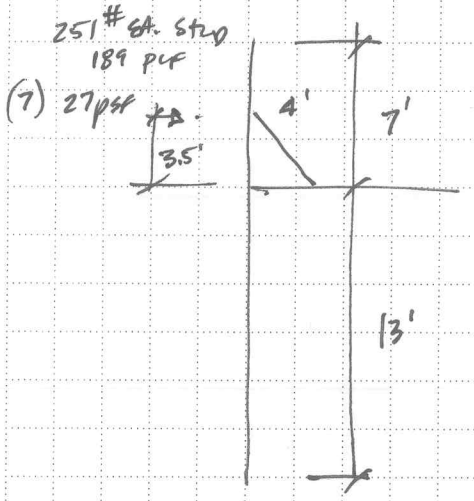
OLLMANN ERNEST MARTIN
ARCHITECTS
509 South State Street
Belvidere, Illinois 61008
815-544-7790 Phone
815-544-7792 Fax

WAUKESHA
Job INC. PARAPET Job No. 15-093
Sheet No. 1 of 4
By _____ Date 3-17-2016

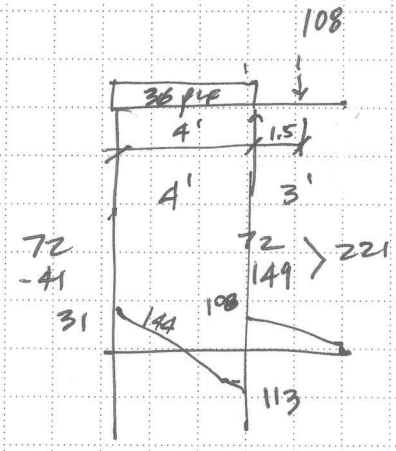
ADDITION PARAPET.

STUDS @ 16" O.C.



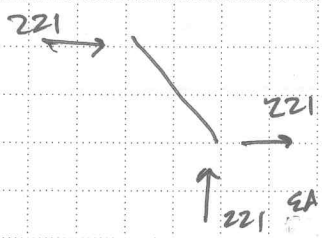
M = 251 (3.5) = 0.879 KFT.

S_{980} = 9.35 N.G.



M = 0.162 KFT

S_{980} = 1.72 2x6 ok.



Support Joist
SPAN = 17'
LOAD = 166 PLF
V = 1411
M = 5.99 KFT

S_{980} = 63.8
USE (3) 2x12's @ KICKER LINE

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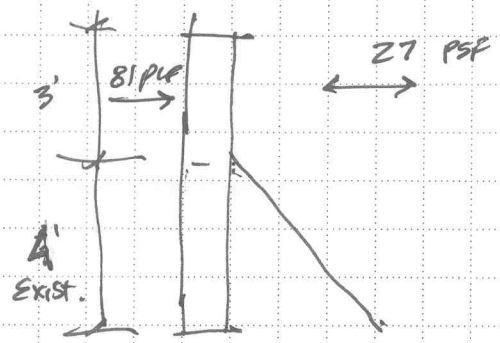
Job ~~Waukesha~~ Job No.
Sheet No. 2 of 4
By Date

INCREASED PARAPET

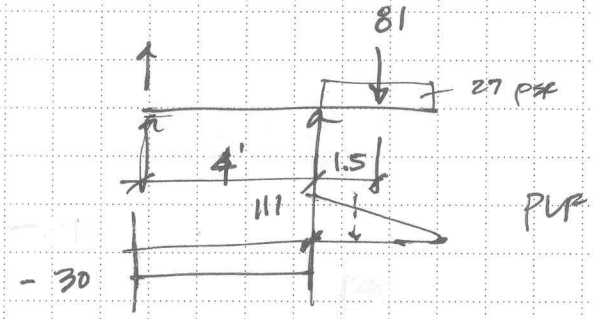


27 (3) = 81 plf

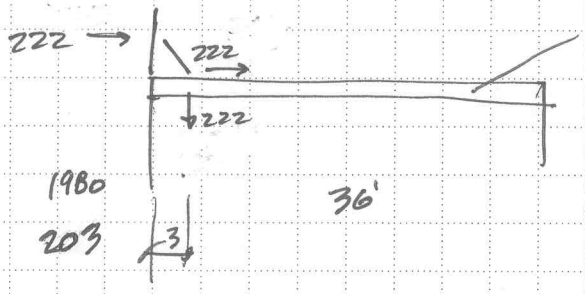
M = 81 (1.5') = 122 Ft lbs / Ft.

Studs @ 24" o.c.
M = 0.2~~74~~ kFt.
$S_{req'd}$ = 3

2x6's ok



24" o.c. trusses



(2)(55) = 110 plf

TOTAL LOAD = 3960 # Exist.

5% max = 198# INCREASE

222# too much

$\frac{198}{2}$ = 99 max plf

30" INCREASE — 2.5' (27 psf) = 67.5

MAX REACTION = 89 plf ok.

ok.

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JOB TITLE Waukesha Culvers
JOB NO. 2015-093 SHEET NO. 3/4
CALCULATED BY DATE 2/4/16
CHECKED BY DATE .

Snow Loads : ASCE 7-05

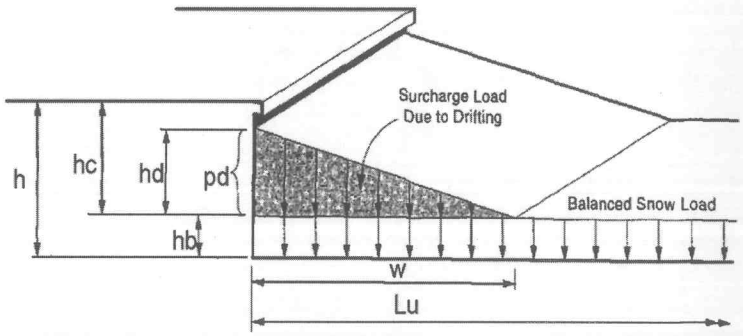
Nominal Snow Forces

Roof slope		=	1.2 deg
Horiz. eave to ridge dist (W)		=	25.0 ft
Roof length parallel to ridge (L)		=	26.0 ft
Type of Roof			Monoslope
Ground Snow Load	Pg	=	30.0 psf
Occupancy Category		=	II
Importance Factor	I	=	1.0
Thermal Factor	Ct	=	1.00
Exposure Factor	Ce	=	1.0
Pf = 0.7*Ce*Ct*I*Pg		=	21.0 psf
Unobstructed Slippery Surface			yes
Sloped-roof Factor	Cs	=	1.00
Balanced Snow Load	**Ps**	=	**21.0 psf**
Rain on Snow Surcharge Angle			0.50 deg
Code Maximum Rain Surcharge			5.0 psf
Rain on Snow Surcharge		=	0.0 psf
Ps plus rain surcharge		=	21.0 psf
Minimum Snow Load	Pfmin	=	20.0 psf
Uniform Roof Design Snow Load		=	**21.0 psf**

NOTE: Alternate spans of continuous beams and other areas shall be loaded with half the design roof snow load so as to produce the greatest possible effect - see code.

Windward Snow Drifts 1 - Against walls, parapets, etc more than 15' long

Upwind fetch	lu	=	115.0 ft
Projection height	h	=	4.0 ft
Snow density	g	=	17.9 pcf
Balanced snow height	hb	=	1.17 ft
	hd	=	2.82 ft
	hc	=	2.83 ft
hc/hb >0.2 = 2.4	**Therefore, design for drift**		
Drift height (hd)		=	2.82 ft
Drift width	w	=	11.28 ft
Surcharge load:	pd = γ*hd	=	**50.5 psf**
Balanced Snow load:		=	21.0 psf
			71.5 psf



Windward Snow Drifts 2 - Against walls, parapets, etc > 15'

Upwind fetch	lu	=	115.0 ft
Projection height	h	=	7.0 ft
Snow density	g	=	17.9 pcf
Balanced snow height	hb	=	1.17 ft
	hd	=	2.82 ft
	hc	=	5.83 ft
hc/hb >0.2 = 5.0	**Therefore, design for drift**		
Drift height (hd)		=	2.82 ft
Drift width	w	=	11.28 ft
Surcharge load:	pd = γ*hd	=	**50.5 psf**

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JOB TITLE Waukesha Culvers
JOB NO. 2015-093 SHEET NO. 4/4
CALCULATED BY DATE 2/4/16
CHECKED BY DATE .

Snow Loads : ASCE 7-05

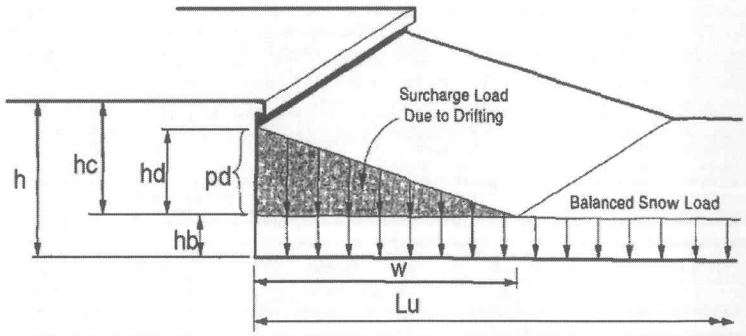
Nominal Snow Forces

Roof slope		=	1.2 deg
Horiz. eave to ridge dist (W)		=	25.0 ft
Roof length parallel to ridge (L)		=	26.0 ft
Type of Roof			Monoslope
Ground Snow Load	Pg	=	30.0 psf
Occupancy Category		=	II
Importance Factor	I	=	1.0
Thermal Factor	Ct	=	1.00
Exposure Factor	Ce	=	1.0
Pf = 0.7*Ce*Ct*I*Pg		=	21.0 psf
Unobstructed Slippery Surface			yes
Sloped-roof Factor	Cs	=	1.00
Balanced Snow Load	**Ps**	=	**21.0 psf**
Rain on Snow Surcharge Angle			0.50 deg
Code Maximum Rain Surcharge			5.0 psf
Rain on Snow Surcharge		=	0.0 psf
Ps plus rain surcharge		=	21.0 psf
Minimum Snow Load	Pfmin	=	20.0 psf
Uniform Roof Design Snow Load		=	**21.0 psf**

NOTE: Alternate spans of continuous beams and other areas shall be loaded with half the design roof snow load so as to produce the greatest possible effect - see code.

Windward Snow Drifts 1 - Against walls, parapets, etc more than 15' long

Upwind fetch	lu	=	42.0 ft
Projection height	h	=	4.0 ft
Snow density	g	=	17.9 pcf
Balanced snow height	hb	=	1.17 ft
	hd	=	1.69 ft
	hc	=	2.83 ft
hc/hb >0.2 = 2.4	**Therefore, design for drift**		
Drift height (hd)		=	1.69 ft
Drift width	w	=	6.78 ft
Surcharge load:	pd = γ*hd	=	**30.3 psf**
Balanced Snow load:		=	21.0 psf
			51.3 psf



Windward Snow Drifts 2 - Against walls, parapets, etc > 15'

Upwind fetch	lu	=	42.0 ft
Projection height	h	=	7.0 ft
Snow density	g	=	17.9 pcf
Balanced snow height	hb	=	1.17 ft
	hd	=	1.69 ft
	hc	=	5.83 ft
hc/hb >0.2 = 5.0	**Therefore, design for drift**		
Drift height (hd)		=	1.69 ft
Drift width	w	=	6.78 ft
Surcharge load:	pd = γ*hd	=	**30.3 psf**