'L (VERIFY) OVER 3/4" PLYWOOD GLUED & SCREWED TO JOISTS PER FLOOR FRAMING PLAN

**TYPICAL FLOOR CONST.:**  
FINISH FLOOR MAT'L (VERIFY) OVER 3/4" PLYWOOD GLUED & SCREWED TO FLOOR FRAMING & FOUNDATION SYSTEM PER PLAN

**TYP. GARAGE SLAB FLOOR CONST.:**  
4" CONC. SLAB W/ 6"x6" W4x4 W/IF. OVER 6" MIN. VAPOR BARRIER OVER 6" MIN. WASHED GRAVEL OVER 8% COMPACTED FILL ON UNDISTURBED SOIL

T.O. SUBFLOOR  
+12'-1 1/8"

T.O. TOP PLATE  
+9'-1 1/8"

**TYP. WALL CONST. (GAP SIDING)**  
HARDIFLANK™ LAP SIDING OVER TYVEK OR EQUAL BLDG. WRAP OVER 1/2" OSB SHEATHING

T.O. SUBFLOOR  
0'-0"

GARAGE SLAB  
VERIFY

**A SECTION**  
8 SCALE: 3/8"=1'-0"

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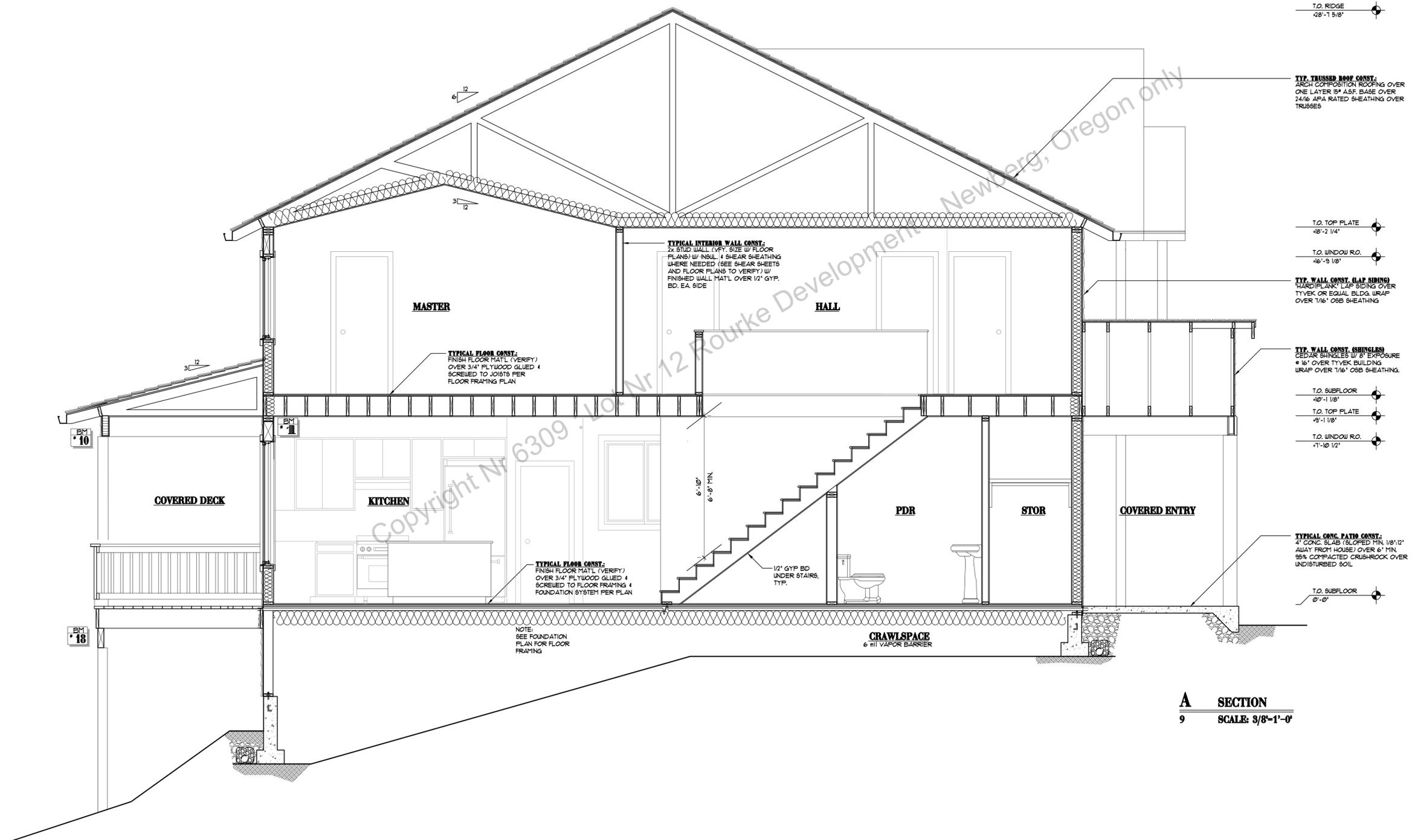
BEAUDRY CONST. LOT 12 ROURKE DEVELOPMENT  
**BIRCH**  
PLAN NUMBER 80117 1,911 TOTAL SQUARE FEET

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JOB NAME: \_\_\_\_\_  
DATE: 041024\_JDM





- T.O. RIDGE  
42'-1 5/8"
- TYP. TRUSSED ROOF CONST.  
ARCH COMPOSITION ROOFING OVER ONE LAYER 5/8" A.S.F. BASE OVER 24/16" APA RATED SHEATHING OVER TRUSSES
- T.O. TOP PLATE  
42'-2 1/4"
- T.O. WINDOW R.O.  
46'-3 1/8"
- TYP. WALL CONST. (CLAP SIDING)  
HARDPLANK LAP SIDING OVER TYVEK OR EQUAL BLDG WRAP OVER 1/16" OSB SHEATHING
- TYP. WALL CONST. (SHINGLES)  
CEDAR SHINGLES W/ 8" EXPOSURE # 16' OVER TYVEK BUILDING WRAP OVER 1/16" OSB SHEATHING
- T.O. SUBFLOOR  
42'-1 1/8"
- T.O. TOP PLATE  
42'-1 1/8"
- T.O. WINDOW R.O.  
41'-10 1/2"
- TYP. CONG. PATIO CONST.  
4" CONG. SLAB (SLOPED MIN. 1/8"12" AWAY FROM HOUSE) OVER 6" MIN. 95% COMPACTED CRUSHROCK OVER UNDISTURBED SOIL
- T.O. SUBFLOOR  
0'-0"

**A** SECTION  
9 SCALE: 3/8"-1'-0"

BEAUDRY CONST. LOT 12 ROURKE DEVELOPMENT  
**BIRCH**  
 PLAN NUMBER 80117 1,911 TOTAL SQUARE FEET

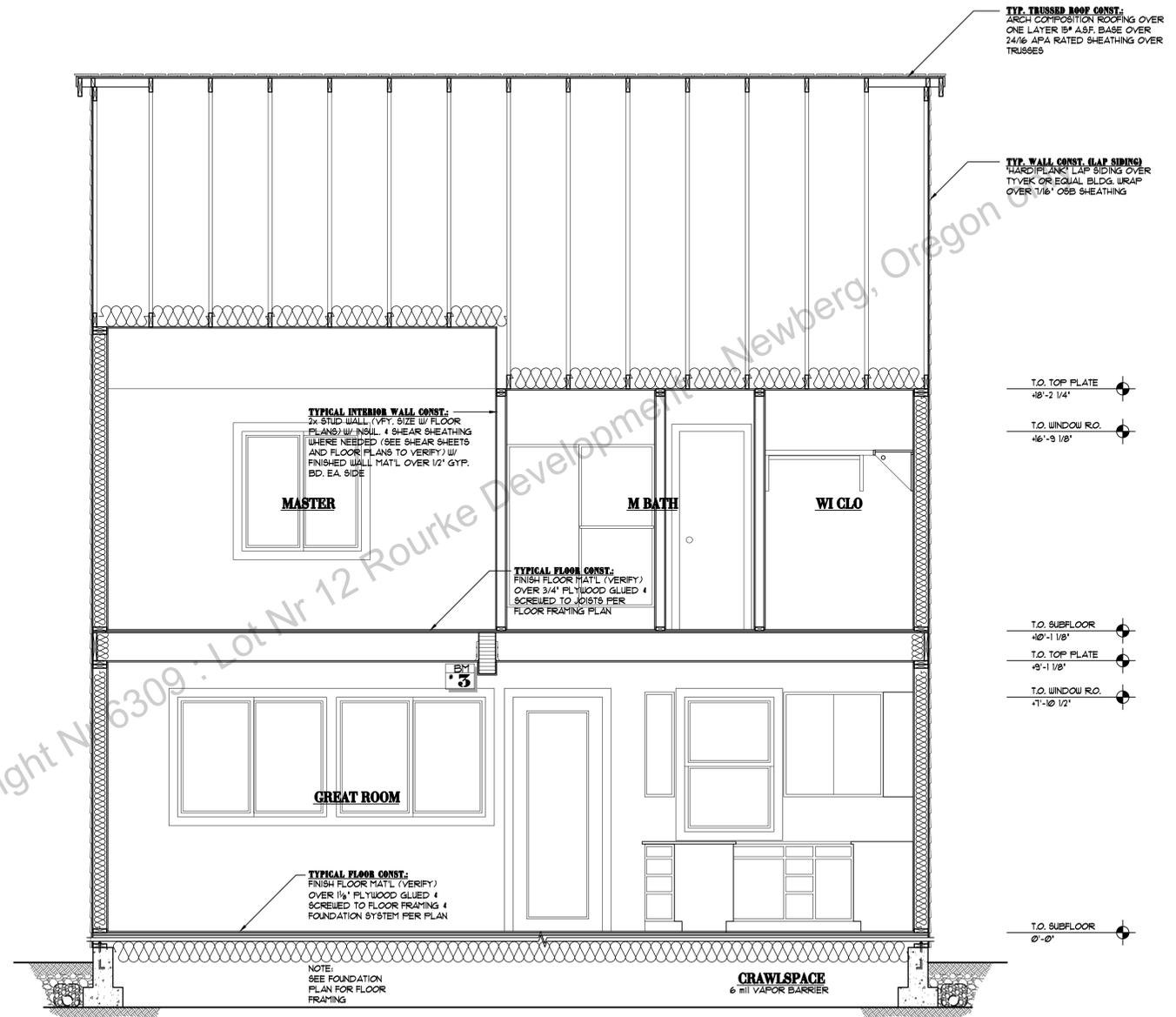
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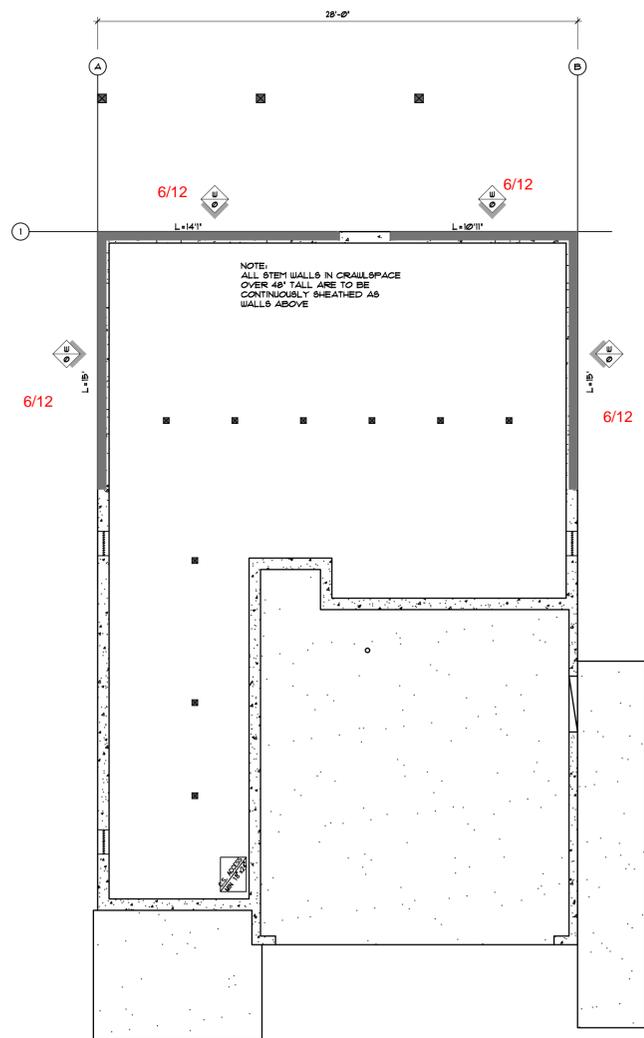
**A SECTION**  
**10 SCALE: 3/8"=1'-0"**

BEAUDRY CONST. LOT 12 ROURKE DEVELOPMENT  
**BIRCH**  
PLAN NUMBER 80117 1,911 TOTAL SQUARE FEET

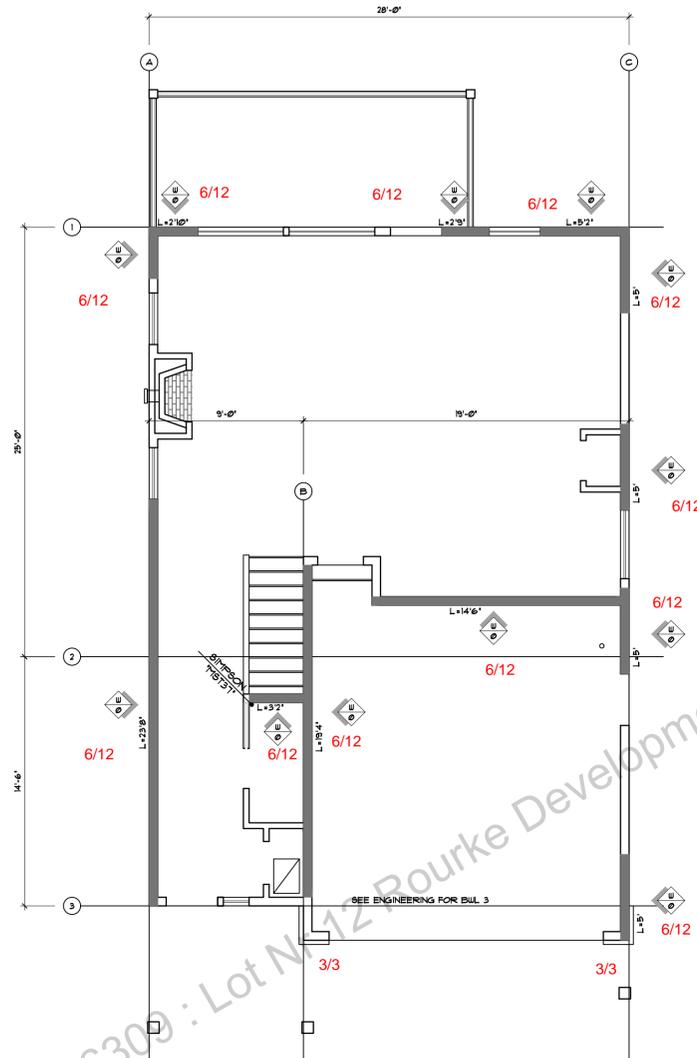
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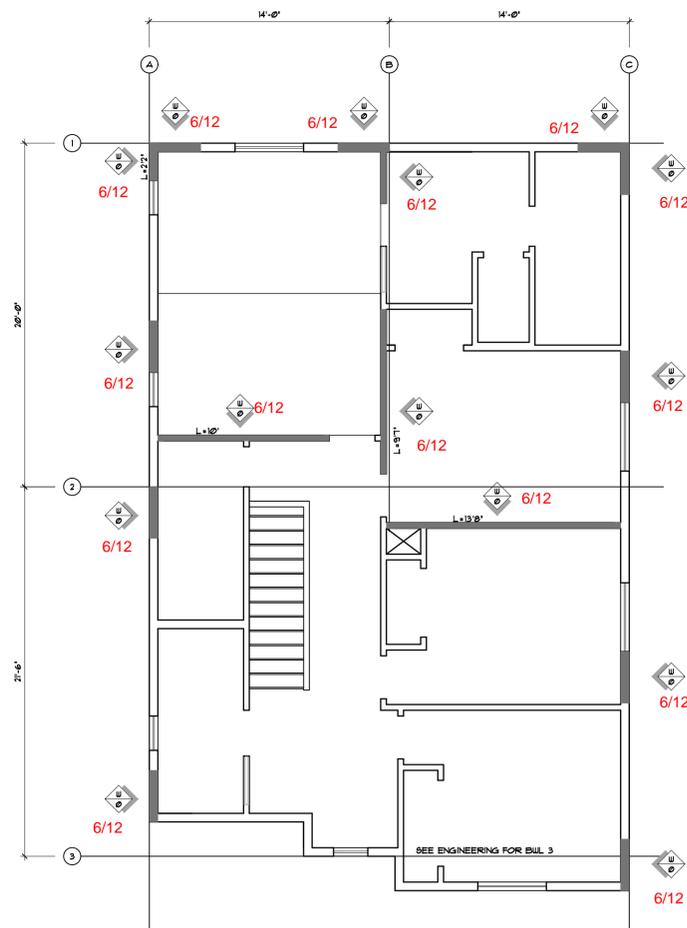
**FOUNDATION SHEAR PLAN**  
SCALE: 3/16"-1'-0"



**MAIN FLOOR SHEAR PLAN**  
SCALE: 3/16"-1'-0"

**LATERAL BRACING NOTES**

1. SEE 'O' SHEET(S) FOR NOTES & DETAILS
2. ALL W/ PANELS TO BE 36' UNO
3. EXTERIOR OF THE HOUSE TO BE SHEATHED W/ MIN 3/8"
3. THE METHOD USED ON THE EXTERIOR WALLS ON THIS PLAN USES WOOD STRUCTURAL PANEL SHEATHING WITH A THICKNESS OF NOT LESS THAN 5/16" FOR STUDS @ 16" O.C. OR NOT LESS THAN 3/8" FOR STUDS AT 24" O.C. THIS PLAN UTILIZES CONTINUOUSLY SHEATHED WALLS. QUALIFYING PANELS ARE TO BE 36' LONG, UNO.
4. C1812 (OR EQUAL) STRAPS AT PI WALLS SHALL EXTEND MIN 3' BEYOND EA. EDGE (TOP & BOTTOM) OF HEADER -- FASTEN W/ (36) 16d
5. THIS PLAN UTILIZES CONTINUOUSLY SHEATHED WALLS. QUALIFYING PANELS ARE TO BE 36' LONG, UNO. ALL WALLS ALONG THE BRACED WALL LINE ARE TO BE SHEATHED IN THIS METHOD. QUALIFYING PANELS ARE SHOWN FOR MIN REQUIRED LENGTHS ONLY.
6. WHERE BRACED WALL LENGTHS ARE GREATER THAN 50'-0", BRACED WALL LINES SHALL BE PERMITTED TO BE DIVIDED INTO SHORTER SEGMENTS 50'-0" OR LESS.



**UPPER FLOOR SHEAR PLAN**  
SCALE: 3/16"-1'-0"



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# GENERAL STRUCTURAL NOTES

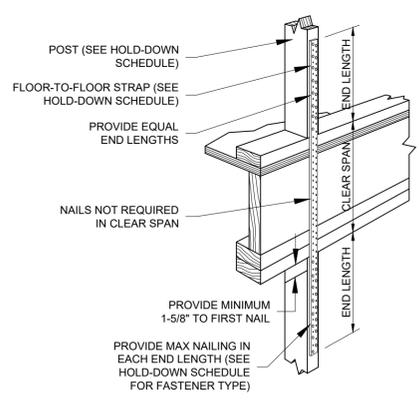
DESIGN CRITERIA Suntel Beaudry Const Birch 6309 (RD12) 5510624

- Building code: Oregon Code
  - Model building code: 2021 IRC
  - Use and occupancy classification: R (Residential - 1-unit dwelling)
  - Risk Category: II (Not occupancy categories I, III, IV)
- Dead loads
  - Roof = 17 psf (7 psf top chord, 10 psf bottom chord)
  - Floor = 12 psf
  - Walls = 10 psf (interior walls), 12 psf (exterior walls)
- Earthquake design data
  - Mapped acceleration parameters
    - Latitude, Longitude: 45.331, -122.968
    - MCE short period  $S_s = 0.86$   $SDS = 0.68$
    - MCE 1.0 sec. period  $S_1 = 0.41$   $SD1 = 0.52$
  - Seismic design category: D1
  - Seismic importance factor,  $I_e = 1$
  - Basic structural system: Bearing wall systems
  - Seismic force-resisting system: Light-frame wood walls (wood sheathing)
    - Response modification factor  $R = 6.5$
    - System overstrength factor  $\Omega = 3$
    - Deflection amplification factor  $C_d = 4$
  - Equivalent Lateral Force Procedure
    - Seismic response coefficient  $C_s = 0.11$
    - Seismic base shear (LRFD)  $V = 6633$  lb
- Wind design data
  - Exposure category: C
  - Basic design wind speed,  $V = 97$  mph
  - Comp. & clad. pressure = 27 psf (end), 23 psf (interior), 37 psf (eave), 33 psf (roof)
  - Internal pressure coeff.,  $C_{pi} = 0.18$
- Geotechnical design basis:
  - Presumptive values, 2018 IBC Table 1806.2
  - Site class = D-Default

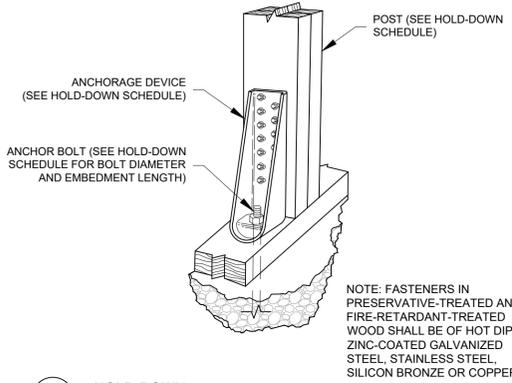
## WOOD

- Wood materials, quality, and construction shall conform to 2021 IBC Chapter 23 and Table 2304.10.
  - Structural lumber (2021 IBC 2303.1.1-9, 2021 NDS)
    - Bearing walls: Douglas-Fir Larch (DF) Stud (ASTM D1990, DOC PS 20)
    - Posts: Douglas-Fir Larch (DF) Stud (ASTM D1990, DOC PS 20)
    - Sill plates: Preservative-treated wood, redwood (AWPA U1 M4)
  - Wood structural panels (2021 IBC 2303.8, 2021 NDS 9.1.3)
    - Wall sheathing: oriented strand board (OSB) (DOC PS 1.2).
    - Sheathing shall be manufactured with exterior glue and not less than 4X8 feet, except at boundaries and at changes in framing (2021 IBC 2305.1, AWC SDPWS-2015).
    - All panel joints in walls shall occur over studs or blocking using a minimum of 8d common nails spaced a maximum of 6 inches at panel edges and 12 inches at intermediate framing (2021 IBC 2306.3).
  - Fasteners
    - Nails (2021 IBC 2303.6, 2021 NDS Table L4) (ASTM F1667)
 

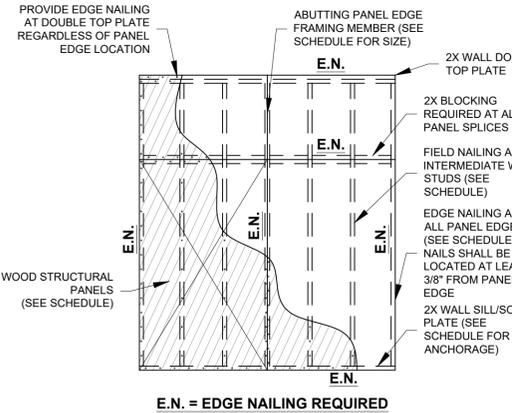
4.1.1.	8d	=	0.131" X 2.5"	0.113" X 2.5"	0.113" X 2.375"
4.1.2.	10d	=	0.148" X 3.0"	0.128" X 3.0"	0.120" X 2.875"
4.1.3.	16d	=	0.162" X 3.5"	0.135" X 3.5"	0.148" X 3.250"
    - Staples (2021 IBC 2303.6)
      - 16 gage = 1.5X0.4375 inch crown (ASTM F1667)
    - Bolts (2021 NDS 12.1.3, Table L1)
      - Anchor bolts (A307) with a 3X3X0.229 inch washer (2021 IBC 2308.3.1) and 7" min embedment.
    - Fasteners in preservative-treated and fire-retardant-treated wood shall be of hot dipped zinc-coated galvanized steel, silicon bronze or copper (2021 IBC 2304.10.5).
    - Sheathing fasteners shall be driven so the head or crown is flush with the sheathing surface (2021 IBC 2304.10.2).
  - Wall construction (2021 IBC 2308.5)
    - Studs shall be placed with their wide dimension perpendicular to the wall. Not less than three studs shall be installed at each corner of an exterior wall (2021 IBC 2308.5.2).
    - In exterior walls and bearing partitions, a wood stud shall not be cut or notched in excess of 25 percent of its depth. In nonbearing partitions, a stud shall not be cut or notched in excess of 40 percent of its depth (2021 IBC 2308.5.9).
    - The diameter of bored holes in wood studs shall not exceed 40 percent of the stud depth. The edge of the bored hole shall not be closer than 0.626 inches to the edge of the stud. Bored holes shall not be located at the same section of stud as a cut or notch (2021 IBC 2308.5.10).



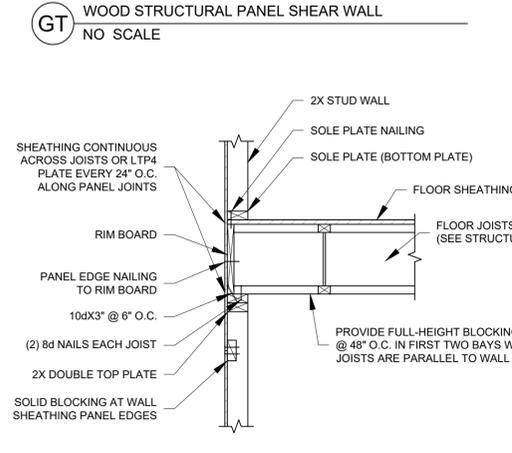
**H** HOLD-DOWN - FLOOR STRAP  
NO SCALE



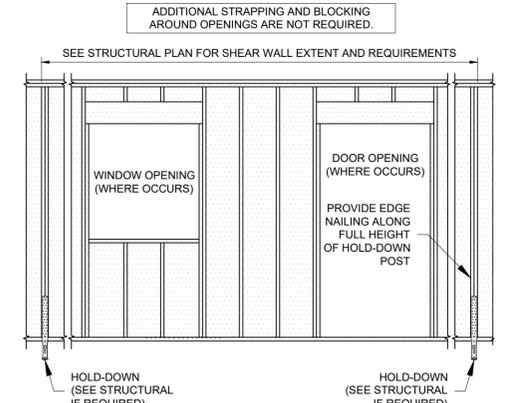
**BL** HOLD-DOWN  
NO SCALE



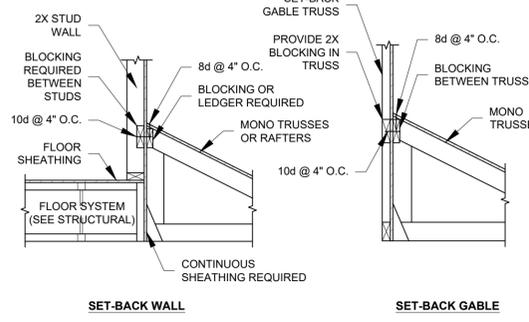
**EL** SHEAR WALL - DIAPHRAGM CONNECTION (JOISTS / RAFTERS)  
NO SCALE



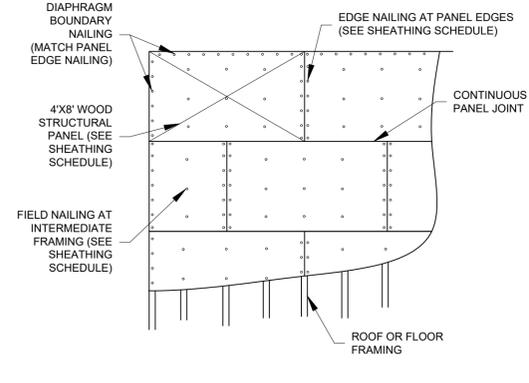
**ZD** BEARING WALL - EXTERIOR TO FLOOR (150 PLF UNIT SHEAR)  
NO SCALE



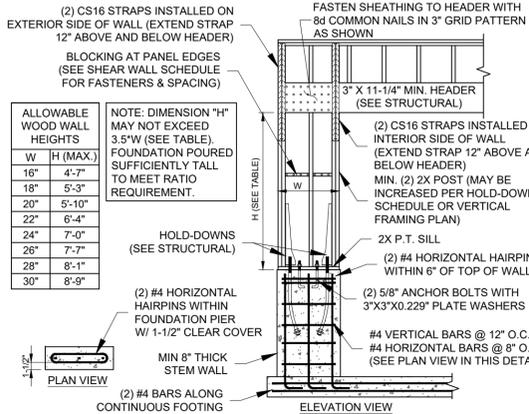
**Y** SHEAR WALL - PERFORATED  
NO SCALE



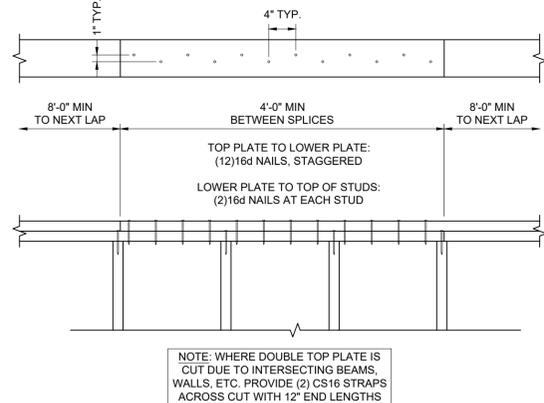
**CI** SHEAR TRANSFER - SET-BACK WALL/GABLE - LOWER ROOF  
NO SCALE



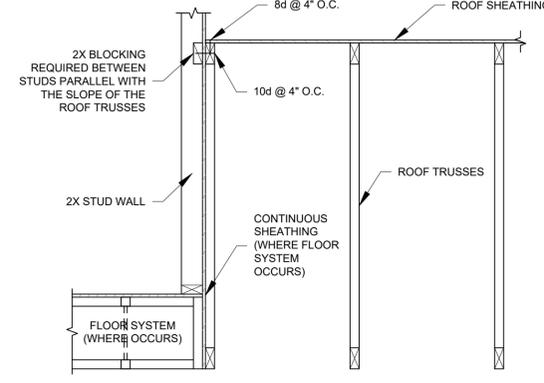
**GU** WOOD STRUCTURAL PANEL DIAPHRAGM - UNBLOCKED  
NO SCALE



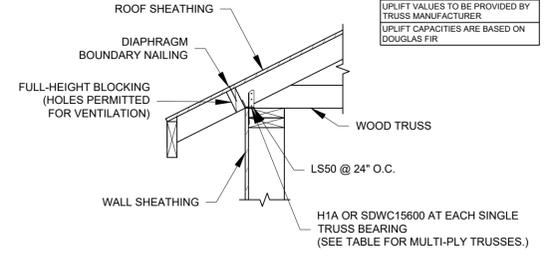
**ZH** GARAGE SHEAR WALL W/ TALLER FOUNDATION PIER  
NO SCALE



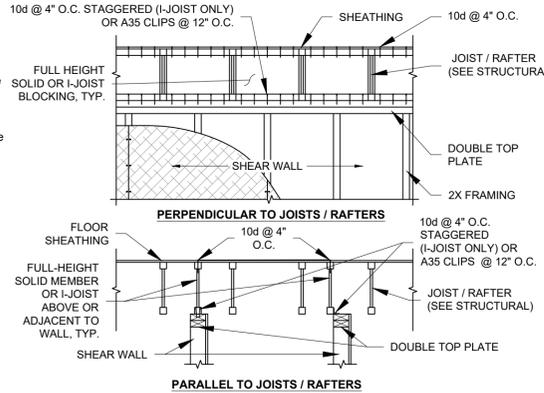
**AP** DIAPHRAGM - TOP PLATE SPLICE  
NO SCALE



**CT** SHEAR WALL - DIAPHRAGM TRANSFER (TRUSS PARALLEL)  
NO SCALE



**ZB** ROOF TRUSSES - BLOCKING  
NO SCALE



**ZC** ROOF TRUSS - WOOD WALL GABLE END BRACING  
NO SCALE

- ## GENERAL
- Construction documents are valid for a single use at the project location and shall not be reused, copied, or reproduced without written approval of the registered design professional in responsible charge.
  - General notes and typical details are provided as a supplement to the construction documents and apply where specific notes and details are not available. Specific notes and structural details shall take precedence over general notes and typical details. Structural requirements shown in the structural plans and in structural details shall take precedence over structural notes indicated in architectural sections.
  - Printed dimensions shall take precedence over scales shown on construction documents. The registered design professional in responsible charge does not warrant the accuracy of scaled dimensions.
  - Approval by the inspector does not imply approval by the registered design professional in responsible charge. Structural specifications that are unclear or ambiguous shall be referred to the registered design professional in responsible charge or interpretation or clarification.
  - The registered design professional in responsible charge assumes no liability for the accuracy, completeness, or code compliance of architectural, electrical, mechanical, drainage, or other non-structural specifications.
  - Omissions in and conflicts between the various elements of the construction documents shall be brought to the immediate attention of the registered design professional in responsible charge and shall be resolved by the same before proceeding with any work involved.
  - Requests for substitutions shall be submitted in writing to the registered design professional in responsible charge and shall include the reasons for the request and any cost differentials. Substitutions are not allowed unless approved in writing by the registered design professional in responsible charge.
  - The contractor shall become familiar with all portions of the construction documents and shall ensure that all subcontractors are familiar with those portions pertaining to their area of work. The contractor shall verify all site conditions, dimensions, elevations, coordinate all doors, windows, non-bearing interior and exterior walls, elevations, slopes, stairs, curbs, drains, recesses, depressions, railings, waterproofing, finishes, chamfer, kerfs, and so forth, and immediately notify the registered design professional in responsible charge regarding actual conditions which are not in agreement with the construction documents.
  - The contractor is responsible for the method, means, and sequence of all structural erection except when specifically noted otherwise in the construction documents. The contractor shall provide temporary shoring and bracing, providing adequate vertical and lateral support during erection. Shoring and bracing shall remain in place until all permanent members are placed and all final connections are completed.
  - The contractor is responsible for standard connections, unless noted otherwise. The contractor shall obtain additional assistance from the registered design professional in responsible charge for non-standard connections.

- ## CONCRETE
- Concrete materials, quality control, and construction shall comply with 2021 IBC Chapter 19 and ACI 318-19.
    - Compressive strength (minimum specified at 28 days)
      - Floors: 3,000 psi (2021 IBC 1808.8.1) (2,500 psi used in design)
      - Interior floor slabs on grade: 4,000 psi
      - Exterior floor slabs on grade: 4,000 psi
      - Suspended slabs: 4,000 psi
      - Walls: 3,000 psi (2021 IBC 1904.1) for R-2, R-3 occupancies and appurtenances, 4,000 psi for other occupancies
  - Materials
    - Cements (ASTM C150). Concrete exposed to freezing and thawing or deicing chemicals shall conform to the maximum water-cementitious material ratios and minimum compressive strength requirements of ACI 318-19 table 19.3.1.1 & 19.3.2.1
    - Aggregates (ASTM C33); nominal maximum size of coarse aggregate shall not be larger than 1/5 the narrowest dimension between forms, nor 1/3 the depth of slabs, nor 3/4 the minimum clear spacing between reinforcing bars or wires, tendons, or ducts (ACI 318-19 26.4.2.1).
    - Water used in mixing concrete shall conform to ASTM C1602 (ACI 318-19 26.4.1.4.1).
    - Admixtures shall be subject to prior approval by the registered design professional in responsible charge (ACI 318-19 26.4.1.5.1(b)).
  - Concrete exposed to freezing and thawing or deicing chemicals shall be air-entrained with air content indicated in ACI 318-19 Table 19.3.3.1. Tolerance on air content as delivered shall be plus/minus 1.5 percent (ACI 318-19 R26.4.2.1(a)(6)).
  - Steel Reinforcement
    - Deformed bars:  $f_y = 60$  ksi (ASTM A615)
    - Welded plain wire:  $f_y = 60$  ksi (ASTM A1064)
    - Deformed Bar Anchors (DBA) (ASTM A1064)
    - Headed Stud Anchors (HSA) (ASTM A1018)
  - At the time concrete is placed, reinforcement shall be free from ice, mud, oil, or other deleterious coatings that decrease bond (ACI 318-19 26.6.1.2(d)).
  - Reinforcement shall be accurately placed and adequately supported before concrete is placed, and shall be secured against displacement (ACI 318-19 26.6.2.2).
  - Details of reinforcement shall conform to ACI 318-19 Chapter 25.
  - Minimum concrete cover (ACI 318-19 Table 20.5.1.3.1)
    - Concrete cast against and exposed to earth: 3 inches
    - Concrete exposed to earth or weather:
      - No. 6 through No. 18 bars: 2 inches
      - No. 5 bar, W31 wire, and smaller: 1.5 inches
    - Concrete not exposed to earth or weather:
      - Slabs, walls, joists No. 11 bar and smaller: 0.75 inches
      - Beams, columns primary reinf., ties, stirrups: 1.5 inches

- ## CONCRETE ACCESSORIES
- Epoxy adhesive anchoring systems shall be Simpson Set-3G or approved with equivalent tension and shear values. Epoxy anchors shall be installed in strict conformance with manufacturer's recommendations. Do not cut reinforcing in new or existing concrete during installation.
  - Permanently exposed embedded plates and angles shall be hot-dipped, galvanized after fabrication, unless otherwise noted. No loads or welds shall be placed on embedded plates or angles for a minimum of 7 days after casting.

**ACUTE ENGINEERING, INC.**  
 Phone 801.229.9020  
 Fax 801.224.0050  
 info@acuteengineering.com

THESE STRUCTURAL DRAWINGS ARE BASED ON ARCHITECTURAL DRAWINGS. SEE CURRENT ISSUE OR REVISION DATA.

DIMENSIONS AND ELEVATIONS ARE SUPPLIED BY THE ARCHITECT. THEY MAY BE PROVIDED ON THE STRUCTURAL PLANS AND DETAILS FOR THE CONVENIENCE OF THE CONTRACTOR. VERIFY DIMENSIONS AND ELEVATIONS WITH ARCHITECTURAL DRAWINGS.

ORIGINAL PROJECT #  
5510624  
DATE:  
18 JUN 2024

SUNTEL BEAUDRY CONST BIRCH 6309 (RD12)

GENERAL STRUCTURAL NOTES

MULTI-PLY TRUSS TO TOP PLATE CONNECTION	
TRUSS UPLIFT	TIE-DOWN
<520 LB	(2) H2-SA
<650 LB	SDWC15600 SCREW
<1040 LB	H1GA OR H1GA-2
<1510 LB	(2) HTS16
<1980 LB	(2) MTS12
<2830 LB	(2) HTS16

UPLIFT VALUES TO BE PROVIDED BY TRUSS MANUFACTURER  
 UPLIFT CAPACITIES ARE BASED ON DOUGLAS FIR

REGISTERED PROFESSIONAL ENGINEER  
 92835PE  
 BRANDON TODD DECKER  
 EXP: 12/31/2025

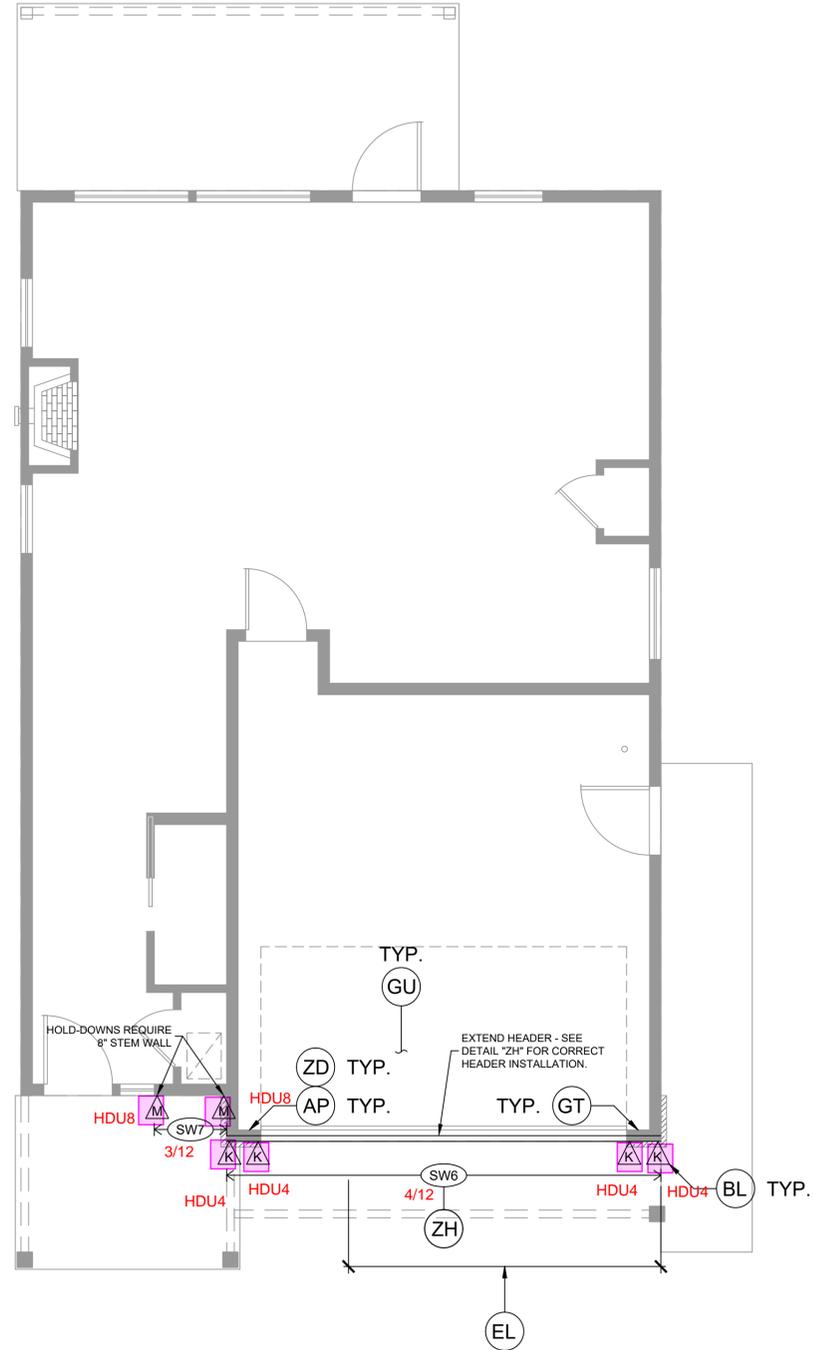
**SN1**

HOLD-DOWN SCHEDULE				
MARK	HOLD-DOWN	MINIMUM FASTENERS	ANCHOR	POST
D	CS16 (11" END LENGTHS)	10d X 2-1/2" (148 X 2-1/2")	(FLOOR STRAP)	(2) 2X POST
K	HDU4-SDS2.5	SDS1/4" X 2-1/2" (SDS25212)	SSTB20	(2) 2X POST
M	HDU8-SDS2.5	SDS1/4" X 2-1/2" (SDS25212)	SSTB28	(2) 2X POST

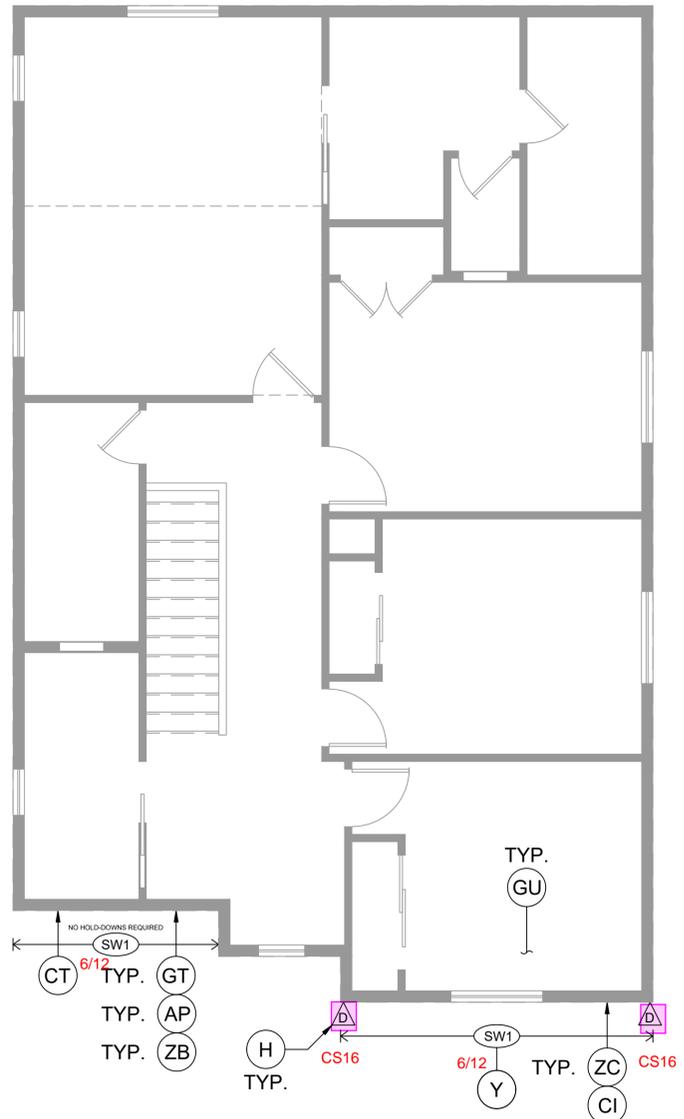
- HOLD-DOWNS SHALL BE SIMPSON STRONG-TIE OR EQUIVALENT.
- SHEAR WALL EDGE NAILING SHALL BE TO HOLD-DOWN POST.
- STHD STRAPS SHALL BE "RJ" TYPE AT RIM JOIST LOCATIONS.

SHEAR WALL SCHEDULE					
MARK	SHEATHING	EDGE NAILING	ABUTTING PANEL EDGE FRAMING	ANCHORAGE	
				SOLE PLATE	SILL PLATE
SW1	7/16"	8d @ 6"	2X	16d @ 4"	1/2" A.B. @ 32"
SW6	7/16" BOTH SIDES	8d @ 4"	2X	16d @ 12"	5/8" A.B. @ 16"
SW7	7/16" BOTH SIDES	8d @ 3"	3X or (2)2X	16d @ 12"	5/8" A.B. @ 16"

- SHEATHING SHALL CONSIST OF WOOD STRUCTURAL PANELS (SEE GSN).
- UNLESS NOTED ON DRAWINGS, EXTERIOR STUDS SHALL BE SPACED AT 16" O.C.
- SHEATHING NAILS SHALL BE COMMON OR GALVANIZED BOX NAILS - FIELD NAIL SPACING SHALL BE 12" FOR STUDS SPACED 16" O.C. OR LESS AND 6" O.C. FOR STUDS SPACED AT 24" O.C.
- FOR SW1 ONLY, EDGE NAILS MAY BE SUBSTITUTED WITH 1-1/2" 16 GAGE STAPLES SPACED AT 3" O.C. AND FIELD NAILS MAY BE SUBSTITUTED WITH 16 GAGE STAPLES AT 12" O.C.
- ANCHORAGE NAILS SHALL BE COMMON NAILS.
- ANCHOR BOLTS SHALL HAVE A 3X3X0.220" WASHER AND 7" MIN EMBEDMENT. THE WASHER SHALL EXTEND TO WITHIN 1/2" FROM THE SHEATHING.
- ANCHOR BOLTS MAY BE SUBSTITUTED WITH TITEN HD AT SAME DIAMETER AND SPACING. PROVIDE MIN. 4-1/4" EMBEDMENT FOR 1/2-DIA. BOLTS AND MIN. 4-3/4" EMBEDMENT FOR 5/8-DIA. BOLTS.
- FOR SW3, SW4, SW7, AND SW8, (2) 2" NOMINAL FRAMING STITCH-NAILED TOGETHER WITH (2) 10d NAILS @ 6" MAY BE USED AT ABUTTING PANEL EDGES IN PLACE OF 3" NOMINAL FRAMING.



**1 MAIN FLOOR SHEAR WALL PLAN**  
 SCALE: 1/4" = 1' - 0"



**2 UPPER FLOOR SHEAR WALL PLAN**  
 SCALE: 1/4" = 1' - 0"

ISSUES / REVISIONS



## GENERAL NOTES

- ALL WORK IS TO COMPLY WITH THE 2023 ORSC CODE AND ANY APPLICABLE STATE, COUNTY OR LOCAL REGULATIONS.
- THE CONTRACTOR IS RESPONSIBLE TO CHECK THE PLANS AND IS TO NOTIFY THE DESIGNER OF ANY ERRORS OR OMISSIONS PRIOR TO THE START OF CONSTRUCTION.
- WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS.
- DESIGN LOADS:
 

ROOF	30 PSF (LIVE LOAD)
FLOOR	40 PSF (LIVE LOAD)
STAIRS	100 PSF
GARAGE FLOOR	125 PSF (1000# FT)
DECKS	60 PSF

(IF YOUR LOCAL AREA REQUIRES DIFFERENT DESIGN LOADS, CONSULT WITH A LOCAL STRUCTURAL ENGINEER TO DETERMINE THE APPROPRIATE REVISIONS.)
- PROVIDE INSULATION Baffles AT EAVE VENTS BETWEEN RAFTERS.
- ALL CARBON MONOXIDE AND SMOKE DETECTORS SHALL BE POWERED BY BATTERY OR CONNECTED TO HOUSE ELECTRIC SYSTEM. INTERCONNECT WITH EACH ONE SO THAT IF ANY ONE TRIPPER THEY WILL ALL SOUND. THEY SHALL ALSO HAVE A BATTERY BACKUP AND BE LOCATED IN EACH BEDROOM AND ON EACH FLOOR LEVEL.
- WARDROBES SHALL HAVE INTERMEDIATE RAILS SPACED SUCH THAT A SPHERE 4" IN DIA. CANNOT PASS THROUGH.
- PROVIDE GROUNDING ELECTRODE AT ELECTRICAL SERVICE CONSISTING OF A MINIMUM 20' LENGTH OF 1/2" STEEL REINFORCEMENT OF FOOTINGS. ELECTRODE SHALL EXTEND 12" MIN. ABOVE THE PLATE LINE.
- THE MAXIMUM AMOUNT OF WATER USED BY NEW PLUMBING FIXTURES: (EPA WATER SENSE LABELED)
 

TOILETS	128 GALLONS/FLUSH
SHOWER HEADS	2.0 GALLONS/MINUTE
INTERIOR FAUCETS	2.5 GALLONS/MINUTE
- IN THE EVENT OF CONFLICT BETWEEN PERTINENT CODES AND REGULATIONS AND REFERENCED STANDARDS OF THESE SPECIFICATIONS, THE MORE STRINGENT PROVISIONS SHALL GOVERN.
- STRUCTURAL SPECIFICATIONS AND DRAWINGS FOR THIS WORK HAVE BEEN PREPARED IN ACCORDANCE WITH GENERALLY ACCEPTED LATERAL DESIGN PRACTICE TO MEET MINIMUM REQUIREMENTS OF THE LATEST EDITION OF THE ORSC.
- SPECIFICATIONS AND DRAWINGS INDICATE FINISHED STRUCTURE. BUILDER SHALL BE RESPONSIBLE FOR CONSTRUCTION METHODS, PROCEDURES, AND CONDITIONS (INCLUDING SAFETY), EXCEPT AS SPECIFICALLY INDICATED OTHERWISE IN THE CONTRACT DOCUMENTS.
- CONSTRUCTION LOADS SHALL NOT EXCEED STRUCTURE NOR SHALL THEY BE IN EXCESS OF DESIGN LOADINGS INDICATED ON DRAWINGS.
- BUILDER SHALL VERIFY ALL MATERIALS, DIMENSIONS, AND CONDITIONS SHOWN ON STRUCTURAL DRAWINGS OR NOTED IN STRUCTURAL SPECIFICATIONS. ANY VARIANCES WITHIN STRUCTURAL DRAWINGS AND SPECIFICATIONS, OR WITHIN CONDITIONS ENCOUNTERED AT JOB SITE SHALL BE REPORTED TO OWNER IN WRITINGS BEFORE COMMENCEMENT OF ANY WORK EFFECTED BY SUCH VARIANCE.
- BUILDER SHALL RIGIDLY ADHERE TO ALL LAWS, CODES, AND ORDINANCES WHICH APPLY TO THIS WORK. HE SHALL NOTIFY AND GIVE CLARIFICATION FROM OWNER IN WRITING OF ANY VARIATIONS BETWEEN CONTRACT DOCUMENTS AND GOVERNING REGULATIONS.
- ALL MANUFACTURED MATERIALS, COMPONENTS, FASTENERS, ASSEMBLIES, ETC. SHALL BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND PROVISIONS OF APPLICABLE (CBO RESEARCH RECOMMENDATIONS WHERE SPECIFIC MANUFACTURED PRODUCTS ARE CALLED FOR, GENERIC EQUALS WHICH MEET APPLICABLE STANDARDS AND SPECIFICATIONS MAY BE USED).
- NO VARIANCE BY A BUILDING OFFICIAL SHALL BE BINDING ON DESIGNERS.
- BUILDER SHALL INVESTIGATE SITE DURING CLEARING AND EARTHWORK OPERATIONS FOR FILLED EXCAVATIONS OR BURIED STRUCTURES SUCH AS CESS POOLS, CISTERNS, FOUNDATIONS, ETC. IF ANY SUCH ITEMS ARE FOUND, OWNER SHALL BE NOTIFIED IMMEDIATELY.
- CARBON MONOXIDE DETECTORS SHALL BE PROVIDED IN ANY HOME WITH A GARAGE. ONE SHALL BE LOCATED WITHIN EACH BEDROOM OR WITHIN 15' OF EACH BEDROOM DOOR. BEDROOMS ON SEPARATE FLOORS REQUIRE SEPARATE DETECTORS.
- D/CHARGE COOP OF RANGE VENT DUCTED TO OUTSIDE AIR WITH MIN 150 CFM INTERMITTENT RATED FAN.

## FOUNDATION NOTES

- FOOTINGS ARE TO BEAR ON UNDISTURBED LEVEL SOIL DEVOID OF ANY ORGANIC MATERIAL AND STEPPED AS REQUIRED TO MAINTAIN THE REQUIRED DEPTH BELOW THE FINISH GRADE.
- SOIL BEARING PRESSURE ASSUMED TO BE 1500 PSF.
- ANY FILL UNDER GRADE SUPPORTED SLABS TO BE A MINIMUM OF 4" GRANULAR MATERIAL COMPACTED TO 95%.
- CONCRETE TO DEVELOP A MIN. OF 2500 PSI AT 28 DAYS WITH A MIN. OF 6 SACKS OF CEMENT PER YARD AND A MAXIMUM SLUMP OF 4".
- CONCRETE SLABS TO HAVE CONTROL JOINTS AT 25' (MAXIMUM) INTERVALS EA. WAY.
- CONCRETE SIDEWALKS TO HAVE 3/4" TOOLED JOINTS AT 5' O.C. (MINIMUM).
- REINFORCING STEEL TO BE A-615 GRADE #6, WELDED WIRE MESH TO BE A-185.
- EXCAVATE THE SITE TO PROVIDE A MINIMUM OF 18" CLEARANCE UNDER ALL GIRDERS.
- COVER ENTIRE CRAWLSPACE WITH # MIL BLACK VIBROQUENT AND EXTEND UP THE STEPCOLUMN 12" (MIN).
- PROVIDE A MINIMUM OF 150 FT OF VENTILATION AREA FOR EACH 150 SQ FT OF CRAWLSPACE AREA. VENTS SHALL HAVE 1/4" OPENINGS IN CORROSIVE RESISTANT SCREEN.
- ALL WOOD IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED OR PROTECTED WITH 30F ROLF ROOFING.
- BEAM POCKETS IN CONCRETE TO HAVE 12" AIRSPACE AT SIDES AND ENDS WITH A MINIMUM BEARING OF 3".
- PROVIDE CRAWLSPACE DRAIN AS PER SEC. R408.5 OF ORSC.
- THE GRADE AWAY FROM FND WALLS SHALL FALL 6" MIN. WITHIN FIRST 10'.
- SLOPE FOR PERMANENT FILLS AND CUT SLOPES SHALL NOT EXCEED 2 UNITS HORIZ. TO 1 UNIT VERT.
- BACKFILL SHALL NOT BE PLACED UNTIL WALL HAS SUFFICIENT STRENGTH AND HAS BEEN ANCHORED TO FLOOR ABOVE ON WALLS W/ MORE THAN 4" UNBALANCED BACKFILL.
- BUILDER SHALL BE RESPONSIBLE FOR SUPPORT OF ALL TEMPORARY EMBANKMENTS AND EXCAVATIONS.
- FOOTINGS SHALL BE FOUNDED ON FIRM, UNDISTURBED, NATIVE, FREE DRAINING SOILS. CONDITIONS FOUND TO BE OTHERWISE SHALL BE REPORTED TO OWNER.
- ALL GROUND OVER WHICH FOOTINGS AND SLABS-ON-GRADE ARE TO BE PLACED SHALL BE FREE OF EXPANSIVE OR COMPRESSIBLE DEBRIS AND ORGANIC MATERIAL.
- FOOTINGS AND SLABS-ON-GRADE CONCRETE SHALL NOT BE PLACED ON MUDDY OR FROZEN GROUND. SUB-GRADE FOR SLABS-ON-GRADE WHERE VAPOR BARRIER IS NOT REQUIRED SHALL BE DAMP AT TIME OF CONCRETE PLACEMENT.
- WOOD SOLE PLATES AT ALL EXTERIOR WALLS ON MONOLITHIC SLABS AT ALL INTERIOR BRACE WALL PANELS ON MONOLITHIC SLABS AND AT ALL WOOD SILL PLATES SHALL BE ANCHORED TO THE FOUNDATION WITH MIN 1/2"x12" BOLTS AT 6' O.C. A #22"x3"x3" WASHER SHALL BE TIGHTENED ON EACH ANCHOR BOLT. INSTALL MIN (2) BOLTS AT THE MIDDLE THIRD POINTS OF EACH PLATE.

## FRAMING NOTES

- ALL EXTERIOR WALL AND BEARING WALL OPENINGS TO HAVE DFP, 4X12 HEADER, OTHERWISE KNOWN AS 'STD HDR' OR 'STANDARD HEADER' UNLESS OTHERWISE INDICATED.
- JOISTS THAT ARE ATTACHED TO FLUSH BEAMS ARE TO BE HUNG WITH SIMPSON LUS TYPE OR EQUIV.
- DOUBLE JOISTS THAT ARE ATTACHED TO FLUSH BEAMS ARE TO BE HUNG WITH SIMPSON LUS TYPE OR EQUIV.
- PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS OVER.
- PROVIDE FIREBLOCKING, DRAFTSTOPS & FIRESTOPS AS PER THE ORSC SEC R6-02.8
- LUMBER SPECIES:
 

A. POSTS, BEAMS, HEADERS JOISTS AND RAFTERS	NO2 DOUG FIR
B. SILLS, PLATES, BLOCKING BRIDGING, ETC.	NO2 DOUG FIR
C. STUDS	STUD GRADE DF
D. POST AND BEAM DECKING	UTILITY GRADE DF
E. PLYWOOD SHEATHING	3/4" CDX FLY, 32/16
F. GULLAY BEAMS	16-2400, DRY ADH.
- NAILING SCHEDULE SEE TABLE 6-02.3(1)
- NOTCHES IN SOLID LUMBER JOISTS, RAFTERS, AND BEAMS SHALL NOT EXCEED ONE-SIXTH OF THE DEPTH OF THE MEMBER. SHALL NOT BE LONGER THAN ONE-THIRD OF THE DEPTH OF THE MEMBER AND SHALL NOT BE LOCATED IN THE MIDDLE ONE-THIRD OF THE SPAN. NOTCHES AT THE ENDS OF THE MEMBER SHALL NOT EXCEED ONE-FOURTH THE DEPTH OF THE MEMBER. THE TENSION SIDE OF MEMBERS 4" (102mm) OR GREATER IN NOMINAL THICKNESS SHALL NOT BE NOTCHED EXCEPT AT ENDS OF THE MEMBERS. THE DIAMETER OF HOLES BORED OR CUT INTO MEMBERS SHALL NOT EXCEED ONE-THIRD THE DEPTH OF THE MEMBER. HOLES SHALL NOT BE CLOSER THAN 2" TO THE TOP OR BOTTOM OF THE MEMBER, OR TO ANY OTHER HOLE LOCATED IN THE MEMBER. WHERE THE MEMBER IS ALSO NOTCHED, THE HOLE SHALL NOT BE CLOSER THAN 2" (51mm) TO THE NOTCH.
- STUDS IN AN EXTERIOR WALL OR LOAD-BEARING PARTITIONS SHALL BE PERMITTED TO BE CUT OR NOTCHED TO A DEPTH NOT EXCEEDING 25% OF ITS WIDTH. STUDS IN NON-LOAD-BEARING PARTITIONS SHALL BE PERMITTED TO BE NOTCHED TO A DEPTH NOT EXCEED 40% OF A SINGLE STUD WIDTH. STUDS SHALL BE PERMITTED TO BE BORED OR DRILLED, PROVIDED THAT THE DIAMETER OF THE RESULTING HOLE IS NO GREATER THAN 40% OF THE STUD WIDTH. THE EDGE OF THE HOLE IS NO CLOSER THAN 5/8" (15.9mm) TO THE EDGE OF THE STUD, AND THE HOLE IS NOT LOCATED IN THE SAME SECTION AS A CUT OR NOTCH.
- INSTALL ALL HORIZONTAL MEMBERS WITH CROWN UP.
- ALL MEMBERS IN BEARING SHALL BE ACCURATELY CUT AND ALIGNED SO THAT FULL BEARING IS PROVIDED WITHOUT USE OF SHIMS OR POSTS SHALL HAVE FULL BLOCKING OR SUPPORT UNDER.
- ALL JOISTS SHALL HAVE A MINIMUM OF 2" BEARING AT SUPPORTS. LAPPING JOISTS SHALL HAVE 6" LAPS CENTERED OVER CLARIFICATION FROM OWNER IN WRITING OF ANY VARIATIONS BETWEEN CONTRACT DOCUMENTS AND GOVERNING REGULATIONS.
- LEDGERS AND STUD WALL FOUNDATION SILL PLATES SHALL BE BOLTED TO CONCRETE W/ ANCHOR BOLTS OF SIZE AND MINIMUM SPACING AS SHOWN ON DRAWINGS. AT LEAST TWO BOLTS SHALL BE PROVIDED FOR EACH PIECE W/ ONE BOLT WITHIN 12" OF EACH END.
- ALL PLYWOOD WALL SHEATHING SHALL BE APPLIED AS FOLLOWS: CENTER VERTICAL JOINTS OVER STUDS AND CENTER HORIZONTAL JOINTS OVER 2" BLOCKING OR PLATE. NAIL TOP OF PANELS TO DOUBLE TOP PLATE, AND NAIL BOTTOM OF PANELS TO ANCHORED SILL PLATE. APPLY JOINTS SO THAT END JOINTS OF ADJACENT COURSE DO NOT OCCUR AT THE SAME STUD.

## ELECTRICAL REQUIREMENTS

- LIGHTING REQUIREMENTS:**
- AT LEAST ONE WALL SWITCH-CONTROLLED LIGHTING OUTLET SHALL BE INSTALLED IN EVERY HABITABLE ROOM AND IN BATHROOMS, HALLWAYS, STAIRWAYS, ATTACHED GARAGES, DETACHED GARAGES PROVIDED WITH ELECTRICAL POWER AND AT THE EXTERIOR SIDE OF EGRESS DOORS, STAIRWAY LIGHTING CONTROL.
- ALL INTERIOR AND EXTERIOR STAIRWAYS SHALL BE PROVIDED WITH A MEANS OF ILLUMINATION TO THE STAIR, INCLUDING THE LANDINGS AND TREADS, TO BE CONTROLLED BY A WALL SWITCH AT EACH FLOOR LEVEL. INTERIOR STAIRS SHALL BE PROVIDED WITH AN ARTIFICIAL LIGHT SOURCE LOCATED IN THE IMMEDIATE VICINITY OF EACH LANDING AT THE TOP AND BOTTOM OF THE STAIR. EXTERIOR STAIRS SHALL BE PROVIDED WITH AN ARTIFICIAL LIGHT SOURCE LOCATED IN THE IMMEDIATE VICINITY OF THE TOP LANDING OF THE STAIR. EXCEPTION: WHERE THE DIFFERENCE BETWEEN FLOOR LEVELS REQUIRES LESS THAN 6" STAIR RISERS.
- FIXTURES IN CLOTHES CLOSETS:**
- SURFACE MOUNTED FLUORESCENT FIXTURES SHALL BE INSTALLED ON THE WALL ABOVE THE DOOR OR ON THE CEILING, PROVIDED THERE IS A MINIMUM CLEARANCE OF 6" BETWEEN THE FIXTURE AND THE NEAREST POINT OF A STORAGE SPACE.
- WET OR DAMP LOCATIONS:**
- FIXTURES INSTALLED IN WET OR DAMP LOCATIONS SHALL BE INSTALLED SO THAT WATER CANNOT ENTER OR ACCUMULATE IN WIRING COMPARTMENTS, LAMP HOLDERS OR OTHER ELECTRICAL PARTS. ALL FIXTURES INSTALLED IN WET LOCATIONS SHALL BE PROVIDED WITH AN ARTIFICIAL LIGHT SOURCE INSTALLED IN DAMP LOCATIONS SHALL BE MARKED 'SUITABLE FOR WET LOCATIONS' OR 'SUITABLE FOR DAMP LOCATIONS'.
- LIGHT SWITCH ACCESS:**
- ALL SWITCHES SHALL BE LOCATED TO ALLOW OPERATION FROM A READILY ACCESSIBLE LOCATION.
- RECEPTACLE OUTLET REQUIREMENTS:**
- IN EVERY KITCHEN, FAMILY ROOM, DINING ROOM, LIVING ROOM, DEN, BEDROOM, OR SIMILAR ROOM OR AREA OF DUELLING UNITS, RECEPTACLE OUTLETS SHALL BE INSTALLED SO THAT NO POINT ALONG THE FLOOR LINE IN ANY WALL SPACE IS MORE THAN 6 FEET, MEASURED HORIZONTALLY FROM AN OUTLET IN THAT SPACE, INCLUDING ANY WALL SPACE THAT IS 2 FEET OR MORE IN WIDTH.
- KITCHENS:**
- RECEPTACLE OUTLETS WITH GFI PROTECTION SHALL BE INSTALLED EVERY 24" ON ALL COUNTER SPACES THAT MEASURE 12" OR WIDER.
- BATHROOMS:**
- AT LEAST ONE WALL RECEPTACLE OUTLET WITH GFI PROTECTION SHALL BE INSTALLED IN BATHROOMS ADJACENT TO EACH BASIN LOCATION.
- OUTDOORS:**
- AT LEAST ONE RECEPTACLE OUTLET WITH GFI PROTECTION SHALL BE INSTALLED OUTDOORS AT THE FRONT AND BACK OF EACH DUELLING UNIT HAVING DIRECT ACCESS TO GRADE.
- HALLWAYS:**
- HALLWAYS OF 10 FEET OR MORE IN LENGTH SHALL HAVE AT LEAST ONE RECEPTACLE OUTLET.
- HVAC OUTLET:**
- A CONVENIENCE RECEPTACLE OUTLET SHALL BE INSTALLED FOR THE SERVICING OF HEATING, AIR-CONDITIONING AND REFRIGERATION EQUIPMENT LOCATED IN ATTICS AND CRAWL SPACES.
- WET LOCATIONS:**
- A RECEPTACLE INSTALLED IN A WET LOCATION SHALL BE IN A WEATHER PROOF ENCLOSURE, THE INTEGRITY OF WHICH IS NOT AFFECTED WHEN THE ATTACHMENT PLUG CAP IS INSERTED.
- \*ADDITIONAL INFORMATION CAN BE FOUND IN THE OREGON RESIDENTIAL SPECIALTY CODE BOOK IN SECTIONS:
- E31-404 SWITCHES  
E31-406 RECEPTACLE OUTLETS  
E31-410 LIGHTING OUTLETS

- HIGH-EFFICIENCY INTERIOR LIGHTING SYSTEM:**
- ALL PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL CONTAIN HIGH EFFICACY LAMPS, SCREW-IN COMPACT FLUORESCENT AND LED LAMPS COMPLY WITH THIS REQUIREMENT. (EXCEPTION: TWO PERMANENTLY INSTALLED LIGHTING FIXTURES ARE NOT REQUIRED TO HAVE HIGH EFFICACY LAMPS.)
- HIGH-EFFICIENCY EXTERIOR LIGHTING SYSTEM:**
- ALL EXTERIOR LIGHTING FIXTURES AFFIXED TO THE EXTERIOR OF THE BUILDING SHALL CONTAIN HIGH EFFICACY LAMPS, EXCEPTION: TWO PERMANENTLY INSTALLED LIGHTING FIXTURES ARE NOT TO HAVE HIGH EFFICACY LAMPS.

## SECTION N1107 LIGHTING

ALL PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL CONTAIN HIGH EFFICACY LAMPS, SCREW-IN COMPACT FLUORESCENT AND LED LAMPS COMPLY WITH THIS REQUIREMENT. EXCEPTION: TWO PERMANENTLY INSTALLED LIGHTING FIXTURES ARE NOT REQUIRED TO HAVE HIGH EFFICACY LAMPS.

ALL EXTERIOR LIGHTING FIXTURES AFFIXED TO THE EXTERIOR OF THE BUILDING SHALL CONTAIN HIGH EFFICACY LAMPS, EXCEPTION: TWO PERMANENTLY INSTALLED LIGHTING FIXTURES ARE NOT REQUIRED TO HAVE HIGH EFFICACY LAMPS.

### R324.13 SOLAR INTERCONNECTION PATHWAY

A SQUARE METAL JUNCTION BOX NOT LESS THAN 4 INCHES BY 4 INCHES WITH A METAL BOX COVER SHALL BE PROVIDED WITHIN 24 INCHES HORIZONTALLY OR VERTICALLY OF THE MAIN ELECTRICAL PANEL. A MINIMUM 3/4 INCH NON-FLEXIBLE METAL RACEWAY SHALL EXTEND FROM THE JUNCTION BOX TO A CAPPED ROOF TERMINATION OR TO AN ACCESSIBLE LOCATION IN THE ATTIC WITH A VERTICAL CLEARANCE NOT LESS THAN 36 INCHES. WHERE RACEWAY TERMINATES IN THE ATTIC, THE TERMINATION SHALL BE LOCATED NOT LESS THAN 6 INCHES ABOVE THE INSULATION. THE END OF THE RACEWAY SHALL BE MARKED AS 'RESERVED FOR SOLAR'. TWO BLANK SPOTS IN THE ELECTRICAL PANEL SHALL BE RESERVED FOR SOLAR.

## TABLE N1101.1(1) DESCRIPTIVE ENVELOPE REQUIREMENTS

BUILDING COMPONENT	MIN. REQUIRED VALUE
WALL INSULATION - ABOVE GRADE	R-21 INTERMEDIATE c
WALL INSULATION - BELOW GRADE *	R-15 c, R/21
FLAT CEILING <sup>1</sup>	R-49
VAULTED CEILING <sup>2</sup>	R-30 RAFTER OR R-30A GJ SCISSOR TRUSS
UNDERFLOORS	R-30
SLAB EDGE PERIMETER *	R-15
HEATED SLAB INTERIOR <sup>1</sup>	R-10
WINDOWS <sup>1</sup>	U-0.21
SKYLIGHTS	U-0.50
EXTERIOR DOORS <sup>b</sup>	U-0.20
EXTERIOR DR <sup>b</sup> W/ >25 SQ. FT. GLAZING	U-0.40

For S1: 1 inch = 25.4mm, 1 sq. ft. = 0.929 m<sup>2</sup>, 1 degree = 0.0175 rad, N/A = not applicable

a. As allowed in Section N1101.4, thermal performance of a component may be adjusted provided that overall heat loss does not exceed the total resulting from conformance to the required U-value standards. Calculations to document equivalent heat loss shall be performed using the procedure and approved U-values contained in Table N1101.1(1).

b. R-values used in this table are nominal, for the insulation only in standard wood framed construction and not for the entire assembly.

c. Wall insulation requirements apply to all exterior wood framed, concrete or masonry walls that are above grade. This includes cripple walls and rim joist areas. Nominal compliance with R-21 insulation and Intermediate Framing (N1104.52) with insulated headers.

e. Below-grade wood, concrete or masonry walls include all walls that are below grade and do not include those portions of such walls that extend more than 24 inches above grade. R-21 for insulation in framed cavity; R-15 continuous insulation.

f. Insulation levels for ceilings that have limited attic/rafter depth such as dormers, bay windows or similar features requiring more than 150 square feet in area may be reduced to not less than R-21 when reduced, the cavity shall be filled (except for required vent spaces) R-49 insulation installed to minimum 6-inch depth at top plate exterior of structure to achieve U-factor

g. Vaulted ceiling surface area exceeding 50 percent of the total heated space floor area shall have a U-factor no greater than U-0.205 (equivalent to R-38 rafter or scissor truss with R-38 advanced framing)

h. A = Advanced frame construction. See section N1104.6

i. Heated slab interior applies to concrete slab floors (both on and below grade) that incorporate a radiant heating system within the slab. Insulation shall be installed underneath the entire slab

j. Sliding glass doors shall comply with window performance requirements. Windows exempt from testing in accordance with sections N1112, Item 3 shall comply with window performance requirements if constructed with thermal break aluminum or wood, or vinyl, or fiberglass frames and double pane glazing with low-emissivity coatings of 0.10 or less. Buildings designed to incorporate passive solar elements may include glazing with a U-factor greater than 0.25 by using Table N1101.1(1) to demonstrate equivalence to building envelope requirements.

k. A maximum of 28 square feet of exterior door area per dwelling unit can have a U-factor of 0.34 or less.

l. Glazing that is either double pane with low-e coating on one surface, or triple pane shall be deemed to comply with this U-0.30 requirement.

m. Minimum 24 inch horizontal or vertical below grade.

## TABLE N1101.1(2) ADDITIONAL MEASURES

1	HIGH EFFICIENCY HVAC SYSTEM: * a. GAS FIRED FURNACE OR BOILER AFUE 94%, OR b. AIR SOURCED HEAT PUMP HSPF 10/14.0 SEER COOLING, OR c. GROUND SOURCED HEAT PUMP COP 3.5 OR ENERGY STAR RATED
2	HIGH EFFICIENCY WATER HEATING SYSTEM: a. NATURAL GAS / PROPANE WATER HEATER WITH UEF 0.90 OR b. ELECTRIC HEAT PUMP WATER HEATER WITH MINIMUM 2.0 COP OR c. NATURAL GAS/PROPANE TANKLESS/INSTANTANEOUS HEATER WITH MIN. 0.850 UEF AND DRAIN WATER HEAT RECOVERY UNIT INSTALLED ON MIN OF ONE SHOWER/TUB-SHOWER.
3	WALL INSULATION UPGRADE: EXTERIOR WALLS = U-0.045/R-21 CONVENTIONAL FRAMING WITH R-5.0 CONTINUOUS INSULATION
4	ADVANCED ENVELOPE: WINDOWS = U-0.21 (AREA WEIGHTED AVERAGE) AND FLAT CEILING <sup>1</sup> = U-0.011/R-6.0 AND FRAMED FLOORS = U-0.026/R-38 OR SLAB EDGE INSULATION TO F-0.48 OR LESS (R-10 FOR 48", R-15 FOR 36" OR R-5 FULLY INSULATED SLAB)
5	DUCTLESS HEAT PUMP: FOR DUELLING UNITS WITH ALL ELECTRIC HEAT PROVIDE: DUCTLESS HEAT PUMP OF MIN. HSPF 10 IN PRIMARY ZONE ELECTRIC HEAT SOURCES AND PROGRAMMABLE THERMOSTAT FOR ALL HEATERS IN BEDROOMS
6	HIGH EFFICIENCY THERMAL ENVELOPE UA <sup>1</sup> : PROPOSED UA IS 8% LOWER THAN THE CODE UA
7	GLAZING AREA: GLAZING AREA, MEASURED AS THE TOTAL FRAMED OPENINGS IS LESS THAN 12 PERCENT OF THE CONDITIONED FLOOR AREA
8	3 ACH LEAKAGE CONTROL AND EFFICIENT VENTILATION: ACHIEVE A MAXIMUM OF 3.0 ACH50 WHOLE HOUSE AIR LEAKAGE WHEN THIRD PARTY TESTED AND PROVIDE A WHOLE-HOUSE VENTILATION SYSTEM INCLUDING HEAT RECOVERY WITH A MIN SENSIBLE HEAT RECOVERY OF NOT LESS THAN 66 PERCENT

FOR S1: 1 SQUARE FOOT = 0.929 M<sup>2</sup>, 1 WATT PER SQUARE FOOT = 10.8 WM<sup>2</sup>

- a. Appliances located within the building thermal envelope shall have sealed combustion air installed. Combustion air shall be ducted directly from the outdoors.
- b. The maximum vaulted ceiling surface area shall not be greater than 50 percent of the total heated space floor area unless vaulted area has a U-factor greater than U-0.205
- c. In accordance with table N1101.1(1), the Proposed UA total of the Proposed Alternative Design shall be a minimum of 8 percent less than the code UA total of the Standard Base Case.

NOTES SHEET

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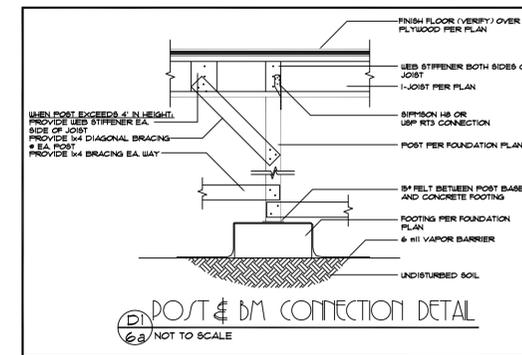
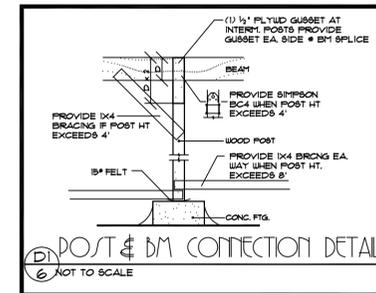
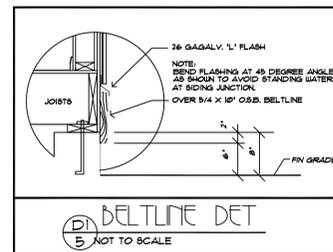
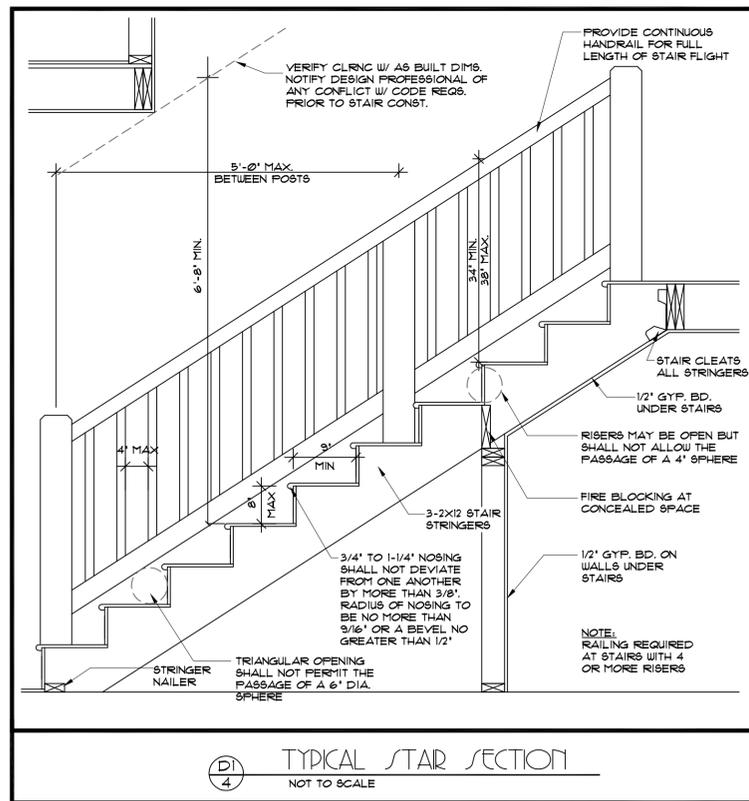
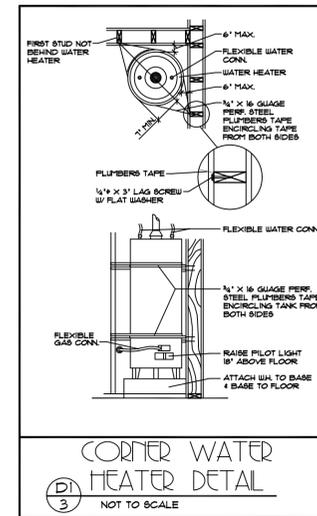
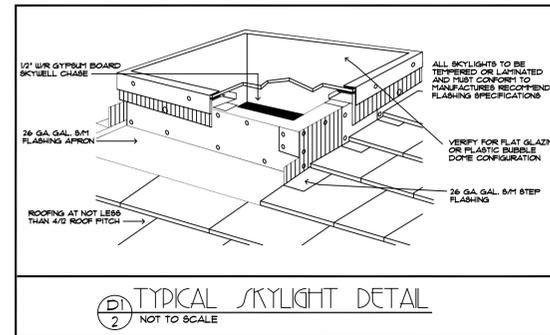
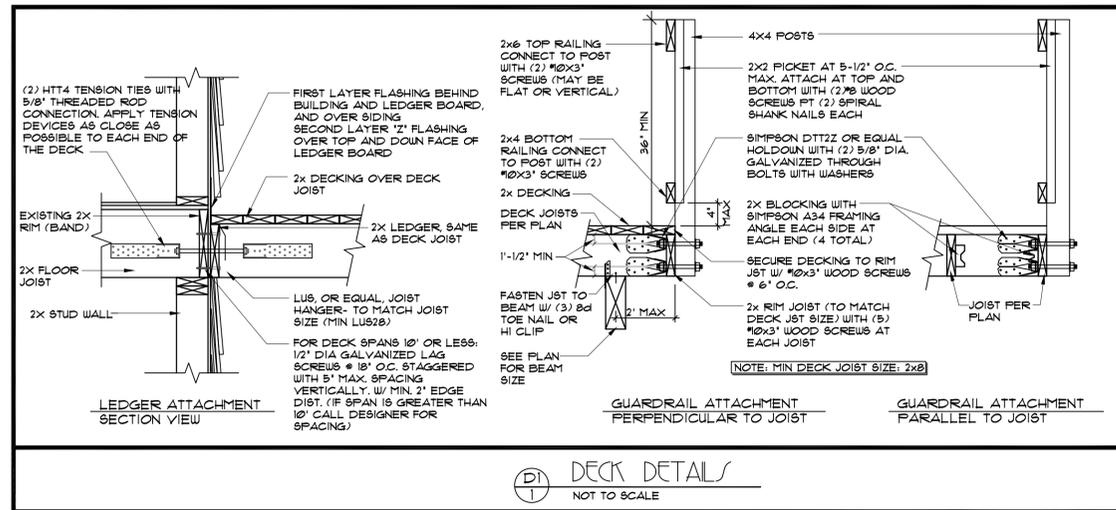
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SHEET: NOTES

DATE: 9/20/19

N1





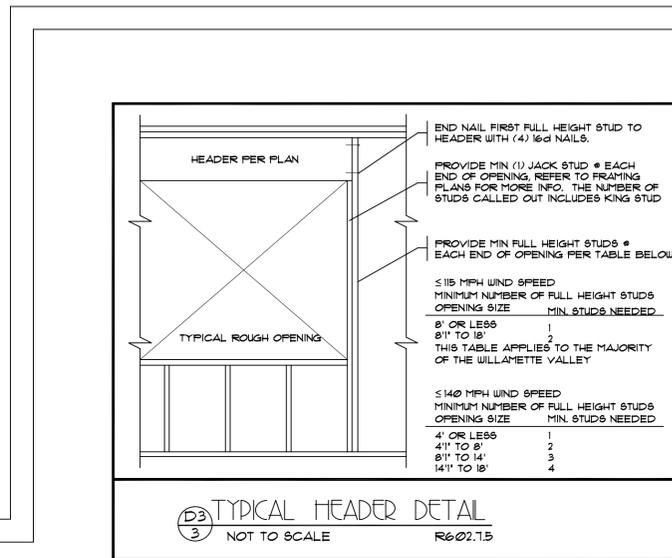
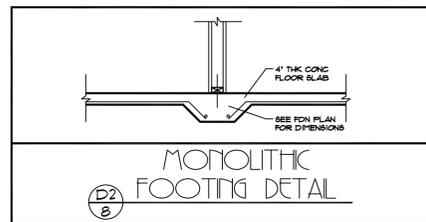
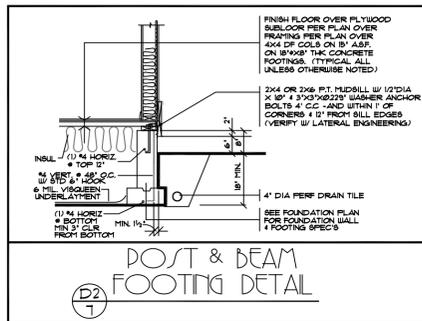
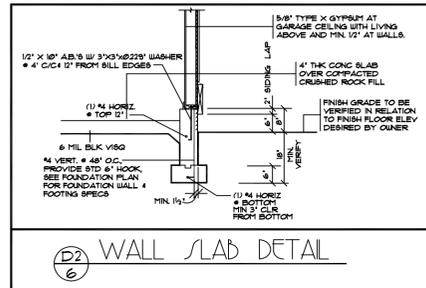
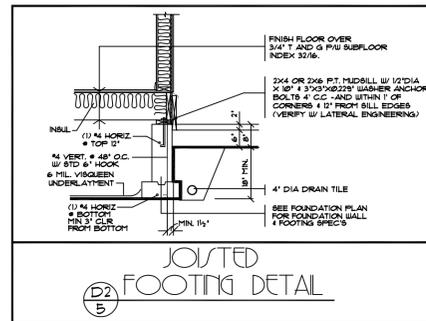
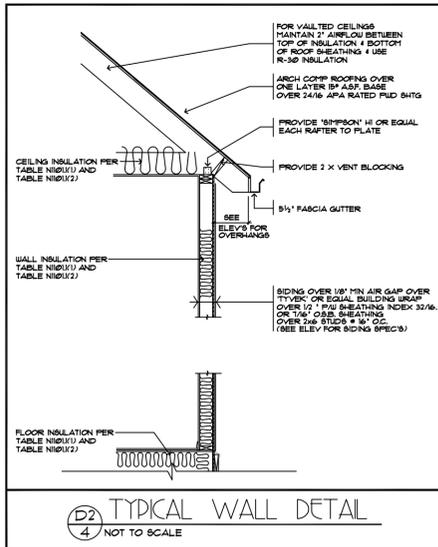
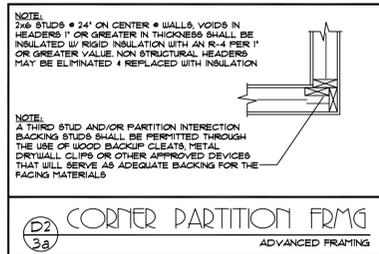
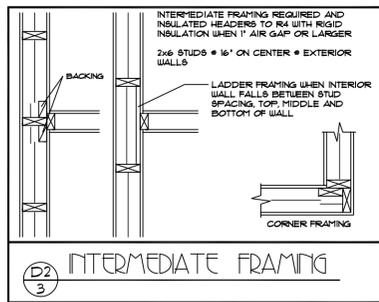
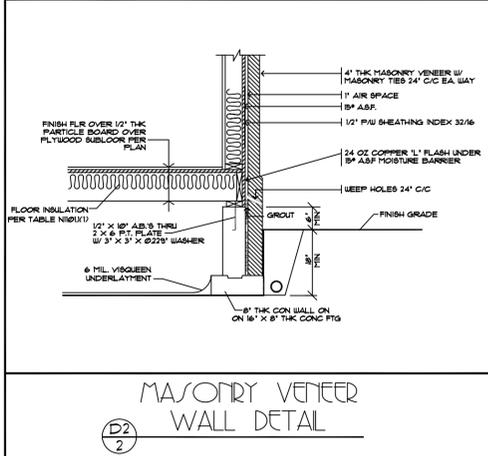
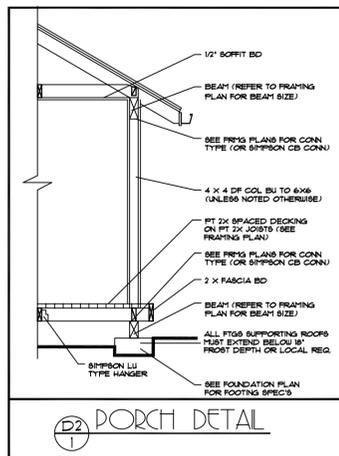
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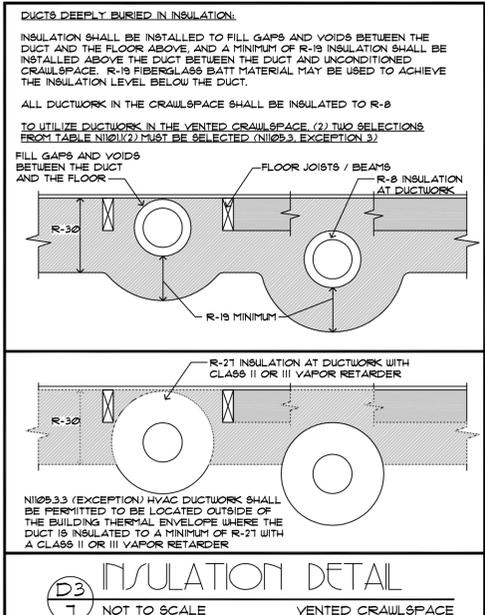
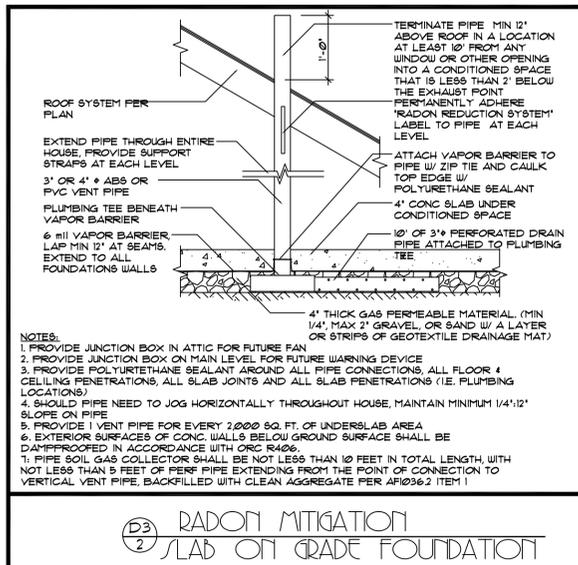
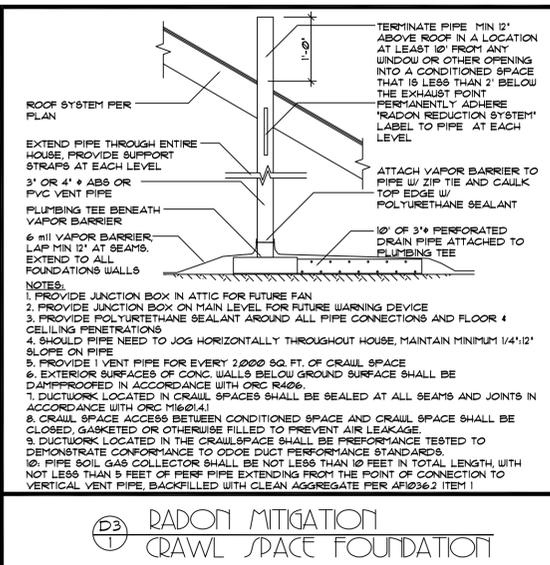
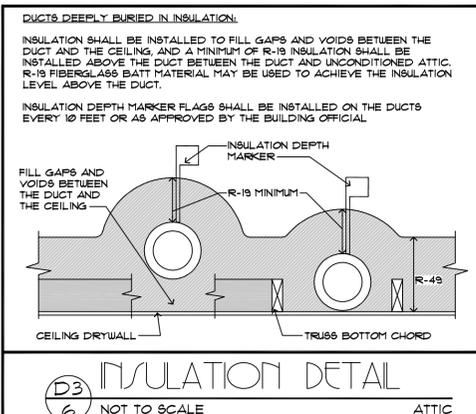
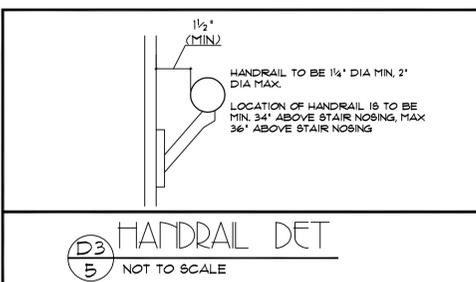
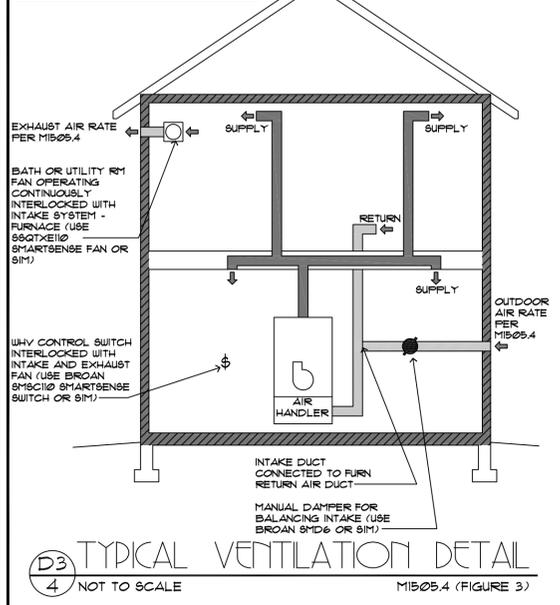
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**D1**

DETAILS SHEET



DUELLING UNIT FLOOR AREA (SQUARE FEET)	NUMBER OF BEDROOMS				
	0-1	2-3	4-5	6-7	>7
1500 OR LESS	30	45	60	75	90
1501 - 3,000	45	60	75	90	105
3,001 - 4,500	60	75	90	105	120
4,501 - 6,000	75	90	105	120	135



DETAILS SHEET

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SHEET: DETAILS

DATE: 12/2019

**D2/D3**

TABLE R602.3(1) FASTENER SCHEDULE FOR STRUCTURAL MEMBERS

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NO. & TYPE OF FASTENER <sup>a, b, c</sup>	SPACING OF FASTENER
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"x20 GAG RIDGE STRAP	3-10d	--
5	RAFTER TO TOP 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, TWO 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	CONTINUED HEADER TO STUD, TOE NAIL	4-8d	--
11	DOUBLE STUDS, FACE NAIL	10d	24" O.C.
12	DOUBLE TOP PLATE, FACE NAIL	10d	24" O.C.
13	DOUBLE TOP PLATES, MIN 24" OFFSET OF END JOINTS, FACE NAIL IN LAPPED AREA	8-16d <sup>d</sup>	--
14	SOLE PLATE TO JOIST, SOLID DECK OR BLOCKING, FACE NAIL	16d	16" O.C.
15	SOLE PLATE TO JOIST, SOLID DECK OR BLOCKING AT BRACED WALL PANELS	3-16d FER 16 <sup>e</sup>	--
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 CORNER & INTERSECTIONS, FACE NAIL	2-10d	--
19	1" BRACE TO EACH STUD & PLATE, FACE NAIL	2 STAPLES 1/4"	--
20	1"x6" SHEATHING TO EACH BEARING, FACE NAIL	2 STAPLES 1/4"	--
21	1"x8" SHEATHING TO EACH BEARING, FACE NAIL	2 STAPLES 1/4"	--
22	WIDER THAN 1"x8" SHEATHING TO EACH BEARING, FACE NAIL	3-8d 4 STAPLES 1/4"	--
FLOOR			
23	JOIST TO SILL OR GIRDER, TOE NAIL	3-8d	--
24	1"x6" SUBFLOOR OR LESS TO EACH JOIST, FACE NAIL	2-8d	--
25	2" SUBFLOOR TO JOIST OR GIRDER, BLIND AND FACE NAIL	2 STAPLES 1/4"	--
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, 32" O.C. AT TOP & BOTTOM, STAGGERED, TWO NAILS AT ENDS & EA. SPLICE.

ITEM	DESCRIPTION OF BUILDING MATERIALS	DESCRIPTION OF FASTENER <sup>b, c, e</sup>	SPACING OF FASTENER EDGES <sup>b</sup> (INCHES) <sup>f</sup>	INTERMEDIATE SUPPORTS <sup>c, e</sup> (INCHES)
WOOD STRUCTURAL PANELS, SUBFLOOR ROOF & INTERIOR WALL SHEATHING TO FRAMING AND PARTICLE BOARD WALL SHEATHING TO FRAMING				
30	1/2" - 1/2"	6d COMMON NAIL (SUBFLOOR WALL) 8d COMMON NAIL (ROOF)	6	12 <sup>g</sup>
31	1/2" - 1"	8d COMMON NAIL	6	12 <sup>g</sup>
32	1/2" - 1/4"	10d COMMON NAIL OR 8d DEFORMED NAIL	6	12
OTHER WALL SHEATHING <sup>h</sup>				
33	1/2" STRUCTURAL CELLULOSE FIBERBOARD SHEATHING	1/2" GALV. ROOFING NAIL, 1/16" CROWN OR 1" CROWN STAPLE 16 GA., 1/4" LONG	3	6
34	25/32" STRUCTURAL CELLULOSE FIBERBOARD SHEATHING	3/4" GALV. ROOFING NAIL, 1/16" CROWN OR 1" CROWN STAPLE 16 GA., 1/4" LONG	3	6
35	1/2" GYPSUM SHEATHING <sup>i</sup>	1/2" GALV. ROOFING NAIL - STAPLE GALV., 1/4" LONG - 1/4" SCREWS, TYPE W OR S	1	1
36	3/8" GYPSUM SHEATHING <sup>i</sup>	3/8" GALV. ROOFING NAIL - STAPLE GALV., 1/8" LONG - 1/8" SCREWS, TYPE W OR S	1	1
WOOD STRUCTURAL PANELS, COMBINATION SUBFLOOR UNDERLAYMENT TO FRAMING				
37	3/4" AND LESS	6d DEFORMED NAIL OR 8d COMMON NAIL	6	12
38	3/8" - 1"	8d DEFORMED NAIL OR 8d COMMON NAIL	6	12
39	1/2" - 1/4"	10d COMMON NAIL OR 8d DEFORMED NAIL	6	12

FOR S1: 1 INCH = 25.4 MM, 1 FOOT = 304.8 MM, 1 MPH = 0.447 M/S - 1 ksi = 6.895 MPa.

a. ALL NAILS ARE SMOOTH-CROWN, BOX OR DEFORMED SHANKS EXCEPT WHERE OTHERWISE STATED. NAILS USED FOR FRAMING AND SHEATHING CONNECTIONS SHALL HAVE MINIMUM AVERAGE BENDING YIELD STRENGTHS AS SHOWN: 80 ksi FOR SHANK DIAMETER OF 0.125" (10d COMMON NAIL), 90 ksi FOR SHANK DIAMETERS LARGER THAN 0.125" BUT NOT LARGER THAN 0.1875", AND 100 ksi FOR SHANK DIAMETERS OF 0.142" OR LESS.

b. STAPLES ARE 16 GAUGE WIRE AND HAVE A MINIMUM 1/16" ON DIAMETER CROWN WIDTH.

c. NAILS SHALL BE SPACED AT NOT MORE THAN 6" O.C. AT ALL SUPPORTS WHERE SPANS ARE 48" OR GREATER.

d. FOUR-FOOT BY 8-FOOT OR 4-FOOT BY 8-FOOT PANELS SHALL BE Nailed VERTICALLY.

e. SPACING OF FASTENERS NOT INCLUDED IN THIS TABLE SHALL BE BASED ON TABLE R602.3(2).

f. FOR REGIONS HAVING BASIC WIND SPEED OF 100 MPH OR GREATER, 8d DEFORMED NAILS SHALL BE USED FOR ATTACHING FLYWOOD AND WOOD STRUCTURAL PANEL ROOF SHEATHING TO FRAMING WITHIN MINIMUM 48-INCH DISTANCE FROM GABLE END WALLS, IF MEAN ROOF HEIGHT IS MORE THAN 25' UP TO 35' MAXIMUM.

g. FOR REGIONS HAVING BASIC WIND SPEED OF LESS THAN 100 MPH, NAILS FOR ATTACHING WOOD STRUCTURAL PANEL ROOF SHEATHING TO GABLE END WALL FRAMING SHALL BE SPACED 6" O.C. WHEN BASIC WIND SPEED IS GREAT THAN 100 MPH, NAILS FOR ATTACHING WOOD STRUCTURAL PANEL ROOF SHEATHING TO INTERMEDIATE SUPPORTS SHALL BE SPACED 6" O.C. FOR MINIMUM 48" DISTANCE FROM RIDGES, EAVES AND GABLE END WALLS, AND 4" O.C. TO GABLE END WALL FRAMING.

h. GYPSUM SHEATHING SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH GA 293. FIBERBOARD SHEATHING SHALL CONFORM TO ASTM C 208.

i. SPACING OF FASTENERS ON FLOOR SHEATHING PANEL EDGES APPLIES TO PANEL EDGES SUPPORTED BY FRAMING MEMBERS AND AT ALL ROOF PLANE PERIMETERS ONLY. SPACING OF FASTENERS ON ROOF SHEATHING PANEL EDGES APPLIES TO PANEL EDGES SUPPORTED BY FRAMING MEMBERS AND AT ALL ROOF PLANE PERIMETERS. BLOCKING OF ROOF OR FLOOR SHEATHING PANEL EDGES PERPENDICULAR TO THE FRAMING MEMBERS SHALL NOT BE REQUIRED EXCEPT AT INTERSECTION OF ADJACENT ROOF PLANES. FLOOR AND ROOF PERIMETER SHALL BE SUPPORTED BY FRAMING MEMBERS OR SOLID BLOCKING.

j. INTERIOR NON-BRACED WALL LINES MAY BE Nailed WITH A MINIMUM 4-10d NAILS.

TABLE R602.3(3) REQUIREMENTS FOR WOOD STRUCTURAL PANEL WALL SHEATHING USED TO RESIST WIND PRESSURES

MINIMUM NAIL SIZE	MINIMUM WOOD STRUCTURAL PANEL SPAN RATING	MINIMUM NOMINAL PANEL THICKNESS (INCHES)	MAXIMUM WALL STUD SPACING (INCHES)	PANEL NAIL SPACING		MAXIMUM WIND SPEED (mph)		
				EDGES (INCHES O.C.)	FIELD (INCHES O.C.)	B	C	D
6d COMMON	15	24/0	3/8	16	12	110	90	85
8d COMMON	175	24/16	1/16	16	12	130	110	105
8d COMMON	175	24/16	1/16	24	12	110	90	85

FOR S1: 1 INCH = 25.4 MM, 1 MPH = 0.447 M/S

a. PANEL STRENGTH AXIS PARALLEL OR PERPENDICULAR TO SUPPORTS, THREE-PLY PLYWOOD SHEATHING WITH STUDS SPACED MORE THAN 16" O.C. SHALL BE APPLIED WITH PANEL STRENGTH AXIS PERPENDICULAR TO SUPPORTS.

b. TABLE IS BASED ON WIND PRESSURES ACTING TOWARD AND AWAY FROM BUILDING SURFACES PER SECTION R301.2. LATERAL BRACING REQUIREMENTS SHALL BE IN ACCORDANCE WITH SECTION R602.10.

c. WOOD STRUCTURAL PANELS WITH SPAN RATINGS OF WALL-16 OR WALL-24 SHALL BE PERMITTED AS AN ALTERNATE TO PANELS WITH A 24/0 SPAN RATING. PLYWOOD SIDING RATED 1800 OR 2400 SHALL BE PERMITTED AS AN ALTERNATE TO PANELS WITH A 24/16 SPAN RATING. WALL-16 AND PLYWOOD SIDING 1800 SHALL BE USED WITH STUDS SPACE A MAXIMUM OF 16" ON CENTER.

PREScriptive PATH LEGEND

METHOD OF BRACING	MIN. REQ'D SHEATHING	CONNECTION CRITERIA
CS-WSP	3/8"	6d COMMON NAILS @ 6" O.C. AT PANEL EDGES & 12" O.C. AT INTERMEDIATE SUPPORTS
CS-G	3/8"	6d COMMON NAILS @ 6" O.C. AT PANEL EDGES & 12" O.C. AT INTERMEDIATE SUPPORTS
CS-PF	1/16"	SEE DETAIL 2/0 SEE PLAN FOR REQ'D STRAPS
WSP	3/8"	6d COMMON NAILS @ 6" O.C. AT PANEL EDGES & 12" O.C. AT INTERMEDIATE SUPPORTS IF 1/16" SHTG IS USED, USE 8d COMMON NAILS
FFH	3/8"	SEE DETAIL 5/0
ABW	3/8"	SEE DETAIL 1/0 SEE PLAN FOR REQ'D HOLD-DOWNS
GB	1/2" GYP. BD. BOTH SIDES OF WALL	NAILS OR SCREWS @ 1' O.C. AT EDGES

a. NAILS:  
19 GAUGE, 1 1/4" LONG, 13/64" HEAD OR  
0.098" DIAMETER, 1 1/4" LONG, ANNULAR-RINGED OR  
5d COOLER NAIL, 0.086" DIAMETER, 13/64" HEAD OR  
GYP BD NAIL, 0.086" DIAMETER, 1 1/4" LONG, 9/32" HEAD  
SCREWS SHALL BE TYPE S OR W AND PENETRATE INTO WOOD FRAMING MIN 3/8".

TABLE R602.10 INTERMITTENT WALL BRACING METHODS

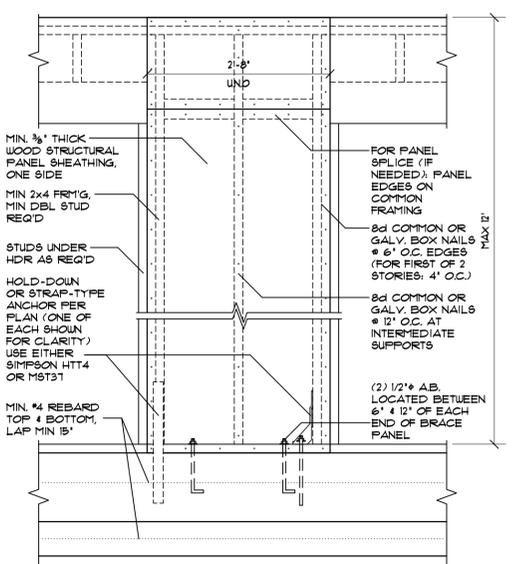
LIB	LET IN BRACING
DWB	DIAGONAL WOOD BOARDS
WSP	WOOD STRUCTURAL PANELS
SFB	STRUCTURAL FIBERBOARD SHEATHING
GB	GYPSUM BOARD
FBS	PARTICLEBOARD SHEATHING
PCP	PORTLAND CEMENT PLASTER
HPS	HARDBOARD PANEL SIDING
ABW	ALTERNATE BRACED WALL
PFH	INTERMITTENT PORTAL FRAME
PFG	INTERMITTENT PORTAL FRAME AT GARAGE

GENERAL NOTES:

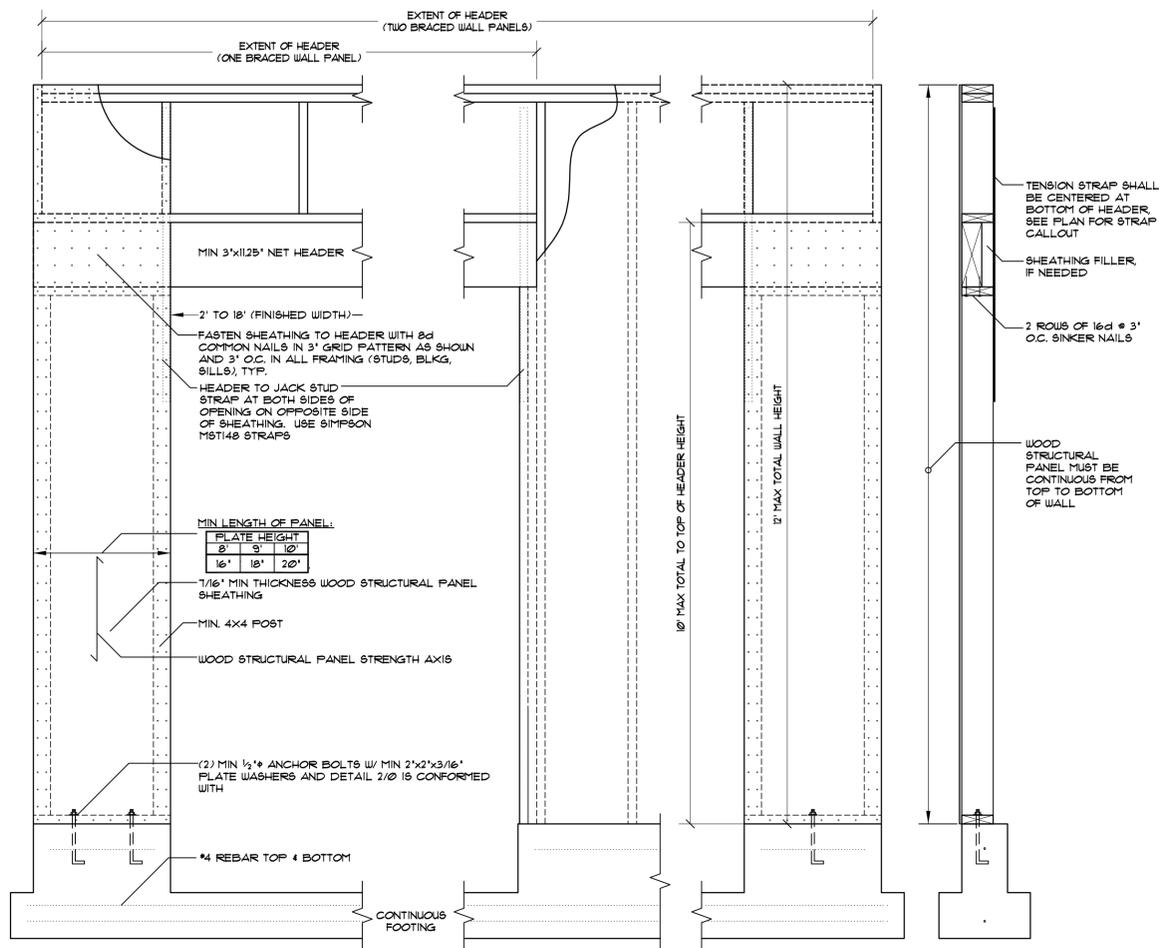
- CONTINUOUS SHEATHING METHODS REQUIRE STRUCTURAL PANEL SHEATHING TO BE USED ON ALL SHEATHABLE SURFACES ON ONE SIDE OF A BRACED WALL LINE INCLUDING AREAS ABOVE AND BELOW OPENINGS AND GABLE END WALLS.
- IN SEISMIC DESIGN CATEGORIES D1 & D2 TOP PLATE LAP SPLICES SHALL BE FACE-Nailed WITH AT LEAST (8) 16d NAILS EA. SIDE OF SPLICE.
- ALL VERTICAL JOINTS OF PANEL SHEATHING SHALL OCCUR OVER AND BE FASTENED TO COMMON STUDS. HORIZONTAL JOINTS IN BRACED WALL PANELS SHALL OCCUR OVER AND BE FASTENED TO COMMON BLOCKING OF A MIN 1 1/2" THICKNESS.
- PLATE WASHERS (MIN 229 INCH THICK BY 3"x3") SHALL BE PROVIDED BETWEEN THE FOUNDATION SILL PLATE AND THE NUT OVER THE FULL LENGTH OF REQUIRED BRACED WALL LINES. WHERE INTERIOR BRACED WALL LINES ARE SUPPORTED ON A CONTINUOUS FOUNDATION, PLATES SHALL HAVE ANCHOR BOLTS SPACED 6' OVC MAX AND LOCATED WITHIN 12" OF ENDS OF EACH PLATE SECTION.

TABLE R602.10.4.1 CONTINUOUS SHEATHING METHODS

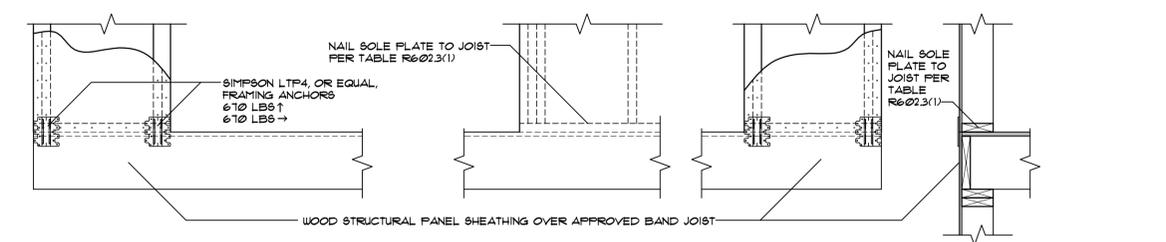
CS-WP	WOOD STRUCTURAL PANELS
CS-G	WSP NEXT TO GARAGE DOOR OPENING
CS-PF	CONTINUOUS PORTAL FRAME



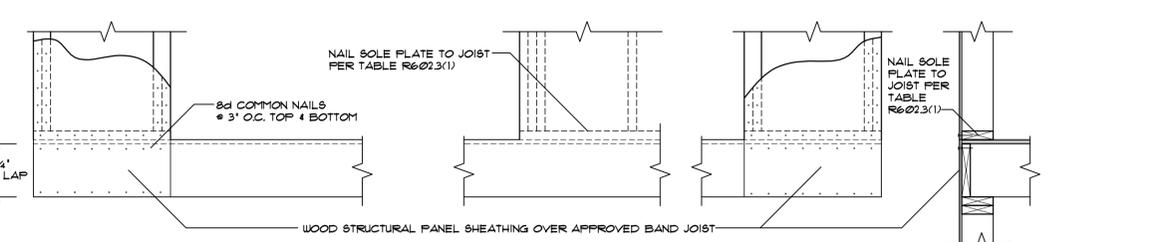
DET 1/0 ALT. BRACED WALL PANEL SCALE: NT5 FIGURE R602.10.6.1



OVER CONCRETE OR MASONRY BLOCK FOUNDATION



OVER RAISED WOOD FLOOR OR SECOND FLOOR - FRAMING ANCHOR OPTION



OVER RAISED WOOD FLOOR OR SECOND FLOOR - WOOD STRUCTURAL PANEL OVERLAP OPTION

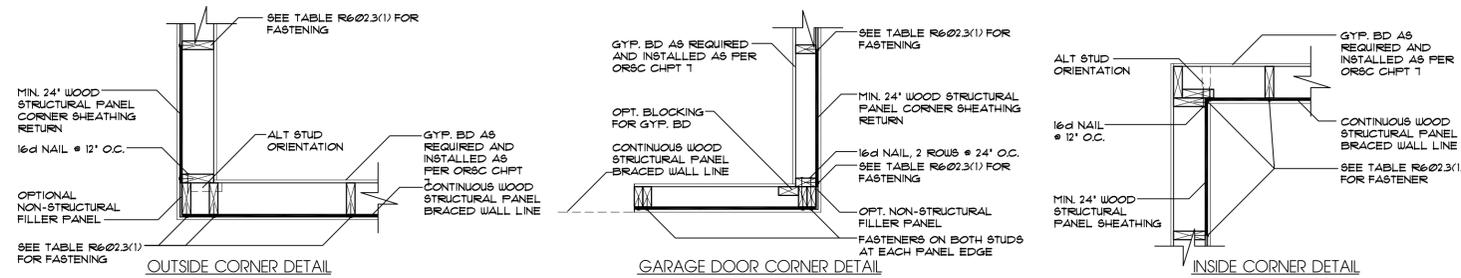
DET 2/0 CONTINUOUS PORTAL FRAME CONSTRUCTION SCALE: NT5 FIGURE R602.10.6.4

LATERAL DETAILS  
PREScriptive PATH

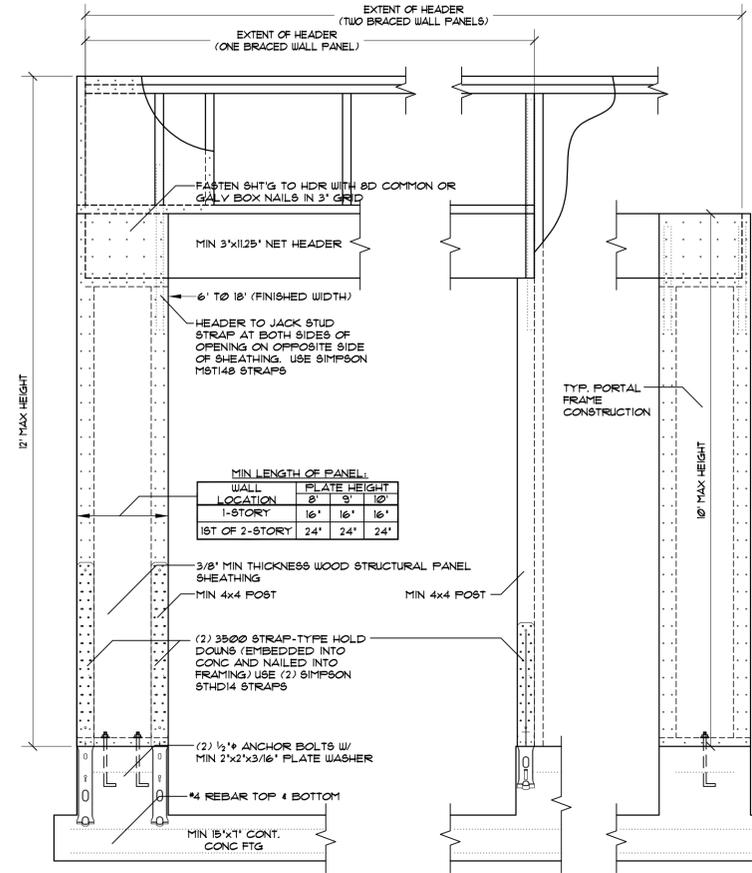
**Suntec**  
DESIGN INC.  
PO Box 1358, Fairview, Oregon 97024  
Tel: (503) 624 0555  
www.suntecdesign.com

THESE PLANS HAVE BEEN LICENSED FOR THE CONSTRUCTION OF ONE BUILDING ONLY. UNAUTHORIZED USE OR COPYING OF THE PLANS, OR THE DESIGN, THE DETAIL, FRINGINGS RIGHTS UNDER THE COPYRIGHT ACT THAT INCLUDE PENALTIES OF UP TO \$100,000 PER WORK WILLFULLY INFRINGED. THESE PLANS HAVE BEEN PREPARED TO MEET CAROLINA BUILDING CODES AND MAY REQUIRE ADAPTATION TO MEET SPECIFIC SITE CONDITIONS AND LOCAL BUILDING REGULATIONS. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND DETAILS PRIOR TO CONSTRUCTION FOR ERRORS AND OMISSIONS. PLEASE SEE YOUR LICENSE AGREEMENT FOR FURTHER INFORMATION.

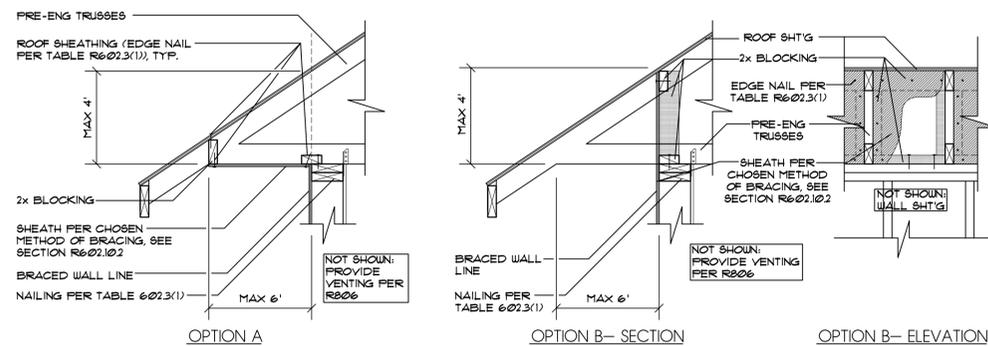
SHEET: PRES. PATH DETAILS  
DATE: 09/21  
**0a**



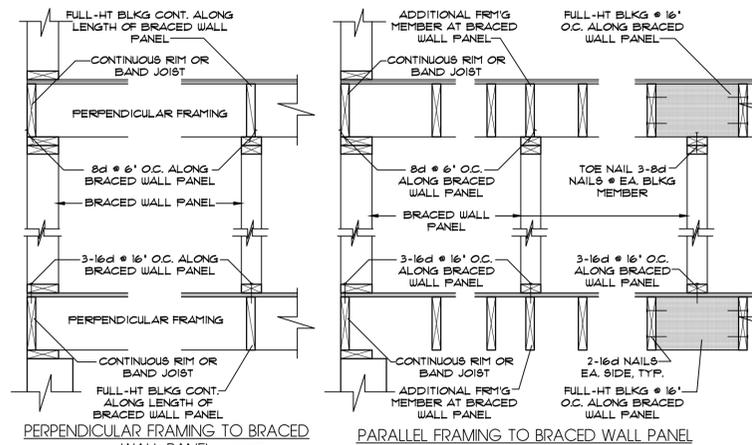
DET 3 CORNER FRM'G FOR CONTINUOUS SHEATHING  
SCALE: 3/4" = 1'-0"



DET 5 PFH: PORTAL FRAME WITH HOLDDOWNS  
SCALE: NTS  
FIGURE R602.10.6.1

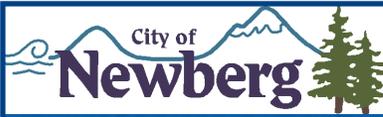


DET 4 WALL TO ROOF CONNECTION  
SCALE: NTS  
FIGURE R602.10.2(2) & (3)



DET 6 BRACED WALL PANEL AT FLOOR/CLG FRM'G  
SCALE: NTS  
FIGURE R602.10.8(1) & (2)

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# NEW SINGLE FAMILY - 1 UNIT PERMIT City of Newberg

PERMIT NUMBER  
**NDWL24-0029**

PERMIT TYPE: <b>NEW SINGLE FAMILY - 1 UNIT</b>	SUBDIVISION/COMM SITE:	TAX MAP NO: <b>R3208 02900</b>
PERMIT SUB TYPE : <b>WITH BACKFLOW</b>		BLDG USE GROUP:
JOB ADDRESS: <b>1015 E RORK CT</b>		
DESCRIPTION: <b>New Single Family Residence W/ NFPA 13R sprinkler system</b>		
ZONED AS:	TOTAL SQFT: <b>0</b>	SPRINKLERS:
TOTAL WORK VALUE: <b>\$345,994.11</b>	TYPE OF CONSTRUCTION:	BUILDING USE:

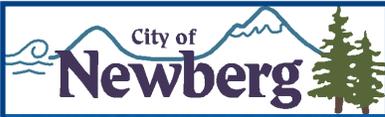
APPLICANT: <b>Corins Custom Homes LLC</b>	PHONE: <b>(971)235-0169</b>
MAILING ADDRESS: <b>10695 NE RENNE RD NEWBERG, OR 97132</b>	FAX:
ARCHITECT/DESIGNER/ENGINEER-WHO DREW THE PLANS: <b>Suntel Design Inc</b>	PHONE: <b>(503)624-0555</b>
MAILING ADDRESS: <b>16865 Boones Ferry Rd Lake Oswego, OR 97035</b>	FAX:
CONTRACTOR: <b>Corins Custom Homes LLC</b>	PHONE: <b>(971)235-0169</b>
MAILING ADDRESS: <b>10695 NE RENNE RD NEWBERG, OR 97132</b>	FAX:
CONTRACTOR: <b>Gramer Heating &amp; Cooling Inc</b>	PHONE: <b>(503)357-8458</b>
MAILING ADDRESS: <b>53725 NW Old Wilson River Road Gales Creek, OR 97117</b>	FAX: <b>(503)357-8458</b>
CONTRACTOR: <b>Jaybel Contractors LLC</b>	PHONE: <b>(714)235-9434</b>
MAILING ADDRESS: <b>710 S McLoughlin Blvd Oregon City, OR 97045</b>	FAX:
OWNER: <b>Scott Bontrager</b>	PHONE: <b>(503)899-5910</b>
MAILING ADDRESS: ,	FAX:

**COMMENTS**

FEES			
DESCRIPTION	ACCOUNT	QUANTITY	PAID AMOUNT
1 AND 2 FAMILY NEW - BATHROOMS	08-0000-322002	0	\$419.69
APPLIANCE VENTS/AIR DUCTS	08-0000-322002	4	\$57.56
BACKFLOW DEVICE	08-0000-322002	0	\$105.17
COMMUNITY DEVELOPMENT FEE .75 PERCENT	01-0000-322009	0	\$2594.96
CPRD SINGLE FAMILY FEE - CITY	01-0000-202002	0	\$187.78
CPRD SINGLE FAMILY FEE - PARKS	01-0000-202002	0	\$9201.22
FAU/GRAVITY FURNACE UP TO 100K	08-0000-322002	1	\$25.93
GAS PIPE OUTLETS	08-0000-322002	4	\$17.70
MECHANICAL PLAN REVIEW FEE 50 PERCENT	08-0000-322002	0	\$100.57
NEWBERG SCHOOL DISTRICT CET RESIDENTIAL FEE - CITY	01-0000-202003	0	\$19.11
NEWBERG SCHOOL DISTRICT CET RESIDENTIAL FEE - SCHOOL	01-0000-202003	0	\$1891.89
P WATER DEVELOPMENT 1" METER FEE	47-0000-349002	0	\$13338.40

General Questions: 503-537-1240 | Inspections: [trakit.newbergoregon.gov/etrakit](http://trakit.newbergoregon.gov/etrakit) or 503-554-7714 | Website: [newbergoregon.gov](http://newbergoregon.gov)





# NEW SINGLE FAMILY - 1 UNIT PERMIT City of Newberg

PERMIT NUMBER  
**NDWL24-0029**

SIDEWALK OR DRIVEWAY APPROACH PERMIT FEE	02-0000-332003	967	\$354.05
SINGLE FAMILY PLAN & STORMWATER REVEIW & FINAL	17-0000-332004	0	\$203.68
STATE SURCHARGE FEE 12 PERCENT - MECHANICAL	08-0000-202012	0	\$24.14
STATE SURCHARGE FEE 12 PERCENT - PLUMBING	08-0000-202012	0	\$62.98
STATE SURCHARGE FEE 12 PERCENT - STRUCTURAL	08-0000-202011	0	\$173.74
STORM SYSTEM DEVELOPMENT SINGLE FAMILY FEE	43-0000-349002	0	\$629.57
STRUCTURAL PERMIT FEE	08-0000-322001	0	\$1447.82
STRUCTURAL PLAN REVIEW FEE 85 PERCENT	08-0000-322001	0	\$1230.65
STRUCTURAL PLAN REVIEW-POST	08-0000-322001	0	\$0.00
TECHNOLOGY FEE - ENGINEERING 5%	36-8675-3090001	0	\$66.56
TECHNOLOGY FEE 5 PERCENT - MECHANICAL	08-0000-341006	0	\$10.06
TECHNOLOGY FEE 5 PERCENT - PLUMBING	08-0000-341006	0	\$26.24
TECHNOLOGY FEE 5 PERCENT - STRUCTURAL	08-0000-341006	0	\$72.39
TRANSPORTATION DEVELOPMENT SINGLE FAMILY / OTHER - PER UNIT	42-0000-349002	0	\$6266.08
VENTILATION SINGLE	08-0000-322002	4	\$57.56
WASTE WATER DEVELOPMENT 1-18 FIXTURES FEE	46-0000-349002	0	\$6039.00
WASTE WATER DEVELOPMENT EACH FIXTURE UNIT OVER 18 FEE	46-0000-349002	0	\$2684.00
WATER CONNECTION FEE	07-0000-349001	0	\$773.52
WOOD/FIREPLACE/MASONRY/FACTORY BUILT	08-0000-322002	1	\$42.39
<b>TOTAL:</b>			<b>\$48,124.41</b>

**ALL WORK TO CONFORM TO THE CURRENT EDITION OF THE ORSC AND OSCC.  
INSPECTIONS REQUESTED PRIOR TO 7AM ILL BE COMPLETED THE SAME BUSINESS DAY.  
INSPECTION RECIEVED AFTER 7AM WILL BE SCHEDULE FOR THE NEXT BUSINESS DAY.**

**8.15.150 UNNECESSARY NOISE – PERMITTED EXCEPTIONS.**

**A. UNREASONABLE NOISE AND EXCEPTIONS.**

**3. The following acts are declared to be per se violations of this section. This enumeration does not constitute an exclusive list:**

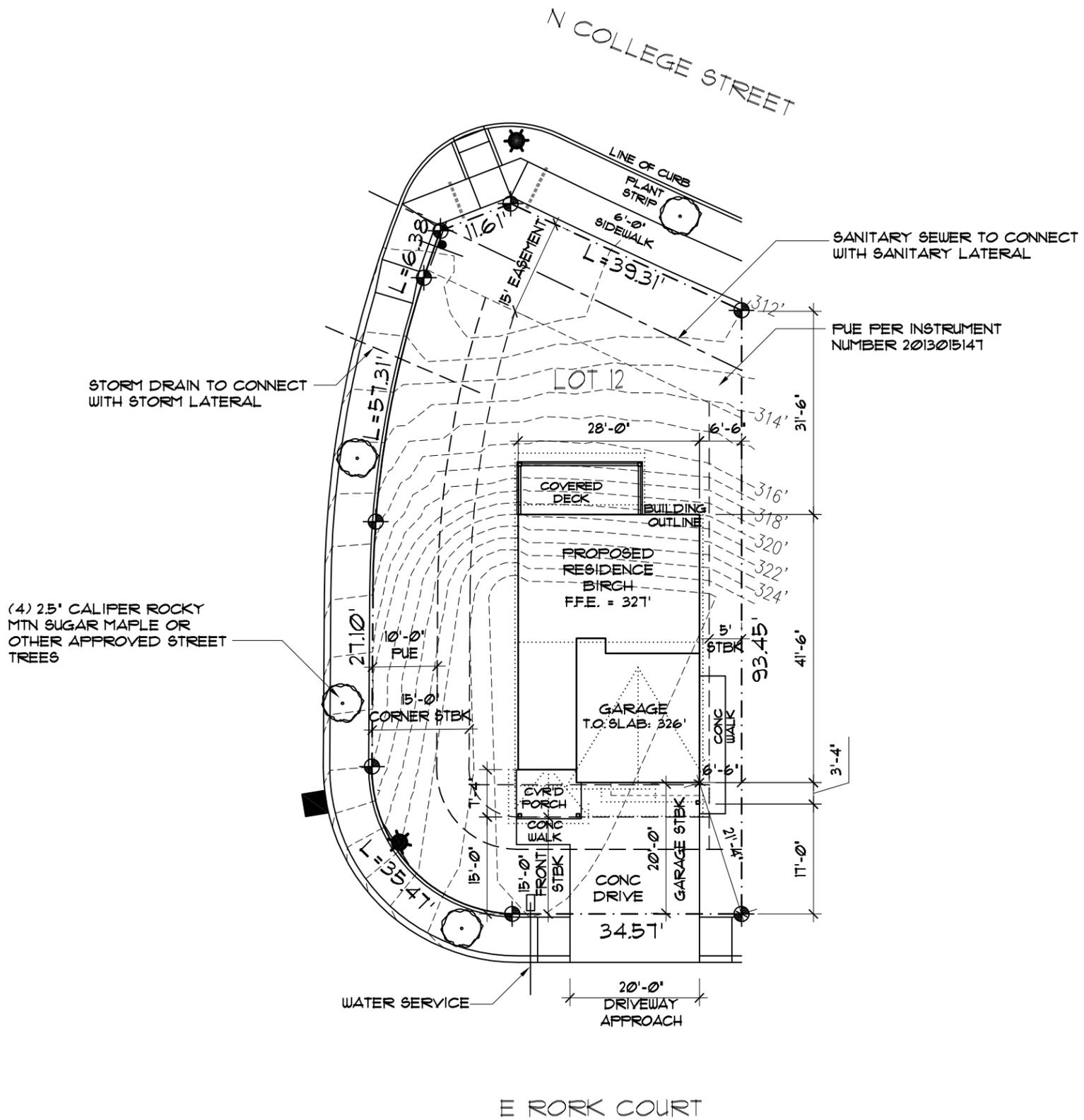
**j. Construction or Repair of Buildings, or Excavation of Streets and Highways. The construction, demolition, alteration or repair of any building or the excavation of streets and highways other than between the hours of 7:00 a.m. and 7:00 p.m. on weekdays. In cases of emergency, construction or repair noises are exempt from this provision. In nonemergency situations, the city may issue a permit, upon application, if the city determines that the public health and safety, as affected by loud and raucous noise caused by construction or repair of buildings or excavation of streets and highways between the hours of 7:00 p.m. and 7:00 a.m. will not be impaired, and if the city further determines that loss or inconvenience would otherwise result. The permit shall grant permission in nonemergency cases for a period of not more than three days. The permit may be renewed once for a period of three days or less.**

**Building Official: Brooks Bateman**

**Issued By: Fe Bates**

**Date: 9/11/2024**





(4) 2.5" CALIPER ROCKY MTN SUGAR MAPLE OR OTHER APPROVED STREET TREES

STORM DRAIN TO CONNECT WITH STORM LATERAL

SANITARY SEWER TO CONNECT WITH SANITARY LATERAL

PUE PER INSTRUMENT NUMBER 2013015147

WATER SERVICE

20'-0" DRIVEWAY APPROACH

E RORK COURT

<b>LOT AREA:</b>	<b>5,595 SQ FT</b>
<b>IMPERVIOUS AREA</b>	
DRIVEWAY	395 SQ. FT
COVERED PORCH	68 SQ. FT
COVERED DECK	152 SQ. FT
WALK WAY	37 SQ. FT
<b>TOTAL</b>	<b>652 SQ. FT</b>
BUILDING FOOTPRINT (NOT INCLUDING OVERHANGS)	1,143 SQ. FT
<b>BUILDING COVERAGE = 32%</b> (MAX BUILDING COVERAGE: 40%)	

**LEGAL DESCRIPTION**  
 LOT 12 - ROURKE DEVELOPMENT  
 RORK COURT  
 NEWBERG, OREGON

SUNTEL DESIGN, INC. IS NOT LIABLE FOR THE ACCURACY OF THE TOPOGRAPHY INFORMATION. IT IS THE SOLE RESPONSIBILITY OF THE BUILDER TO VERIFY ALL SITE CONDITIONS, INCLUDING ANY FILL PLACED ON THE SITE, AND INFORM OWNERS OF ANY POTENTIAL FIELD MODIFICATIONS.



PLAN NAME: BRCH  
 DATE: 1/2023

**P**



BEAUDRY CONSTRUCTION

LOT 12, ROURKE DEVELOPMENT

**SITE PLAN**

**BIRCH**

SCALE: 1"=20'-0"



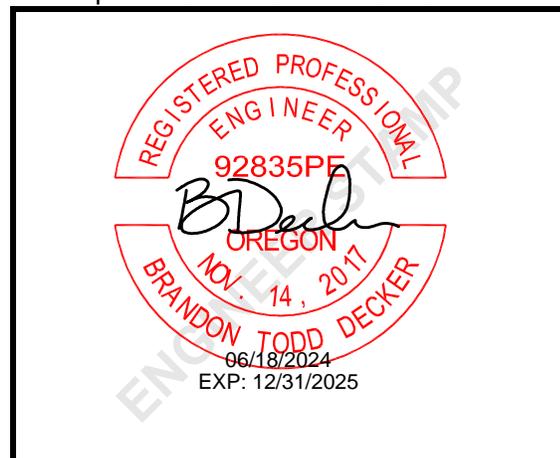
Phone: 801.229.9020  
Email: info@acuteeng.com

## Structural Calculations

**Project Name:** Suntel Beaudry Const Birch 6309 (RD12)  
5510624  
**Project Location:** Rourke Development lot# 12  
Newberg, Oregon 97132  
**Project Number:** 5510624  
**Date:** 6/18/2024

Calculations and engineering for this plan are for lateral only. Vertical engineering is not included in the scope of this work.

This report is for the project and location listed. It may not be revised, copied or reproduced without written consent.



**Project Name:** Suntel Beaudry Const Birch 6309 (RD12)  
**5510624**

**Project Location:** Rourke Development lot# 12  
Newberg, Oregon 97132

**Project Number:** 5510624

**Date:** 6/18/2024

Suntel Beaudry Const Birch 6309 (RD12) 5510624

5510624  
6/18/2024  
GS

**Project information**

---

Address / location \* = Rourke Development lot# 12

Area / subdivision

Area / subdiv. No. 1 = Other

City, county = Newberg (Yamhill county)

State, Zip Code = Oregon 97132

\* The structural calculations report and corresponding construction documents are valid for a single use at the project location and shall not be reused, copied, or reproduced without written consent.

**Jurisdiction / occupancy information**

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Jurisdiction = Oregon

Building code = Oregon Code

Model building code = 2021 IRC 2018 IBC 101.2 & IRC R301.1.3

Use and occupancy classification = Residential - 1-unit dwelling (R)

Risk category = Not occupancy categories I, III, IV (II)

\*\* Building code compliance of non-structural issues is not addressed. Refer to the architect or designer for compliance.

**Environmental load parameters**


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**Earthquake**

Latitude, longitude	= 45.3313, -122.9677	
Mapped short period	Ss = 0.856	2021 IBC Figure 1613.2.1(1)
Mapped 1-sec. period	S1 = 0.414	2021 IBC Figure 1613.2.1(2)

**Wind**

Basic design wind speed	V = 97 mph	2021 IBC Figure 1609.3(1), 1609.3(2), 1609.3(3)
Exposure category	= C	2021 IBC 1609.4.3

**Soil**

## Geotechnical design basis †

Area / subdiv. No. 1	= Presumptive values, 2018 IBC Table 1806.2	
Minimum frost cover	= 12 in.	2021 IBC 1809.5
Site class	= D-Default	
Special requirements	= None	

Lateral active press.	= 30 psf/ft	
Lateral at-rest press.	= 60 psf/ft	
Lateral passive press.	= 150 psf/ft	
Coeff. of friction	= 0.25	
Allow. vert. bearing	Qa = 1500 psf	
Min. cont. footing	= 18 in.	
Min. spot footing	= 20 in.	

† It is recommended that a geotechnical investigation be conducted unless satisfactory data from adjacent areas is available that demonstrates an investigation is not necessary for any of the conditions in 2021 IBC 1803.5 (1-12).  
 The structural calculations report and corresponding construction documents are only valid for the soil parameters listed herein. The design professional in responsible charge shall be notified if observations or field conditions differ.

**Snow**

Elevation (max)	= 360 ft	
Flat roof snow load	Pf = 25 psf	Jurisdiction

**Rain**

15-min. rainfall intensity	= in/hr	
60-min. rainfall intensity	= in/hr	

**Deferred submittals**


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None

## LOAD SETS

### Roof dead loads

(2021 IBC 1606, ASCE 7-16 Table C3.1-1a)

Asphalt shingles	= 2 psf	ASCE 7-16 Table C3.1-1a
Felt or ready roofing, roof sheathing	= 3 psf	ASCE 7-16 Table C3.1-1a
Wood trusses, misc	= 5 psf	Estimated
Insulation, gypsum sheathing	= 5 psf	ASCE 7-16 Table C3.1-1a
Miscellaneous	= 2 psf	Estimated
Roof DL No. 1	<b>Total = 17 psf</b>	



**Floor dead loads**

(2021 IBC 1606, ASCE 7-16 Table C3.1-1a)

Floor sheathing	= 2 psf	ASCE 7-16 Table C3.1-1a
Wood joists/trusses, MEP, misc	= 6 psf	ASCE 7-16 Table C3.1-1a
Gypsum sheathing	= 2 psf	ASCE 7-16 Table C3.1-1a
Interior Walls	= 2 psf	Estimated
Floor DL No. 1	<b>Total = 12 psf</b>	
6" suspended concrete slab	= 75 psf	Estimated
Floor DL No. 2	<b>Total = 75 psf</b>	

**Wall dead loads**

(2021 IBC 1606, ASCE 7-16 Table C3.1-1a)

Interior stud walls	= 10 psf	ASCE 7-16 12.14.8.1
Exterior 2x6@16"o.c., 5/8" gyp, insul., 7/16" sheathi	= 12 psf	ASCE 7-16 Table C3.1-1a

**Roof live loads**

(2021 IBC 1607)

Occupancy or use	Unif. (psf)	Conc. (lb)	Ref.
Roofs (ordinary construction)	= 20	300	2021 IBC Table 1607.1 No. 27

**Floor live loads**

(2021 IBC 1607)

Occupancy or use	Unif. (psf)	Conc. (lb)	Ref.
Residential (1-2 unit dwelling)	= 40	0	2021 IBC Table 1607.1 No. 26
Stairs and exits (residential 1-2 unit dwelling)	= 40	300	2021 IBC Table 1607.1 No. 31
Decks	= 60	0	2021 IBC Table 1607.1 No. 5

**Load sets**

Live load (occupancy or use)	(psf)	Dead load	(psf)	Abbrev.
Flat roof snow load	25	Roof DL No. 1	17	S 25 17
Residential (1-2 unit dwelling)	40	Floor DL No. 1	12	L 40 12
Stairs and exits (residential 1-2 unit dwelling)	40	Floor DL No. 1	12	Ex 40 12
Decks	60	Floor DL No. 1	12	D 60 12
Residential (1-2 unit dwelling)	40	Floor DL No. 2	75	C 40 75

**Deflection limits (L/limit)**

(2021 IBC 1604.3.1)

Construction	L	S or W	D+L
Roof members (supporting plaster ceiling)	= 360	360	240
Floor members (joists)	= 480		240
Floor members (beams/headers)	= 360		240
Exterior walls and interior partitions (with other britt)	=	240	

# SNOW CALCULATIONS

## Ground snow loads

(ASCE 7-16 Chap. 7.2)

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Basis	=	Jurisdiction defined
County	=	Yamhill
Elevation	=	360 ft
Ground snow load	$P_g =$	30 psf

## Flat roof snow loads

(ASCE 7-16 Chap. 7.3)

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Basis	=	Jurisdiction	
Roof exposure definition	=	Not fully exposed or sheltered (ASCE 7-16 Table 7.3-1, Notes a and b).	
Roof exposure	=	Partial	ASCE 7-16 Table 7.3-1 (notes a,b)
Terrain category (wind)	=	C	
Exposure factor	$C_e =$	1	ASCE 7-16 Table 7.3-1
Roof thermal condition	=	Cold, ventilated roofs exceeding R-25 between ventilated and heated space.	
Thermal factor	$C_t =$	1.1	ASCE 7-16 Table 7.3-2
Risk category	=	II	
Snow importance factor	$I_s =$	1	ASCE 7-16 Table 1.5-2
Flat roof snow load	$P_f =$	25 psf	Jurisdiction

## Sloped roof snow loads

(ASCE 7-16 Chap. 7.4)

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Basis	=	Jurisdiction	
Roof surface	=	Non-slippery (asphalt shingles, wood shingles, or shakes).	
Roof slope	=	40 deg.	
Roof slope factor	$C_s =$	0.93	ASCE 7-16 Chap. C7.4
Eave snow load	$P_{eave} =$	50 psf	ASCE 7-16 Chap. 7.4.5
Balanced snow load	$P_s =$	25 psf	Jurisdiction

## Unbalanced roof snow loads

(ASCE 7-16 Chap. 7.6)

### Hip and gable roofs

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Eave to ridge distance	$W =$	21.25 ft	
Roof system	=	Truss	
Snow density	$\gamma =$	18 pcf	ASCE 7-16 Equation 7.7-1
Height of balanced snow	$H_b =$	1 ft	ASCE 7-16 Chap. 7.7.1
Unbalanced snow load	$P_s =$	25 psf	ASCE 7-16 Chap. 7.6.1

# WIND CALCULATIONS

## Design wind pressure

(2021 IBC 1609, ASCE 7-16 Chap. 26)

### Terrain exposure

Surface roughness (upwind)	= Terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger.	
Exposure category	= C	2021 IBC 1609.4.3
Terrain exp. constant	alpha = 9.5	ASCE 7-16 Table 26.11-1
Terrain exp. constant	Zg = 900	ASCE 7-16 Table 26.11-1
Terrain exp. constant	Zmin = 15 ft	ASCE 7-16 Table 26.11-1
Topographic factor	Kzt = 1	ASCE 7-16 Chap. 26.8.2

### Basic wind pressure

Basic design wind speed	V = 97 mph	2021 IBC Figures 1609.3(1), (2), (3)
Structure type	= Buildings - MWFRS	
Wind directionality factor	Kd = 0.85	ASCE 7-16 Table 26.6-1
Risk category	= II	2021 IBC Table 1604.5
Approx. fundamental freq.	= 5.61 hz	
Structure type	= Rigid	ASCE 7-16 Chap. 26.2
Gust effect factor	G = 0.85	ASCE 7-16 Chap. 26.11.1
Enclosure	= Enclosed (A building having less than 4 sq ft of openings in each wall)	
Roof pitch	= 10:12	
Internal pressure coeff.	GCpi = 0.18	ASCE 7-16 Chap. 26.13, Table 26.13-1
Basic velocity pressure	q = 20.21 psf	ASCE 7-16 Equation 26.10-1

### Directional Procedure: Components and cladding

(ASCE 7-16 Chap. 30.3)

Roof mean height	h = 23.1 ft	ASCE 7-16 Chap. 26.2
Effective wind area (wall components)	Aeff = 25 sf	
Velocity press. exp. coeff.	Kz = 0.93	ASCE 7-16 Table 26.10-1 Note 1.
Velocity pressure	qh = 18.79 psf	ASCE 7-16 Equation 26.10-1
Pressure coefficients		
	End      Interior	
Positive (wall)	GCp = 0.93      0.93	ASCE 7-16 Figure 30.3-1
Negative (wall)	GCp = -1.26      -1.03	ASCE 7-16 Figure 30.3-1
Maximum pressure (wall)	max p = 27.05      22.74      psf	ASCE 7-16 Equation 30.3-1
Positive (roof)	GCp = 0.50      0.50	ASCE 7-16 Equation 30.3-1
Negative (roof)	GCp = -1.80      -1.60	ASCE 7-16 Equation 30.3-1
Maximum pressure (roof)	max p = 37.21      33.45      psf	ASCE 7-16 Equation 30.3-1

**Elevation Geometry**

Level	Trib. Height (ft)	Horiz. dim. (ft)		Max roof Elev. (ft)	Front Proj. A (sf)		Side Proj. A (sf)	
		Front	Side		Gable	Sloped	Gable	Sloped
2	4.3	28	42.5	29.8	88	217	218	103
1	9.0	28	41.5	13.3	2	4	24	25

**Directional Procedure: MWFRS external pressure coefficients**

(ASCE 7-16 Chap. 26.10, Figure 27.3-1 weighted Cp for sloped / gabled area)

Level	Front, Cp				Side, Cp			
	Windward		Leeward		Windward		Leeward	
Roof	Max Cp	Min Cp	Max Cp	Min Cp	Max Cp	Min Cp	Max Cp	Min Cp
2	0.45	0.16	-0.54	-0.54	0.62	0.51	-0.53	-0.53
1	0.52	0.25	-0.53	-0.53	0.57	0.34	-0.55	-0.55
Walls	Windward	Leeward	Side	Windward	Leeward	Side		
	0.80	-0.40	-0.70	0.80	-0.50	-0.70		

**Directional Procedure: MWFRS wind pressures**

(ASCE 7-16 Chap. 26.10.1, Table 26.10-1)

Level	Elev. (ft)	Kz	qz (psf)	Front pressure (psf)			Side pressure (psf)		
				+GCpi	-GCpi	Total	+GCpi	-GCpi	Total
Walls - Leeward									
Max h	18.50	0.89	17.93	-9.27	-2.81		-10.85	-4.39	
Walls - Windward									
2	18.50	0.89	17.93	8.96	15.42	18.23	8.96	15.42	19.81
1	10.00	0.85	17.16	8.44	14.89	17.71	8.44	14.89	19.29
Roofs - Leeward									
2	29.80	0.98	19.82	-12.69	-5.55		-12.53	-5.40	
1	13.30	0.85	17.16	-10.85	-4.67		-11.12	-4.95	
Roofs - Windward									
2	29.80	0.98	19.82	-0.92	11.15	16.70	5.02	14.06	19.46
1	13.30	0.85	17.16	0.52	10.72	15.39	1.93	11.43	16.38

**Directional Procedure: Wind Lateral Loads**

(ASCE 7-16 Chap. 27.2-27.3)

Level	Front				Side			
	Walls (lb)	Roof (lb)	Fx (ASD) (lb)	Vx (ASD) (lb)	Walls (lb)	Roof (lb)	Fx (ASD) (lb)	Vx (ASD) (lb)
2	1,302	3,056	4,358	4,358	2,147	3,748	5,895	5,895
1	2,677	55	2,733	7,090	4,371	481	4,853	10,748

# SEISMIC CALCULATIONS

## Seismic Design Criteria

(2021 IBC 1613.2, ASCE 7-16 Chap. 11)

### Mapped acceleration parameters

Latitude	=	45.331
Longitude	=	-122.968
MCE short period	Ss =	0.856 g
MCE 1.0 sec. period	S1 =	0.414 g

### Design acceleration parameters

Site class	=	D-Default		
Site coefficient	Fa =	1.2		
Site coefficient	Fv =	1.886		
Adjusted short period	SMS =	1.03	Design short period	SDS = 0.68
Adjusted 1.0 sec. period	SM1 =	0.78	Design 1.0 sec. period	SD1 = 0.52
Risk category	=	II		
IRC Seismic design category	=	D1		

## Dead loads

(2021 IBC 1606; ASCE 7-16 Chap. 12.7.2, Table C3.1-1a)

Effective seismic snow weight	=	0 psf	ASCE 7-16 Chap. 12.7.2
Roof DL No. 1	=	17 psf	
Floor DL No. 1	=	12 psf	
Interior stud walls	=	10 psf	
Exterior 2x6@16"o.c., 5/8" gyp, insul., 7/16" sheathi	=	12 psf	

**Equivalent Lateral Force Procedure**

(ASCE 7-16 Chap. 12.8)

Primary LFRS	
Basic structural system	= Bearing wall systems
Seismic force-resisting system	= Light-frame wood walls (wood sheathii

**Structural design parameters**

Response modification factor	R = 6.5	ASCE 7-16 Table 12.2-1 No. A15
System overstrength factor	Omega = 3	ASCE 7-16 Table 12.2-1 No. A15
Deflection amplification factor	Cd = 4	ASCE 7-16 Table 12.2-1 No. A15
Building height limit	= 65 ft	ASCE 7-16 Table 12.2-1 No. A15

**Fundamental period**

Structure type	= All other	
Approximate period parameter	Ct = 0.02	ASCE 7-16 Table 12.8-2
Approximate period parameter	x = 0.75	ASCE 7-16 Table 12.8-2
Height above base	= 18.5 ft	
Approximate fundamental period	Ta = 0.178 sec.	ASCE 7-16 Equation 12.8-7
Approximate fundamental freq.	n = 5.61 hz	
Long period transition period	TL = 8 sec.	ASCE 7-16 Figure 22-14

**Seismic base shear**

Seismic importance factor	Ie = 1.00	ASCE 7-16 Table 1.5-2
Seismic response coefficient	Csmin = 0.03	ASCE 7-16 Equations 12.8-5,6
Seismic response coefficient	Csmax = 0.449	ASCE 7-16 Equations 12.8-3,4
Seismic response coefficient	Cs = 0.11	ASCE 7-16 Equation 12.8-2
Seismic base shear (LRFD)	V = 6633 lb	ASCE 7-16 Equation 12.8-1

**Weight Parameters**

	Exterior Wall			Roof		Floor + Int Wall		Total Weight (lb)
	Trib.	Permtr 1 (ft)	Permtr 2 (ft)	Area (sf)	Weight (psf)	Area (sf)	Weight (psf)	
2	4	143	0	1,314	17	0	12	29,631
1	9	139	0	264	17	1,135	12	33,324
Total								62,955

**Seismic Lateral Loads**

(ASCE 7-16 Chap. 12.8.3)

Level	Height (ft)	Floor (in)	Hx (ft)	Cvx	Fx (lb)	Vx (Shear walls)	
						LRFD (lb)	ASD (lb)
2	8.0	12	18.50	0.6	4,125	4,125	2,887
1	9.0	0	10.00	0.4	2,508	6,633	4,643



# LFRS (SHEAR) CALCULATIONS

## Level 1 - Transverse LFRS (2021 IBC 2305)

Wind lateral load (ASD)	=	7,090 lb
Seismic lateral load (ASD)	=	4,643 lb

Line	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
W =															
E =															

Line	Wall segment		Opening (ft)		LFRS				Anchorage		Hold-down	
	L (ft)	h (ft)	b total	h max	Type	Wind	Allow	Seismic	Allow	D (in.)	Type	T (lb)



**Level 1 - Longitudinal LFRS (2021 IBC 2305)**

Wind lateral load (ASD) = 10,748 lb  
 Seismic lateral load (ASD) = 4,643 lb

Line	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
W =	2,687	2,687													
E =	1,161	1,161													

Line	Wall segment		Opening (ft)		Type	LFRS				D (in.)	Anchorage		Hold-down	
	L (ft)	h (ft)	b total	h max		Wind	Allow	Seismic	Allow		Type	T (lb)	Type	
A	3.2	9	0	0	SW7	840	974	363	696	0.94	5/8" A.B. @ 16"	6,707	HDU8-SDS2.5	
B 1	1.5	3.5	0	0	SW6	896	913	387	600	0.52	5/8" A.B. @ 16"	2,682	HDU4-SDS2.5	
B 1	1.5	3.5	0	0	SW6	896	913	387	600	0.53	5/8" A.B. @ 16"	2,715	HDU4-SDS2.5	
B 2	19	2	0	0	SW6	141	1,065	61	700	0.02	5/8" A.B. @ 16"	0		



**Level 2 - Transverse LFRS (2021 IBC 2305)**

Wind lateral load (ASD) = 4,358 lb  
 Seismic lateral load (ASD) = 2,887 lb

Line	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
W =															
E =															

Line	Wall segment		Opening (ft)		LFRS				Anchorage		Hold-down	
	L (ft)	h (ft)	b total	h max	Type	Wind	Allow	Seismic	Allow	D (in.)	Type	T (lb)

**Level 2 - Longitudinal LFRS (2021 IBC 2305)**

Wind lateral load (ASD)	=	5,895 lb
Seismic lateral load (ASD)	=	2,887 lb

Line	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
W =	1,474	1,474													
E =	722	722													

Line	Wall segment		Opening (ft)		Type	LFRS				D (in.)	Anchorage		Hold-down	
	L (ft)	h (ft)	b total	h max		Wind	Allow	Seismic	Allow		Type	T (lb)	Type	
A	9	8	0	0	SW1	164	365	80	261	0.25	16d @ 4"	0		
B	13.66	8	4	5	SW1	153	291	75	208	0.30	16d @ 4"	658	CS16	

# DIAPHRAGMS

## Sheathing analysis

APA Engineered Wood Construction Guide, Form No. E30W (2016 APA)

Location	Label	Applied loads (OOP)		Sheathing		Support spacing (in.)	Allow	Result
		LL (psf)	DL (psf)	Size	Rating		LL (psf)	
Roof	S 25 17	25	17	7/16"	24/16	24	44	OK 43%
Upper Floor	L 40 12	40	12	3/4"	48/24	16	335	OK 88%
Main Floor	L 40 12	40	12	3/4"	48/24	16	335	OK 88%

## Diaphragm parameters

Level	Seismic Fpx	Transverse (front)		Longitudinal (side)		Minimum Sheathing Thickness	Diaphragm Nailing		
		Wind MWFRS	Horz. dim. (ft)	Wind MWFRS	Horz. dim. (ft)		Edge 1	Edge 2	Blocking
2	2,887	4,358	28	5,895	42.5	7/16"	8d @ 6"	8d @ 6"	Unblocked
1	3,195	2,733	28	4,853	41.5	15/32"	8d @ 6"	8d @ 6"	Unblocked

## Diaphragm analysis

Level	Max Span (ft)	Reaction Load (lb)		Line L (ft)	Diaphragm Layout	Wind		Seismic	
		Wind	Seismic			v (plf)	Allow (plf)	v (plf)	Allow (plf)
Transverse (front) direction									
2	28	2,179	1,444	42.5	Case 1	51	322.5	34	230.35714
1	28	1,366	1,597	41.5	Case 1	33	335	38	239.28571
Longitudinal (side) direction									
2	42.5	2,948	1,444	28	Case 3	105	237.5	52	169.64286
1	41.5	2,426	1,597	28	Case 3	87	252.5	57	180.35714

**Chord Analysis**

Level	Max Span (ft)	Depth (ft)	% Total Load	Chord Force (lb)	Collector Type	Allow (lb)
Transverse (front) direction			on Diaph.			
2	28	43	100%	359	TP Splice (12) 16d	2,700
1	28	42	100%	269	TP Splice (12) 16d	2,700
Longitudinal (side) direction						
2	42.5	28	100%	1,119	TP Splice (12) 16d	2,700
1	41.5	28	100%	899	TP Splice (12) 16d	2,700

**Strut Analysis**

Level	Line Length (ft)	Strut Length (ft)	% Total Load	Strut Force (lb)	Collector Type	Allow (lb)
Transverse (front) direction						
2	42.5	21	50%	1,089	TP Splice (12) 16d	2,700
1	41.5	21	50%	799	TP Splice (12) 16d	2,700
Longitudinal (side) direction			0			
2	28	14	50%	1,474	TP Splice (12) 16d	2,700
1	28	14	50%	1,213	TP Splice (12) 16d	2,700

**Section III:  
Conditions – File SUB221-0003 Rourke Subdivision**

- A.** The applicant is conditioned to complete construction (i.e. required public improvements, utilities, streets) for the subdivision phase within two years of the preliminary plat approval.

The applicant is conditioned to record the final plat within the subdivision approval period. The applicant must provide the following information for review and approval prior to construction of any improvements:

1. Access easements and maintenance agreements shall be recorded for the shared driveways as part of the final platting process.
2. Construction plans must be submitted for all infrastructure, per the requirements below.
3. Future construction will be reviewed for compliance with all applicable lot and parking coverage requirements during the building permit review process.

**General Requirements for the Public Improvement Permit:**

The Public Works Design and Construction Standards require that the applicant submit engineered construction plans for review and approval of all utilities, public street improvements, and any new public streets being constructed. Please note that additional Engineering Department plan review application and fees apply for review of plans. Submit any required easements for review and approval and record approved easements. No construction of, or connection to, any existing or proposed public utility/improvements will be permitted until all plans are approved and all necessary permits have been obtained.

- a. Public utility infrastructure improvements not limited to street improvements, public walkways, water, wastewater, and stormwater will require permits from partner agencies to authorize different work tasks. All other agency permitting will be required prior to the City of Newberg issuing a Public Improvement Permit.

- B.** The applicant must provide the following information for review and approval prior to construction of any improvements:

**1. Street Trees**

- a. Street trees along N College Street will need to be from the approved street trees species list and planted 50 feet on center. The applicant will also need to ensure the planter strip contains grass, shrubs, and ground cover per NMC 15.420.010 required minimum standards for landscaping. Street trees are required along Rourke Court and will need to be placed 10 feet behind the curb tight sidewalk but outside the public utility easement. The trees will need to be 35 feet on center and from the approved street tree species list. The street trees will need to be planted prior to occupancy of Lots 1, 2, 5, 6, 7, 8, 10, 11 and 12. If the landscaping cannot

be completed prior to issuance of occupancy the applicant may place a security on file per NMC 15.420.010(C).

## **2. Streets, Pedestrian Walkways, Shared Driveway and Street Lighting**

- a. Final street improvement plans will need to be submitted and approved prior to applying for building permits.
- b. Final street improvement plans will need to be submitted for approval as part of the public improvement permit application.
- c. Final plans showing Rourke Court as a Limited Residential Street with no parking on both sides of the street shall be submitted as part of the public improvement permit.
- d. The applicant shall pay a proportional cost for the traffic control upgrade to the City of Newberg for the number of trips being added to the E Foothills Drive/OR219-N College Street intersection as a direct result of the development. The most severe impact to the operation of the intersection occurs during the PM peak period. The following formula was used to develop a Traffic Impact Fee to capture the proportional impact of the development:
  - i.  $(4 \text{ PM trips directly proportional to the development}) / (1111 \text{ PM peak hour total trips through the intersection}) * (\$825,000 \text{ for the TSP cost of an intersection upgrade}) = \$2,970 \text{ Traffic Impact Fee}$
- e. A right-of-way dedication of sufficient width to achieve the minimum of 69-feet of right-of-way and 24 feet of pavement from the new curb to the right-of-way center line along the site's N College Street frontage shall be recorded and documentation of the recording submitted prior to building permit applications.
- f. The applicant shall submit for approval from ODOT for access to N College Street with the Public Improvement Permit Application.
- g. Final plans showing Rourke Court as a Limited Residential Street with no parking on both sides of the street shall be submitted as part of the public improvement permit.
- h. Final plans meeting the requirements of the fire chief shall be submitted with the public improvement permit application.
- i. Final plans showing 6-foot sidewalks along Rourke Court and along the N College Street frontage shall be submitted for approval with the public improvement permit application.
- j. Final plans showing Rourke Court as a Limited Residential Street with 6-foot-wide sidewalks shall be submitted for approval with the public improvements permit application.

- k. Plans showing 5.5-foot-wide planter strips on N College shall be submitted for approval as part of the public improvement permit application. The applicant will need to obtain an ODOT permit for the N College Street frontage improvements prior to issuance of the City of Newberg Public Improvement Permit.
- l. Final plans showing the proposed public walkway connecting Rourke Court with N College Street with a 10-foot-wide paved surface to be submitted with the public improvements permit application.
- m. Final plans showing Rourke Court as a street with no parking, a mountable curb and curbside sidewalks will be required as part of the public works permit application.
- n. Prior to issuance of building permits, building plans to be submitted showing fire sprinkler systems in every building along Rourke Court.
- o. The applicant shall obtain approval of the name of the proposed residential street prior to installing street signs.
- q. Final plans are required to be submitted with permit applications showing the driveway for Parcel 1 located as far as possible from the intersection with N College Street.
- r. Access easements and maintenance agreements for both shared driveways shall be recorded prior to the final plat approval.
- s. The applicant shall submit for approval from ODOT for access to N College Street with the Public Improvement Permit Application.
- t. The applicant will be required to show via a lighting analysis that the proposed street lighting meets City standards or provide additional Option A street lighting that is compliant with the City's Public Works Design and Construction Standards.

### **3. Water**

- a. Final plans including the proposed water lines shall be submitted as part of the public improvement permit application.
- b. Results of fire flow tests performed by a private contractor hired by the applicant shall be submitted prior to issuance of building permits accordance with requirements of the fire marshal.

- c. Final water line plans will need to be submitted for approval as part of the public improvement permit application.
- d. Final plans including the proposed water lines shall be submitted as part of the public improvement permit application. Utility designs and alignments will be reviewed as part of the Public Improvement Permit.

#### **4. Miscellaneous Permits**

- a. Applicant is to provide copies of any State and/or Federal permits related to the onsite wetlands and show compliance with any State and/or Federal permits, or provide documentation from State and/or Federal agencies that wetland/waters of the state related permits are not required, prior to issuance of permits from the City of Newberg.
- b. The applicant will be required to obtain and submit a DEQ 1200-C permit prior to issuance of a public improvement permit.
- c. The applicant will need to obtain an ODOT permit for the N College Street frontage improvements prior to issuance of the City of Newberg Public Improvement Permit.
- d. The applicant shall submit for approval from ODOT for access to N College Street with the Public Improvement Permit Application.

#### **5. Wastewater**

- a. Final plans for the proposed wastewater line will need to be submitted for approval as part of the public improvement permit application.
- b. Final plans of the proposed wastewater line with individual service laterals to each lot shall be submitted as part of the public improvements permit application. Utility designs and alignments will be reviewed as part of the Public Improvement Permit.
- c. The existing septic system is to be decommissioned according to Yamhill County standards. Documentation of the septic system abandonment or removal in accordance with Yamhill County standards shall be submitted with the public improvement permit application.

#### **6. Easements**

- a. Final plans showing utility easements will be required as part of the public works improvement permit application.

- b. Access and utility easements and maintenance agreements for both shared driveways shall be recorded prior to the final plat approval.
- c. The applicant will be required to submit recorded documents that include necessary utility easements meeting the specifications and standards of the City's Public Works Design and Construction Standards, but not necessarily limited to:
  - i. 10-foot public utility easements along all public street frontages including Lot 10.
  - ii. 15-foot public access easement for the proposed public walkway.
  - iii. 25-foot access and utility easement for the water and sewer lines in both shared driveways.
  - iv. Maintain and protect all existing utilities easements encumbered on the property.

## 7. Stormwater

- a. A final stormwater management report and construction plans meeting the City's Public Works Design and Construction Standards will be required as part of the public works improvement permit application.
  - b. The applicant is also required to obtain ODOT approval and a permit from ODOT for the proposed storm system improvements along N College prior to issuance of a City Public Improvement Permit.
  - c. The applicant will need to submit a final stormwater report and construction plans meeting the City's Public Works Design and Construction Standards and NMC 13.25 Stormwater Management requirements and obtain a Public Improvement Permit. Utility designs and alignments will be reviewed as part of the Public Improvement Permit.
- C. The applicant must complete the following prior to final plat approval.
- 1. **Substantially Complete the Construction Improvements:** Prior to final plat approval, the applicant must substantially complete the construction improvements and secure for inspection with the Engineering Division (503-537-1273). In addition to those items listed below, the inspector will also be looking for completion of items such as sidewalks, street signs, streetlights, and fire hydrants.
- ORS455.174 defines substantial completion as the completion of the:
- a. Water supply system;
  - b. Fire hydrant system;

- c. Sewage disposal system;
- d. Storm water drainage system;
- e. Curbs;
- f. Demarcating of street signs acceptable for emergency responders; and
- g. Roads necessary for access by emergency vehicles.

**D.** Final plat submission requirements and approval criteria: In accordance with NDC final plans showing utility easements will be required prior to submitting for building permits. 15.235.070, final plats require review and approval by the director prior to recording with Yamhill County. The final plat submission requirements, approval criteria, and procedure are as follows:

1. Submission Requirements:

The applicant shall submit the final plat within two years, or as otherwise provided for in NMC 15.235.030. The format of the plat shall conform to ORS Chapter 92. The final plat application shall include the following items:

- a. One original and one identical copy of the final plat for signature. The plat copies shall be printed on mylar, and must meet the requirements of the county recorder and county surveyor. The plat must contain a signature block for approval by the city recorder and community development director, in addition to other required signature blocks for county approval. Preliminary paper copies of the plat are acceptable for review at the time of final plat application.
- b. Written response to any conditions of approval assigned to the land division.
- c. A title report for the property, current within six months of the final plat application date.
- d. Copies of any required dedications, easements, or other documents.
- e. Copies of all homeowner's agreements, codes, covenants, and restrictions, or other bylaws, as applicable. This shall include documentation of the formation of a homeowner's association, including but not limited to a draft homeowner's association agreement regarding the maintenance of planter strips adjacent to the rear yard of proposed through lots.
- f. Copies of any required maintenance agreements for common property.
- g. A bond, as approved by the city engineer, for public infrastructure improvements, if the improvements are not substantially complete prior to the final plat.
- h. Any other item required by the city to meet the conditions of approval assigned to the land division.

2. **Approval Process and Criteria.** By means of a Type I procedure, the director shall review and approve, or deny, the final plat application based on findings of compliance or noncompliance with the preliminary plat conditions of approval.

**E. Filing and recording:** In accordance with NMC 15.235.080, a new lot is not a legal lot for purposes of ownership (title), sale, lease, or development/land use until a final plat is recorded for the subdivision or partition containing the lot. The final plat filing and recording requirements are as follows:

1. **Filing Plat with County.** Within 60 days of the city approval of the final plat, the applicant shall submit the final plat to Yamhill County for signatures of county officials as required by ORS Chapter 92.
2. **Proof of Recording.** Upon final recording with the county, the applicant shall submit to the city a paper copy of all sheets of the recorded final plat. This shall occur prior to the issuance of building permits for the newly created lots.
3. **Prerequisites to Recording the Plat.**
  - a. No plat shall be recorded unless all ad valorem taxes and all special assessments, fees, or other charges required by law to be placed on the tax roll have been paid in the manner provided by ORS Chapter 92;
  - b. No plat shall be recorded until the county surveyor approves it in the manner provided by ORS Chapter 92.

**Development Notes:**

1. **Postal Service:** The applicant shall submit plans to the Newberg Postmaster for approval of proposed mailbox delivery locations. Contact the Newberg Post Office for assistance at 503-554-8014.
2. **PGE:** PGE can provide electrical service to the project under terms of the current tariff which will involve developer expense and easements. Contact the Service & Design Supervisor, PGE, at 503-463-4348.
3. **Zipty:** The developer must coordinate trench/conduit requirements with Zipty. Contact the Engineering Division, Zipty, at 541-269-3375.
4. **Addresses:** The Planning Division will assign address for the new subdivision. Planning Division staff will send out notice of the new address after they receive a recorded copy of the final subdivision plat.

**Sold To:**

Corins Custom Homes  
 10695 NE Renne Rd  
 Newberg, OR 97132

**Job Info:**

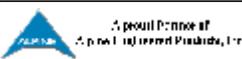
Job #: 0824061  
 Salesman: MICHAEL GAMBY  
 Owner:  
 Contractor:  
 Contact: Fill in later  
 Phone: ??  
 P.O. #:  
 Loading: 42

**Job Information:**

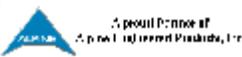
Rourke Lot 12  
 \*\* Verify \*\*  
 Newberg OR 97132  
 Cust\_ID CO0169

**QUOTE****Dates:**

Date: 8/8/2024  
 Del. Date:

**WoodTruss**

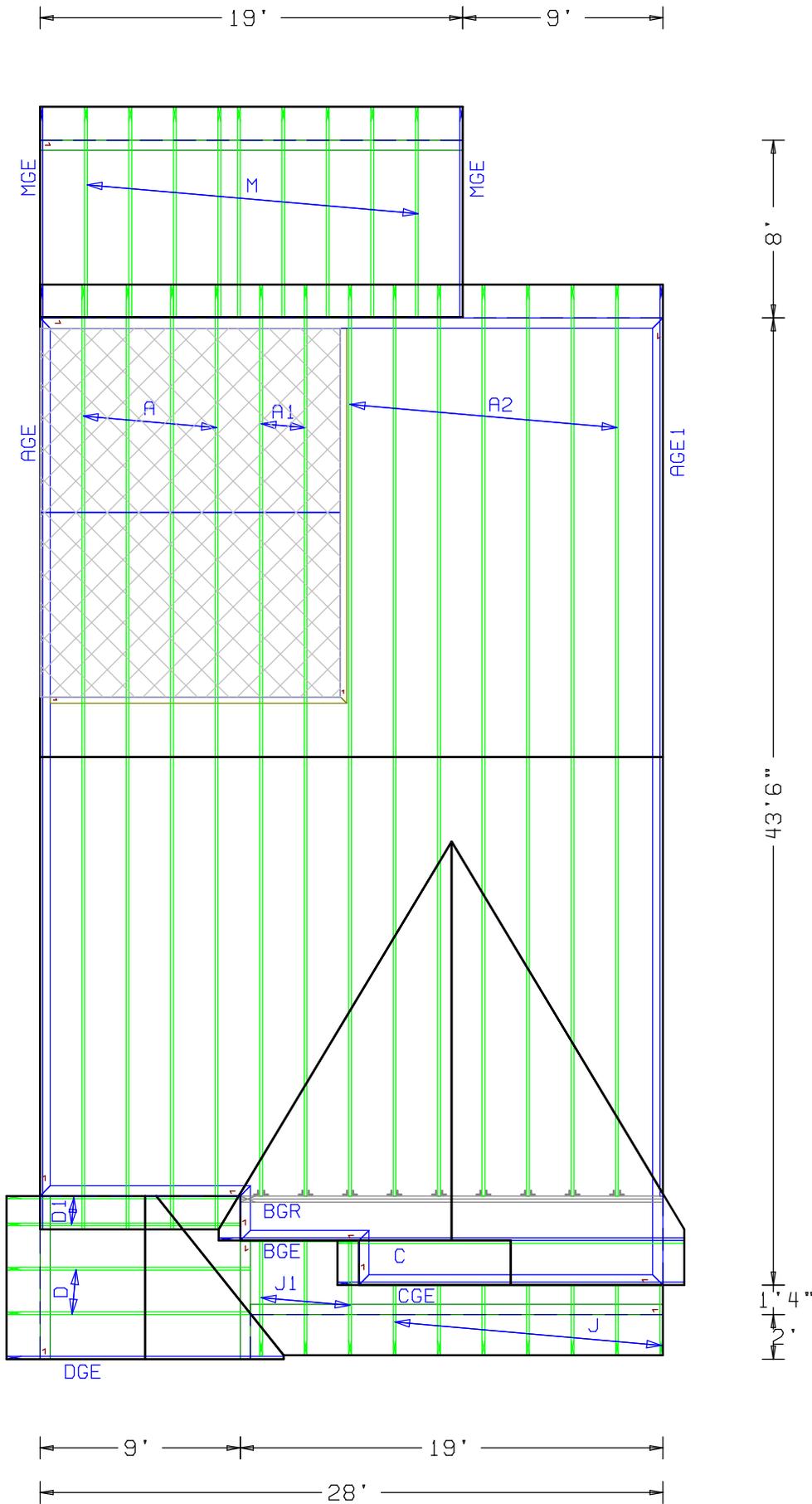
Qty	Span	Description	Pitch TC/BC	OHL OHR	TC Size BC Size	Truss	Notes
4	39-06-00	A	6 / 2	01-06-00 01-06-00	2x4 2x4		
2	39-06-00	A1	6 / 2	01-06-00 00-00-00	2x4 2x4		
7	39-06-00	A2	6 / 0	01-06-00 00-00-00	2x4 2x4		
1	39-06-00	AGE	6 / 2	01-06-00 01-06-00	2x4 2x4		
1	39-06-00	AGE1	6 / 0	01-06-00 00-00-00	2x4 2x4		
1	19-00-00	BGE	10 / 0	00-11-09 00-11-09	2x4 2x4		
1	19-00-00	BGR 2 - Ply	10 / 0	00-00-00 00-00-00	2x4 2x6		
1	13-08-00	C	10 / 0	00-11-09 00-11-09	2x4 2x4		
1	13-08-00	CGE	10 / 0	00-11-09 00-11-09	2x4 2x4		
2	09-05-08	D	10 / 0	01-06-00 00-00-00	2x4 2x4		
2	09-00-00	D1	10 / 0	01-06-00 00-00-00	2x4 2x4		
1	09-05-08	DGE	10 / 0	01-06-00 01-06-00	2x4 2x4		
7	01-03-08	J	8 / 0	01-10-00 00-00-00	2x4 2x4		
3	03-03-08	J1	8 / 0	01-10-00 00-00-00	2x4 2x4		
9	07-11-08	M	3 / 0	01-06-00 00-00-00	2x4 2x4		
2	07-11-08	MGE	3 / 0	01-06-00 00-00-00	2x4 2x4		

**Blocks**

Qty	Description
25	2X4 SOLID BLOCK
25	2X4 VENTED BLOCK



54' 10"      39' 6"      8'      7' 4"      8'



Customer: Corins Custom Homes  
 Desc.: Rourke Lot 12  
 ADDRESS: \*\* Verify \*\*  
 Designed by: MICHAEL GAMBY

JOB NO:  
0824061

PAGE NO:  
1 OF 1



08/09/2024



Alpine, an ITW Company  
 155 Harlem Ave  
 North Building, 4th Floor  
 Glenview, IL 60025  
 Phone: (800)877-3678 (916)387-0116  
 Fax: (916)387-1110  
 www.alpineitw.com

Site Information:	Page 1:
Customer: Truss Components of Oregon, Inc.	Job Number: 0824061
Job Description: Rourke Lot 12	
Address: ** Verify **, Newberg, OR 97132	

Job Engineering Criteria:	
Design Code: IBC 2021	IntelliVIEW Version: 23.02.04 JRef #: 1Y2871750007
Wind Standard: ASCE 7-16      Wind Speed (mph): 120	Design Loading (psf): 42.00
Building Type: Closed	

This package contains general notes pages, 16 truss drawing(s) and 5 detail(s).

Item	Drawing Number	Truss
1	222.24.1707.10977	A
3	222.24.1707.15207	A2
5	222.24.1707.49073	AGE1
7	222.24.1708.10863	BGR
9	222.24.1708.14480	CGE
11	222.24.1708.17610	D1
13	222.24.1708.23183	J
15	222.24.1708.26567	M
17	BRCLBSUB0119	
19	GABRST160118	
21	A12015ENC160118	

Item	Drawing Number	Truss
2	222.24.1707.12947	A1
4	222.24.1707.46577	AGE
6	222.24.1710.23670	BGE
8	222.24.1708.12490	C
10	222.24.1708.16127	D
12	222.24.1708.21100	DGE
14	222.24.1708.24673	J1
16	222.24.1708.30390	MGE
18	A12030ENC160118	
20	GBLLETIN0118	

## **General Notes**

### **Truss Design Engineer Scope of Work, Design Assumptions and Design Responsibilities:**

The design responsibilities assumed in the preparation of these design drawings are those specified in ANSI/TPI 1, Chapter 2; and the National Design Standard for Metal Plate Connected Wood Truss Construction, by the Truss Plate Institute. The truss component designs conform to the applicable provisions of ANSI/TPI 1 and NDS, the National Design Specification for Wood Construction by AWC. The truss component designs are based on the specified loading and dimension information furnished by others to the Truss Design Engineer. The Truss Design Engineer has no duty to independently verify the accuracy or completeness of the information provided by others and may rely on that information without liability. The responsibility for verification of that information remains with others neither employed nor controlled by the Truss Design Engineer. The Truss Design Engineer's seal and signature on the attached drawings, or cover page listing these drawings, indicates acceptance of professional engineering responsibility solely for the truss component designs and not for the technical information furnished by others which technical information and consequences thereof remain their sole responsibility.

The suitability and use of these drawings for any particular structure is the responsibility of the Building Designer in accordance with ANSI/TPI 1 Chapter 2. The Building Designer is responsible for determining that the dimensions and loads for each truss component match those required by the plans and by the actual use of the individual component, and for ascertaining that the loads shown on the drawings meet or exceed applicable building code requirements and any additional factors required in the particular application. Truss components using metal connector plates with integral teeth shall not be placed in environments that will cause the moisture content of the wood in which plates are embedded to exceed 19% and/or cause corrosion of connector plates and other metal fasteners.

The Truss Design Engineer shall not be responsible for items beyond the specific scope of the agreed contracted work set forth herein, including but not limited to: verifying the dimensions of the truss component, calculation of any of the truss component design loads, inspection of the truss components before or after installation, the design of temporary or permanent bracing and their attachment required in the roof and/or floor systems, the design of diaphragms or shear walls, the design of load transfer connections to and from diaphragms and shear walls, the design of load transfer to the foundation, the design of connections for truss components to their bearing supports, the design of the bearing supports, installation of the truss components, observation of the truss component installation process, review of truss assembly procedures, sequencing of the truss component installation, construction means and methods, site and/or worker safety in the installation of the truss components and/or its connections.

This document may be a high-quality facsimile of the original engineering document which is a digitally signed electronic file with third party authentication. A wet or embossed seal copy of this engineering document is available upon request.

### **Temporary Lateral Restraint and Bracing:**

Temporary lateral restraint and diagonal bracing shall be installed according to the provisions of BCSI chapters B1, B2, B7 and/or B10 (Building Component Safety Information, by TPI and SBCA), or as specified by the Building Designer or other Registered Design Professional. The required locations for lateral restraint and/or bracing depicted on these drawings are only for the permanent lateral support of the truss members to reduce buckling lengths, and do not apply to and may not be relied upon for the temporary stability of the truss components during their installation.

### **Permanent Lateral Restraint and Bracing:**

The required locations for lateral restraint or bracing depicted on these drawings are for the permanent lateral support of the truss members to reduce buckling lengths. Permanent lateral support shall be installed according to the provisions of BCSI chapters B3, B7 and/or B10, or as specified by the Building Designer or other Registered Design Professional. These drawings do not depict or specify installation/erection bracing, wind bracing, portal bracing or similar building stability bracing which are parts of the overall building design to be specified, designed, and detailed by the Building Designer.

### **Connector Plate Information:**

Alpine connector plates are made of ASTM A653 or ASTM A1063 galvanized steel with the following designations, gauges and grades: W=Wave, 20ga, grade 40; H=High Strength, 20ga, grade 60; S=Super Strength, 18ga, grade 60. Information on model code compliance is contained in the ICC Evaluation Service report ESR-1118, available on-line at [www.icc-es.org](http://www.icc-es.org).

### **Bearing Information:**

The bearing area factor,  $C_b$ , is considered for the allowable capacity of solid sawn wood bearings supporting trusses that are located a minimum of 3" from the end of the lumber piece.

## **General Notes** (continued)

### **Coated Lumber:**

Coated lumber must be properly re-dried and maintained below 19% or less moisture level through all stages of construction and usage. Coated lumber has no adjustments to lumber properties. Coated lumber may be more brittle than uncoated lumber. Special handling care must be taken to prevent breakage during all handling activities. Refer to manufacturer literature, specifications, and code evaluation reports for restrictions, details, and requirements.

### **Fire Retardant Treated Lumber:**

Fire retardant treated lumber must be properly re-dried and maintained below 19% or less moisture level through all stages of construction and usage. Fire retardant treated lumber may be more brittle than untreated lumber. Special handling care must be taken to prevent breakage during all handling activities.

### **Key to Terms:**

Information provided on drawings reflects a summary of the pertinent information required for the truss design. Detailed information on load cases, reactions, member lengths, forces and members requiring permanent lateral support may be found in calculation sheets available upon written request.

BCDL = Bottom Chord standard design Dead Load in pounds per square foot.

BCLL = Bottom Chord standard design Live Load in pounds per square foot.

C = Coated lumber.

C-AT = AtTEK coated lumber.

C-FX = FX Lumber Guard coated lumber.

C -TE = TechWood 4400 coated lumber.

CL = Certified lumber.

Des Ld = total of TCLL, TCDL, BCLL and BCDL Design Load in pounds per square foot.

FRT = Fire Retardant Treated lumber.

FRT-BF = Boraflame Fire Retardant Treated lumber

FRT-DB = D-Blaze Fire Retardant Treated lumber.

FRT-DC = Dricon Fire Retardant Treated lumber.

FRT-FP = FirePRO Fire Retardant Treated lumber.

FRT-FL = FlamePRO Fire Retardant Treated lumber.

FRT-FT = FlameTech Fire Retardant Treated lumber.

FRT-ON = OnWood Fire Retardant Treated lumber.

FRT-PG = PYRO-GUARD Fire Retardant Treated lumber.

FRT-PR = ProWood Fire Retardant Treated lumber.

g = green lumber.

HORZ(LL) = maximum Horizontal panel point deflection due to Live Load, in inches.

HORZ(TL) = maximum Horizontal panel point long term deflection in inches, due to Total Load, including creep adjustment.

HPL = additional Horizontal Load added to a truss Piece in pounds per linear foot or pounds.

Ic = Incised lumber.

FJ = Finger Jointed lumber.

L/# = user specified divisor for limiting span/deflection ratio for evaluation of actual L/defl value.

L/defl = ratio of Length between bearings, in inches, divided by the vertical Deflection due to creep, in inches, at the referenced panel point. Reported as 999 if greater than or equal to 999.

Loc = Location, starting location of left end of bearing or panel point (joint) location of deflection.

Max BC CSI = Maximum bending and axial Combined Stress Index for Bottom Chords for all load cases.

Max TC CSI = Maximum bending and axial Combined Stress Index for Top Chords for all load cases.

Max Web CSI = Maximum bending and axial Combined Stress Index for Webs for all load cases.

NCBCLL = Non-Concurrent Bottom Chord design Live Load in pounds per square foot.

PL = additional Load applied at a user specified angle on a truss Piece in pounds per linear foot or pounds.

PLB = additional vertical load added to a Bottom chord Piece of a truss in pounds per linear foot or pounds

PLT = additional vertical load added to a Top chord Piece of a truss in pounds per linear foot or pounds.

PP = Panel Point.

R = maximum downward design Reaction, in pounds, from all specified gravity load cases, at the indicated location (Loc).

-R = maximum upward design Reaction, in pounds, from all specified gravity load cases, at the identified location (Loc).

Rh = maximum horizontal design Reaction in either direction, in pounds, from all specified gravity load cases, at the indicated location (Loc).

RL = maximum horizontal design Reaction in either direction, in pounds, from all specified non-gravity (wind or seismic) load cases, at the indicated location (Loc).

## **General Notes** (continued)

### **Key to Terms** (continued):

Rw = maximum downward design Reaction, in pounds, from all specified non-gravity (wind or seismic) load cases, at the identified location (Loc).

TCDL = Top Chord standard design Dead Load in pounds per square foot.

TCLL = Top Chord standard design Live Load in pounds per square foot.

U = maximum Upward design reaction, in pounds, from all specified non-gravity (wind or seismic) load cases, at the indicated location (Loc).

VERT(CL) = maximum Vertical panel point deflection in inches due to Live Load and Creep Component of Dead Load in inches.

VERT(CTL) = maximum Vertical panel point deflection ratios due to Live Load and Creep Component of Dead Load, and maximum long term Vertical panel point deflection in inches due to Total load, including creep adjustment.

VERT(LL) = maximum Vertical panel point deflection in inches due to Live Load.

VERT(TL) = maximum Vertical panel point long term deflection in inches due to Total load, including creep adjustment.

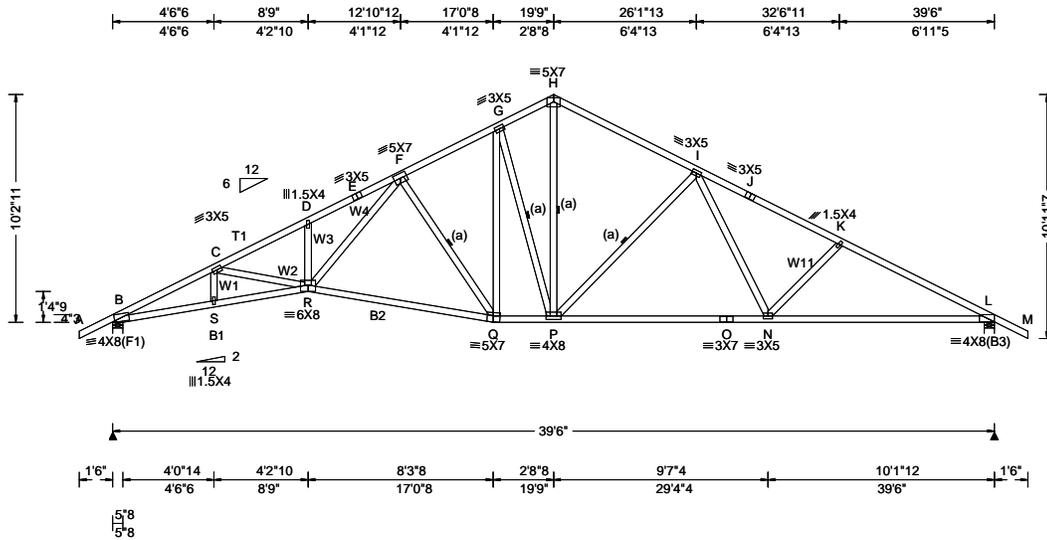
W = Width of non-hanger bearing, in inches.

Refer to ASCE-7 for Wind and Seismic abbreviations.

Uppercase Acronyms not explained above are as defined in TPI 1.

### **References:**

1. AWC: American Wood Council; 222 Catocin Circle SE, Suite 201; Leesburg, VA 20175; [www.awc.org](http://www.awc.org).
2. ICC: International Code Council; [www.iccsafe.org](http://www.iccsafe.org).
3. Alpine, a division of ITW Building Components Group Inc.: 155 Harlem Ave, North Building, 4th Floor, Glenview, IL 60025; [www.alpineitw.com](http://www.alpineitw.com).
4. TPI: Truss Plate Institute, 2670 Crain Highway, Suite 203, Waldorf, MD 20601; [www.tpinst.org](http://www.tpinst.org).
5. SBCA: Wood Truss Council of America, 6300 Enterprise Lane, Madison, WI 53719; [www.sbcacomponents.com](http://www.sbcacomponents.com)



<b>Loading Criteria (psf)</b> TCLL: 25.00 TCDL: 10.00 BCLL: 0.00 BCDL: 7.00 Des Ld: 42.00 NCBCLL: 0.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	<b>Wind Criteria</b> Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 23.10 ft TCDL: 6.0 psf BCDL: 4.2 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.95 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	<b>Snow Criteria (Pg,Pf in PSF)</b> Pg: 25.0 Ct: 1.1 CAT: II Pf: 21.2 Ce: 1.1 Lu: - Cs: 1.00 Snow Duration: 1.15  <b>Building Code:</b> IBC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:2(0)/4(0) Plate Type(s): WAVE	<b>Defl/CSI Criteria</b> PP Deflection in loc L/defl L/# VERT(LL): 0.339 F 999 360 VERT(CL): 0.582 F 807 240 HORZ(LL): 0.159 L - - HORZ(TL): 0.273 L - - Creep Factor: 2.0 Max TC CSI: 0.759 Max BC CSI: 0.923 Max Web CSI: 0.982  VIEW Ver: 23.02.04.0123.13	<b>▲ Maximum Reactions (lbs)</b> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Loc</th> <th colspan="3">Gravity</th> <th colspan="3">Non-Gravity</th> </tr> <tr> <th>R+</th> <th>/R-</th> <th>/Rh</th> <th>/Rw</th> <th>/U</th> <th>/RL</th> </tr> </thead> <tbody> <tr> <td>B</td> <td>1823</td> <td>-</td> <td>-</td> <td>/878</td> <td>/284</td> <td>/262</td> </tr> <tr> <td>L</td> <td>1822</td> <td>-</td> <td>-</td> <td>/883</td> <td>/282</td> <td>-</td> </tr> </tbody> </table> <p>Wind reactions based on MWFRS B Brg Wid = 5.5 Min Req = 2.9 (Truss) L Brg Wid = 5.5 Min Req = 3.0 (Truss) Bearings B &amp; L are a rigid surface. Members not listed have forces less than 375# <b>Maximum Top Chord Forces Per Ply (lbs)</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Chords</th> <th>Tens.Comp.</th> <th>Chords</th> <th>Tens. Comp.</th> </tr> </thead> <tbody> <tr> <td>B - C</td> <td>1433 - 4441</td> <td>G - H</td> <td>898 - 1908</td> </tr> <tr> <td>C - D</td> <td>1397 - 4269</td> <td>H - I</td> <td>878 - 2002</td> </tr> <tr> <td>D - E</td> <td>1492 - 4271</td> <td>I - J</td> <td>1047 - 2701</td> </tr> <tr> <td>E - F</td> <td>1504 - 4198</td> <td>J - K</td> <td>1033 - 2833</td> </tr> <tr> <td>F - G</td> <td>936 - 2203</td> <td>K - L</td> <td>1087 - 3162</td> </tr> </tbody> </table>	Loc	Gravity			Non-Gravity			R+	/R-	/Rh	/Rw	/U	/RL	B	1823	-	-	/878	/284	/262	L	1822	-	-	/883	/282	-	Chords	Tens.Comp.	Chords	Tens. Comp.	B - C	1433 - 4441	G - H	898 - 1908	C - D	1397 - 4269	H - I	878 - 2002	D - E	1492 - 4271	I - J	1047 - 2701	E - F	1504 - 4198	J - K	1033 - 2833	F - G	936 - 2203	K - L	1087 - 3162
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**Lumber**  
Top chord 2x4 HF #2 T1 2x4 HF #1&Bet;  
Bot chord 2x4 HF #2 B1 2x4 HF #1&Bet;  
B2 2x4 DF-L #2;  
Webs 2x4 HF #2 W1,W2,W3,W11 2x4 HF Standard + HF Stud; W4 2x4 DF-L Standard + DF-L Stud;

**Bracing**  
(a) Continuous lateral restraint equally spaced on member.

**Loading**  
Truss designed for unbalanced snow loads.

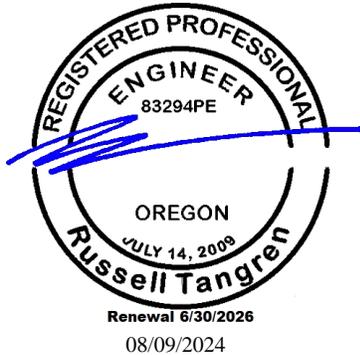
**Wind**  
Wind loads based on MWFRS with additional C&C member design.  
Wind loading based on both gable and hip roof types.

**Maximum Bot Chord Forces Per Ply (lbs)**

Chords	Tens.Comp.	Chords	Tens. Comp.
B - S	3919 - 1210	P - O	2233 - 584
S - R	3949 - 1219	O - N	2233 - 584
R - Q	2565 - 700	N - L	2736 - 822
Q - P	1883 - 428		

**Maximum Web Forces Per Ply (lbs)**

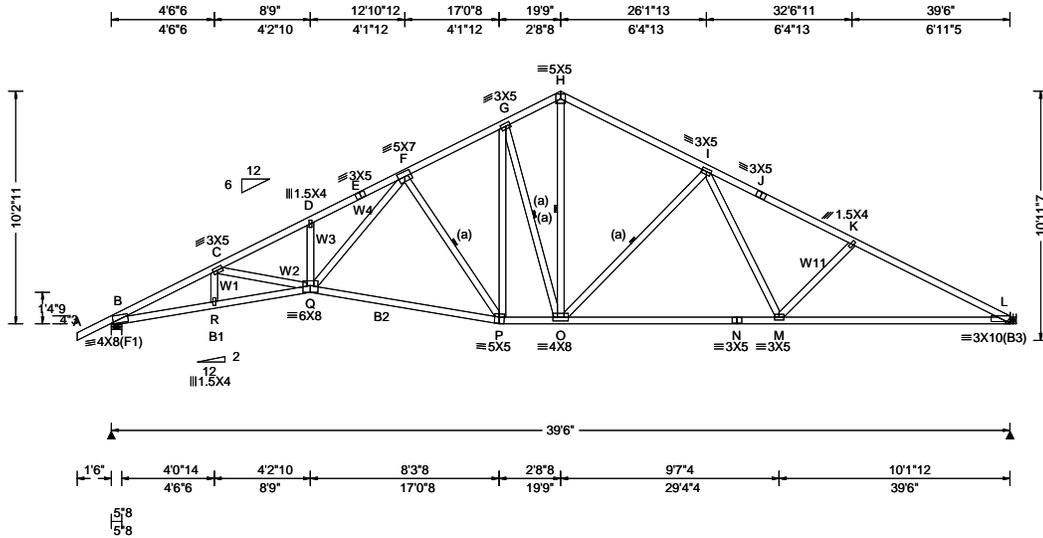
Webs	Tens.Comp.	Webs	Tens. Comp.
R - F	1984 - 622	H - P	1332 - 587
F - Q	460 - 1138	P - I	406 - 781
Q - G	594 - 228	I - N	496 - 120
G - P	382 - 797	N - K	273 - 427



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For more information see these web sites: Alpine: alpineitw.com; TPI: tpinst.org; SBCA: sbccomponents.com; ICC: iccsafe.org; AWC: awc.org

Truss Components of Oregon, Inc.  
P. O. Box 468  
Cornelius OR 97113  
(503)357-2118

155 Harlem Ave  
North Building, 4th Floor  
Glenview, IL 60025



<b>Loading Criteria (psf)</b> TCLL: 25.00 TCDL: 10.00 BCLL: 0.00 BCDL: 7.00 Des Ld: 42.00 NCBCLL: 0.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	<b>Wind Criteria</b> Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 23.10 ft TCDL: 6.0 psf BCDL: 4.2 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.95 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	<b>Snow Criteria (Pg,Pf in PSF)</b> Pg: 25.0 Ct: 1.1 CAT: II Pf: 21.2 Ce: 1.1 Lu: - Cs: 1.00 Snow Duration: 1.15  <b>Building Code:</b> IBC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:2(0)/4(0) Plate Type(s): WAVE	<b>Defl/CSI Criteria</b> PP Deflection in loc L/defl L/# VERT(LL): 0.354 F 999 360 VERT(CL): 0.610 F 772 240 HORZ(LL): 0.163 L - - HORZ(TL): 0.281 L - - Creep Factor: 2.0 Max TC CSI: 0.884 Max BC CSI: 0.948 Max Web CSI: 0.986  VIEW Ver: 23.02.04.0123.13	<b>▲ Maximum Reactions (lbs)</b> Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 1827 - / - / - / 879 / 285 / 249 L 1703 - / - / - / 804 / 258 / - Wind reactions based on MWFRS B Brg Wid = 5.5 Min Req = 2.9 (Truss) L Brg Wid = - Min Req = - Bearing B is a rigid surface. Members not listed have forces less than 375# <b>Maximum Top Chord Forces Per Ply (lbs)</b> Chords Tens.Comp. Chords Tens. Comp. B - C 1457 -4449 G - H 901 -1915 C - D 1426 -4281 H - I 882 -2008 D - E 1521 -4281 I - J 1064 -2731 E - F 1533 -4208 J - K 1050 -2862 F - G 939 -2211 K - L 1107 -3197
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**Lumber**  
Top chord 2x4 HF #2  
Bot chord 2x4 HF #2 B1 2x4 HF #1&Bet.;  
B2 2x4 DF-L #2;  
Webs 2x4 HF #2 W1,W2,W3,W11 2x4 HF Standard +  
HF Stud; W4 2x4 DF-L Standard + DF-L Stud;

**Bracing**  
(a) Continuous lateral restraint equally spaced on member.

**Loading**  
Truss designed for unbalanced snow loads.

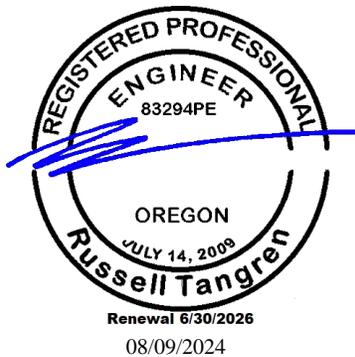
**Wind**  
Wind loads based on MWFRS with additional C&C member design.  
Wind loading based on both gable and hip roof types.

**Maximum Bot Chord Forces Per Ply (lbs)**

Chords	Tens.Comp.	Chords	Tens. Comp.
B - R	3928 -1277	O - N	2247 -637
R - Q	3959 -1287	N - M	2247 -637
Q - P	2573 -756	M - L	2773 -889
P - O	1890 -477		

**Maximum Web Forces Per Ply (lbs)**

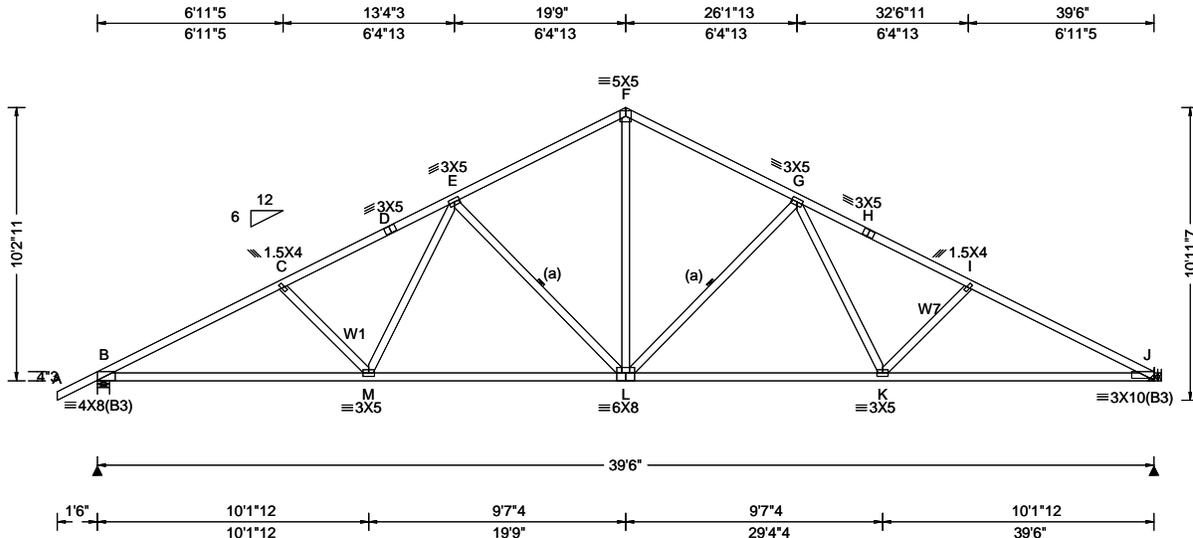
Webs	Tens.Comp.	Webs	Tens. Comp.
Q - F	1986 -647	H - O	1337 -590
F - P	471 -1140	O - I	411 -791
P - G	597 -229	I - M	521 -135
G - O	383 -786	M - K	284 -446



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<b>Loading Criteria (psf)</b> TCLL: 25.00 TCDL: 10.00 BCLL: 0.00 BCDL: 7.00 Des Ld: 42.00 NCBCLL: 0.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	<b>Wind Criteria</b> Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 23.10 ft TCDL: 6.0 psf BCDL: 4.2 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.95 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	<b>Snow Criteria (Pg,Pf in PSF)</b> Pg: 25.0 Ct: 1.1 CAT: II Pf: 21.2 Ce: 1.1 Lu: - Cs: 1.00 Snow Duration: 1.15  Building Code: IBC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:2(0)/4(0) Plate Type(s): WAVE	<b>Defl/CSI Criteria</b> PP Deflection in loc L/defl L/# VERT(LL): 0.235 L 999 360 VERT(CL): 0.405 L 999 240 HORZ(LL): 0.098 J - - HORZ(TL): 0.169 J - - Creep Factor: 2.0 Max TC CSI: 0.750 Max BC CSI: 0.774 Max Web CSI: 0.895  VIEW Ver: 23.02.04.0123.13	<b>▲ Maximum Reactions (lbs)</b> Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 1824 - / - / - / 883 / 283 / 249 J 1702 - / - / - / 803 / 258 - / - Wind reactions based on MWFRS B Brg Wid = 5.5 Min Req = 3.0 (Truss) J Brg Wid = - Min Req = - Bearing B is a rigid surface. Members not listed have forces less than 375# <b>Maximum Top Chord Forces Per Ply (lbs)</b> Chords Tens.Comp. Chords Tens. Comp. B - C 1093 -3168 F - G 883 -2011 C - D 1038 -2838 G - H 1066 -2737 D - E 1052 -2706 H - I 1050 -2859 E - F 883 -2011 I - J 1110 -3195
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**Lumber**  
Top chord 2x4 HF #2  
Bot chord 2x4 HF #2  
Webs 2x4 HF #2 W1,W7 2x4 HF Standard + HF Stud;

**Bracing**  
(a) Continuous lateral restraint equally spaced on member.

**Loading**  
Truss designed for unbalanced snow loads.

**Wind**  
Wind loads based on MWFRS with additional C&C member design.  
Wind loading based on both gable and hip roof types.

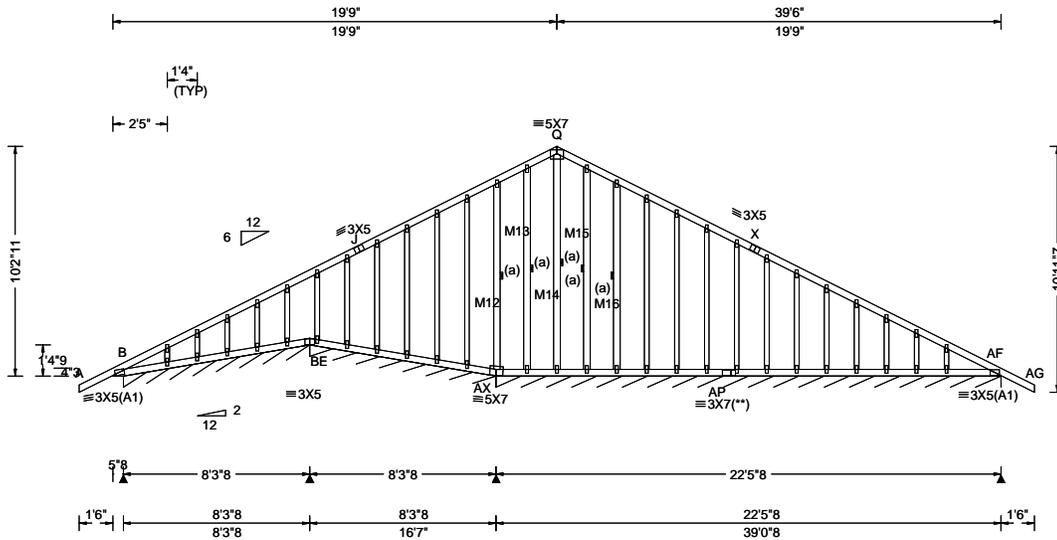
<b>Maximum Bot Chord Forces Per Ply (lbs)</b>			
Chords	Tens.Comp.	Chords	Tens. Comp.
B - M	2742 -894	L - K	2244 -634
M - L	2236 -657	K - J	2772 -891
<b>Maximum Web Forces Per Ply (lbs)</b>			
Webs	Tens.Comp.	Webs	Tens. Comp.
C - M	277 -431	L - G	407 -790
M - E	495 -127	G - K	519 -141
E - L	402 -771	K - I	288 -449
F - L	1243 -476		



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<b>Loading Criteria (psf)</b> TCLL: 25.00 TCDL: 10.00 BCLL: 0.00 BCDL: 7.00 Des Ld: 42.00 NCBCLL: 0.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	<b>Wind Criteria</b> Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 23.10 ft TCDL: 6.0 psf BCDL: 4.2 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.95 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	<b>Snow Criteria (Pg,Pf in PSF)</b> Pg: 25.0 Ct: 1.1 CAT: II Pf: 21.2 Ce: 1.1 Lu: - Cs: 1.00 Snow Duration: 1.15  Building Code: IBC 2021 TPI Std: 2014 Rep Fac: Varies by Ld Case FT/RT:2(0)/4(0) Plate Type(s): WAVE	<b>Defl/CSI Criteria</b> PP Deflection in loc L/def L/# VERT(LL): 0.002 Q 999 360 VERT(CL): 0.004 T 999 240 HORZ(LL): 0.006 AB - - HORZ(TL): 0.008 AB - - Creep Factor: 2.0 Max TC CSI: 0.318 Max BC CSI: 0.078 Max Web CSI: 0.331  VIEW Ver: 23.02.04.0123.13	<b>▲ Maximum Reactions (lbs), or *=PLF</b> Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B* 118 /- /- /59 /18 /36 BE* 152 /- /- /59 /33 /- AX* 128 /- /- /51 /11 /- Wind reactions based on MWFRS B Brg Wid = 99.5 Min Req = - BE Brg Wid = 99.5 Min Req = - AX Brg Wid = 269 Min Req = - Bearings B, BE, & AX are a rigid surface. Members not listed have forces less than 375# <b>Maximum Top Chord Forces Per Ply (lbs)</b> Chords Tens.Comp. Chords Tens. Comp.
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**Lumber**  
Top chord 2x4 HF #2  
Bot chord 2x4 HF #2  
Webs 2x3 HF #2 M12,M13,M14,M15,M16 2x4 HF #2;

**Bracing**  
(a) Continuous lateral restraint equally spaced on member.

**Plating Notes**  
All plates are 1.5X4 except as noted.  
(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

**Loading**  
Truss designed to support 1-0-0 top chord outlooker span and cladding load not to exceed 5 PSF one face, and 24" span opposite face. Top chord may be notched 1.5" deep X 3.5" AT 48" o/c along top edge. DO NOT OVERCUT. No knots or other lumber defects allowed within 12" of notches. Do not notch in overhang or heel panel.  
Truss designed for unbalanced snow loads.

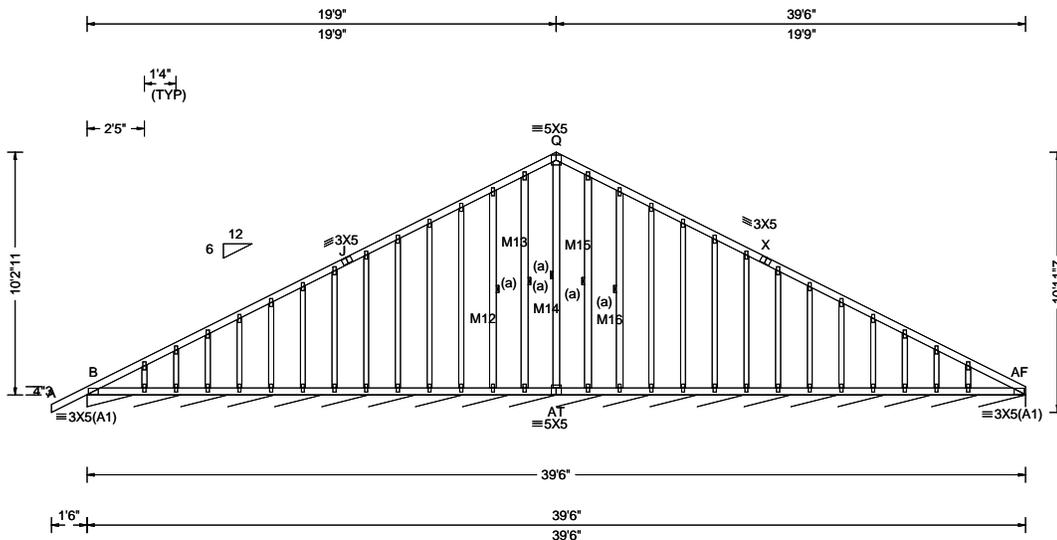
**Wind**  
Wind loads based on MWFRS with additional C&C member design.  
Left cantilever is exposed to wind  
Wind loading based on both gable and hip roof types.

**Gable Studs**  
Provide lateral wind bracing per Alpine wind bracing details or per engineer of record. 2X3 studs require reinforcement at 70% of the length tabulated for 2X4 studs of the same grade.

**Additional Notes**  
See DWGS A12030ENC160118, GBLLETIN0118, & GABRST160118 for gable wind bracing and other requirements.  
Shim all supports to solid bearing.



SEQN: 503033 FROM: MG	GABL Ply: 1 Qty: 1	Job Number: 0824061 Rourke Lot 12 Truss Label: AGE1	Cust: R 7175 JRef: 1Y2871750007 T6 DrwNo: 222.24.1707.49073 BFR / RTT 08/09/2024
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<b>Loading Criteria (psf)</b> TCCL: 25.00 TCCL: 10.00 BCLL: 0.00 BCDL: 7.00 Des Ld: 42.00 NCBCLL: 0.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	<b>Wind Criteria</b> Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 23.10 ft TCCL: 6.0 psf BCDL: 4.2 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.95 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	<b>Snow Criteria (Pg,Pf in PSF)</b> Pg: 25.0 Ct: 1.1 CAT: II Pf: 21.2 Ce: 1.1 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IBC 2021 TPI Std: 2014 Rep Fac: Varies by Ld Case FT/RT:2(0)/4(0) Plate Type(s): WAVE	<b>Defl/CSI Criteria</b> PP Deflection in loc L/def L/# VERT(LL): 0.002 Q 999 360 VERT(CL): 0.004 T 999 240 HORZ(LL): -0.004 G - - HORZ(TL): 0.007 L - - Creep Factor: 2.0 Max TC CSI: 0.230 Max BC CSI: 0.049 Max Web CSI: 0.325 VIEW Ver: 23.02.04.0123.13	<b>▲ Maximum Reactions (lbs), or *=PLF</b> <table border="1"> <thead> <tr> <th rowspan="2">Loc</th> <th colspan="3">Gravity</th> <th colspan="3">Non-Gravity</th> </tr> <tr> <th>R+</th> <th>/R-</th> <th>/Rh</th> <th>/Rw</th> <th>/U</th> <th>/RL</th> </tr> </thead> <tbody> <tr> <td>AF* 122</td> <td>-</td> <td>-</td> <td>/41</td> <td>/16</td> <td>/7</td> <td></td> </tr> </tbody> </table> Wind reactions based on MWFRS AF Brg Wid = 474 Min Req = - Bearing B is a rigid surface. Members not listed have forces less than 375# <b>Maximum Top Chord Forces Per Ply (lbs)</b> <table border="1"> <thead> <tr> <th rowspan="2">Chords</th> <th colspan="2">Tens.Comp.</th> <th colspan="2">Chords</th> <th colspan="2">Tens. Comp.</th> </tr> <tr> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>J - Q</td> <td>401</td> <td>-64</td> <td>Q - X</td> <td>400</td> <td>-68</td> <td></td> </tr> </tbody> </table>						Loc	Gravity			Non-Gravity			R+	/R-	/Rh	/Rw	/U	/RL	AF* 122	-	-	/41	/16	/7		Chords	Tens.Comp.		Chords		Tens. Comp.								J - Q	401	-64	Q - X	400	-68	
				Loc	Gravity			Non-Gravity																																									
R+	/R-	/Rh	/Rw		/U	/RL																																											
AF* 122	-	-	/41	/16	/7																																												
Chords	Tens.Comp.		Chords		Tens. Comp.																																												
J - Q	401	-64	Q - X	400	-68																																												
<b>Lumber</b> Top chord 2x4 HF #2 Bot chord 2x4 HF #2 Webs 2x3 HF #2 M12,M13,M14,M15,M16 2x4 HF #2;																																																	

**Lumber**  
 Top chord 2x4 HF #2  
 Bot chord 2x4 HF #2  
 Webs 2x3 HF #2 M12,M13,M14,M15,M16 2x4 HF #2;

**Additional Notes**  
 See DWGS A12030ENC160118, GBLLETIN0118, & GABRST160118 for gable wind bracing and other requirements.

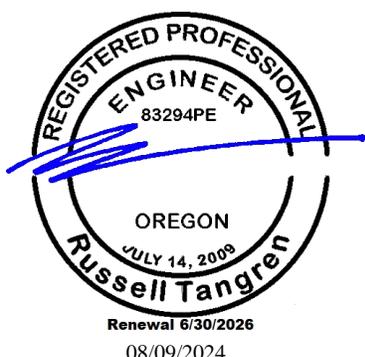
**Bracing**  
 (a) Continuous lateral restraint equally spaced on member.

**Plating Notes**  
 All plates are 1.5X4 except as noted.

**Loading**  
 Truss designed to support 1-0-0 top chord outlookers and cladding load not to exceed 5.00 PSF one face and 24.0" span opposite face. Top chord may be notched 1.5" deep X 3.5" at 48" o/c along top edge. DO NOT OVERCUT. No knots or other lumber defects allowed within 12" of notches. Do not notch in overhang or heel panel, unless specified otherwise. Truss designed for unbalanced snow loads.

**Wind**  
 Wind loads based on MWFRS with additional C&C member design.  
 Wind loading based on both gable and hip roof types.

**Gable Studs**  
 Provide lateral wind bracing per Alpine wind bracing details or per engineer of record. 2X3 studs require reinforcement at 70% of the length tabulated for 2X4 studs of the same grade.

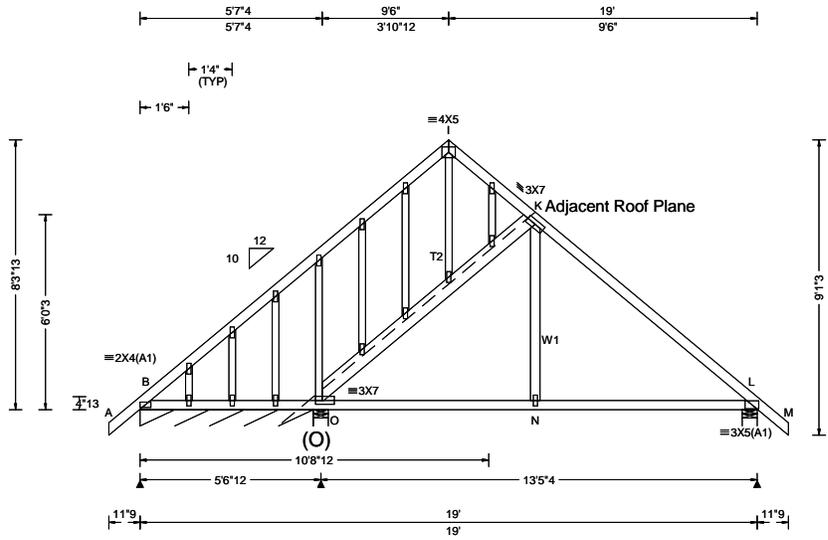


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SEQN: 503024 FROM: MG	GABL Ply: 1 Qty: 1	Job Number: 0824061 Rourke Lot 12 Truss Label: BGE	Cust: R 7175 JRef: 1Y2871750007 T4 DrwNo: 222.24.1710.23670 BFR / RTT 08/09/2024
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<b>Loading Criteria (psf)</b> TCLL: 25.00 TCDL: 10.00 BCLL: 0.00 BCDL: 7.00 Des Ld: 42.00 NCBCLL: 0.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	<b>Wind Criteria</b> Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 22.14 ft TCDL: 6.0 psf BCDL: 4.2 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	<b>Snow Criteria (Pg,Pf in PSF)</b> Pg: 25.0 Ct: 1.1 CAT: II Pf: 21.2 Ce: 1.1 Lu: - Cs: 0.93 Snow Duration: 1.15  <b>Building Code:</b> IBC 2021 TPI Std: 2014 Rep Fac: Varies by Ld Case FT/RT:2(0)/4(0) Plate Type(s): WAVE	<b>Defl/CSI Criteria</b> PP Deflection in loc L/def L/# VERT(LL): 0.013 H 999 360 VERT(CL): 0.026 H 999 240 HORZ(LL): 0.014 L - - HORZ(TL): 0.023 T - - Creep Factor: 2.0 Max TC CSI: 0.826 Max BC CSI: 0.370 Max Web CSI: 0.079  VIEW Ver: 23.02.04.0123.13	<b>▲ Maximum Reactions (lbs), or *=PLF</b> Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B* 130 -/ - /58 /8 /52 O 818 -/ - /371 /238 -/ L 936 -/ - /399 /74 -/ Wind reactions based on MWFRS B Brg Wid = 64.0 Min Req = - O Brg Wid = 5.5 Min Req = 1.5 (Truss) L Brg Wid = 5.5 Min Req = 1.5 (Truss) Bearings B, O, & L are a rigid surface. Members not listed have forces less than 375# <b>Maximum Top Chord Forces Per Ply (lbs)</b> Chords Tens.Comp. Chords Tens. Comp.
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**Lumber**  
Top chord 2x4 HF #2 T2 2x6 HF #2;  
Bot chord 2x4 HF #2  
Webs 2x3 HF #2 W1 2x4 HF Standard + HF Stud;

T2: Brace all exposed vertical surfaces for lateral wind forces. Brace interior top chord with nailer or sistered truss at edge of lower roof diaphragm. All diaphragms, braces, and connections shall be designed by the engineer of record.

I - K	121	-389	K - L	118	-990
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**Maximum Bot Chord Forces Per Ply (lbs)**

Chords	Tens.Comp.	Chords	Tens. Comp.
B - O	396	N - L	607
O - N	608		0

**Maximum Web Forces Per Ply (lbs)**

Webs	Tens.Comp.
O - K	380 -737

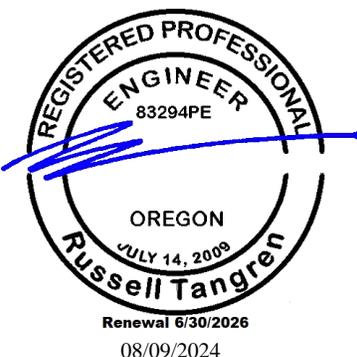
**Plating Notes**  
All plates are 1.5X4 except as noted.

**Loading**  
Truss designed to support 1-0-0 top chord outlookers and 5 PSF cladding on one face in area (O) only, and 24" span on opposite face. Top chord may be notched 1.5" deep X 3.5" AT 48" o/c along top edge. DO NOT OVERCUT. No knots or other lumber defects allowed within 12" of notches. Do not notch in overhang or heel panel.

**Wind**  
Wind loads based on MWFRS with additional C&C member design.  
Wind loading based on both gable and hip roof types.

**Gable Studs**  
Provide lateral wind bracing per Alpine wind bracing details or per engineer of record. 2X3 studs require reinforcement at 70% of the length tabulated for 2X4 studs of the same grade.

**Additional Notes**  
See DWGS A12030ENC160118, GBLLETIN0118, & GABRST160118 for gable wind bracing and other requirements.

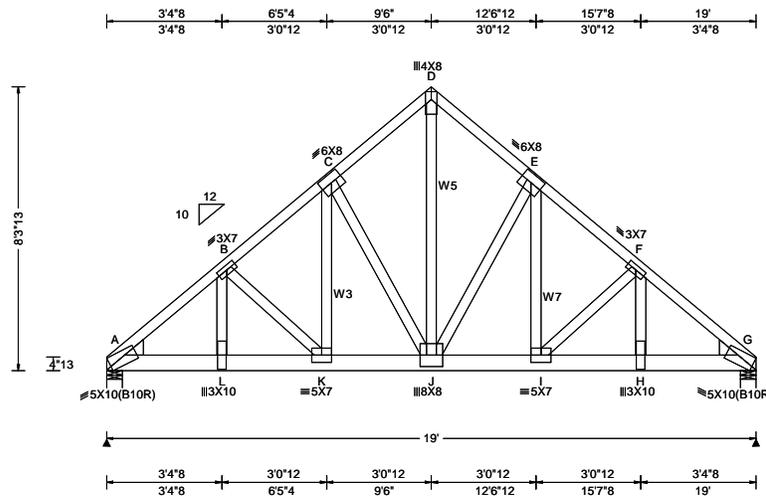


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Truss Components of Oregon, Inc.  
P. O. Box 468  
Cornelius OR 97113  
(503)357-2118

155 Harlem Ave  
North Building, 4th Floor  
Glenview, IL 60025

2 Complete Trusses Required



<b>Loading Criteria (psf)</b> TCLL: 25.00 TCDL: 10.00 BCLL: 0.00 BCDL: 7.00 Des Ld: 42.00 NCBCLL: 0.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	<b>Wind Criteria</b> Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 22.55 ft TCDL: 6.0 psf BCDL: 4.2 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	<b>Snow Criteria (Pg,Pf in PSF)</b> Pg: 25.0 Ct: 1.1 CAT: II Pf: 21.2 Ce: 1.1 Lu: - Cs: 0.93 Snow Duration: 1.15  <b>Building Code:</b> IBC 2021 TPI Std: 2014 Rep Fac: Varies by Ld Case FT/RT:2(0)/4(0) Plate Type(s): WAVE	<b>Defl/CSI Criteria</b> PP Deflection in loc L/defl L/# VERT(LL): 0.143 J 999 360 VERT(CL): 0.239 J 937 240 HORZ(LL): 0.055 C - - HORZ(TL): 0.092 C - - Creep Factor: 2.0 Max TC CSI: 0.522 Max BC CSI: 0.628 Max Web CSI: 0.890  VIEW Ver: 23.02.04.0123.13	<b>▲ Maximum Reactions (lbs)</b> Gravity Non-Gravity Loc R+ /R- /Rh /Rw /U /RL A 8910 /- /- /- /1412 /- G 7988 /- /- /- /1273 /- Wind reactions based on MWFRS A Brg Wid = 5.5 Min Req = 4.8 (Truss) G Brg Wid = 5.5 Min Req = 4.3 (Truss) Bearings A & G are a rigid surface. Members not listed have forces less than 375# <b>Maximum Top Chord Forces Per Ply (lbs)</b> Chords Tens.Comp. Chords Tens. Comp. A - B 877 -5499 D - E 554 -3463 B - C 729 -4568 E - F 728 -4557 C - D 554 -3462 F - G 866 -5429
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**Lumber**  
Top chord 2x4 HF #2  
Bot chord 2x6 DF-L SS  
Webs 2x4 :HF Standard + HF Stud: W3,  
W7 2x4 DF-L Standard + DF-L Stud; W5 2x4 HF #2;  
Lt Wedge: 2x6 HF #2;Rt Wedge: 2x6 HF #2;

**Nailnote**  
Nail Schedule:0.120"x3", min. nails  
Top Chord: 1 Row @12.00" o.c.  
Bot Chord: 2 Rows @ 3.00" o.c. (Each Row)  
Webs : 1 Row @ 4" o.c.  
Use equal spacing between rows and stagger nails  
in each row to avoid splitting.

**Special Loads**  
-----(Lumber Dur.Fac.=1.15 / Plate Dur.Fac.=1.15)  
TC: From 76 plf at 0.00 to 76 plf at 19.00  
BC: From 7 plf at 0.00 to 7 plf at 19.00  
BC: 1703 lb Conc. Load at 0.94, 2.94, 4.94, 6.94  
8.94,10.94,12.94,14.94,16.94

**Wind**  
Wind loads and reactions based on MWFRS.  
Wind loading based on both gable and hip roof types.



**Maximum Bot Chord Forces Per Ply (lbs)**

Chords	Tens.Comp.	Chords	Tens. Comp.
A - L	4191 -664	J - I	3400 -540
L - K	4170 -661	I - H	4113 -653
K - J	3406 -540	H - G	4133 -656

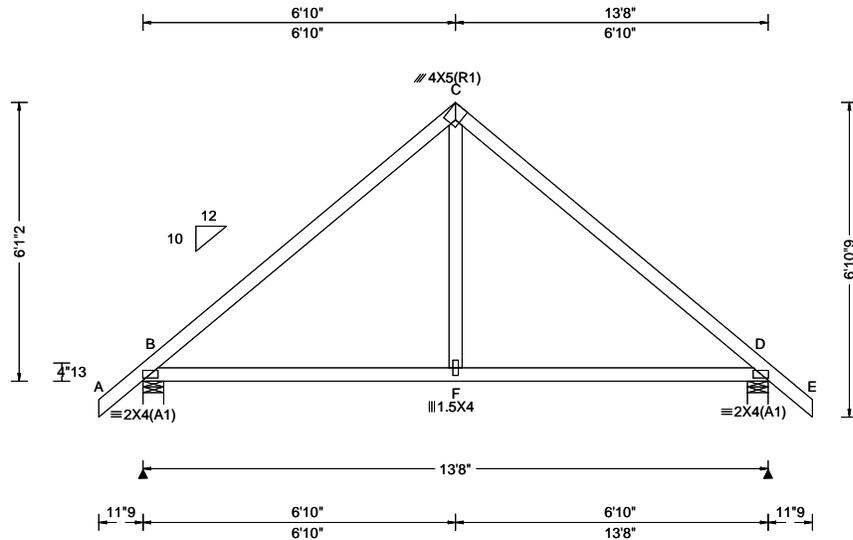
**Maximum Web Forces Per Ply (lbs)**

Webs	Tens.Comp.	Webs	Tens. Comp.
L - B	1170 -168	J - E	246 -1542
B - K	155 -973	E - I	1953 -294
K - C	1972 -296	I - F	144 -902
C - J	248 -1554	F - H	1090 -157
D - J	4231 -655		

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North Building, 4th Floor  
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<b>Loading Criteria (psf)</b> TCLL: 25.00 TCDL: 10.00 BCLL: 0.00 BCDL: 7.00 Des Ld: 42.00 NCBCLL: 0.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	<b>Wind Criteria</b> Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 21.03 ft TCDL: 6.0 psf BCDL: 4.2 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	<b>Snow Criteria (Pg,Pf in PSF)</b> Pg: 25.0 Ct: 1.1 CAT: II Pf: 21.2 Ce: 1.1 Lu: - Cs: 0.93 Snow Duration: 1.15  <b>Building Code:</b> IBC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:2(0)/4(0) Plate Type(s): WAVE	<b>Defl/CSI Criteria</b> PP Deflection in loc L/def L/# VERT(LL): 0.005 B 999 360 VERT(CL): 0.009 B 999 240 HORZ(LL): 0.009 D - - HORZ(TL): 0.012 B - - Creep Factor: 2.0 Max TC CSI: 0.561 Max BC CSI: 0.322 Max Web CSI: 0.071  VIEW Ver: 23.02.04.0123.13	<b>▲ Maximum Reactions (lbs)</b> Gravity Non-Gravity Loc R+ /R- /Rh /Rw /U /RL B 694 /- /- /358 /100 /189 D 694 /- /- /358 /100 /- Wind reactions based on MWFRS B Brg Wid = 5.5 Min Req = 1.5 (Truss) D Brg Wid = 5.5 Min Req = 1.5 (Truss) Bearings B & D are a rigid surface. Members not listed have forces less than 375# <b>Maximum Top Chord Forces Per Ply (lbs)</b> Chords Tens.Comp. Chords Tens. Comp. B - C 246 -681 C - D 245 -681
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**Lumber**

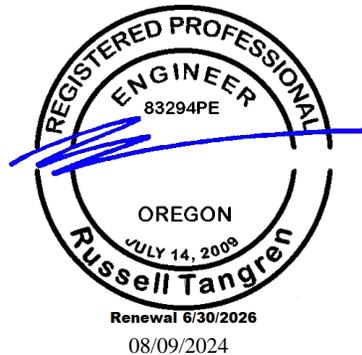
Top chord 2x4 HF #2  
Bot chord 2x4 HF #2  
Webs 2x4 :HF Standard + HF Stud:

**Wind**

Wind loads based on MWFRS with additional C&C member design.  
Wind loading based on both gable and hip roof types.

**Maximum Bot Chord Forces Per Ply (lbs)**

Chords	Tens.Comp.	Chords	Tens. Comp.
B - F	410 -16	F - D	410 -16

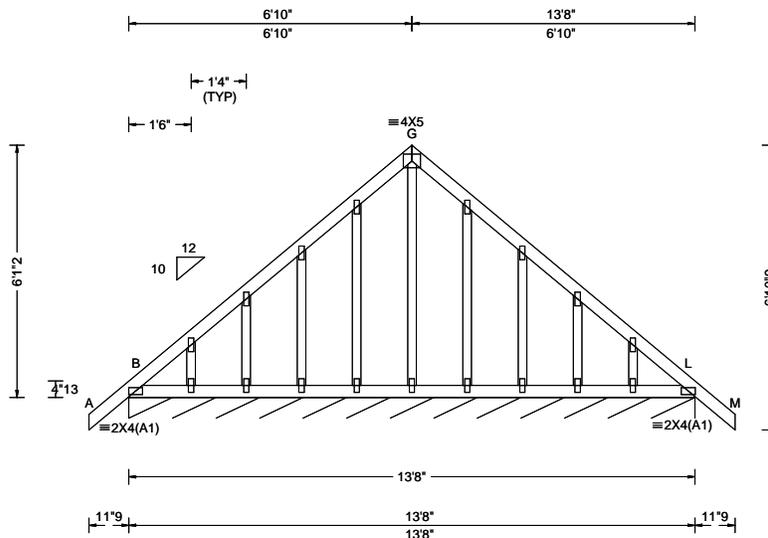


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SEQN: 503020 FROM: MG	GABL Ply: 1 Qty: 1	Job Number: 0824061 Rourke Lot 12 Truss Label: CGE	Cust: R 7175 JRef: 1Y2871750007 T2 DrwNo: 222.24.1708.14480 BFR / RTT 08/09/2024
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<b>Loading Criteria (psf)</b> TCLL: 25.00 TCCL: 10.00 BCLL: 0.00 BCDL: 7.00 Des Ld: 42.00 NCBCLL: 0.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	<b>Wind Criteria</b> Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 21.03 ft TCCL: 6.0 psf BCDL: 4.2 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	<b>Snow Criteria (Pg,Pf in PSF)</b> Pg: 25.0 Ct: 1.1 CAT: II Pf: 21.2 Ce: 1.1 Lu: - Cs: 0.93 Snow Duration: 1.15 Building Code: IBC 2021 TPI Std: 2014 Rep Fac: Varies by Ld Case FT/RT:2(0)/4(0) Plate Type(s): WAVE	<b>Defl/CSI Criteria</b> PP Deflection in loc L/def L/# VERT(LL): 0.001 G 999 360 VERT(CL): 0.002 H 999 240 HORZ(LL): -0.003 E - - HORZ(TL): 0.004 E - - Creep Factor: 2.0 Max TC CSI: 0.105 Max BC CSI: 0.028 Max Web CSI: 0.172 VIEW Ver: 23.02.04.0123.13	<b>▲ Maximum Reactions (lbs), or *=PLF</b> <table border="1"> <thead> <tr> <th colspan="2">Gravity</th> <th colspan="4">Non-Gravity</th> </tr> <tr> <th>Loc</th> <th>R+ / R-</th> <th>/ Rh</th> <th>/ Rw</th> <th>/ U</th> <th>/ RL</th> </tr> </thead> <tbody> <tr> <td>L*</td> <td>127</td> <td>/-</td> <td>/-</td> <td>/51</td> <td>/18 /16</td> </tr> </tbody> </table> Wind reactions based on MWFRS L Brg Wid = 164 Min Req = - Bearing B is a rigid surface. Members not listed have forces less than 375#	Gravity		Non-Gravity				Loc	R+ / R-	/ Rh	/ Rw	/ U	/ RL	L*	127	/-	/-	/51	/18 /16
Gravity		Non-Gravity																				
Loc	R+ / R-	/ Rh	/ Rw	/ U	/ RL																	
L*	127	/-	/-	/51	/18 /16																	

**Lumber**

Top chord 2x4 HF #2  
 Bot chord 2x4 HF #2  
 Webs 2x3 HF #2

**Plating Notes**

All plates are 1.5X4 except as noted.

**Loading**

Truss designed to support 1-0-0 top chord outlookers and cladding load not to exceed 5.00 PSF one face and 24.0" span opposite face. Top chord may be notched 1.5" deep X 3.5" at 48" o/c along top edge. DO NOT OVERCUT. No knots or other lumber defects allowed within 12" of notches. Do not notch in overhang or heel panel, unless specified otherwise.

**Wind**

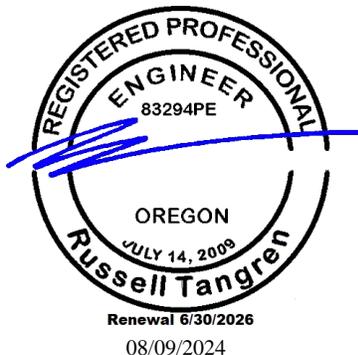
Wind loads based on MWFRS with additional C&C member design.  
 Wind loading based on both gable and hip roof types.

**Gable Studs**

Provide lateral wind bracing per Alpine wind bracing details or per engineer of record. 2X3 studs require reinforcement at 70% of the length tabulated for 2X4 studs of the same grade.

**Additional Notes**

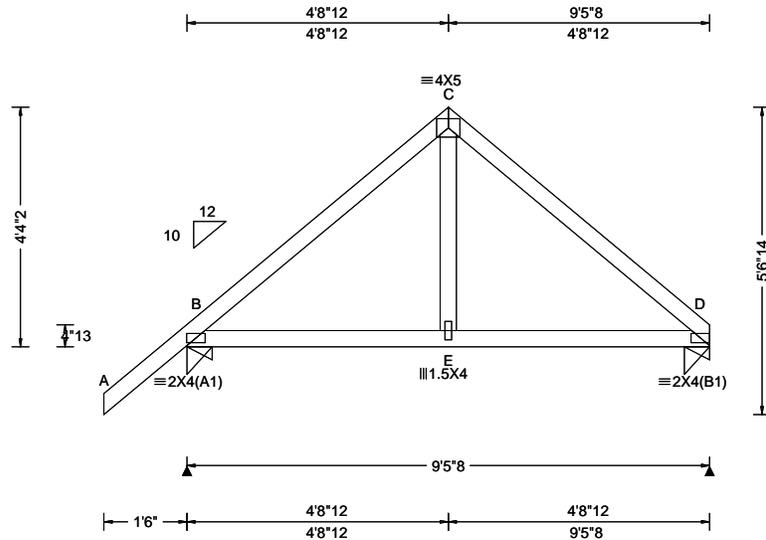
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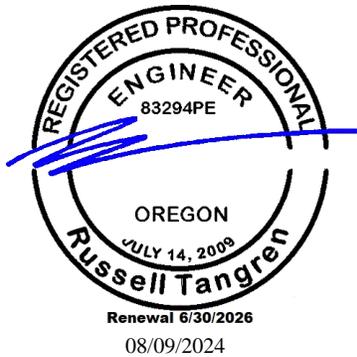
<b>Loading Criteria (psf)</b> TCLL: 25.00 TCDL: 10.00 BCLL: 0.00 BCDL: 7.00 Des Ld: 42.00 NCBCLL: 0.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	<b>Wind Criteria</b> Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 6.0 psf BCDL: 4.2 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	<b>Snow Criteria (Pg,Pf in PSF)</b> Pg: 25.0 Ct: 1.1 CAT: II Pf: 21.2 Ce: 1.1 Lu: - Cs: 0.93 Snow Duration: 1.15  <b>Building Code:</b> IBC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:2(0)/4(0) Plate Type(s): WAVE	<b>Defl/CSI Criteria</b> PP Deflection in loc L/def L/# VERT(LL): 0.004 E 999 360 VERT(CL): 0.006 E 999 240 HORZ(LL): 0.002 D - - HORZ(TL): 0.004 D - - Creep Factor: 2.0 Max TC CSI: 0.239 Max BC CSI: 0.145 Max Web CSI: 0.041  VIEW Ver: 23.02.04.0123.13	<b>▲ Maximum Reactions (lbs)</b> Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 560 /- /- /304 /42 /138 D 414 /- /- /208 /24 /- Wind reactions based on MWFRS B Brg Wid = 5.5 Min Req = 1.5 (Truss) D Brg Wid = 5.5 Min Req = 1.5 (Truss) Bearings B & D are a rigid surface. Members not listed have forces less than 375# <b>Maximum Top Chord Forces Per Ply (lbs)</b> Chords Tens.Comp. Chords Tens. Comp. B - C 195 -450 C - D 178 -441
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**Lumber**

Top chord 2x4 HF #2  
Bot chord 2x4 HF #2  
Webs 2x4 :HF Standard + HF Stud:

**Wind**

Wind loads based on MWFRS with additional C&C member design.  
Wind loading based on both gable and hip roof types.

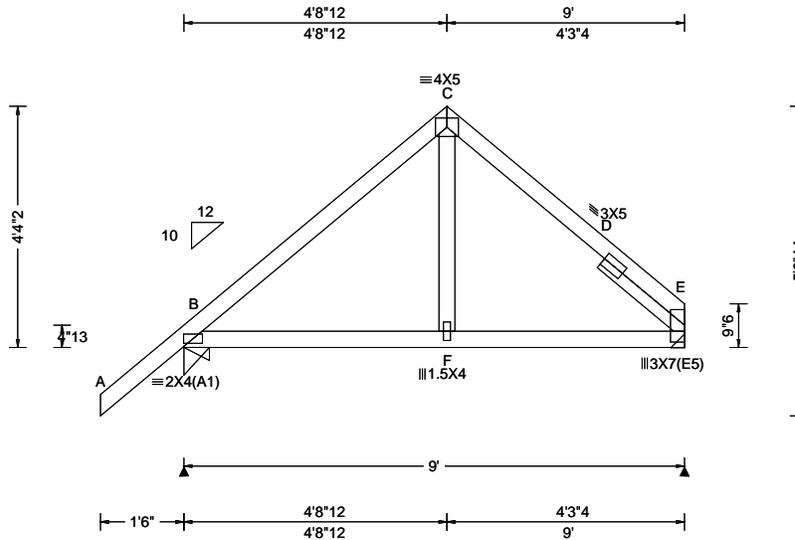


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SEQN: 503016 FROM: MG	COMN Ply: 1 Qty: 2	Job Number: 0824061 Rourke Lot 12 Truss Label: D1	Cust: R 7175 JRef: 1Y2871750007 T3 DrwNo: 222.24.1708.17610 BFR / RTT 08/09/2024
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<b>Loading Criteria (psf)</b> TCCL: 25.00 TCDL: 10.00 BCLL: 0.00 BCDL: 7.00 Des Ld: 42.00 NCBCLL: 0.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	<b>Wind Criteria</b> Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 6.0 psf BCDL: 4.2 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	<b>Snow Criteria (Pg,Pf in PSF)</b> Pg: 25.0 Ct: 1.1 CAT: II Pf: 21.2 Ce: 1.1 Lu: - Cs: 0.93 Snow Duration: 1.15 Building Code: IBC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:2(0)/4(0) Plate Type(s): WAVE	<b>Defl/CSI Criteria</b> PP Deflection in loc L/def L/# VERT(LL): 0.026 D 999 360 VERT(CL): 0.047 D 999 240 HORZ(LL): -0.022 D - - HORZ(TL): 0.039 D - - Creep Factor: 2.0 Max TC CSI: 0.278 Max BC CSI: 0.135 Max Web CSI: 0.157 VIEW Ver: 23.02.04.0123.13	<b>▲ Maximum Reactions (lbs)</b> Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL
				B 546 /- /- /299 /41 /134 E 386 /- /- /190 /22 /- Wind reactions based on MWFRS B Brg Wid = 5.5 Min Req = 1.5 (Truss) E Brg Wid = - Min Req = - Bearing B is a rigid surface. Members not listed have forces less than 375# <b>Maximum Top Chord Forces Per Ply (lbs)</b> Chords Tens.Comp. Chords Tens. Comp. B - C 192 -428 D - E 395 -541

**Lumber**

Top chord 2x4 HF #2  
 Bot chord 2x4 HF #2  
 Webs 2x4 :HF Standard + HF Stud:  
 Rt Slider: 2x3 HF #2; block length = 1.938'

**Wind**

Wind loads based on MWFRS with additional C&C member design.  
 Wind loading based on both gable and hip roof types.

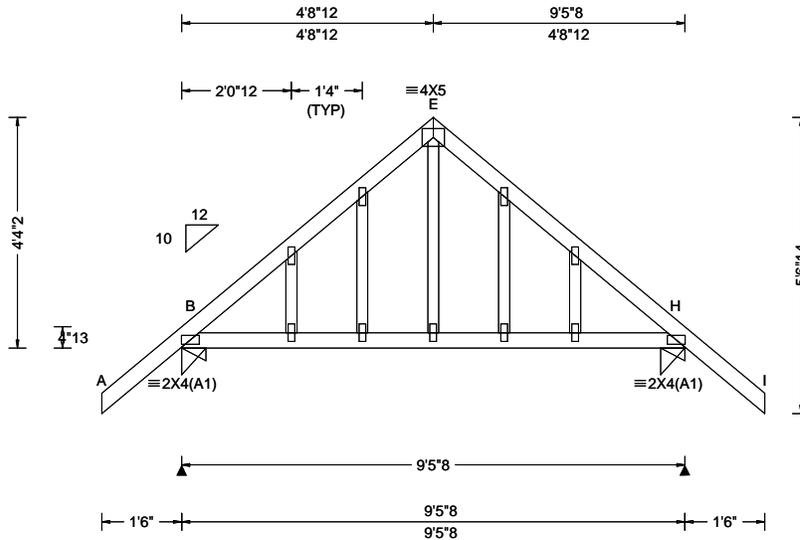


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SEQN: 503018 FROM: MG	GABL Ply: 1 Qty: 1	Job Number: 0824061 Rourke Lot 12 Truss Label: DGE	Cust: R 7175 JRef: 1Y2871750007 T12 DrwNo: 222.24.1708.21100 BFR / RTT 08/09/2024
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<b>Loading Criteria (psf)</b> TCLL: 25.00 TCDL: 10.00 BCLL: 0.00 BCDL: 7.00 Des Ld: 42.00 NCBCLL: 0.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	<b>Wind Criteria</b> Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 6.0 psf BCDL: 4.2 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	<b>Snow Criteria (Pg,Pf in PSF)</b> Pg: 25.0 Ct: 1.1 CAT: II Pf: 21.2 Ce: 1.1 Lu: - Cs: 0.93 Snow Duration: 1.15  <b>Building Code:</b> IBC 2021 TPI Std: 2014 Rep Fac: Varies by Ld Case FT/RT:2(0)/4(0) Plate Type(s): WAVE	<b>Defl/CSI Criteria</b> PP Deflection in loc L/def L/# VERT(LL): 0.015 J 999 360 VERT(CL): 0.028 J 999 240 HORZ(LL): 0.010 C - - HORZ(TL): 0.020 C - - Creep Factor: 2.0 Max TC CSI: 0.256 Max BC CSI: 0.262 Max Web CSI: 0.068  VIEW Ver: 23.02.04.0123.13	<b>▲ Maximum Reactions (lbs)</b> Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 660 /- /- /334 /176 /178 H 660 /- /- /334 /176 /- Wind reactions based on MWFRS B Brg Wid = 5.5 Min Req = 1.5 (Truss) H Brg Wid = 5.5 Min Req = 1.5 (Truss) Bearings B & H are a rigid surface. Members not listed have forces less than 375# <b>Maximum Top Chord Forces Per Ply (lbs)</b> Chords Tens.Comp. Chords Tens. Comp. B - E 240 -513 E - H 241 -513
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**Lumber**

Top chord 2x4 HF #2  
Bot chord 2x4 HF #2  
Webs 2x3 HF #2

**Plating Notes**

All plates are 1.5X4 except as noted.

**Loading**

Truss designed to support 1-0-0 top chord outlookers and cladding load not to exceed 5.00 PSF one face and 24.0' span opposite face. Top chord may be notched 1.5" deep X 3.5" at 48" o/c along top edge. DO NOT OVERCUT. No knots or other lumber defects allowed within 12" of notches. Do not notch in overhang or heel panel, unless specified otherwise.

**Wind**

Wind loads based on MWFRS with additional C&C member design.  
Wind loading based on both gable and hip roof types.

**Gable Studs**

Provide lateral wind bracing per Alpine wind bracing details or per engineer of record. 2X3 studs require reinforcement at 70% of the length tabulated for 2X4 studs of the same grade.

**Additional Notes**

See DWGS A12015ENC160118, GBLLETIN0118, & GABRST160118 for gable wind bracing and other requirements.



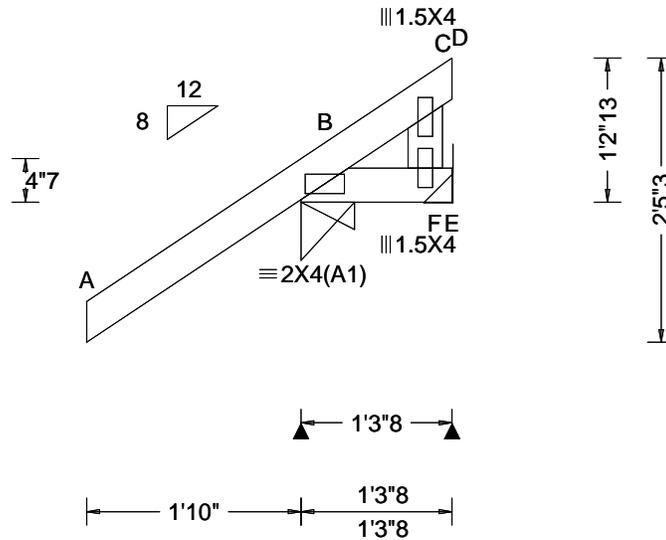
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155 Harlem Ave  
North Building, 4th Floor  
Glenview, IL 60025

SEQN: 503010 FROM: MG	MONO Ply: 1 Qty: 7	Job Number: 0824061 Rourke Lot 12 Truss Label: J	Cust: R 7175 JRef: 1Y2871750007 T20 DrwNo: 222.24.1708.23183 BFR / RTT 08/09/2024
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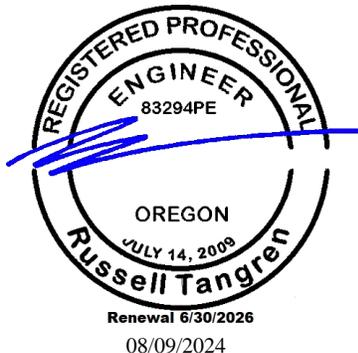
<b>Loading Criteria (psf)</b> TCLL: 25.00 TCDL: 10.00 BCLL: 0.00 BCDL: 7.00 Des Ld: 42.00 NCBCLL: 0.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	<b>Wind Criteria</b> Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 6.0 psf BCDL: 4.2 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	<b>Snow Criteria (Pg,Pf in PSF)</b> Pg: 25.0 Ct: 1.1 CAT: II Pf: 21.2 Ce: 1.1 Lu: - Cs: 1.00 Snow Duration: 1.15  Building Code: IBC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:2(0)/4(0) Plate Type(s): WAVE	<b>Defl/CSI Criteria</b> PP Deflection in loc L/def L/# VERT(LL): NA VERT(CL): NA HORZ(LL): -0.001 B - - HORZ(TL): 0.002 B - - Creep Factor: 2.0 Max TC CSI: 0.292 Max BC CSI: 0.054 Max Web CSI: 0.037  VIEW Ver: 23.02.04.0123.13	<b>▲ Maximum Reactions (lbs)</b> Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 349 /- /- /238 /47 /54 E - /-91 /- /51 /87 /- Wind reactions based on MWFRS B Brg Wid = 5.5 Min Req = 1.5 (Truss) E Brg Wid = - Min Req = - Bearing B is a rigid surface. Members not listed have forces less than 375#
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**Lumber**

Top chord 2x4 HF #2  
Bot chord 2x4 HF #2  
Webs 2x4 :HF Standard + HF Stud:

**Wind**

Wind loads based on MWFRS with additional C&C member design.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

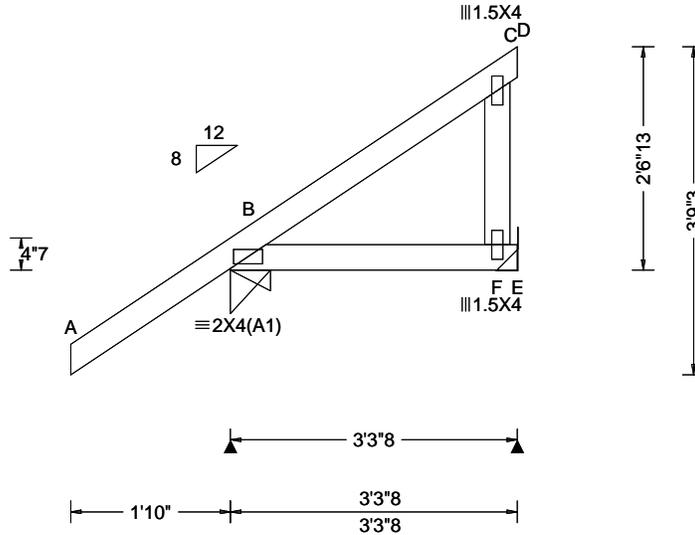


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(503)357-2118



155 Harlem Ave  
North Building, 4th Floor  
Glenview, IL 60025



<b>Loading Criteria (psf)</b>	<b>Wind Criteria</b>	<b>Snow Criteria (Pg,Pf in PSF)</b>	<b>Defl/CSI Criteria</b>	<b>▲ Maximum Reactions (lbs)</b>																											
TCLL: 25.00 TCDL: 10.00 BCLL: 0.00 BCDL: 7.00 Des Ld: 42.00 NCBCLL: 0.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 6.0 psf BCDL: 4.2 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	Pg: 25.0 Ct: 1.1 CAT: II Pf: 21.2 Ce: 1.1 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IBC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:2(0)/4(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): NA VERT(CL): NA HORZ(LL): -0.001 B - - HORZ(TL): 0.002 B - - Creep Factor: 2.0 Max TC CSI: 0.292 Max BC CSI: 0.053 Max Web CSI: 0.073 VIEW Ver: 23.02.04.0123.13	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Loc</th> <th colspan="3">Gravity</th> <th colspan="3">Non-Gravity</th> </tr> <tr> <th>R+</th> <th>/R-</th> <th>/Rh</th> <th>/Rw</th> <th>/U</th> <th>/RL</th> </tr> </thead> <tbody> <tr> <td>B</td> <td>342</td> <td>/-</td> <td>/-</td> <td>/211</td> <td>/15</td> <td>/94</td> </tr> <tr> <td>E</td> <td>92</td> <td>/-</td> <td>/-</td> <td>/68</td> <td>/25</td> <td>/-</td> </tr> </tbody> </table> Wind reactions based on MWFRS B Brg Wid = 5.5 Min Req = 1.5 (Truss) E Brg Wid = - Min Req = - Bearing B is a rigid surface. Members not listed have forces less than 375#	Loc	Gravity			Non-Gravity			R+	/R-	/Rh	/Rw	/U	/RL	B	342	/-	/-	/211	/15	/94	E	92	/-	/-	/68	/25	/-
Loc	Gravity			Non-Gravity																											
	R+	/R-	/Rh	/Rw	/U	/RL																									
B	342	/-	/-	/211	/15	/94																									
E	92	/-	/-	/68	/25	/-																									

**Lumber**

Top chord 2x4 HF #2  
 Bot chord 2x4 HF #2  
 Webs 2x4 :HF Standard + HF Stud:

**Wind**

Wind loads based on MWFRS with additional C&C member design.  
 Right end vertical not exposed to wind pressure.  
 Wind loading based on both gable and hip roof types.

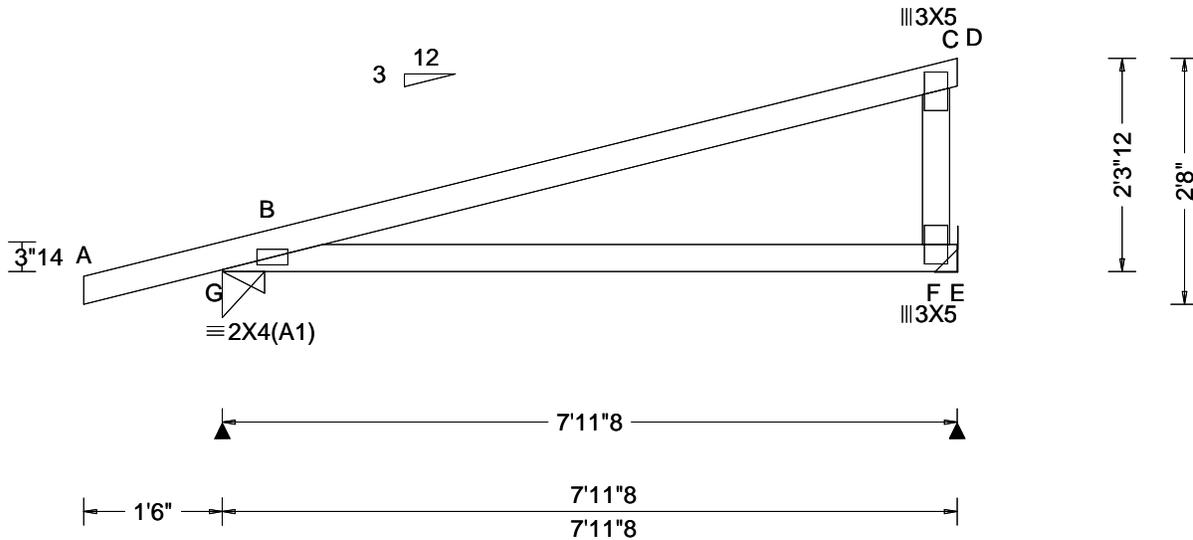


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155 Harlem Ave  
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 Glenview, IL 60025

SEQN: 503026 FROM: MG	MONO Ply: 1 Qty: 9	Job Number: 0824061 Rourke Lot 12 Truss Label: M	Cust: R 7175 JRef: 1Y2871750007 T23 DrwNo: 222.24.1708.26567 BFR / RTT 08/09/2024
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<b>Loading Criteria (psf)</b> TCLL: 25.00 TCDL: 10.00 BCLL: 0.00 BCDL: 7.00 Des Ld: 42.00 NCBCLL: 0.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	<b>Wind Criteria</b> Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 6.0 psf BCDL: 4.2 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	<b>Snow Criteria (Pg,Pf in PSF)</b> Pg: 25.0 Ct: 1.1 CAT: II Pf: 21.2 Ce: 1.1 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IBC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:2(0)/4(0) Plate Type(s): WAVE	<b>Defl/CSI Criteria</b> PP Deflection in loc L/def L/# VERT(LL): NA VERT(CL): NA HORZ(LL): 0.026 B - - HORZ(TL): 0.043 B - - Creep Factor: 2.0 Max TC CSI: 0.815 Max BC CSI: 0.510 Max Web CSI: 0.416 VIEW Ver: 23.02.04.0123.13	<b>▲ Maximum Reactions (lbs)</b> <table border="1"> <thead> <tr> <th rowspan="2">Loc</th> <th colspan="3">Gravity</th> <th colspan="3">Non-Gravity</th> </tr> <tr> <th>R+</th> <th>/R-</th> <th>/Rh</th> <th>/Rw</th> <th>/U</th> <th>/RL</th> </tr> </thead> <tbody> <tr> <td>G</td> <td>465</td> <td>-</td> <td>-</td> <td>/205</td> <td>/62</td> <td>/69</td> </tr> <tr> <td>E</td> <td>321</td> <td>-</td> <td>-</td> <td>/138</td> <td>/43</td> <td>-</td> </tr> </tbody> </table>	Loc	Gravity			Non-Gravity			R+	/R-	/Rh	/Rw	/U	/RL	G	465	-	-	/205	/62	/69	E	321	-	-	/138	/43	-
				Loc		Gravity			Non-Gravity																						
R+	/R-	/Rh	/Rw		/U	/RL																									
G	465	-	-	/205	/62	/69																									
E	321	-	-	/138	/43	-																									
Wind reactions based on MWFRS G Brg Wid = 5.5 Min Req = 1.5 (Truss) E Brg Wid = - Min Req = - Bearing G is a rigid surface. Members not listed have forces less than 375#																															

**Lumber**

Top chord 2x4 HF #2  
 Bot chord 2x4 HF #2  
 Webs 2x4 :HF Standard + HF Stud:

**Wind**

Wind loads based on MWFRS with additional C&C member design.  
 Right end vertical not exposed to wind pressure.  
 Wind loading based on both gable and hip roof types.



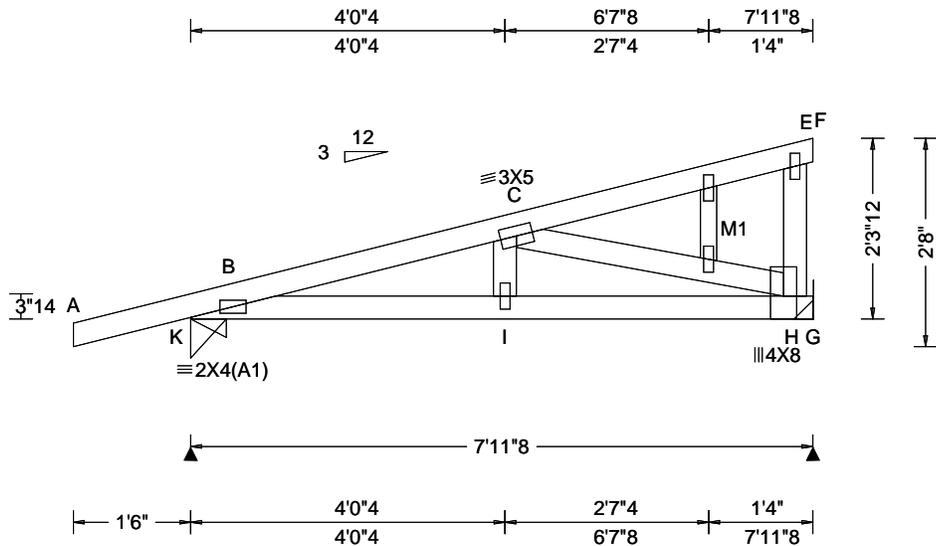
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155 Harlem Ave  
 North Building, 4th Floor  
 Glenview, IL 60025

SEQN: 503029 FROM: MG	GABL Ply: 1 Qty: 2	Job Number: 0824061 Rourke Lot 12 Truss Label: MGE	Cust: R 7175 JRef: 1Y2871750007 T22 DrwNo: 222.24.1708.30390 BFR / RTT 08/09/2024
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<b>Loading Criteria (psf)</b> TCLL: 25.00 TCDL: 10.00 BCLL: 0.00 BCDL: 7.00 Des Ld: 42.00 NCBCLL: 0.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	<b>Wind Criteria</b> Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 6.0 psf BCDL: 4.2 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	<b>Snow Criteria (Pg,Pf in PSF)</b> Pg: 25.0 Ct: 1.1 CAT: II Pf: 21.2 Ce: 1.1 Lu: - Cs: 1.00 Snow Duration: 1.15  Building Code: IBC 2021 TPI Std: 2014 Rep Fac: Varies by Ld Case FT/RT:2(0)/4(0) Plate Type(s): WAVE	<b>Defl/CSI Criteria</b> PP Deflection in loc L/defl L/# VERT(LL): 0.022 I 999 360 VERT(CL): 0.037 I 999 240 HORZ(LL): 0.005 H - - - HORZ(TL): 0.009 H - - - Creep Factor: 2.0 Max TC CSI: 0.248 Max BC CSI: 0.207 Max Web CSI: 0.478  VIEW Ver: 23.02.04.0123.13	<b>▲ Maximum Reactions (lbs)</b> Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL K 528 /- /- /223 /209 /131 G 374 /- /- /148 /137 /- Wind reactions based on MWFRS K Brg Wid = 5.5 Min Req = 1.5 (Truss) G Brg Wid = - Min Req = - Bearing K is a rigid surface. Members not listed have forces less than 375# <b>Maximum Top Chord Forces Per Ply (lbs)</b> Chords Tens.Comp. B - C 454 -735
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**Lumber**  
Top chord 2x4 HF #2  
Bot chord 2x4 HF #2  
Webs 2x4 :HF Standard + HF Stud: M1 2x3 HF #2;

**Plating Notes**  
All plates are 1.5X4 except as noted.

**Loading**  
Truss designed to support 1-0-0 top chord outlookers and cladding load not to exceed 5.00 PSF one face and 24.0' span opposite face. Top chord may be notched 1.5" deep X 3.5" at 48" o/c along top edge. DO NOT OVERCUT. No knots or other lumber defects allowed within 12" of notches. Do not notch in overhang or heel panel, unless specified otherwise.

**Wind**  
Wind loads based on MWFRS with additional C&C member design.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

**Additional Notes**  
See DWGS A12015ENC160118, GBLLETIN0118, & GABRST160118 for gable wind bracing and other requirements.



**Maximum Bot Chord Forces Per Ply (lbs)**  
Chords Tens.Comp. Chords Tens. Comp.  
B - I 685 -570 I - H 683 -575

**Maximum Web Forces Per Ply (lbs)**  
Webs Tens.Comp.  
C - H 605 -717

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**ALPINE**  
AN ITW COMPANY  
155 Harlem Ave  
North Building, 4th Floor  
Glenview, IL 60025

# CLR Reinforcing Member Substitution

This detail is to be used when a Continuous Lateral Restraint (CLR) is specified on a truss design but an alternative web reinforcement method is desired.

## Notes:

This detail is only applicable for changing the specified CLR shown on single ply sealed designs to T-reinforcement or L-reinforcement or scab reinforcement.

Alternative reinforcement specified in chart below may be conservative. For minimum alternative reinforcement, re-run design with appropriate reinforcement type.

Use scabs instead of L- or T- reinforcement on webs with intersecting truss joints, such as K-web joints, that may interfere with proper application along the narrow face of the web.

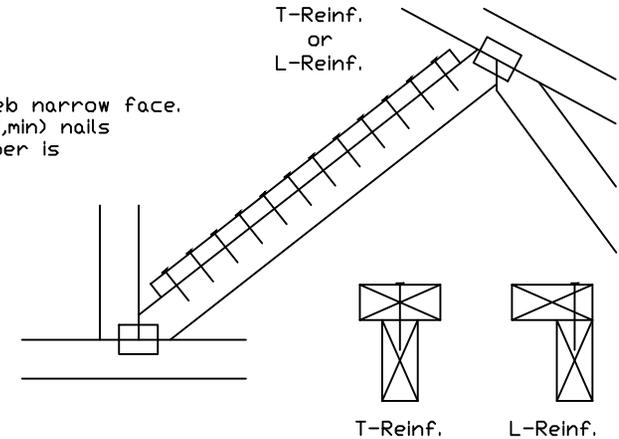
Web Member Size	Specified CLR Restraint	Alternative Reinforcement T- or L- Reinf.	Scab Reinf.
2x3 or 2x4	1 row	2x4	1-2x4
2x3 or 2x4	2 rows	2x6 or 2x4	2-2x4
2x6	1 row	2x4	1-2x6
2x6	2 rows	2x6	2-2x4(*)
2x8	1 row	2x6	1-2x8
2x8	2 rows	2x6	2-2x6(*)

T-reinforcement, L-reinforcement, or scab reinforcement to be same species and grade or better than web member unless specified otherwise on Engineer's sealed design.

(\*) Center scab on wide face of web. Apply (1) scab to each face of web.

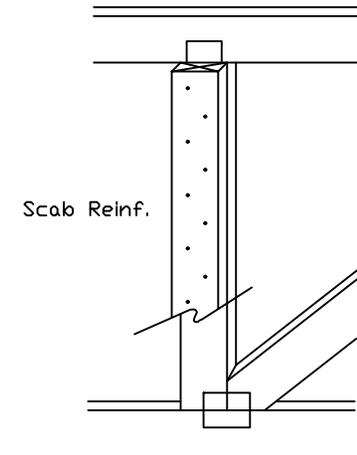
## T-Reinforcement or L-Reinforcement:

Apply to either side of web narrow face. Attach with 10d (0.128"x3.0",min) nails at 6" o.c. Reinforcing member is a minimum 80% of web member length.



## Scab Reinforcement:

Apply scab(s) to wide face of web. No more than (1) scab per face. Attach with 10d (0.128"x3.0",min) nails at 6" o.c. Reinforcing member is a minimum 80% of web member length.



155 Harlem Ave  
North Building, 4th Floor  
Glenview, IL 60025

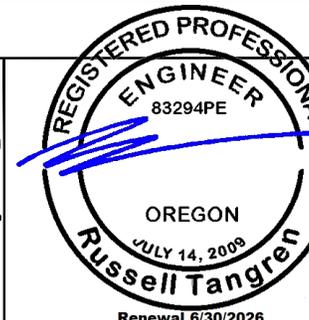
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TC LL	PSF	REF CLR Subst.
TC DL	PSF	DATE 01/02/19
BC DL	PSF	DRWG BRCLBSUB0119
BC LL	PSF	
TOT. LD.	PSF	
DUR. FAC.		
SPACING		

Renewal 6/30/2026

08/09/2024

# Gable Stud Reinforcement Detail

ASCE 7-16: 120 mph Wind Speed, 30' Mean Height, Enclosed, Exposure C, Kzt = 1.00

Or: 100 Mph Wind Speed, 30' Mean Height, Partially Enclosed, Exposure C, Kzt = 1.00  
Or: 100 mph Wind Speed, 30' Mean Height, Enclosed, Exposure D, Kzt = 1.00

Max Gable Vertical Length	2x4 Gable Vertical		Brace Grade	No Braces	(1) 1x4 'L' Brace *		(1) 2x4 'L' Brace *		(2) 2x4 'L' Brace **		(1) 2x6 'L' Brace *		(2) 2x6 'L' Brace **		
	Spacing	Species			Group A	Group B	Group A	Group B	Group A	Group B	Group A	Group B	Group A	Group B	
	24" o.c.	SPF	#1 / #2	HF	4' 7"	7' 10"	8' 1"	9' 3"	9' 7"	11' 0"	11' 5"	14' 0"	14' 0"	14' 0"	14' 0"
4' 4"					7' 2"	7' 8"	9' 1"	9' 5"	10' 10"	11' 4"	14' 0"	14' 0"	14' 0"	14' 0"	
Stud					4' 4"	7' 2"	7' 7"	9' 1"	9' 5"	10' 10"	11' 4"	14' 0"	14' 0"	14' 0"	14' 0"
Standard			4' 4"	6' 2"	6' 7"	8' 2"	8' 9"	10' 10"	11' 4"	12' 10"	13' 9"	14' 0"	14' 0"	14' 0"	
			#1	4' 10"	7' 11"	8' 2"	9' 4"	9' 8"	11' 1"	11' 6"	14' 0"	14' 0"	14' 0"	14' 0"	
			#2	4' 7"	7' 10"	8' 1"	9' 3"	9' 7"	11' 0"	11' 5"	14' 0"	14' 0"	14' 0"	14' 0"	
SP		DFL	Stud	4' 6"	6' 6"	6' 11"	8' 7"	9' 2"	10' 11"	11' 4"	13' 6"	14' 0"	14' 0"	14' 0"	
				Standard	4' 4"	5' 9"	6' 1"	7' 7"	8' 2"	10' 4"	11' 1"	11' 11"	12' 10"	14' 0"	14' 0"
				#1 / #2	5' 3"	8' 11"	9' 3"	10' 7"	11' 0"	12' 7"	13' 1"	14' 0"	14' 0"	14' 0"	14' 0"
		HF	Stud	5' 0"	8' 10"	9' 3"	10' 5"	10' 10"	12' 5"	12' 11"	14' 0"	14' 0"	14' 0"	14' 0"	
				Standard	5' 0"	7' 6"	8' 0"	10' 1"	10' 9"	12' 5"	12' 11"	14' 0"	14' 0"	14' 0"	14' 0"
				#1	5' 6"	9' 1"	9' 5"	10' 8"	11' 1"	12' 8"	13' 2"	14' 0"	14' 0"	14' 0"	14' 0"
SP	DFL	Stud	5' 3"	8' 11"	9' 3"	10' 7"	11' 0"	12' 7"	13' 1"	14' 0"	14' 0"	14' 0"	14' 0"		
			Standard	5' 1"	7' 11"	8' 5"	10' 6"	10' 11"	12' 6"	13' 0"	14' 0"	14' 0"	14' 0"	14' 0"	
			#1 / #2	5' 9"	9' 10"	10' 2"	11' 7"	12' 1"	12' 7"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	
	HF	Stud	5' 6"	9' 8"	10' 1"	11' 6"	11' 11"	13' 8"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
			Standard	5' 6"	8' 8"	9' 3"	11' 6"	11' 11"	13' 8"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	
			#1	6' 0"	10' 0"	10' 4"	11' 9"	12' 2"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	
SP	DFL	Stud	5' 9"	9' 10"	10' 2"	11' 7"	12' 1"	13' 10"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
			Standard	5' 8"	9' 2"	9' 9"	11' 6"	12' 0"	13' 9"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	
			#1	5' 8"	9' 2"	9' 9"	11' 6"	12' 0"	13' 9"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	
	Standard	5' 6"	8' 1"	8' 7"	10' 9"	11' 6"	13' 8"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		

**Bracing Group Species and Grades:**

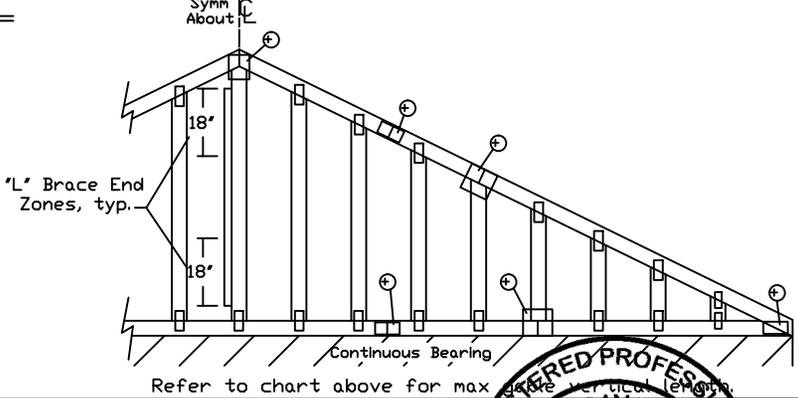
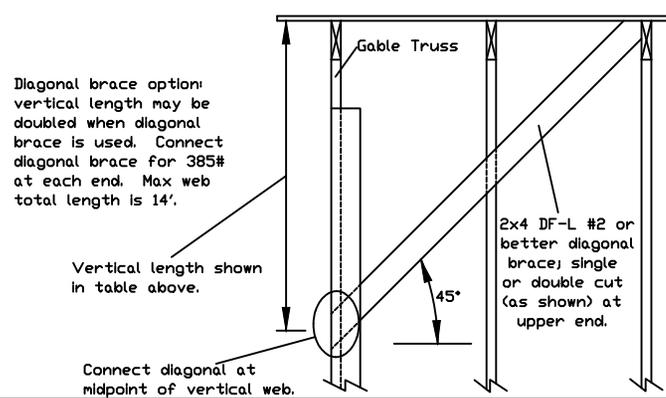
Group A:			
Spruce-Pine-Fir		Hem-Fir	
#1 / #2	Standard	#2	Stud
#3	Stud	#3	Standard
Douglas Fir-Larch		Southern Pine***	
#3	Stud	#3	Stud
Standard	Standard	Standard	Standard

Group B:			
Hem-Fir			
#1 & Btr			
#1			
Douglas Fir-Larch		Southern Pine***	
#1	Stud	#1	Stud
#2	Standard	#2	Standard

1x4 Braces shall be SRB (Stress-Rated Board).  
 \*\*\*For 1x4 So. Pine use only Industrial 55 or Industrial 45 Stress-Rated Boards. Group B values may be used with these grades.

**Gable Truss Detail Notes:**  
 Wind Load deflection criterion is L/240.  
 Provide uplift connections for 70 plf over continuous bearing (5 psf TC Dead Load).  
 Gable end supports load from 4' 0" outlookers with 2' 0" overhang, or 12' plywood overhang.



Attach 'L' braces with 10d (0.128"x3.0" min) nails.  
 \* For (1) 'L' brace: space nails at 2' o.c. in 18' end zones and 4' o.c. between zones.  
 \*\* For (2) 'L' braces: space nails at 3' o.c. in 18' end zones and 6' o.c. between zones.

'L' bracing must be a minimum of 80% of web member length.

Gable Vertical Plate Sizes	
Vertical Length	No Splice
Less than 4' 0"	1X4 or 2X3
Greater than 4' 0", but less than 11' 6"	2X4
Greater than 11' 6"	3X4

+ Refer to common truss design for peak, splice, and heel plates.

Refer to the Building Designer for conditions not addressed by this detail.

155 Harlem Ave  
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**REGISTERED PROFESSIONAL ENGINEER**  
 83294PE  
 OREGON  
 JULY 14, 2008  
 Russell Tangren  
 Renewal 6/30/2026

REF	ASCE7-16-GAB12030
DATE	01/26/2018
DRWG	A12030ENC160118
	MAX. TOT. LD. 60 PSF
	MAX. SPACING 24.0"

# ASCE 7-16: 120 mph, 30' Mean Height, Closed, Exposure C Common Residential Gable End Wind Bracing Requirements - Stiffeners

120 mph, 30ft. Mean Hgt, ASCE 7-16, Enclosed, Exp C, or  
100 mph, 30ft. Mean Hgt, ASCE 7-16, Enclosed, Exp D, or  
100 mph, 30ft. Mean Hgt, ASCE 7-16, Part. Enclosed, Exp C,  
Kzt = 1.00, Wind TC DL=5.0 psf, Wind BC DL=5.0 psf.

Lateral chord bracing requirements  
Top: Continuous roof sheathing  
Bot: Continuous ceiling diaphragm

See Engineer's sealed design referencing this detail for lumber, plates, and other information not shown on this detail.

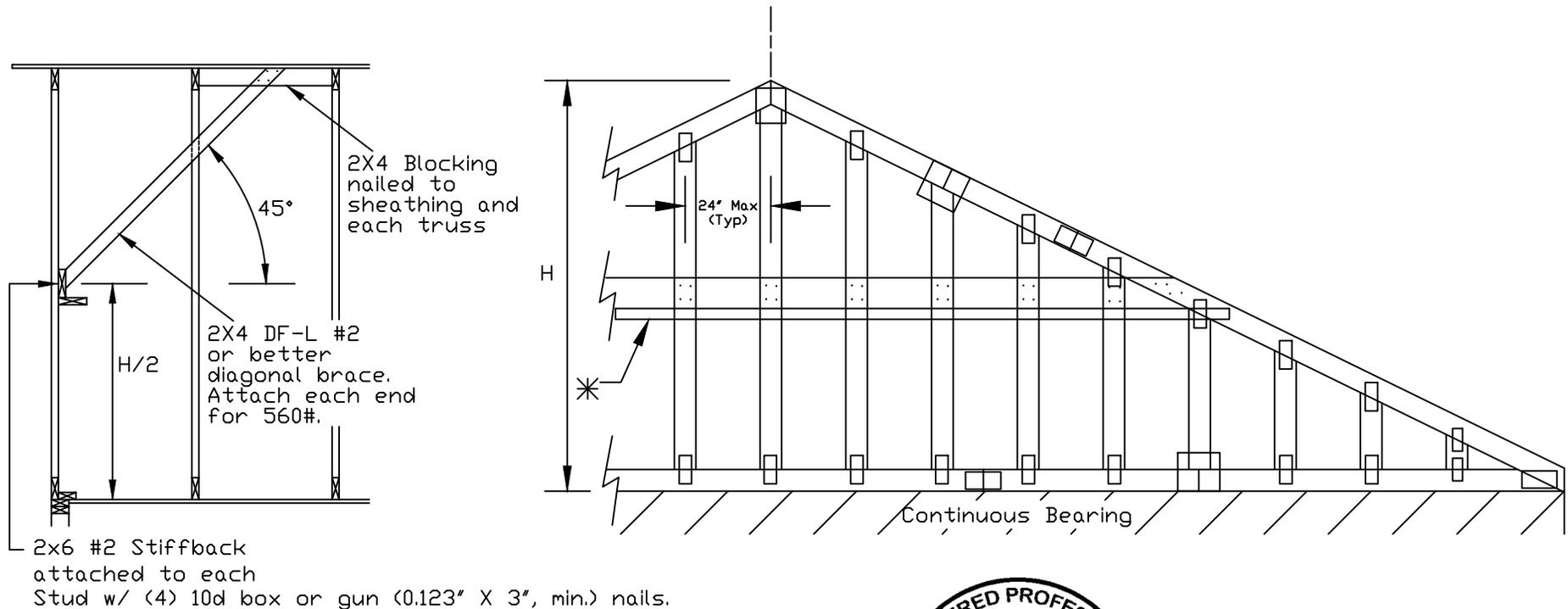
Nails: 10d box or gun (0.128"x3",min) nails.

H Less than 4'6" - no stud bracing required

H Greater than 4'6" to 7'6" in length  
provide a 2x6 stiffback at mid-height and brace stiffback to roof diaphragm every 6'0" (see detail below or refer to DRWG A12030ENC160118).

H Greater than 7'6" to 12'0" max:  
provide a 2x6 stiffback at mid-height and brace to roof diaphragm every 4'0" (see detail below or refer to DRWG A12030ENC160118).

\* Optional 2x L-reinforcement attached to stiffback with 10d box or gun (0.128" x 3", min.) nails @ 6" o.c.



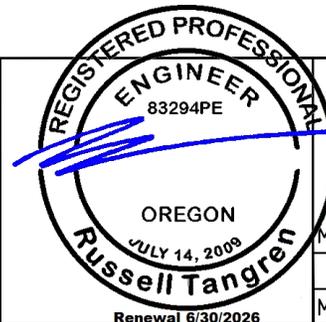
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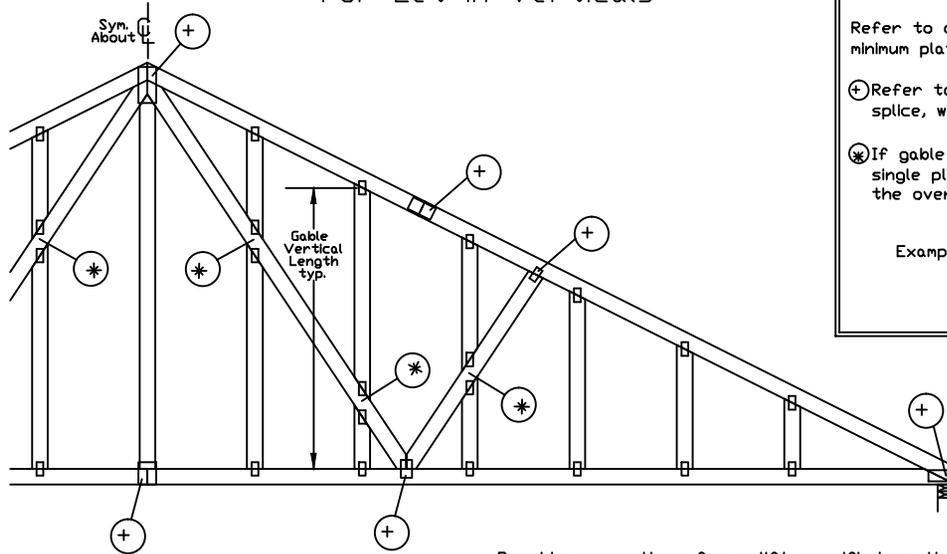
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REF	GE WHALER
DATE	01/02/2018
DRWG	GABRST160118
	MAX. TOT. LD. 60 PSF
	MAX. SPACING

# Gable Detail For Let-in Verticals

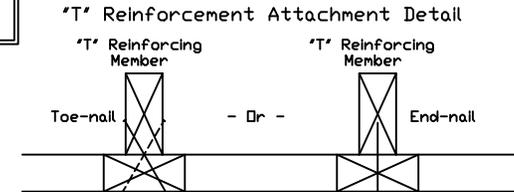


**Gable Truss Plate Sizes**

Refer to appropriate Alpine gable detail for minimum plate sizes for vertical studs.

- ⊕ Refer to Engineered truss design for peak, splice, web, and heel plates.
- ⊗ If gable vertical plates overlap, use a single plate that covers the total area of the overlapped plates to span the web.

Example:



Provide connections for uplift specified on the engineered truss design.

Attach each 'T' reinforcing member with  
End Driven Nails:  
10d Common (0.148"x 3",min) Nails at 4' o.c. plus  
(4) nails in the top and bottom chords.

Toenailed Nails:  
10d Common (0.148"x3",min) Toenails at 4' o.c. plus  
(4) toenails in the top and bottom chords.

This detail to be used with the appropriate Alpine gable detail for ASCE wind load.

- ASCE 7-05 Gable Detail Drawings  
A13015051014, A12015051014, A11015051014, A10015051014, A14015051014, A13030051014, A12030051014, A11030051014, A10030051014, A14030051014
- ASCE 7-10 & ASCE 7-16 Gable Detail Drawings  
A11515ENC100118, A12015ENC100118, A14015ENC100118, A16015ENC100118, A18015ENC100118, A20015ENC100118, A20015END100118, A20015PE100118, A11530ENC100118, A12030ENC100118, A14030ENC100118, A16030ENC100118, A18030ENC100118, A20030ENC100118, A20030END100118, A20030PE100118, S11515ENC100118, S12015ENC100118, S14015ENC100118, S16015ENC100118, S18015ENC100118, S20015ENC100118, S20015END100118, S20015PE100118, S11530ENC100118, S12030ENC100118, S14030ENC100118, S16030ENC100118, S18030ENC100118, S20030ENC100118, S20030END100118, S20030PE100118

See appropriate Alpine gable detail for maximum unreinforced gable vertical length.

To convert from 'L' to 'T' reinforcing members, multiply 'T' increase by length (based on appropriate Alpine gable detail).

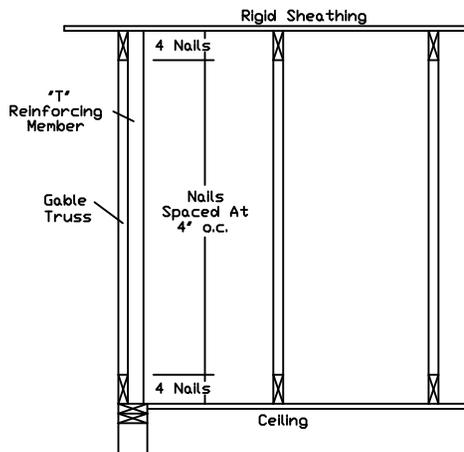
Maximum allowable 'T' reinforced gable vertical length is 14' from top to bottom chord.

'T' reinforcing member material must match size, specie, and grade of the 'L' reinforcing member.

**Web Length Increase w/ 'T' Brace**

'T' Reinf. Mbr. Size	'T' Increase
2x4	30 %
2x6	20 %

Example:  
ASCE 7-10 Wind Speed = 120 mph  
Mean Roof Height = 30 ft, Kzt = 1.00  
Gable Vertical = 24'o.c. SP #3  
'T' Reinforcing Member Size = 2x4  
'T' Brace Increase (From Above) = 30% = 1.30  
(1) 2x4 'L' Brace Length = 8' 7"  
Maximum 'T' Reinforced Gable Vertical Length  
1.30 x 8' 7" = 11' 2"



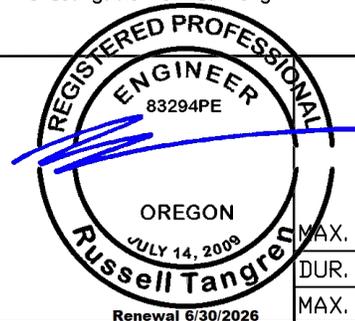
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REF LET-IN VERT  
DATE 01/02/2018  
DRWG GBLLETIN0118

MAX. TOT. LD. 60 PSF  
DUR. FAC. ANY  
MAX. SPACING 24.0"



155 Harlem Ave  
North Building, 4th Floor  
Glenview, IL 60025

Renewal 6/30/2026

08/09/2024

# Gable Stud Reinforcement Detail

ASCE 7-16: 120 mph Wind Speed, 15' Mean Height, Enclosed, Exposure C, Kzt = 1.00

Or: 100 mph Wind Speed, 15' Mean Height, Partially Enclosed, Exposure C, Kzt = 1.00  
Or: 100 mph Wind Speed, 15' Mean Height, Enclosed, Exposure D, Kzt = 1.00

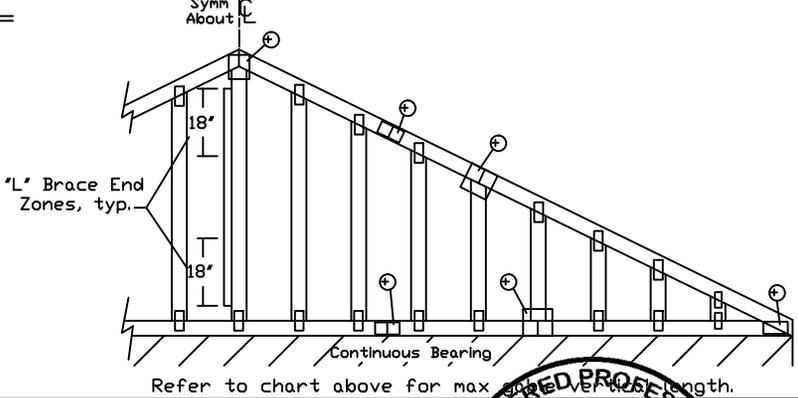
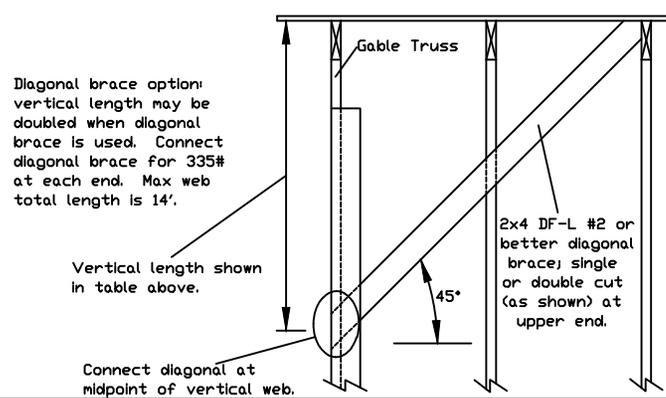
Max Gable Vertical Length	2x4 Gable Vertical		Brace Grade	No Braces	(1) 1x4 'L' Brace *		(1) 2x4 'L' Brace *		(2) 2x4 'L' Brace **		(1) 2x6 'L' Brace *		(2) 2x6 'L' Brace **			
	Spacing	Species			Group A	Group B	Group A	Group B	Group A	Group B	Group A	Group B	Group A	Group B		
	24" o.c.	SPF	#1 / #2	HF	#1 / #2	4' 10"	8' 2"	8' 6"	9' 8"	10' 1"	11' 6"	12' 0"	14' 0"	14' 0"	14' 0"	14' 0"
#3					4' 7"	7' 9"	8' 3"	9' 7"	9' 11"	11' 5"	11' 10"	14' 0"	14' 0"	14' 0"	14' 0"	
Stud					4' 7"	7' 8"	8' 2"	9' 7"	9' 11"	11' 5"	11' 10"	14' 0"	14' 0"	14' 0"	14' 0"	
Standard			#1	4' 7"	6' 7"	7' 0"	8' 10"	9' 5"	11' 5"	11' 10"	13' 10"	14' 0"	14' 0"	14' 0"	14' 0"	
			#2	5' 0"	8' 4"	8' 7"	9' 10"	10' 2"	11' 8"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	
			#3	4' 10"	8' 2"	8' 6"	9' 8"	10' 1"	11' 6"	12' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	
SP		DFL	#1	4' 8"	7' 0"	7' 5"	9' 3"	9' 11"	11' 5"	11' 11"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	
			#2	4' 10"	8' 2"	8' 6"	9' 8"	10' 1"	11' 6"	12' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	
			#3	4' 8"	7' 0"	7' 5"	9' 3"	9' 11"	11' 5"	11' 11"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	
		Standard	#1	4' 7"	6' 2"	6' 7"	8' 2"	8' 9"	11' 1"	11' 10"	12' 10"	13' 9"	14' 0"	14' 0"	14' 0"	14' 0"
			#2	5' 0"	8' 4"	8' 7"	9' 10"	10' 2"	11' 8"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	
			#3	4' 10"	8' 2"	8' 6"	9' 8"	10' 1"	11' 6"	12' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	
16" o.c.	SPF	#1 / #2	HF	#1 / #2	5' 6"	9' 5"	9' 9"	11' 1"	11' 6"	13' 2"	13' 9"	14' 0"	14' 0"	14' 0"	14' 0"	
				#3	5' 3"	9' 3"	9' 9"	10' 11"	11' 4"	13' 0"	13' 7"	14' 0"	14' 0"	14' 0"	14' 0"	
				Stud	5' 3"	9' 3"	9' 7"	10' 11"	11' 4"	13' 0"	13' 7"	14' 0"	14' 0"	14' 0"	14' 0"	
		Standard	#1	5' 3"	8' 1"	8' 7"	10' 10"	11' 4"	13' 0"	13' 7"	14' 0"	14' 0"	14' 0"	14' 0"		
			#2	5' 9"	9' 6"	9' 10"	11' 3"	11' 8"	13' 4"	13' 10"	14' 0"	14' 0"	14' 0"	14' 0"		
			#3	5' 6"	9' 5"	9' 9"	11' 1"	11' 6"	13' 2"	13' 9"	14' 0"	14' 0"	14' 0"	14' 0"		
	SP	DFL	#1	5' 5"	8' 6"	9' 1"	11' 0"	11' 5"	13' 1"	13' 8"	14' 0"	14' 0"	14' 0"	14' 0"		
			#2	5' 5"	8' 6"	9' 1"	11' 0"	11' 5"	13' 1"	13' 8"	14' 0"	14' 0"	14' 0"	14' 0"		
			#3	5' 5"	8' 6"	9' 1"	11' 0"	11' 5"	13' 1"	13' 8"	14' 0"	14' 0"	14' 0"	14' 0"		
		Standard	#1	5' 3"	7' 6"	8' 0"	10' 0"	10' 9"	13' 0"	13' 7"	14' 0"	14' 0"	14' 0"	14' 0"		
			#2	5' 9"	9' 6"	9' 10"	11' 3"	11' 8"	13' 4"	13' 10"	14' 0"	14' 0"	14' 0"	14' 0"		
			#3	5' 6"	9' 5"	9' 9"	11' 1"	11' 6"	13' 2"	13' 9"	14' 0"	14' 0"	14' 0"	14' 0"		
12" o.c.	SPF	#1 / #2	HF	#1 / #2	6' 1"	10' 4"	10' 8"	12' 2"	12' 8"	13' 2"	14' 0"	14' 0"	14' 0"	14' 0"		
				#3	5' 9"	10' 2"	10' 7"	12' 0"	12' 6"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
				Stud	5' 9"	10' 2"	10' 7"	12' 0"	12' 6"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
		Standard	#1	5' 9"	9' 4"	9' 11"	12' 0"	12' 6"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
			#2	6' 4"	10' 6"	10' 10"	12' 4"	12' 10"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
			#3	6' 1"	10' 4"	10' 8"	12' 2"	12' 8"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
	SP	DFL	#1	5' 11"	9' 10"	10' 6"	12' 1"	12' 7"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
			#2	5' 11"	9' 10"	10' 6"	12' 1"	12' 7"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
			#3	5' 11"	9' 10"	10' 6"	12' 1"	12' 7"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
		Standard	#1	5' 9"	8' 8"	9' 3"	11' 7"	12' 5"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
			#2	6' 4"	10' 6"	10' 10"	12' 4"	12' 10"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
			#3	5' 9"	8' 8"	9' 3"	11' 7"	12' 5"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		

**Bracing Group Species and Grades:**

Group A:			
Spruce-Pine-Fir		Hem-Fir	
#1 / #2	Standard	#2	Stud
#3	Stud	#3	Standard
Douglas Fir-Larch		Southern Pine***	
#3		#3	
Stud		Stud	
Standard		Standard	
Group B:			
Hem-Fir			
#1 & Btr			
#1			
Douglas Fir-Larch		Southern Pine***	
#1		#1	
#2		#2	

1x4 Braces shall be SRB (Stress-Rated Board).  
\*\*\*For 1x4 So. Pine use only Industrial 55 or Industrial 45 Stress-Rated Boards. Group B values may be used with these grades.

**Gable Truss Detail Notes:**  
Wind Load deflection criterion is L/240.  
Provide uplift connections for 35 plf over continuous bearing (5 psf TC Dead Load).  
Gable end supports load from 4' 0" outlookers with 2' 0" overhang, or 12' plywood overhang.



Attach 'L' braces with 10d (0.128"x3.0" min) nails.  
\* For (1) 'L' brace: space nails at 2' o.c. in 18' end zones and 4' o.c. between zones.  
\*\* For (2) 'L' braces: space nails at 3' o.c. in 18' end zones and 6' o.c. between zones.  
'L' bracing must be a minimum of 80% of web member length.

Gable Vertical Plate Sizes	
Vertical Length	No Splice
Less than 4' 0"	1X4 or 2X3
Greater than 4' 0", but less than 11' 6"	2X4
Greater than 11' 6"	3X4

+ Refer to common truss design for peak, splice, and heel plates.

Refer to the Building Designer for conditions not addressed by this detail.

**WARNING: READ AND FOLLOW ALL NOTES ON THIS DRAWING**  
**IMPORTANT: FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS.**

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7 or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions.

Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation & bracing of trusses.

A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.

For more information see this Job's general notes page and these web sites:  
ALPINE: [www.alpineitw.com](http://www.alpineitw.com); TPI: [www.tpinet.org](http://www.tpinet.org); SBCA: [www.sbcacomponents.com](http://www.sbcacomponents.com); ICC: [www.iccsafe.org](http://www.iccsafe.org)

**REGISTERED PROFESSIONAL ENGINEER**  
83294PE  
OREGON  
JULY 14, 2009  
Russell Tangren

MAX. TOT. LD. 60 PSF  
MAX. SPACING 24.0"

REF	ASCE7-16-GAB12015
DATE	01/26/2018
DRWG	A12015ENC160118

City of Newberg, OR

# Inspection Report

**Inspection:** Engineering Final Inspection

**Inspector:** ENG- Tyler Spencer

**Inspection Date:** May 15, 2025

**Record:** \*Building Permit #BLD-25-92

**Location:** 1015 E RORK CT, Newberg, OR 97132

**Applicant:** Corin Beaudry

ENGINEERING FINAL INSP

**Overall Result:** Pass

City of Newberg, OR

# Inspection Report

**Inspection:** Plumbing Final Inspection

**Inspector:** BLD- BrooksBateman

**Inspection Date:** Apr 29, 2025

**Record:** \*Building Permit #BLD-25-92

**Location:** 1015 E RORK CT, Newberg, OR 97132

**Applicant:** Corin Beaudry

PLUMBING FINAL

**Overall Result:** Pass

City of Newberg, OR

# Inspection Report

**Inspection:** Mechanical Final Inspections

**Inspector:** BLD- Brooks Bateman

**Inspection Date:** May 8, 2025

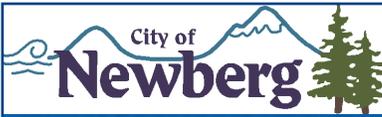
**Record:** \*Building Permit #BLD-25-92

**Location:** 1015 E RORK CT, Newberg, OR 97132

**Applicant:** Corin Beaudry

MECHANICAL FINAL INSP

**Overall Result:** Pass



# Contractor Permit Inspections City of Newberg

**Permit Number: NDWL24-0029**

**Description: New Single Family Residence W/ NFPA 13R sprinkler system**

Applied: **7/18/2024**

Approved: **9/10/2024**

Site Address: **1015 E RORK CT**

Issued: **9/11/2024**

Finalized:

City, State Zip Code: **Newberg, OR 97132**

Status: **ISSUED**

Applicant: **Corins Custom Homes LLC**

Parent Permit: **NREV24-0031**

Owner: **Scott Bontrager**

Parent Project:

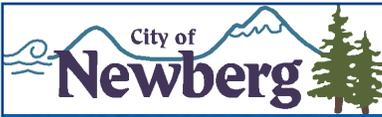
Contractor: **Jaybel Contractors LLC**

Details:

### LIST OF INSPECTIONS

SEQ ID	SCHEDULED DATE	COMPLETED DATE	TYPE	INSPECTOR	RESULT	REMARKS
	9/12/2024	9/12/2024	FOOTING	Brooks Bateman	APPROVED	
Notes:						
	9/12/2024	9/12/2024	SETBACKS	Brooks Bateman	APPROVED	
Notes:						
	9/18/2024	9/18/2024	FOUNDATION	Jared Bradbury	APPROVED	
Notes:						
	9/25/2024	9/25/2024	POST AND BEAM	Brooks Bateman	APPROVED	eTRAKiT Inspection Request
Notes: 9/25/2024 6:55 AM Corins Custom Homes LLC  Contact Name: Corins Custom Homes LLC Site Address: 1015 E RORK CT Phone: 9712350169 e-Mail: build@corinscustomhomes.com						
	9/25/2024	9/25/2024	UNDERFLOOR PLUMBING	Brooks Bateman	APPROVED	eTRAKiT Inspection Request
Notes: 9/25/2024 6:55 AM Corins Custom Homes LLC  Contact Name: Corins Custom Homes LLC Site Address: 1015 E RORK CT Phone: 9712350169 e-Mail: build@corinscustomhomes.com						





# Contractor Permit Inspections City of Newberg

	9/26/2024	9/26/2024	CRAWL DRAIN PIPING	Brooks Bateman	APPROVED	eTRAKiT Inspection Request
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Notes:  
 9/26/2024 5:59 AM Corins Custom Homes LLC  
  
 Contact Name: Corins Custom Homes LLC  
 Site Address: 1015 E RORK CT  
 Phone: 9712350169  
 e-Mail: build@corinscustomhomes.com

	9/26/2024	9/26/2024	RAIN DRAIN	Brooks Bateman	APPROVED	eTRAKiT Inspection Request
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Notes:  
 9/26/2024 5:59 AM Corins Custom Homes LLC  
  
 Contact Name: Corins Custom Homes LLC  
 Site Address: 1015 E RORK CT  
 Phone: 9712350169  
 e-Mail: build@corinscustomhomes.com

	9/26/2024	9/26/2024	SANITARY SEWER	Brooks Bateman	APPROVED	eTRAKiT Inspection Request
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Notes:  
 9/26/2024 5:59 AM Corins Custom Homes LLC  
  
 Contact Name: Corins Custom Homes LLC  
 Site Address: 1015 E RORK CT  
 Phone: 9712350169  
 e-Mail: build@corinscustomhomes.com

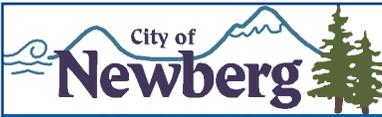
	9/26/2024	9/26/2024	WATER LINE	Brooks Bateman	APPROVED	eTRAKiT Inspection Request
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Notes:  
 9/26/2024 5:59 AM Corins Custom Homes LLC  
  
 Contact Name: Corins Custom Homes LLC  
 Site Address: 1015 E RORK CT  
 Phone: 9712350169  
 e-Mail: build@corinscustomhomes.com

	10/16/2024	10/16/2024	SHEAR WALL	Brooks Bateman	APPROVED	eTRAKiT Inspection Request
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Notes:  
 10/14/2024 11:57 AM Corins Custom Homes LLC  
  
 Contact Name: Corins Custom Homes LLC  
 Site Address: 1015 E RORK CT  
 Phone: 9712350169  
 e-Mail: build@corinscustomhomes.com





# Contractor Permit Inspections

## City of Newberg

	10/21/2024	10/21/2024	METER SET	Matt Katke	APPROVED	eTRAKiT Inspection Request
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Notes:

10/18/2024 8:54 AM Corins Custom Homes LLC  
 Our design we submitted for our fire suppression works with a 3/4" meter. Please set a 3/4" meter.  
 Contact Name: Corins Custom Homes LLC  
 Site Address: 1015 E RORK CT  
 Phone: 9712350169  
 e-Mail: build@corinscustomhomes.com

	11/6/2024	11/6/2024	ROUGH PLUMBING	Brooks Bateman	APPROVED	eTRAKiT Inspection Request
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Notes:

11/5/2024 9:05 AM Corins Custom Homes LLC  
 Contact Name: Corins Custom Homes LLC  
 Site Address: 1015 E RORK CT  
 Phone: 9712350169  
 e-Mail: build@corinscustomhomes.com

	12/26/2024	12/26/2024	GAS LINE	State BCD	NOT READY	eTRAKiT Inspection Request
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Notes:

12/23/2024 1:09 PM Corins Custom Homes LLC  
 Contact Name: Corins Custom Homes LLC  
 Site Address: 1015 E RORK CT  
 Phone: 9712350169  
 e-Mail: build@corinscustomhomes.com

	12/26/2024	12/26/2024	GAS PRESSURE TEST	State BCD	NOT READY	eTRAKiT Inspection Request
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Notes:

12/23/2024 1:09 PM Corins Custom Homes LLC  
 Contact Name: Corins Custom Homes LLC  
 Site Address: 1015 E RORK CT  
 Phone: 9712350169  
 e-Mail: build@corinscustomhomes.com

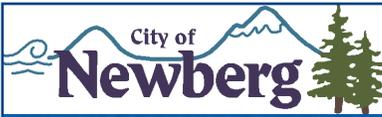
	12/26/2024	12/26/2024	MECH ROUGH	State BCD	DENIED	eTRAKiT Inspection Request
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Notes:

12/23/2024 1:09 PM Corins Custom Homes LLC  
 Contact Name: Corins Custom Homes LLC  
 Site Address: 1015 E RORK CT  
 Phone: 9712350169  
 e-Mail: build@corinscustomhomes.com

Missing dryer vent and upstairs bathroom fan vents.





# Contractor Permit Inspections

## City of Newberg

	12/31/2024	12/31/2024	2:45 PM	GAS LINE	State BCD	APPROVED	eTRAKiT Inspection Request
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Notes:  
 12/30/2024 10:59 AM Corins Custom Homes LLC

Contact Name: Corins Custom Homes LLC  
 Site Address: 1015 E RORK CT  
 Phone: 9712350169  
 e-Mail: build@corinscustomhomes.com

I adjusted pressure from 35+ to 25 for testing. There was no change in pressure after 30 minutes. Tagged line.

	12/31/2024	12/31/2024	3:00 PM	MECH ROUGH	State BCD	APPROVED	eTRAKiT Inspection Request
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Notes:  
 12/30/2024 10:59 AM Corins Custom Homes LLC

Contact Name: Corins Custom Homes LLC  
 Site Address: 1015 E RORK CT  
 Phone: 9712350169  
 e-Mail: build@corinscustomhomes.com

Missing vents have now been installed.

	1/3/2025	1/3/2025		FRAMING	Clair Company	DENIED	eTRAKiT Inspection Request
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Notes:  
 1/2/2025 11:43 AM Corins Custom Homes LLC

Contact Name: Corins Custom Homes LLC  
 Site Address: 1015 E RORK CT  
 Phone: 9712350169  
 e-Mail: build@corinscustomhomes.com

Provide 3/2X6 post at mid span of stair per plan on sheet 6Secure second floor sheer wall along B line to roof structure per planProvide truss engineering for inspection

	1/8/2025	1/8/2025		FRAMING	Brooks Bateman	DENIED	eTRAKiT Inspection Request
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Notes:  
 1/7/2025 8:28 AM Corins Custom Homes LLC

Contact Name: Corins Custom Homes LLC  
 Site Address: 1015 E RORK CT  
 Phone: 9712350169  
 e-Mail: build@corinscustomhomes.com

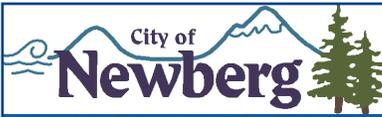
Complete truss bracing

	1/13/2025	1/13/2025		FRAMING	Brooks Bateman	APPROVED	eTRAKiT Inspection Request
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Notes:  
 1/10/2025 7:39 AM Corins Custom Homes LLC

Contact Name: Corins Custom Homes LLC  
 Site Address: 1015 E RORK CT  
 Phone: 9712350169  
 e-Mail: build@corinscustomhomes.com





# Contractor Permit Inspections

## City of Newberg

	1/13/2025	1/13/2025	INSULATION	Brooks Bateman	APPROVED	eTRAKiT Inspection Request
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Notes:  
 1/10/2025 1:28 PM Corins Custom Homes LLC

Contact Name: Corins Custom Homes LLC  
 Site Address: 1015 E RORK CT  
 Phone: 9712350169  
 e-Mail: build@corinscustomhomes.com

	1/27/2025	1/27/2025	DRIVEWAY APPROACH	Mike Grimes	DENIED	eTRAKiT Inspection Request
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Notes:  
 1/24/2025 10:38 PM Corins Custom Homes LLC

Contact Name: Corins Custom Homes LLC  
 Site Address: 1015 E RORK CT  
 Phone: 9712350169  
 e-Mail: build@corinscustomhomes.com

Cross slope in multiple locations including around radius of corner exceeds 2% max. Regrade and compaction to achieve required 4" concrete depth for driveway and 6" through driveway approach.

	1/27/2025	1/27/2025	SIDEWALK	Mike Grimes	DENIED	eTRAKiT Inspection Request
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Notes:  
 1/24/2025 10:38 PM Corins Custom Homes LLC

Contact Name: Corins Custom Homes LLC  
 Site Address: 1015 E RORK CT  
 Phone: 9712350169  
 e-Mail: build@corinscustomhomes.com

Cross slope in multiple locations including around radius of corner exceeds 2% max. Regrade and compaction to achieve required 4" concrete depth.

	1/27/2025	1/27/2025	SLAB/FLATWORK	Brooks Bateman	WRONG INSPECTION	eTRAKiT Inspection Request
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Notes:  
 1/24/2025 10:38 PM Corins Custom Homes LLC

Contact Name: Corins Custom Homes LLC  
 Site Address: 1015 E RORK CT  
 Phone: 9712350169  
 e-Mail: build@corinscustomhomes.com

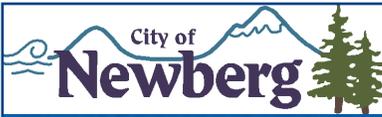
Call for side walk and approach. This will require a city engineering inspector not a city inspector from the building division

	1/28/2025	1/28/2025	DRIVEWAY APPROACH	Mike Grimes	APPROVED	eTRAKiT Inspection Request
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Notes:  
 1/27/2025 10:28 PM Corins Custom Homes LLC

Contact Name: Corins Custom Homes LLC  
 Site Address: 1015 E RORK CT  
 Phone: 9712350169  
 e-Mail: build@corinscustomhomes.com





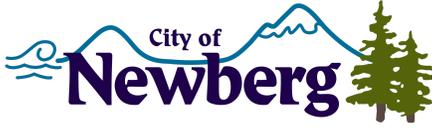
# Contractor Permit Inspections City of Newberg

Forms only

	1/28/2025	1/28/2025	SIDEWALK	Mike Grimes	APPROVED	eTRAKiT Inspection Request
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Notes:  
1/27/2025 10:29 PM Corins Custom Homes LLC  
  
Contact Name: Corins Custom Homes LLC  
Site Address: 1015 E RORK CT  
Phone: 9712350169  
e-Mail: build@corinscustomhomes.com  
  
forms only





PERMIT #: BLD-25-92

ISSUED DATE: October 13, 2025

## CERTIFICATE OF OCCUPANCY

This structure has been inspected, and at the time of certificate issuance, is in compliance with all applicable codes and regulations for occupancy based on the edition of the Oregon Specialty Code.

**Site Address:** 1015 E RORK CT, Newberg, OR, 97132

**Parcel #:** R3208BB 01200

**Construction Types:** /

**Permit Type:** Residential

**Fire Sprinkler Required by Code:** No

**Fire Sprinkler Installed/Altered:** No

**DETAILED DESCRIPTION OF WORK:** New Single Family Residence

### AUTHORIZED PERMIT HOLDERS

**Owner:** CALDIE JEFFREY BONTRAGER MELISSA , NEWBERG, OR. 97132  
BONTRAGER SCOTT

**Contractor:** CORIN ELIZABETH BEAUDRY **CCB License #:** 228447

### CONDITIONS

**ALL FINAL INSPECTIONS HAVE BEEN COMPLETED AND THE BUILDING IS APPROVED FOR OCCUPANCY**

**THIS CERTIFICATE MAY BE REVOKED BY THE City of Newberg, OR UPON VIOLATION OF ANY OF ITS RULES AND REGULATIONS.**

To view permit details related to this Certificate, scan this barcode or visit [newbergor.viewpointcloud.com/#/records/554](http://newbergor.viewpointcloud.com/#/records/554)



City of Newberg, OR

# Inspection Report

**Inspection:** Building Final Inspection

**Inspector:** BLD- Brooks Bateman

**Inspection Date:** May 16, 2025

**Record:** \*Building Permit #BLD-25-92

**Location:** 1015 E RORK CT, Newberg, OR 97132

**Applicant:** Corin Beaudry

BUILDING FINAL

**Overall Result:** Pass