PRRWF20240597

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JMontgomery
04/10/2024
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City of Puyallup
Development & Permitting Services
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TO BE PROVIDED BY THE PERMITTEE
ON SITE FOR REFERENCE

AHBL

Supplemental Structural Calculations

PREPARED FOR:

InSite Architects
1000 University Ave W
Suite 130
St. Paul, MN 55104

PROJECT:

Wesley Bradley Park
Phase II – Brownstones (3 Story Rev)
2220236.20

PREPARED BY:

Kyle Gysler, PE
Senior Project Engineer

REVIEWED BY:

Drew McEachern, PE, SE
Principal

DATE:

March 2024

PRRWF20240597

Structural Calculations

For

Wesley Bradley Park
Phase II –Brownstones (3 Story Revision)
Puyallup, WA

Project # 2220236.20

Project Principal	Drew McEachern, PE, SE
Project Engineer	Kyle Gysler, PE

Design Criteria

Design Codes and Standards

Codes and Standards: Structural design and construction shall be in accordance with the applicable sections of the following codes and standards as adopted and amended by the local building authority: International Building Code, 2018 Edition.

Structural Design Criteria:

Live Load Criteria:

Roof (Min Blanket Snow)	25 psf
Residential (Private Rooms and Corridors)	40 psf
Residential (Public Rooms and Corridors)	100 psf
Stairs and Exits	100 psf
Decks and Balconies (1.5x Occupancy Served, not exceeding 100 psf)	60 psf
Mechanical Mezzanine	50 psf
Light Storage	125 psf
Parking Garage	40 psf or 3,000 lbs wheel
Handrails and Guards	50 plf or 200 lbs concentrated

Wind Load Criteria:

Basic Wind Speed	98 mph
Risk Category	II
Wind Exposure	B
Topographic Factor	1.0

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Seismic Criteria:

Risk Category			II
Seismic Importance Factor			1.00
S_s	= 1.257	S_1	= 0.434
S_{ds}	= 1.000	S_{d1}	= 0.434
Site Class			= C
Seismic Design Category			= D
Response Modification Coeff. (R):			6 ½ (Light-Frame Wood Shear Wall) 5 (Special Reinforced Concrete Shear Wall)
Seismic Response Coeff. (C_s):			0.154 (Light-Frame Wood Shear Wall) 0.200 (Special Reinforced Concrete Shear Wall)

Soil Criteria:

Based on Geotechnical Engineering Report by: Terra Associates, Inc., dated November 14, 2016.

Allowable Soil Bearing Capacity: 3,000 psf allow 33% increase for loads from wind or seismic origin.

Active Earth Pressure	=	35 pcf
At Rest Earth Pressure	=	100 psf (uniform)
Seismic Earth Pressure	=	8H psf
Friction Coefficient	=	0.35
Passive Pressure	=	350 pcf

Project Description

The project consists of a new building at the Wesley Bradley Park Campus. The structure was previously designed and submitted with two stories of conventional wood framing supported on one story of cast-in-place concrete construction. This submittal includes the revision to three stories of conventional wood framing over one story of cast-in-place concrete construction. The framing systems remain the same as previously submitted. The following calculations are supplemental to the previously submitted calculations.

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AHBL, INC.
2215 N. 30th Street, Suite 300
Tacoma, WA 98403

Project Title: Wesley Bradley Park Phase 2 - Brownstones
Engineer: KBG
Project ID: 2220236.20
Project Descr:

Wood Beam

Project File: 2220236_Brownstone Wood Framing.ec6

DESCRIPTION: L3 Transfer Beam

CODE REFERENCES

Calculations per NDS 2018, IBC 2018, CBC 2019, ASCE 7-16
Load Combination Set : IBC 2021

Material Properties

Analysis Method : Allowable Stress Design
Load Combination : IBC 2021

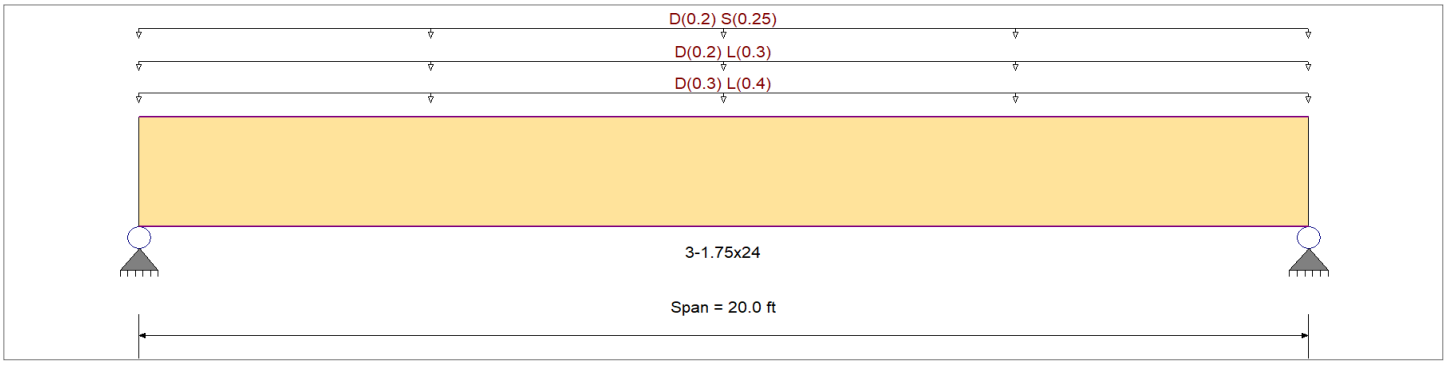
Wood Species : iLevel Truss Joist
Wood Grade : MicroLam LVL 2.0 E

Beam Bracing : Beam is Fully Braced against lateral-torsional buckling

Fb +	2,600.0 psi
Fb -	2,600.0 psi
Fc - Prll	2,510.0 psi
Fc - Perp	750.0 psi
Fv	285.0 psi
Ft	1,555.0 psi

E : Modulus of Elasticity

Ebend- xx	2,000.0 ksi
Eminbend - xx	1,016.54 ksi
Density	42.010 pcf



Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Beam self weight calculated and added to loading
Uniform Load : D = 0.030, L = 0.040 ksf, Tributary Width = 10.0 ft, (L3 Interior Floor)
Uniform Load : D = 0.040, L = 0.060 ksf, Tributary Width = 5.0 ft, (L3 Exterior Floor)
Uniform Load : D = 0.020, S = 0.0250 ksf, Tributary Width = 10.0 ft, (Roof)

DESIGN SUMMARY

Design OK

Maximum Bending Stress Ratio	=	0.723 : 1	Maximum Shear Stress Ratio	=	0.482 : 1
Section used for this span		3-1.75x24	Section used for this span		3-1.75x24
fb: Actual	=	1,710.43 psi	fv: Actual	=	137.33 psi
F'b	=	2,366.10 psi	F'v	=	285.00 psi
Load Combination		+D+L	Load Combination		+D+L
Location of maximum on span	=	10.000 ft	Location of maximum on span	=	0.000 ft
Span # where maximum occurs	=	Span # 1	Span # where maximum occurs	=	Span # 1

Maximum Deflection

Max Downward Transient Deflection	0.210 in	Ratio =	1145 >=360	Span: 1 : L Only
Max Upward Transient Deflection	0 in	Ratio =	0 <360	n/a
Max Downward Total Deflection	0.434 in	Ratio =	553 >=180	Span: 1 : +D+0.750L+0.750S
Max Upward Total Deflection	0 in	Ratio =	0 <180	n/a

Maximum Forces & Stresses for Load Combinations

Load Combination / Segment Length	Span #	Max Stress Ratios M	V	CD	CM	C_t	CLx	C_F	Cfu	C_i	C_r	Moment Values M	fb	F'b	Shear Values V	fv	F'v
D Only														0.0	0.00	0.0	0.0
Length = 20.0 ft	1	0.412	0.275	0.90	1.00	1.00	1.00	0.910	1.00	1.00	1.00	36.84	877.1	2,129.5	5.92	70.4	256.5
+D+L					1.00	1.00	1.00	0.910	1.00	1.00	1.00			0.0	0.00	0.0	0.0
Length = 20.0 ft	1	0.723	0.482	1.00	1.00	1.00	1.00	0.910	1.00	1.00	1.00	71.84	1,710.4	2,366.1	11.54	137.3	285.0
+D+S					1.00	1.00	1.00	0.910	1.00	1.00	1.00			0.0	0.00	0.0	0.0
Length = 20.0 ft	1	0.432	0.288	1.15	1.00	1.00	1.00	0.910	1.00	1.00	1.00	49.34	1,174.7	2,721.0	7.92	94.3	327.8
+D+0.750L					1.00	1.00	1.00	0.910	1.00	1.00	1.00			0.0	0.00	0.0	0.0
Length = 20.0 ft	1	0.508	0.339	1.25	1.00	1.00	1.00	0.910	1.00	1.00	1.00	63.09	1,502.1	2,957.6	10.13	120.6	356.3
+D+0.750L+0.750S					1.00	1.00	1.00	0.910	1.00	1.00	1.00			0.0	0.00	0.0	0.0

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AHBL, INC.
2215 N. 30th Street, Suite 300
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Project Title: Wesley Bradley Park Phase 2 - Brownstones
Engineer: KBG
Project ID: 2220236.20
Project Descr:

Wood Beam

Project File: 2220236_Brownstone Wood Framing.ec6

DESCRIPTION: L3 Transfer Beam

Maximum Forces & Stresses for Load Combinations

Load Combination / Segment Length	Span #	Max Stress Ratios M	V	CD	CM	C_t	CLx	C_F	Cfu	C_i	C_r	Moment Values M	fb	F'b	Shear Values V	fv	F'v
Length = 20.0 ft	1	0.634	0.423	1.15	1.00	1.00	1.00	0.910	1.00	1.00	1.00	72.46	1,725.3	2,721.0	11.64	138.5	327.8
+0.60D					1.00	1.00	1.00	0.910	1.00	1.00	1.00			0.0	0.00	0.0	0.0
Length = 20.0 ft	1	0.139	0.093	1.60	1.00	1.00	1.00	0.910	1.00	1.00	1.00	22.10	526.3	3,785.8	3.55	42.3	456.0

Overall Maximum Deflections

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
+D+0.750L+0.750S	1	0.4338	10.073		0.0000	0.000

Vertical Reactions

Support notation : Far left is #1 Values in KIPS

Load Combination	Support 1	Support 2
Max Upward from all Load Conditions	14.493	14.493
Max Upward from Load Combinations	14.493	14.493
Max Upward from Load Cases	7.368	7.368
D Only	7.368	7.368
+D+L	14.368	14.368
+D+S	9.868	9.868
+D+0.750L	12.618	12.618
+D+0.750L+0.750S	14.493	14.493
+0.60D	4.421	4.421
L Only	7.000	7.000
S Only	2.500	2.500

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Project Descr:

Wood Beam

Project File: 2220236_Brownstone Wood Framing.ec6

DESCRIPTION: 3rd Floor LVL Joist w/ Wall Above

CODE REFERENCES

Calculations per NDS 2018, IBC 2018, CBC 2019, ASCE 7-16
Load Combination Set : IBC 2021

Material Properties

Analysis Method : Allowable Stress Design
Load Combination : IBC 2021

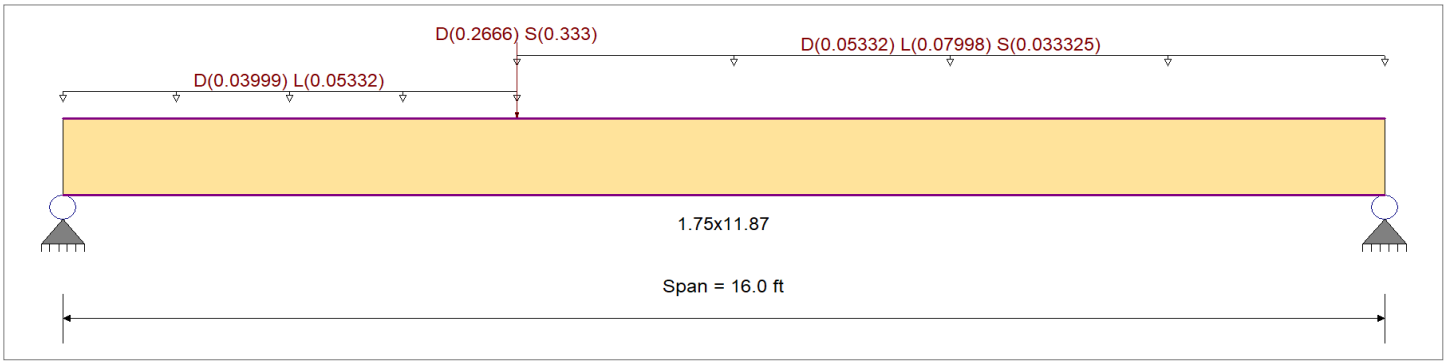
Wood Species : iLevel Truss Joist
Wood Grade : MicroLam LVL 2.0 E

Beam Bracing : Beam is Fully Braced against lateral-torsional buckling

Fb +	2,600.0 psi
Fb -	2,600.0 psi
Fc - Prll	2,510.0 psi
Fc - Perp	750.0 psi
Fv	285.0 psi
Ft	1,555.0 psi

E : Modulus of Elasticity

Ebend- xx	2,000.0 ksi
Eminbend - xx	1,016.54 ksi
Density	42.010 pcf



Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Beam self weight NOT internally calculated and added
Load for Span Number 1
Uniform Load : D = 0.030, L = 0.040 ksf, Extent = 0.0 -->> 5.50 ft, Tributary Width = 1.333 ft, (Interior Floor)
Uniform Load : D = 0.040, L = 0.060, S = 0.0250 ksf, Extent = 5.50 -->> 16.0 ft, Tributary Width = 1.333 ft, (Exterior Deck)
Point Load : D = 0.2666, S = 0.3330 k @ 5.50 ft, (Exterior Wall)

DESIGN SUMMARY

Design OK

Maximum Bending Stress Ratio	=	0.532 1	Maximum Shear Stress Ratio	=	0.252 : 1
Section used for this span		1.75x11.87	Section used for this span		1.75x11.87
fb: Actual	=	1,592.61 psi	fv: Actual	=	71.87 psi
F'b	=	2,994.26 psi	F'v	=	285.00 psi
Load Combination		+D+0.750L+0.750S	Load Combination		+D+L
Location of maximum on span	=	7.124 ft	Location of maximum on span	=	15.066 ft
Span # where maximum occurs	=	Span # 1	Span # where maximum occurs	=	Span # 1

Maximum Deflection

Max Downward Transient Deflection	0.222 in	Ratio =	865 >=360	Span: 1 : L Only
Max Upward Transient Deflection	0 in	Ratio =	0 <360	n/a
Max Downward Total Deflection	0.510 in	Ratio =	376 >=180	Span: 1 : +D+0.750L+0.750S
Max Upward Total Deflection	0 in	Ratio =	0 <180	n/a

Maximum Forces & Stresses for Load Combinations

Load Combination / Segment Length	Span #	Max Stress Ratios M	V	CD	CM	C_t	CLx	C_F	Cfu	C_i	C_r	Moment Values M	fb	F'b	Shear Values V	fv	F'v
D Only														0.0	0.00	0.0	0.0
Length = 16.0 ft	1	0.298	0.142	0.90	1.00	1.00	1.00	1.001	1.00	1.00	1.00	2.40	699.4	2,343.3	0.50	36.3	256.5
+D+L					1.00	1.00	1.00	1.001	1.00	1.00	1.00			0.0	0.00	0.0	0.0
Length = 16.0 ft	1	0.527	0.252	1.00	1.00	1.00	1.00	1.001	1.00	1.00	1.00	4.71	1,373.4	2,603.7	1.00	71.9	285.0
+D+S					1.00	1.00	1.00	1.001	1.00	1.00	1.00			0.0	0.00	0.0	0.0
Length = 16.0 ft	1	0.411	0.184	1.15	1.00	1.00	1.00	1.001	1.00	1.00	1.00	4.22	1,231.3	2,994.3	0.84	60.4	327.8
+D+0.750L					1.00	1.00	1.00	1.001	1.00	1.00	1.00			0.0	0.00	0.0	0.0
Length = 16.0 ft	1	0.370	0.174	1.25	1.00	1.00	1.00	1.001	1.00	1.00	1.00	4.12	1,202.9	3,254.6	0.86	62.1	356.3

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Project Title: Wesley Bradley Park Phase 2 - Brownstones
Engineer: KBG
Project ID: 2220236.20
Project Descr:

Wood Beam

Project File: 2220236_Brownstone Wood Framing.ec6

DESCRIPTION: 3rd Floor LVL Joist w/ Wall Above

Maximum Forces & Stresses for Load Combinations

Load Combination / Segment Length	Span #	Max Stress Ratios M	V	CD	CM	C_t	CLx	C_F	Cfu	C_i	C_r	Moment Values M	fb	F'b	Shear Values V	fv	F'v
+D+0.750L+0.750S					1.00	1.00	1.00	1.001	1.00	1.00	1.00			0.0	0.00	0.0	0.0
Length = 16.0 ft	1	0.532	0.243	1.15	1.00	1.00	1.00	1.001	1.00	1.00	1.00	5.46	1,592.6	2,994.3	1.10	79.8	327.8
+0.60D					1.00	1.00	1.00	1.001	1.00	1.00	1.00			0.0	0.00	0.0	0.0
Length = 16.0 ft	1	0.101	0.048	1.60	1.00	1.00	1.00	1.001	1.00	1.00	1.00	1.44	419.6	4,165.9	0.30	21.8	456.0

Overall Maximum Deflections

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
+D+0.750L+0.750S	1	0.5100	7.942		0.0000	0.000

Vertical Reactions

Support notation : Far left is #1 Values in KIPS

Load Combination	Support 1	Support 2
Max Upward from all Load Conditions	1.180	1.229
Max Upward from Load Combinations	1.180	1.229
Max Upward from Load Cases	0.541	0.615
D Only	0.541	0.506
+D+L	1.059	1.120
+D+S	0.874	0.855
+D+0.750L	0.930	0.967
+D+0.750L+0.750S	1.180	1.229
+0.60D	0.324	0.303
L Only	0.518	0.615
S Only	0.333	0.350

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AHBL, INC.
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Project Title: Wesley Bradley Park Phase 2 - Brownstones
Engineer: KBG
Project ID: 2220236.20
Project Descr:

Wood Column

Project File: 2220236_Brownstone Wood Framing.ec6

DESCRIPTION: 3.5x5.25 PSL

Code References

Calculations per NDS 2018, IBC 2018, CBC 2019, ASCE 7-16
Load Combinations Used : IBC 2021

General Information

Analysis Method	Allowable Stress Design		
End Fixities	Top & Bottom Pinned		
Overall Column Height	10 ft		
(Used for non-slender calculations)			
Wood Species	iLevel Truss Joist		
Wood Grade	Parallam PSL 1.8E		
Fb +	2,400.0 psi	Fv	190.0 psi
Fb -	2,400.0 psi	Ft	1,755.0 psi
Fc - Prll	2,500.0 psi	Density	45.070 pcf
Fc - Perp	425.0 psi		

E : Modulus of Elasticity . . .	x-x Bending	y-y Bending	Axial
Basic	1,800.0	1,800.0	1,800.0 ksi
Minimum	914.88	914.88	

Wood Section Name	**3.5x5.25**
Wood Grading/Manuf.	Trus-Joist
Wood Member Type	Parallam PSL
Exact Width	**3.50** in
Exact Depth	**5.250** in
Area	18.375 in^2
Ix	42.205 in^4
Iy	18.758 in^4

Allow Stress Modification Factors	
Cf or Cv for Bending	1.096
Cf or Cv for Compressio	1.0
Cf or Cv for Tension	1.0
Cm : Wet Use Factor	1.0
Ct : Temperature Fact	1.0
Cfu : Flat Use Factor	1.0
Kf : Built-up columns	1.0
Use Cr : Repetitive ?	No

Column Buckling Condition:
ABOUT X-X Axis: Lux = 10 ft, Kx = 1.0
ABOUT Y-Y Axis: Luy = 10 ft, Ky = 1.0

Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Column self weight included : 57.511 lbs * Dead Load Factor
AXIAL LOADS . . .
Axial Load at 10.0 ft, D = 11.250 k

DESIGN SUMMARY

Bending & Shear Check Results

PASS Max. Axial+Bending Stress Ratio = **0.9982 : 1**

Load Combination	D Only
Governing NDS Forumla	Comp Only, fc/Fc'
Location of max.above base	0.0 ft
At maximum location values are .	
Applied Axial	11.308 k
Applied Mx	0.0 k-ft
Applied My	0.0 k-ft
Fc : Allowable	616.48 psi

PASS Maximum Shear Stress Ratio = **0.0 : 1**

Load Combination	+0.60D
Location of max.above base	10.0 ft
Applied Design Shear	0.0 psi
Allowable Shear	304.0 psi

Maximum SERVICE Lateral Load Reactions . .

Top along Y-Y	0.0 k	Bottom along Y-Y	0.0 k
Top along X-X	0.0 k	Bottom along X-X	0.0 k

Maximum SERVICE Load Lateral Deflections . . .

Along Y-Y 0.0 in at 0.0 ft above base
for load combination : n/a

Along X-X 0.0 in at 0.0 ft above base
for load combination : n/a

Other Factors used to calculate allowable stresses . . .

	Bending	Compression	Tension

Load Combination Results

Load Combination	C_D	C_P	Maximum Axial + Bending Stress Ratios: Stress Ratio	Status	Location	Maximum Shear Ratios: Stress Ratio	Status	Location
D Only	0.900	0.274	0.9982	PASS	0.0 ft	0.0	PASS	10.0 ft
+0.60D	1.600	0.157	0.5879	PASS	0.0 ft	0.0	PASS	10.0 ft

Maximum Reactions

Note: Only non-zero reactions are listed.

Load Combination	X-X Axis Reaction k @ Base	@ Top	Y-Y Axis Reaction @ Base	@ Top	Axial Reaction @ Base	My - End Moments k-ft @ Base	@ Top	Mx - End Moments @ Base	@ Top
D Only					11.308				
+0.60D					6.785				

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Project Title: Wesley Bradley Park Phase 2 - Brownstones
Engineer: KBG
Project ID: 2220236.20
Project Descr:

Wood Column

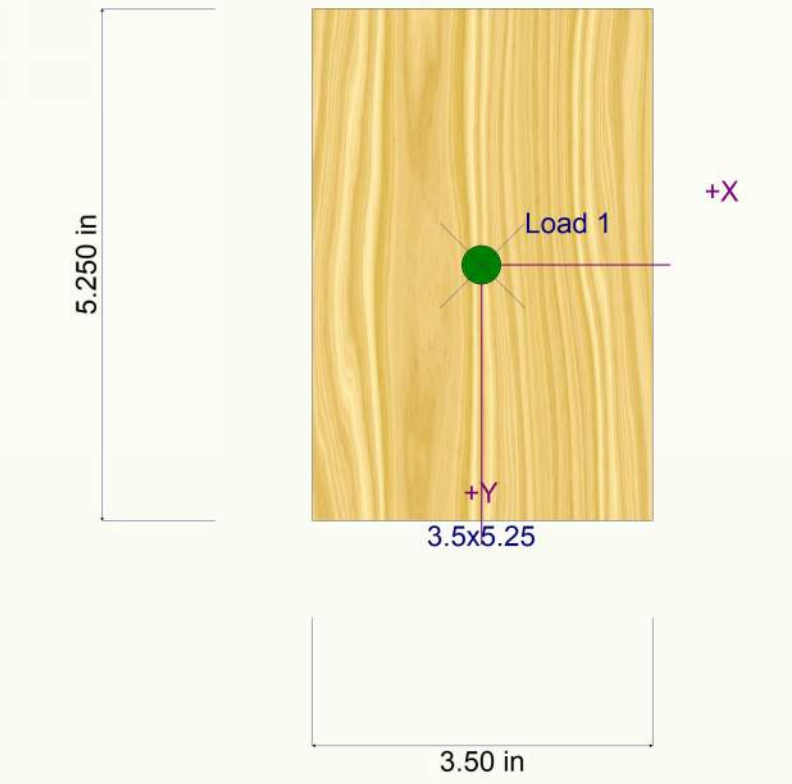
Project File: 2220236_Brownstone Wood Framing.ec6

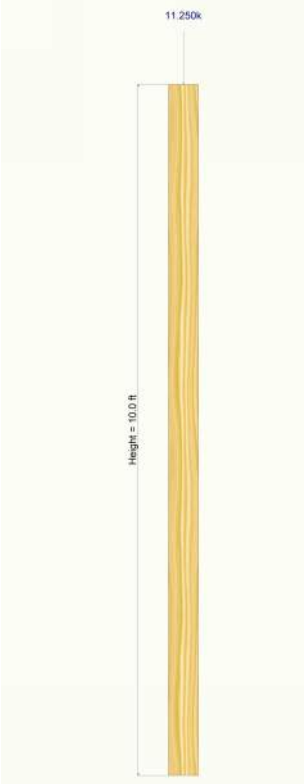
DESCRIPTION: 3.5x5.25 PSL

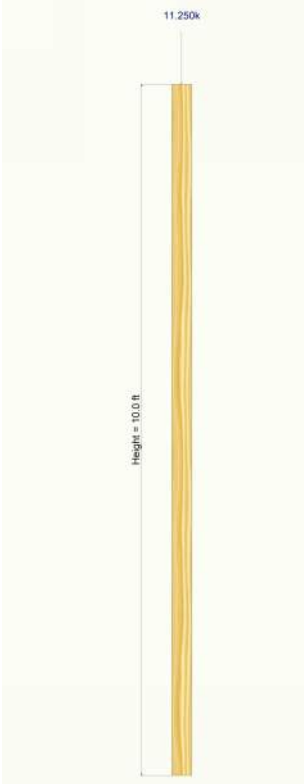
Maximum Deflections for Load Combinations

Load Combination	Max. X-X Deflection	Distance	Max. Y-Y Deflection	Distance
D Only	0.0000 in	0.000ft	0.000 in	0.000 ft
+0.60D	0.0000 in	0.000ft	0.000 in	0.000 ft

Sketches







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AHBL, INC.
2215 N. 30th Street, Suite 300
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Project Title: Wesley Bradley Park Phase 2 - Brownstones
Engineer: KBG
Project ID: 2220236.20
Project Descr:

Wood Column

Project File: 2220236_Brownstone Wood Framing.ec6

DESCRIPTION: 3.5x7 PSL

Code References

Calculations per NDS 2018, IBC 2018, CBC 2019, ASCE 7-16
Load Combinations Used : IBC 2021

General Information

Analysis Method	Allowable Stress Design		
End Fixities	Top & Bottom Pinned		
Overall Column Height	10 ft		
(Used for non-slender calculations)			
Wood Species	iLevel Truss Joist		
Wood Grade	Parallam PSL 1.8E		
Fb +	2,400.0 psi	Fv	190.0 psi
Fb -	2,400.0 psi	Ft	1,755.0 psi
Fc - Prll	2,500.0 psi	Density	45.070 pcf
Fc - Perp	425.0 psi		

E : Modulus of Elasticity . . .	x-x Bending	y-y Bending	Axial
Basic	1,800.0	1,800.0	1,800.0 ksi
Minimum	914.88	914.88	

Wood Section Name	**3.5x7.0**		
Wood Grading/Manuf.	Trus-Joist		
Wood Member Type	Parallam PSL		
Exact Width	**3.50** in	Allow Stress Modification Factors	
Exact Depth	**7.0** in	Cf or Cv for Bending	1.062
Area	24.50 in^2	Cf or Cv for Compressio	1.0
Ix	100.042 in^4	Cf or Cv for Tension	1.0
Iy	25.010 in^4	Cm : Wet Use Factor	1.0
		Ct : Temperature Fact	1.0
		Cfu : Flat Use Factor	1.0
		Kf : Built-up columns	1.0
		Use Cr : Repetitive ?	No

Column Buckling Condition:
ABOUT X-X Axis: Lux = 10 ft, Kx = 1.0
ABOUT Y-Y Axis: Luy = 10 ft, Ky = 1.0

Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Column self weight included : 76.682 lbs * Dead Load Factor
AXIAL LOADS . . .
Axial Load at 10.0 ft, D = 15.0 k

DESIGN SUMMARY

Bending & Shear Check Results

PASS Max. Axial+Bending Stress Ratio = **0.9982 : 1**

Load Combination	D Only
Governing NDS Forumla	Comp Only, fc/Fc'
Location of max.above base	0.0 ft
At maximum location values are .	
Applied Axial	15.077 k
Applied Mx	0.0 k-ft
Applied My	0.0 k-ft
Fc : Allowable	616.48 psi

PASS Maximum Shear Stress Ratio = **0.0 : 1**

Load Combination	+0.60D
Location of max.above base	10.0 ft
Applied Design Shear	0.0 psi
Allowable Shear	304.0 psi

Maximum SERVICE Lateral Load Reactions . .

Top along Y-Y	0.0 k	Bottom along Y-Y	0.0 k
Top along X-X	0.0 k	Bottom along X-X	0.0 k

Maximum SERVICE Load Lateral Deflections . . .

Along Y-Y 0.0 in at 0.0 ft above base
for load combination : n/a

Along X-X 0.0 in at 0.0 ft above base
for load combination : n/a

Other Factors used to calculate allowable stresses . . .

	Bending	Compression	Tension

Load Combination Results

Load Combination	C_D	C_P	Maximum Axial + Bending Stress Ratios: Stress Ratio	Status	Location	Maximum Shear Ratios: Stress Ratio	Status	Location
D Only	0.900	0.274	0.9982	PASS	0.0 ft	0.0	PASS	10.0 ft
+0.60D	1.600	0.157	0.5879	PASS	0.0 ft	0.0	PASS	10.0 ft

Maximum Reactions

Note: Only non-zero reactions are listed.

Load Combination	X-X Axis Reaction k @ Base	@ Top	Y-Y Axis Reaction @ Base	@ Top	Axial Reaction @ Base	My - End Moments k-ft @ Base	@ Top	Mx - End Moments @ Base	@ Top
D Only					15.077				
+0.60D					9.046				

PRRWF20240597

AHBL, INC.
2215 N. 30th Street, Suite 300
Tacoma, WA 98403

Project Title: Wesley Bradley Park Phase 2 - Brownstones
Engineer: KBG
Project ID: 2220236.20
Project Descr:

Wood Column

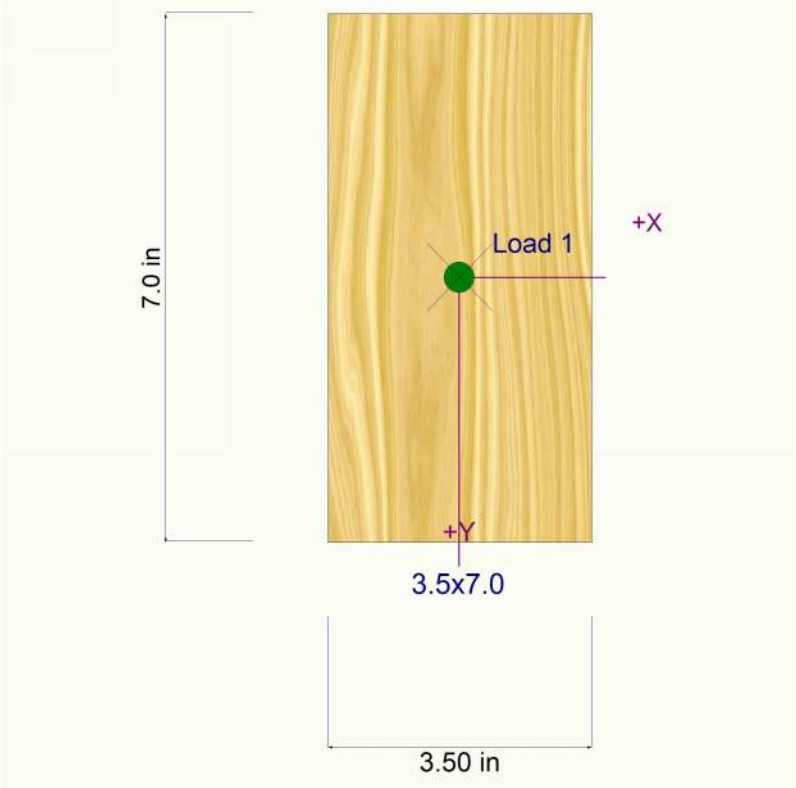
Project File: 2220236_Brownstone Wood Framing.ec6

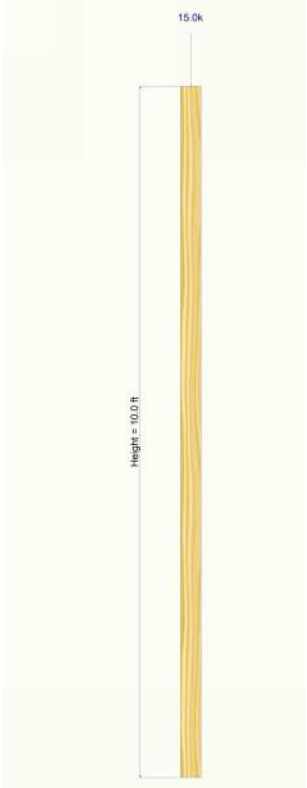
DESCRIPTION: 3.5x7 PSL

Maximum Deflections for Load Combinations

Load Combination	Max. X-X Deflection	Distance	Max. Y-Y Deflection	Distance
D Only	0.0000 in	0.000ft	0.000 in	0.000 ft
+0.60D	0.0000 in	0.000ft	0.000 in	0.000 ft

Sketches





PRRWF20240597

AHBL, INC.
2215 N. 30th Street, Suite 300
Tacoma, WA 98403

Project Title: Wesley Bradley Park Phase 2 - Brownstones
Engineer: KBG
Project ID: 2220236.20
Project Descr:

Wood Column

Project File: 2220236_Brownstone Wood Framing.ec6

DESCRIPTION: 5.25x5.25 PSL

Code References

Calculations per NDS 2018, IBC 2018, CBC 2019, ASCE 7-16
Load Combinations Used : IBC 2021

General Information

Analysis Method	Allowable Stress Design		
End Fixities	Top & Bottom Pinned		
Overall Column Height	10 ft		
(Used for non-slender calculations)			
Wood Species	iLevel Truss Joist		
Wood Grade	Parallam PSL 1.8E		
Fb +	2,400.0 psi	Fv	190.0 psi
Fb -	2,400.0 psi	Ft	1,755.0 psi
Fc - Prll	2,500.0 psi	Density	45.070 pcf
Fc - Perp	425.0 psi		

E : Modulus of Elasticity . . .	x-x Bending	y-y Bending	Axial
Basic	1,800.0	1,800.0	1,800.0 ksi
Minimum	914.88	914.88	

Wood Section Name	**5.25x5.25**
Wood Grading/Manuf.	Trus-Joist
Wood Member Type	Parallam PSL
Exact Width	**5.250** in
Exact Depth	**5.250** in
Area	27.563 in^2
Ix	63.308 in^4
Iy	63.308 in^4

Allow Stress Modification Factors

Cf or Cv for Bending	1.096
Cf or Cv for Compressio	1.0
Cf or Cv for Tension	1.0
Cm : Wet Use Factor	1.0
Ct : Temperature Fact	1.0
Cfu : Flat Use Factor	1.0
Kf : Built-up columns	1.0
Use Cr : Repetitive ?	No

Column Buckling Condition:
ABOUT X-X Axis: Lux = 10 ft, Kx = 1.0
ABOUT Y-Y Axis: Luy = 10 ft, Ky = 1.0

Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Column self weight included : 86.268 lbs * Dead Load Factor
AXIAL LOADS . . .
Axial Load at 10.0 ft, D = 35.0 k

DESIGN SUMMARY

Bending & Shear Check Results

PASS Max. Axial+Bending Stress Ratio = **0.9997 : 1**

Load Combination	D Only
Governing NDS Forumla	Comp Only, fc/Fc'
Location of max.above base	0.0 ft
At maximum location values are .	
Applied Axial	35.086 k
Applied Mx	0.0 k-ft
Applied My	0.0 k-ft
Fc : Allowable	1,273.40 psi

PASS Maximum Shear Stress Ratio = **0.0 : 1**

Load Combination	+0.60D
Location of max.above base	10.0 ft
Applied Design Shear	0.0 psi
Allowable Shear	304.0 psi

Maximum SERVICE Lateral Load Reactions . .

Top along Y-Y	0.0 k	Bottom along Y-Y	0.0 k
Top along X-X	0.0 k	Bottom along X-X	0.0 k

Maximum SERVICE Load Lateral Deflections . . .

Along Y-Y 0.0 in at 0.0 ft above base
for load combination : n/a

Along X-X 0.0 in at 0.0 ft above base
for load combination : n/a

Other Factors used to calculate allowable stresses . . .

	Bending	Compression	Tension

Load Combination Results

Load Combination	C_D	C_P	Maximum Axial + Bending Stress Ratios: Stress Ratio	Status	Location	Maximum Shear Ratios: Stress Ratio	Status	Location
D Only	0.900	0.566	0.9997	PASS	0.0 ft	0.0	PASS	10.0 ft
+0.60D	1.600	0.342	0.5582	PASS	0.0 ft	0.0	PASS	10.0 ft

Maximum Reactions

Note: Only non-zero reactions are listed.

Load Combination	X-X Axis Reaction k @ Base	@ Top	Y-Y Axis Reaction @ Base	@ Top	Axial Reaction @ Base	My - End Moments k-ft @ Base	@ Top	Mx - End Moments @ Base	@ Top
D Only					35.086				
+0.60D					21.052				

PRRWF20240597

AHBL, INC.
2215 N. 30th Street, Suite 300
Tacoma, WA 98403

Project Title: Wesley Bradley Park Phase 2 - Brownstones
Engineer: KBG
Project ID: 2220236.20
Project Descr:

Wood Column

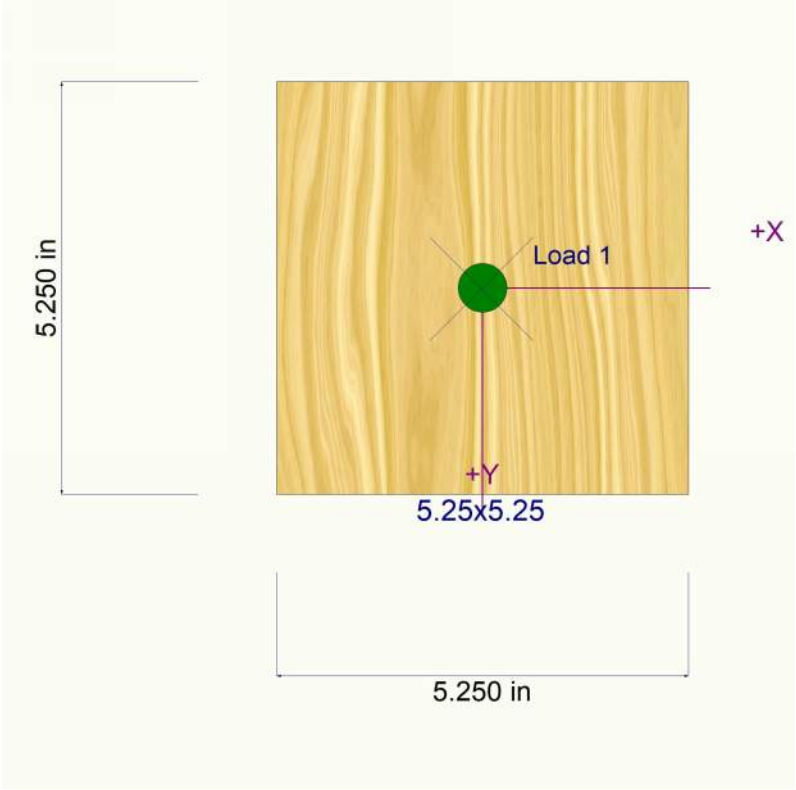
Project File: 2220236_Brownstone Wood Framing.ec6

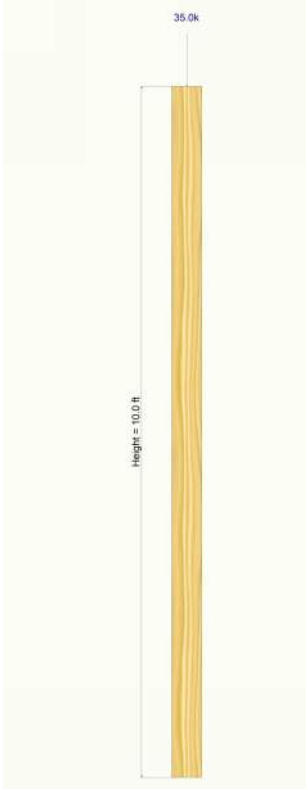
DESCRIPTION: 5.25x5.25 PSL

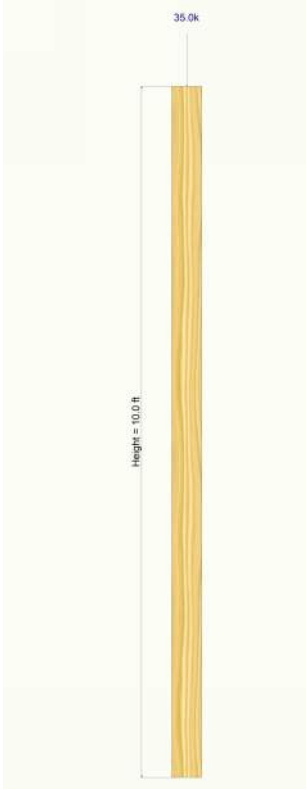
Maximum Deflections for Load Combinations

Load Combination	Max. X-X Deflection	Distance	Max. Y-Y Deflection	Distance
D Only	0.0000 in	0.000ft	0.000 in	0.000 ft
+0.60D	0.0000 in	0.000ft	0.000 in	0.000 ft

Sketches







PRRWF20240597

AHBL, INC.
2215 N. 30th Street, Suite 300
Tacoma, WA 98403

Project Title: Wesley Bradley Park Phase 2 - Brownstones
Engineer: KBG
Project ID: 2220236.20
Project Descr:

Wood Beam

Project File: 2220236_Brownstone Wood Framing.ec6

DESCRIPTION: Storage Beam

CODE REFERENCES

Calculations per NDS 2018, IBC 2018, CBC 2019, ASCE 7-16
Load Combination Set : IBC 2021

Material Properties

Analysis Method : Allowable Stress Design
Load Combination : IBC 2021

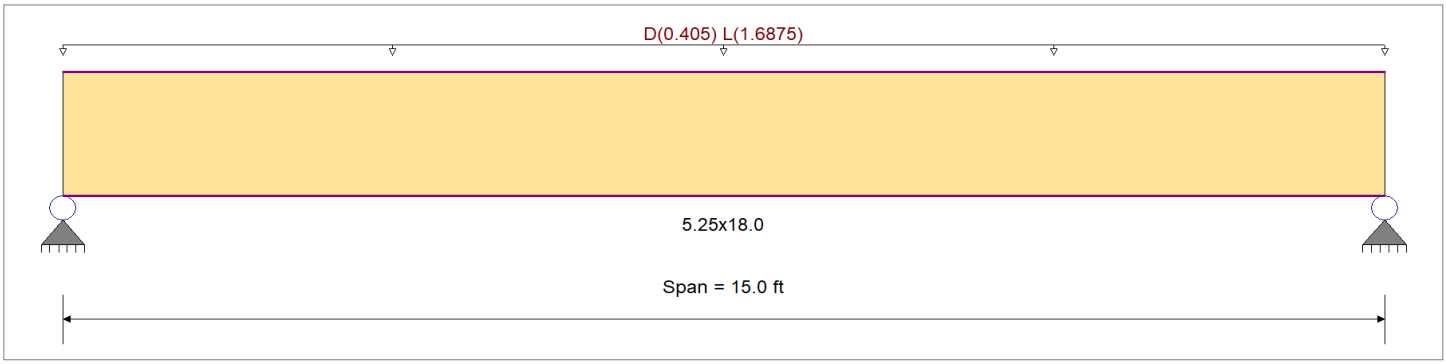
Wood Species : iLevel Truss Joist
Wood Grade : Parallam PSL 2.0E

Beam Bracing : Beam is Fully Braced against lateral-torsional buckling

Fb +	2900 psi
Fb -	2900 psi
Fc - Prll	2900 psi
Fc - Perp	750 psi
Fv	290 psi
Ft	2025 psi

E : Modulus of Elasticity

Ebend- xx	2000 ksi
Eminbend - xx	1016.535 ksi
Density	45.07 pcf



Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Beam self weight calculated and added to loading
Uniform Load : D = 0.030, L = 0.1250 ksf, Tributary Width = 13.50 ft

DESIGN SUMMARY

Design OK

Maximum Bending Stress Ratio	=	0.911 : 1	Maximum Shear Stress Ratio	=	0.699 : 1
Section used for this span		5.25x18.0	Section used for this span		5.25x18.0
fb: Actual	=	2,526.28 psi	fv: Actual	=	202.84 psi
F'b	=	2,772.37 psi	F'v	=	290.00 psi
Load Combination		+D+L	Load Combination		+D+L
Location of maximum on span	=	7.500 ft	Location of maximum on span	=	13.522 ft
Span # where maximum occurs	=	Span # 1	Span # where maximum occurs	=	Span # 1

Maximum Deflection

Max Downward Transient Deflection	0.379 in	Ratio =	475 >=360	Span: 1 : L Only
Max Upward Transient Deflection	0 in	Ratio =	0 <360	n/a
Max Downward Total Deflection	0.476 in	Ratio =	377 >=180	Span: 1 : +D+L
Max Upward Total Deflection	0 in	Ratio =	0 <180	n/a

Maximum Forces & Stresses for Load Combinations

Load Combination / Segment Length	Span #	Max Stress Ratios M	V	CD	CM	C_t	CLx	C_F	Cfu	C_i	C_r	Moment Values M	fb	F'b	Shear Values V	fv	F'v
D Only														0.0	0.00	0.0	0.0
Length = 15.0 ft	1	0.207	0.159	0.90	1.00	1.00	1.00	0.956	1.00	1.00	1.00	12.22	517.4	2,495.1	2.62	41.5	261.0
+D+L					1.00	1.00	1.00	0.956	1.00	1.00	1.00			0.0	0.00	0.0	0.0
Length = 15.0 ft	1	0.911	0.699	1.00	1.00	1.00	1.00	0.956	1.00	1.00	1.00	59.68	2,526.3	2,772.4	12.78	202.8	290.0
+D+0.750L					1.00	1.00	1.00	0.956	1.00	1.00	1.00			0.0	0.00	0.0	0.0
Length = 15.0 ft	1	0.584	0.448	1.25	1.00	1.00	1.00	0.956	1.00	1.00	1.00	47.82	2,024.1	3,465.5	10.24	162.5	362.5
+0.60D					1.00	1.00	1.00	0.956	1.00	1.00	1.00			0.0	0.00	0.0	0.0
Length = 15.0 ft	1	0.070	0.054	1.60	1.00	1.00	1.00	0.956	1.00	1.00	1.00	7.33	310.4	4,435.8	1.57	24.9	464.0

PRRWF20240597

AHBL, INC.
2215 N. 30th Street, Suite 300
Tacoma, WA 98403

Project Title: Wesley Bradley Park Phase 2 - Brownstones
Engineer: KBG
Project ID: 2220236.20
Project Descr:

Wood Beam

DESCRIPTION: Storage Beam

Overall Maximum Deflections

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
+D+L	1	0.4764	7.555		0.0000	0.000

Vertical Reactions

Support notation : Far left is #1 Values in KIPS

Load Combination	Support 1	Support 2
Max Upward from all Load Conditions	15.916	15.916
Max Upward from Load Combinations	15.916	15.916
Max Upward from Load Cases	12.656	12.656
D Only	3.259	3.259
+D+L	15.916	15.916
+D+0.750L	12.752	12.752
+0.60D	1.956	1.956
L Only	12.656	12.656

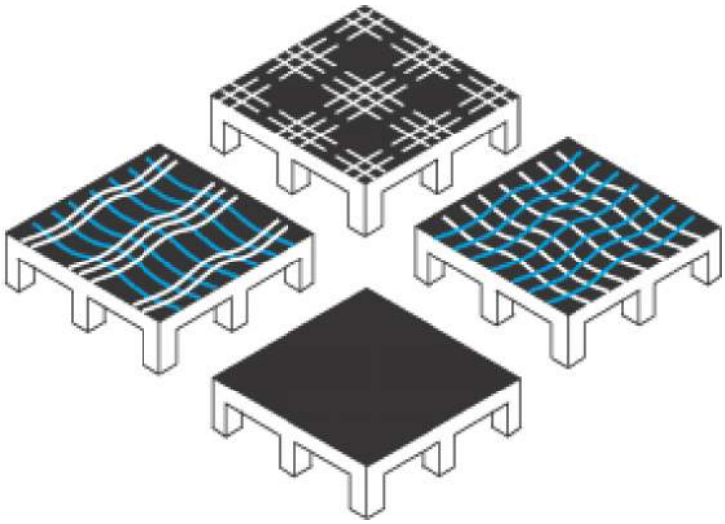


Table of Contents

Units

Geometry Units

Plan Dimensions: feet
Angles: degrees
Slab Thickness: inches
Elevations: inches
Support Dimensions: inches
Support Height: feet

Loading and Reaction Unit

Point Force: Kips
- Report As Zero: 0 Kips

Point Moment: kip-ft
- Report As Zero: 0 kip-ft

Line Force: kips/ft
- Report As Zero: 0 kips/ft

Line Moment: Kips
- Report As Zero: 0 Kips

Area Force: psf
- Report As Zero: 0 psf

Area Moment: #/foot
- Report As Zero: 0 #/foot

Spring and Stiffness Unit

Point Force Spring: kips/in
Point Moment Spring: k-ft/°
Line Force Spring: ksi
Line Moment Spring: k/°
Area Force Spring: pci
Area Moment Spring: k/ft°

Slab Analysis Units

Force: Kips
- Report As Zero: 0 Kips

Force Per Width: kips/ft
- Report As Zero: 0 kips/ft

Moment: kip-ft
- Report As Zero: 0 kip-ft

Moment Per Width: Kips
- Report As Zero: 0 Kips

Concrete Stress: psi
- Report As Zero: 0 psi

Deflection: inches
- Report As Zero: 0 inches

Materials Units

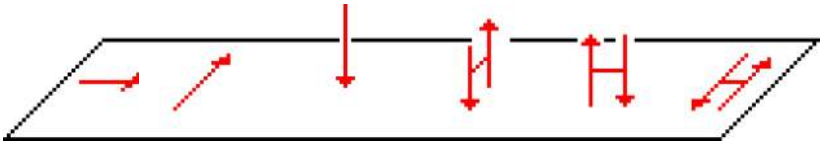
Concrete Volume: yd^3
Tendon Force: Kips
Reinforcing Stress: ksi
Reinforcing Area: in^2
Tendon Force Per Width: kips/ft
PT Weight: pounds
Reinforcement Weight: tons
Tendon Profile: inches
Cover: inches

Miscellaneous Unit

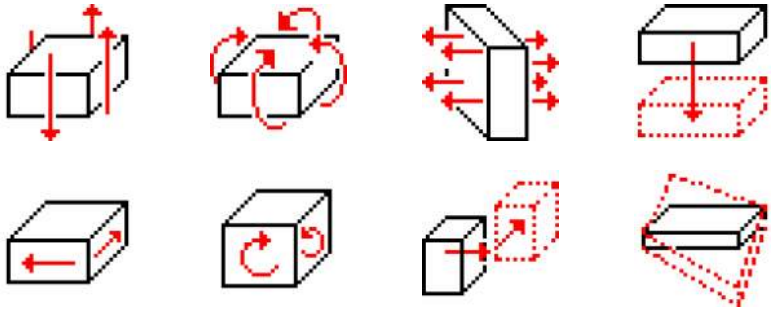
Floor Area: ft^2
Tendon Angles (for friction): radians
Density: pcf
Temperature Change: °F
Elongations: inches

Signs

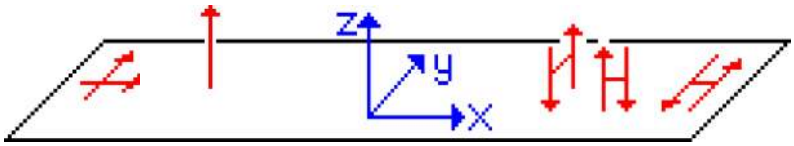
Positive Loads



Positive Analysis



Positive Reactions



Materials

Concrete Mix

Mix Name	Density (pcf)	Density For Loads (pcf)	f'ci (psi)	f'c (psi)	fcui (psi)	fcu (psi)	Poissons Ratio	Thermal Exp. Coeff	Ec Calc	User Eci (psi)	User Ec (psi)
3000 psi	150	150	3000	3000	3725	3725	0.2	5.556e-6	Code	2500000	3000000
4000 psi	150	150	3000	4000	3725	4975	0.2	5.556e-6	Code	2500000	3000000
5000 psi	150	150	3000	5000	3725	6399	0.2	5.556e-6	Code	2500000	3000000
6000 psi	150	150	3000	6000	3725	7450	0.2	5.556e-6	Code	2500000	3000000

PT Systems

System Name	Type	Aps (in²)	Eps (ksi)	fse (ksi)	fpy (ksi)	fpu (ksi)	Duct Width (inches)	Strands Per Duct	Min Radius (feet)
½" Unbonded	unbonded	0.153	28000	175	243	270	0.5	1	6
½" Bonded	bonded	0.153	28000	160	243	270	3	4	6
0.6" Unbonded	unbonded	0.217	28000	175	243	270	0.6	1	8
0.6" Bonded	bonded	0.217	28000	160	243	270	4	4	8

PT Stressing Parameters

System Name	Jacking Stress (ksi)	Seating Loss (inches)	Anchor Friction	Wobble Friction (1/feet)	Angular Friction (1/radians)	Long-Term Losses (ksi)
½" Unbonded	216	0.25	0	0.0014	0.07	22
½" Bonded	216	0.25	0.02	0.001	0.2	22
0.6" Unbonded	216	0.25	0	0.0014	0.07	22
0.6" Bonded	216	0.25	0.02	0.001	0.2	22

Reinforcing Bars

Bar Name	As (in²)	Es (ksi)	Fy (ksi)	Coating	Straight Ld/Db	90 Hook Ld/Db	180 Hook Ld/Db
#3	0.11	29000	60	None	Code	Code	Code
#4	0.2	29000	60	None	Code	Code	Code
#5	0.31	29000	60	None	Code	Code	Code
#6	0.44	29000	60	None	Code	Code	Code
#7	0.6	29000	60	None	Code	Code	Code
#8	0.79	29000	60	None	Code	Code	Code
#9	1	29000	60	None	Code	Code	Code
#10	1.27	29000	60	None	Code	Code	Code
#11	1.56	29000	60	None	Code	Code	Code

Materials (2)

SSR Systems

SSR System Name	Stud Area (in²)	Head Area (in²)	Min Clear Head Spacing (inches)	Specified Stud Spacing (inches)	Fy (ksi)	Stud Spacing Rounding Increment (inches)	Min Studs Per Rail	System Type
3/8" SSR	0.11	1.11	0.5	None	50	0.25	2	Rail
1/2" SSR	0.196	1.96	0.5	None	50	0.25	2	Rail
5/8" SSR	0.307	3.07	0.5	None	50	0.25	2	Rail
3/4" SSR	0.442	4.42	0.5	None	50	0.25	2	Rail
Ancon Shearfix Auto-Size	0.1217	1.096	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 10 mm	0.1217	1.096	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 12 mm	0.1753	1.578	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 14 mm	0.2386	2.147	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 16 mm	0.3116	2.805	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 20 mm	0.4869	4.383	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 24 mm	0.7012	6.311	0.5906	None	72.52	0.03937	2	Rail

Loadings

Loading Name	*Type*	*Analysis*	*On-Pattern Factor*	*Off-Pattern Factor*
Self-Dead Loading	Self-Weight	Normal	1	1
Balance Loading	Balance	Normal	1	1
Hyperstatic Loading	Hyperstatic	Hyperstatic	1	1
Temporary Construction (At Stressing) Loading	Stressing Dead	Normal	1	1
Other Dead Loading	Dead	Normal	1	1
Live (Reducible) Loading	Live (Reducible)	Normal	1	0
Live (Unreducible) Loading	Live (Unreducible)	Normal	1	0
Live (Storage) Loading	Live (Storage)	Normal	1	0
Live (Parking) Loading	Live (Parking)	Normal	1	0
Live (Roof) Loading	Live (Roof)	Normal	1	0
Snow Loading	Snow	Normal	1	1

Load Combinations

All Dead LC

Active Design Criteria: <none>
Analysis: Linear

Loading	*Standard Factor*	*Alt. Envelope Factor*
Self-Dead Loading	1	1
Other Dead Loading	1	1

Dead + Balance LC

Active Design Criteria: <none>
Analysis: Linear

Loading	*Standard Factor*	*Alt. Envelope Factor*
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1

Initial Service LC

Active Design Criteria: Initial Service Design
Analysis: Linear

Loading	*Standard Factor*	*Alt. Envelope Factor*
Self-Dead Loading	1	1
Balance Loading	1.13	1.13
Temporary Construction (At Stressing) Loading	1	1

Service LC: D + L

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design
Analysis: Linear

Loading	*Standard Factor*	*Alt. Envelope Factor*
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	1	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0

Service LC: D + Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design
Analysis: Linear

Loading	*Standard Factor*	*Alt. Envelope Factor*
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Roof) Loading	1	0

Load Combinations (2)

Service LC: D + S

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design
Analysis: Linear

Loading	*Standard Factor*	*Alt. Envelope Factor*
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Snow Loading	1	0

Service LC: D + 0.75L + 0.75Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design
Analysis: Linear

Loading	*Standard Factor*	*Alt. Envelope Factor*
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.75	0
Live (Unreducible) Loading	0.75	0
Live (Storage) Loading	0.75	0
Live (Parking) Loading	0.75	0
Live (Roof) Loading	0.75	0

Service LC: D + 0.75L + 0.75S

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design
Analysis: Linear

Loading	*Standard Factor*	*Alt. Envelope Factor*
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.75	0
Live (Unreducible) Loading	0.75	0
Live (Storage) Loading	0.75	0
Live (Parking) Loading	0.75	0
Snow Loading	0.75	0

Sustained Service LC

Active Design Criteria: Sustained Service Design
Analysis: Linear

Loading	*Standard Factor*	*Alt. Envelope Factor*
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.5	0.5
Live (Unreducible) Loading	0.5	0.5
Live (Storage) Loading	1	1
Live (Parking) Loading	0.5	0.5
Live (Roof) Loading	0.5	0.5

Load Combinations (3)

Factored LC: 1.4D

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design
Analysis: Linear

Loading	*Standard Factor*	*Alt. Envelope Factor*
Self-Dead Loading	1.4	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.4	0.9

Factored LC: 1.2D + 1.6L + 0.5Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design
Analysis: Linear

Loading	*Standard Factor*	*Alt. Envelope Factor*
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	1.6	0
Live (Unreducible) Loading	1.6	0
Live (Storage) Loading	1.6	0
Live (Parking) Loading	1.6	0
Live (Roof) Loading	0.5	0

Factored LC: 1.2D + f1L + 1.6Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design
Analysis: Linear

Loading	*Standard Factor*	*Alt. Envelope Factor*
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	0.5	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0
Live (Roof) Loading	1.6	0

Factored LC: 1.2D + 1.6L + 0.5S

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design
Analysis: Linear

Loading	*Standard Factor*	*Alt. Envelope Factor*
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	1.6	0
Live (Unreducible) Loading	1.6	0
Live (Storage) Loading	1.6	0
Live (Parking) Loading	1.6	0
Snow Loading	0.5	0

Load Combinations (4)

Factored LC: 1.2D + f1L + 1.6S

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design
Analysis: Linear

Loading	*Standard Factor*	*Alt. Envelope Factor*
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	0.5	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0
Snow Loading	1.6	0

Design Rules

Code Minimum Desig

318-19 Min. Reinforcement

User Minimum Desig

Specified Min. Reinforcement

Initial Service Desig

318-19 Initial Service Design

Service Design

318-19 Service Design

Include detailed section analysis

Sustained Service Desig

318-19 Sustained Service Design

Strength Design

318-19 Strength Design

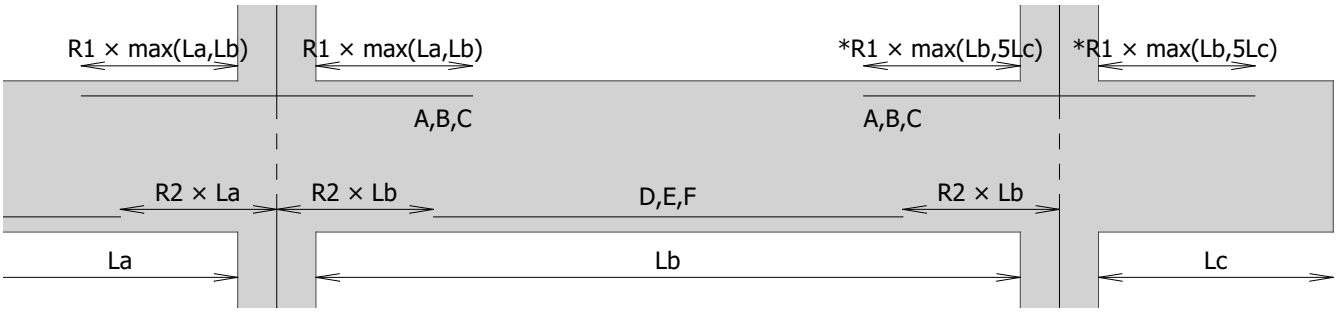
Punching Shear Design

Ductility Desig

318-19 Ductility Design

Detailing Rules

Custom Span Detailing Rules



Rule Name	*A Fraction*	*A R1*	*B Fraction*	*B R1*	*C Fraction*	*C R1*	*D Fraction*	*D R2*	*E Fraction*	*E R2*	*F Fraction*	*F R2*
None	0	0	0	0	0	0	0	0	0	0	0	0

"A", "B" and "C", are support reinforcement sets, based on the peak reinforcement in the support zone.
"D", "E" and "F", are span reinforcement sets, based on the peak reinforcement in the span zone.
"*R1" is never taken as greater than 0.2 when multiplied by Lc (or Lcc).
"Fraction" is the ratio of set reinforcement to peak reinforcement. It is always in the 0.0 to 1.0 range.

Load History

Load History Step Name	*Load Combination*	*Duration (days)*	*Total Age (days)*
Maximum Short Term Load	Service LC: D + L	30	33
Sustained Load	Sustained Service LC	5000	5033
Final Instantaneous Load	Service LC: D + L	0	5033

Tendon Parameters Groups

Banded Tendon Polyline Groups

Group Name	PT System	I.P. Ratio	Eff. Force (Kips)	Number of Strands	Optimize	Min Force (Kips)	Max Force (Kips)	Force Incr. (Kips)	Min Strands	Max Strands	Strands Increment

Distributed Tendon Quadrilateral Groups

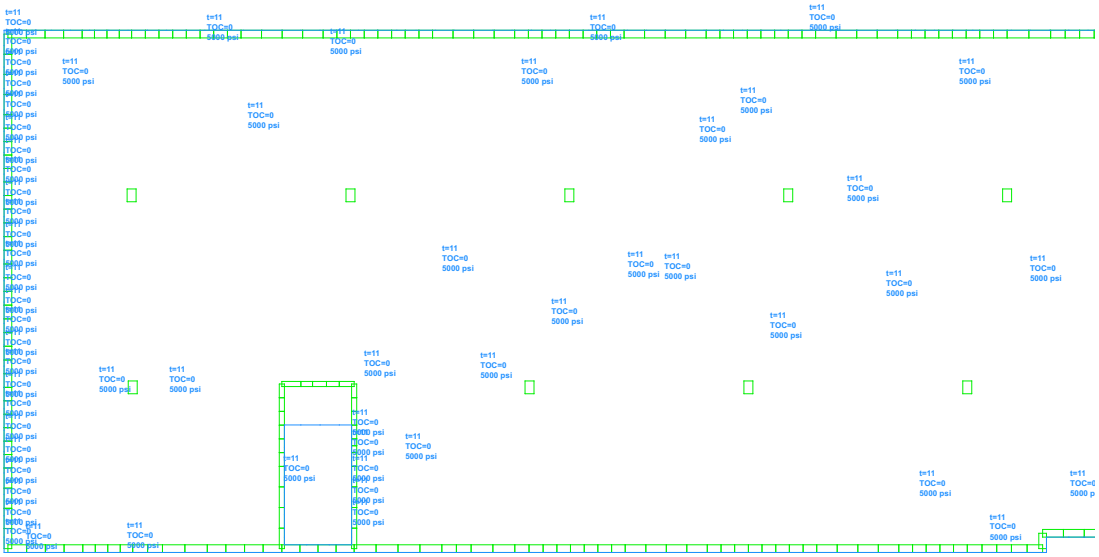
Group Name	PT System	I.P. Ratio	Spacing (feet)	Eff. Force (kips/ft)	# Strands (1/feet)	Optimize	Min Force (kips/ft)	Max Force (kips/ft)	Force Incr. (kips/ft)	Min Strands (1/feet)	Max Strands (1/feet)	Strands Ir (1/feet)

Profile Polyline Groups

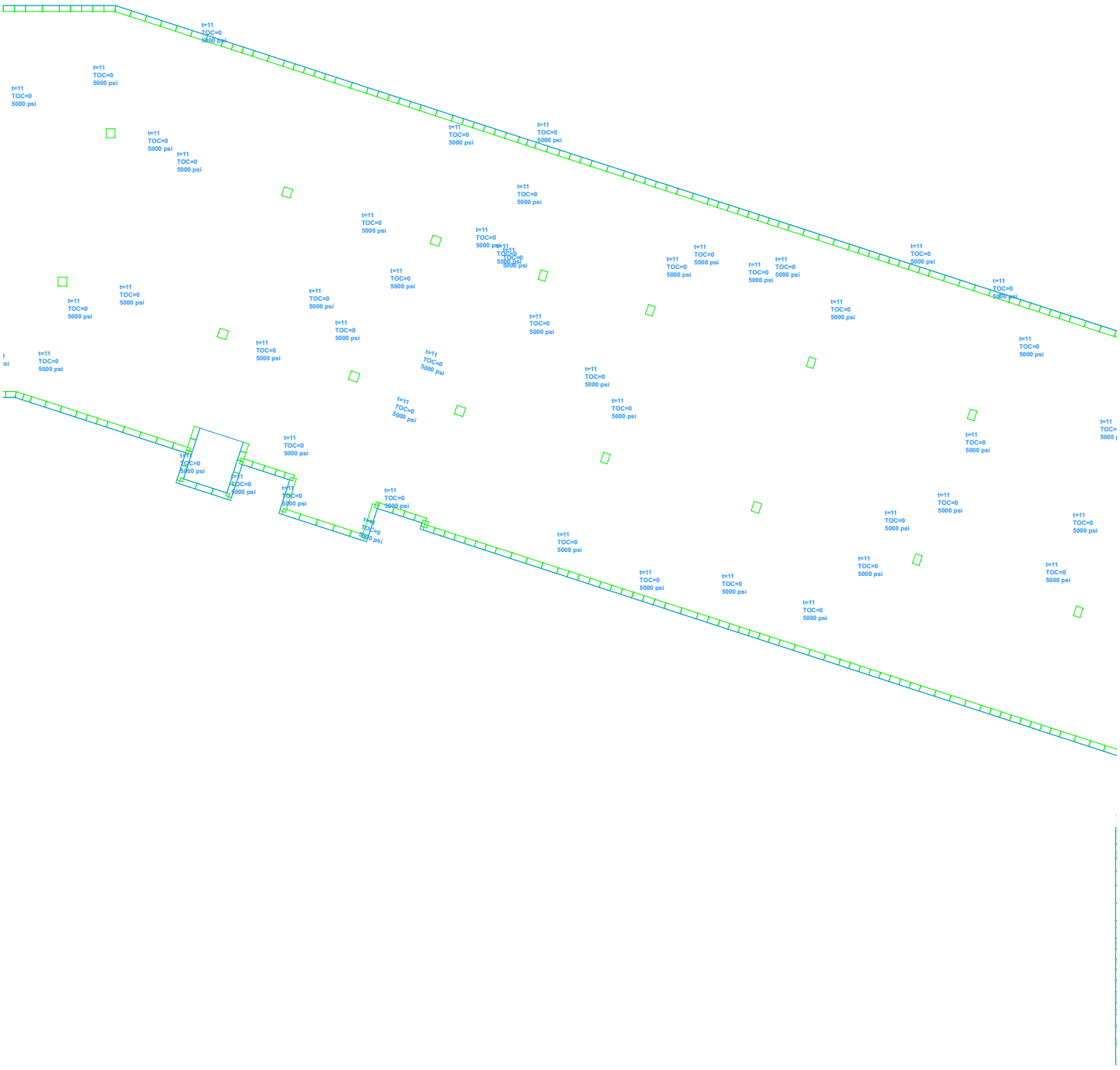
Group Name	Elevation Reference	Elevation (inches)	Optimize	Min Elevation (inches)	Max Elevation (inches)	Elevation Incr. (inches)

Element: Slab Summary Plan

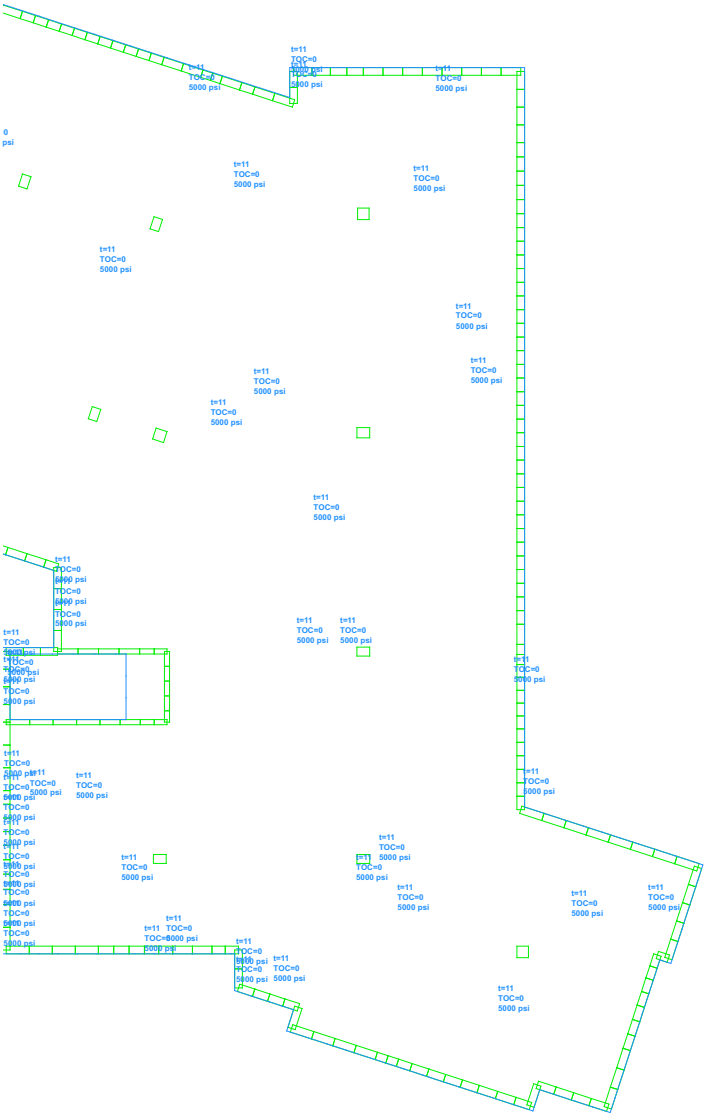
Element: User Lines; User Notes; User Dimensions; Wall Elements Below; Wall Elements Above; Column Elements Below; Column Elements Above; Point Springs; Point Spring Icons; Line Springs; Line Spring Icons; Slab Elements; Slab Element Outline Only; Slab Element Thicknesses; Slab Element Elevations; Slab Element Concrete Models;
Scale = 1:300



Element: Slab Summary Plan (2)



Element: Slab Summary Plan (3)



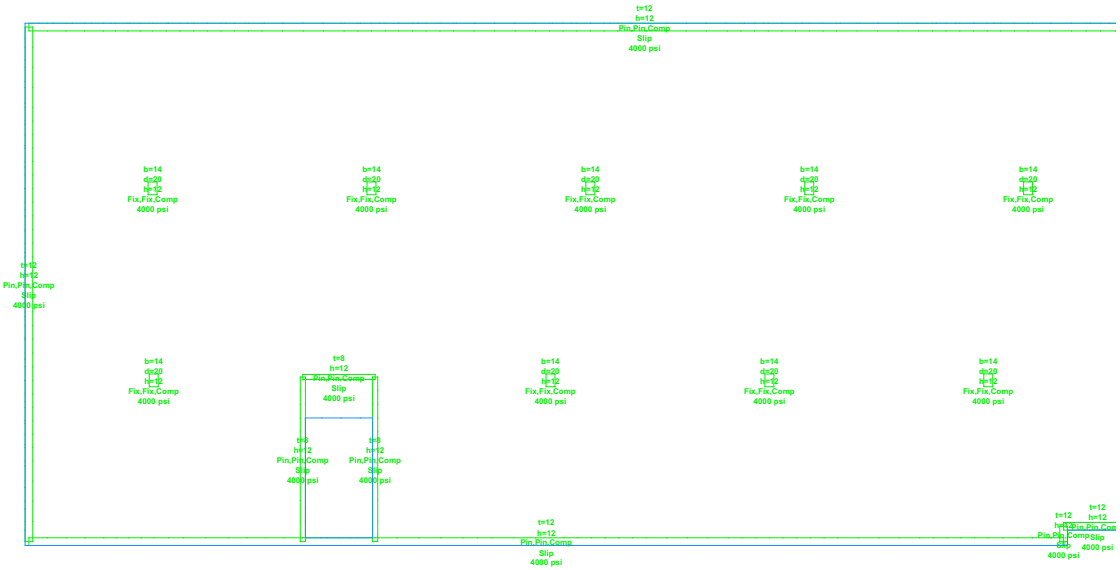
Element: Slab Summary Plan (4)

Element: Slab Summary Plan (5)

Element: Slab Summary Plan (6)

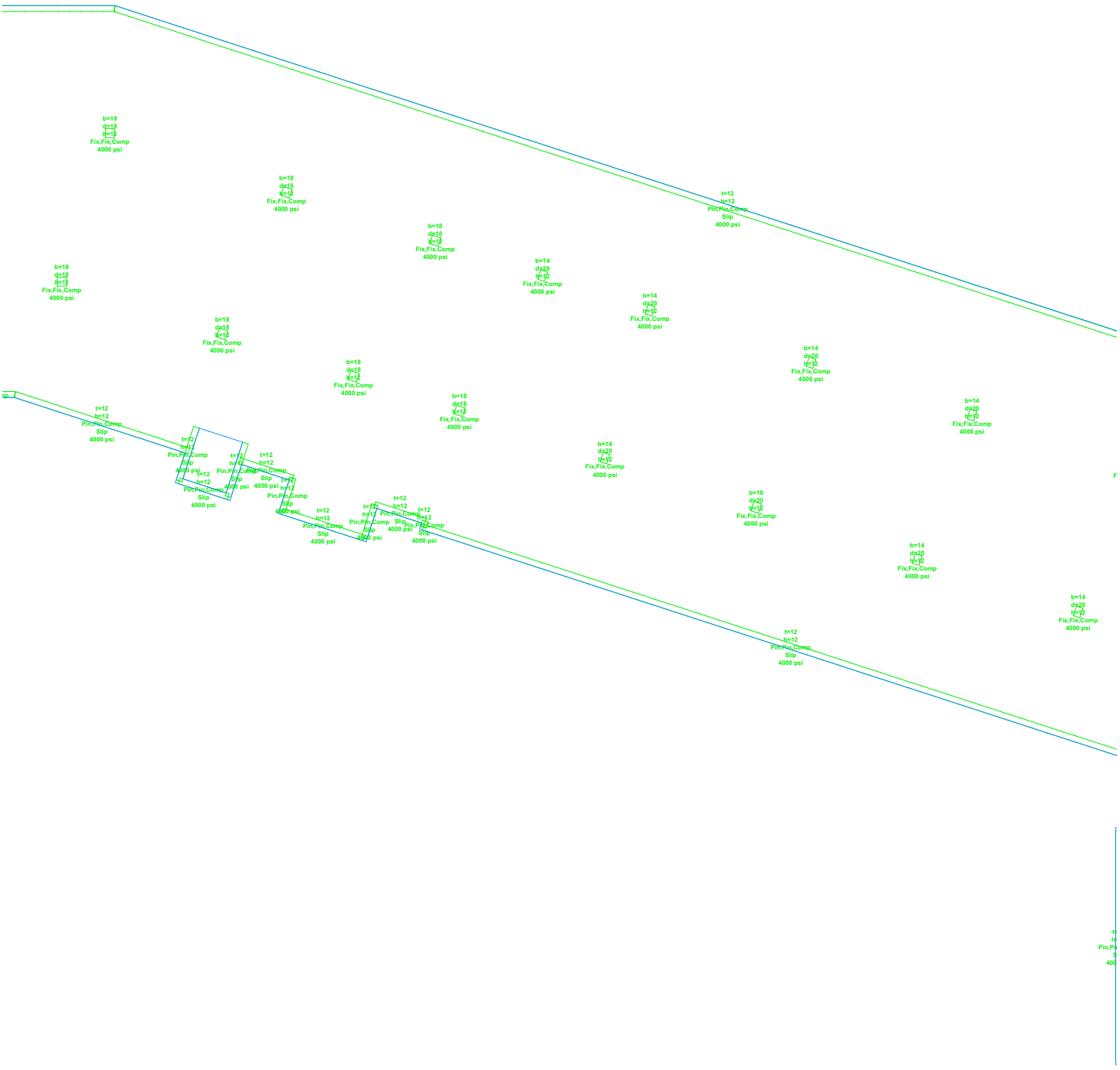
Element: Supports Below Slab Summary Plan

Element: User Lines; User Notes; User Dimensions; Wall Elements Below; Wall Element Thicknesses; Wall Element Heights; Wall Element Fixity; Wall Element Shear Fixity; Wall Element Concrete Models; Wall Element Outline Only; Column Elements Below; Column Element Dimensions; Column Element Heights; Column Element Fixity; Column Element Concrete Models; Point
Scale = 1:300

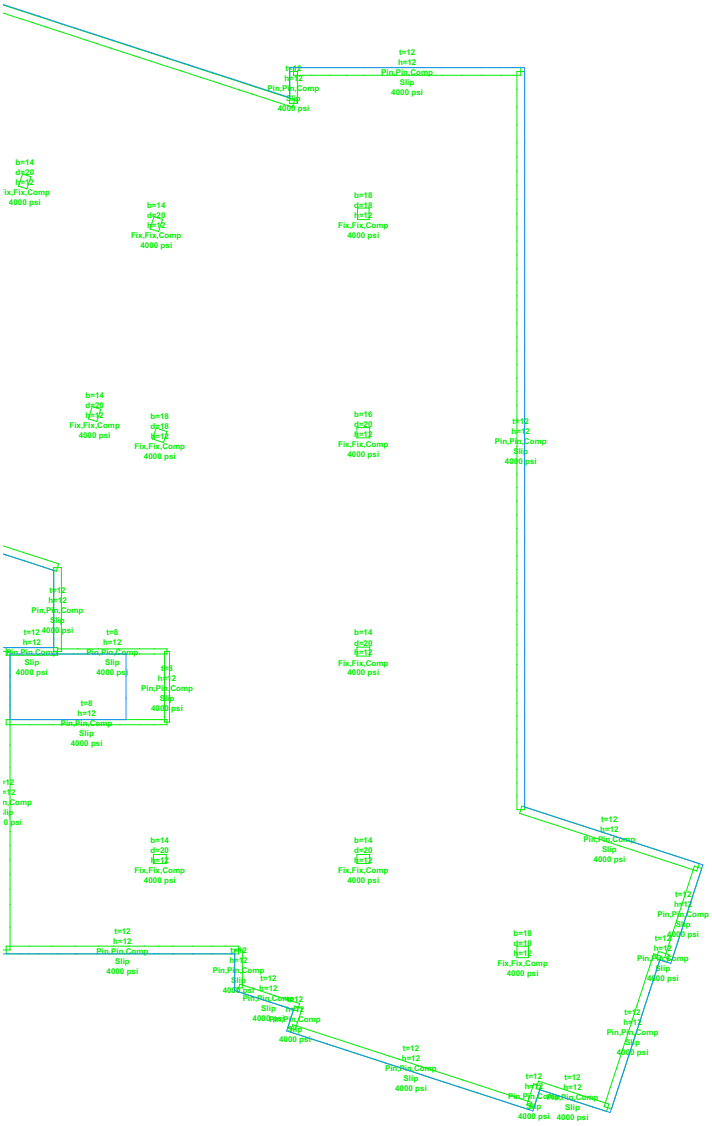


Element: Supports Below Slab Summary Plan (2)

Springs; Point Spring Icons; Point Spring Values; Point Spring Elevations; Line Springs; Line Spring Icons; Line Spring Values; Line Spring Elevations; Slab Elements; Slab Element Outline Only;



Element: Supports Below Slab Summary Plan (3)



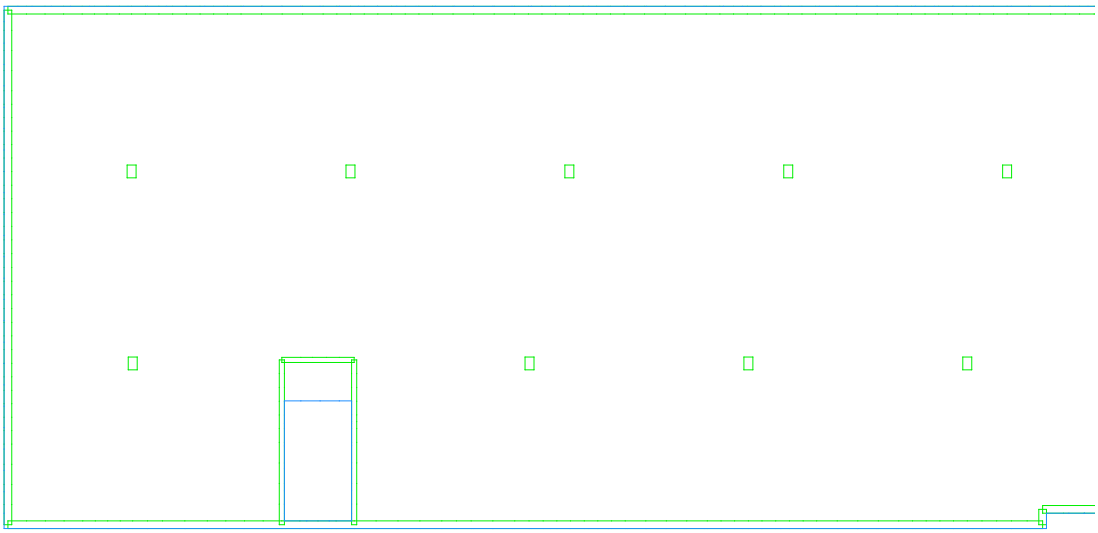
Element: Supports Below Slab Summary Plan (4)

Element: Supports Below Slab Summary Plan (5)

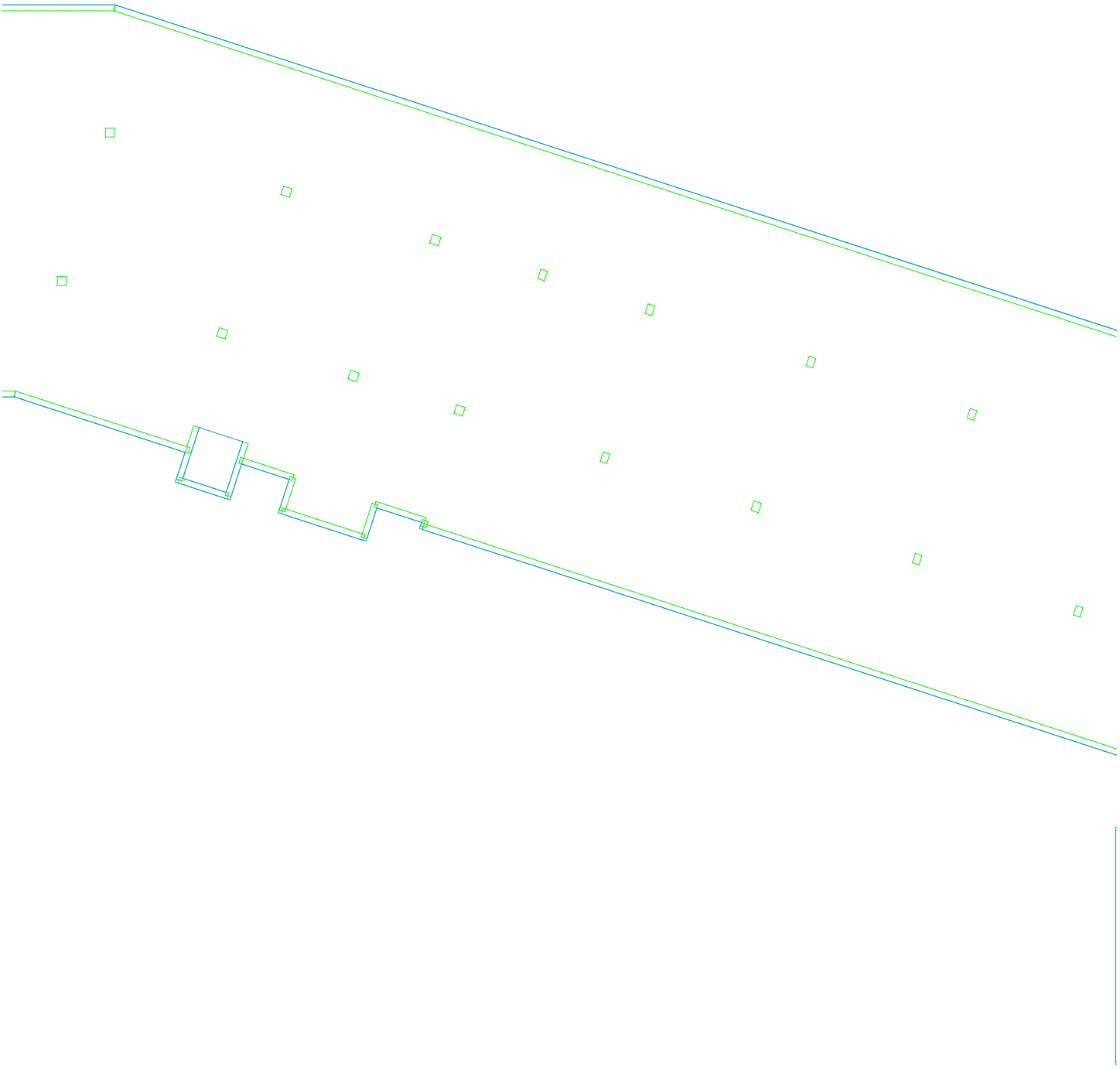
Element: Supports Below Slab Summary Plan (6)

Temporary Construction (At Stressing) Loading: All Loads Pl

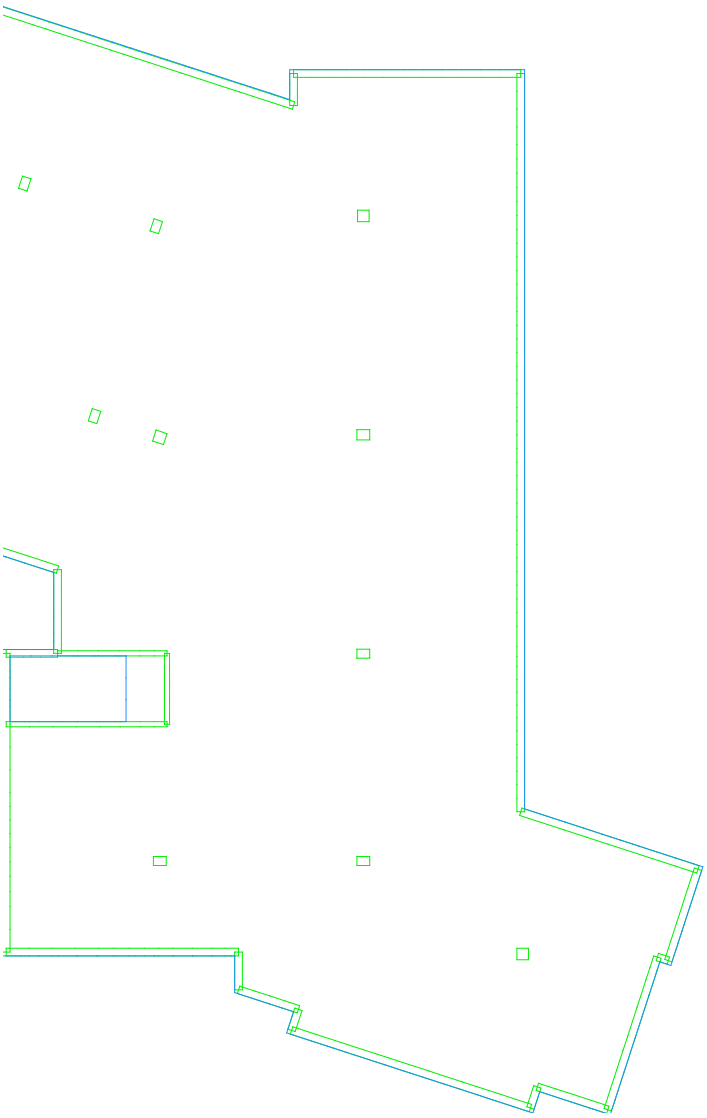
Temporary Construction (At Stressing) Loading: User Lines; User Notes; User Dimensions; Point Loads; Point Load Icons; Point Load Values; Line Loads; Line Load Icons; Line Load Values; Area Loads; Area Load Icons; Area Load Values; Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:300



Temporary Construction (At Stressing) Loading: All Loads Pl



Temporary Construction (At Stressing) Loading: All Loads Pl



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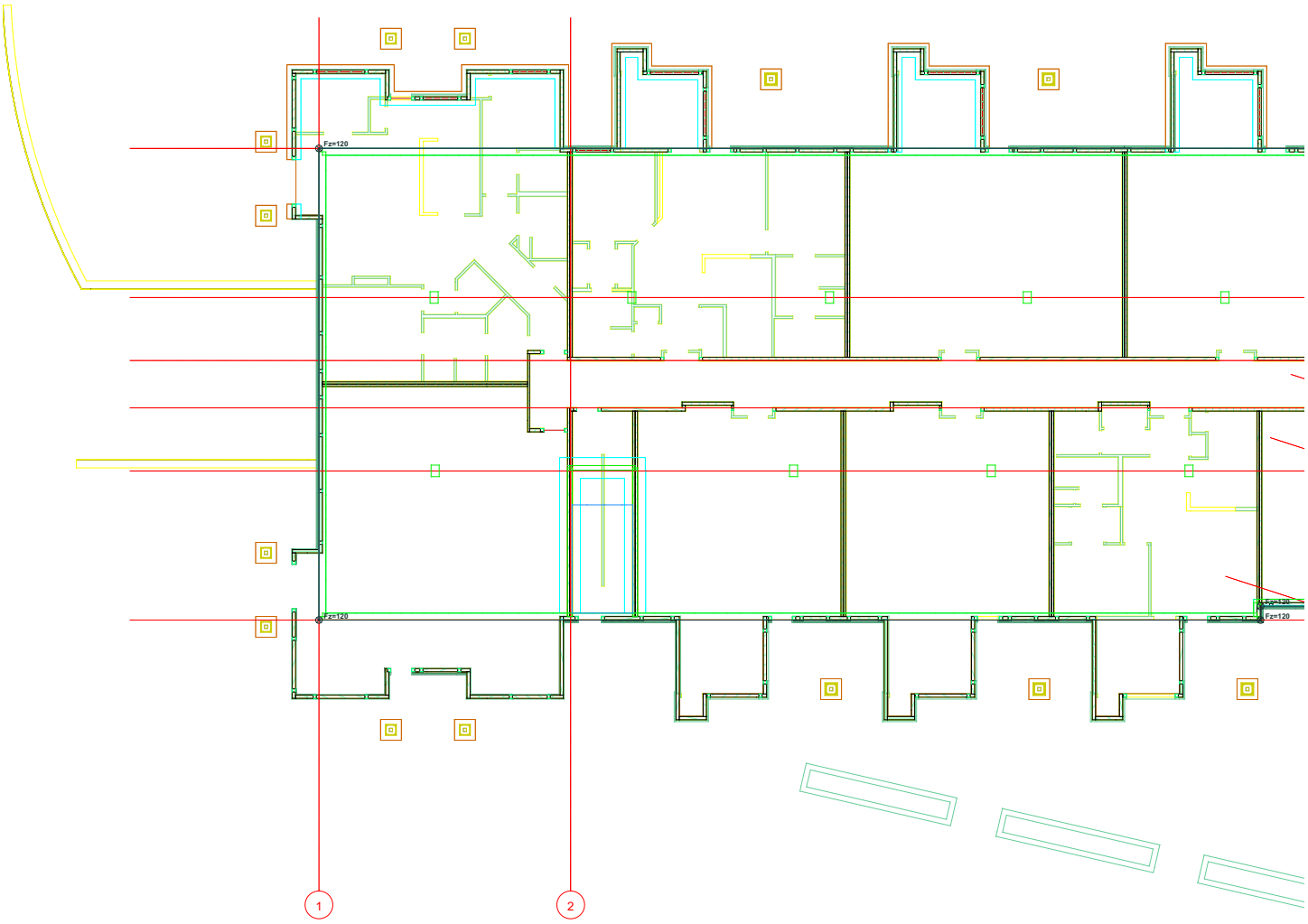
Temporary Construction (At Stressing) Loading: All Loads Pl

Temporary Construction (At Stressing) Loading: All Loads Pl

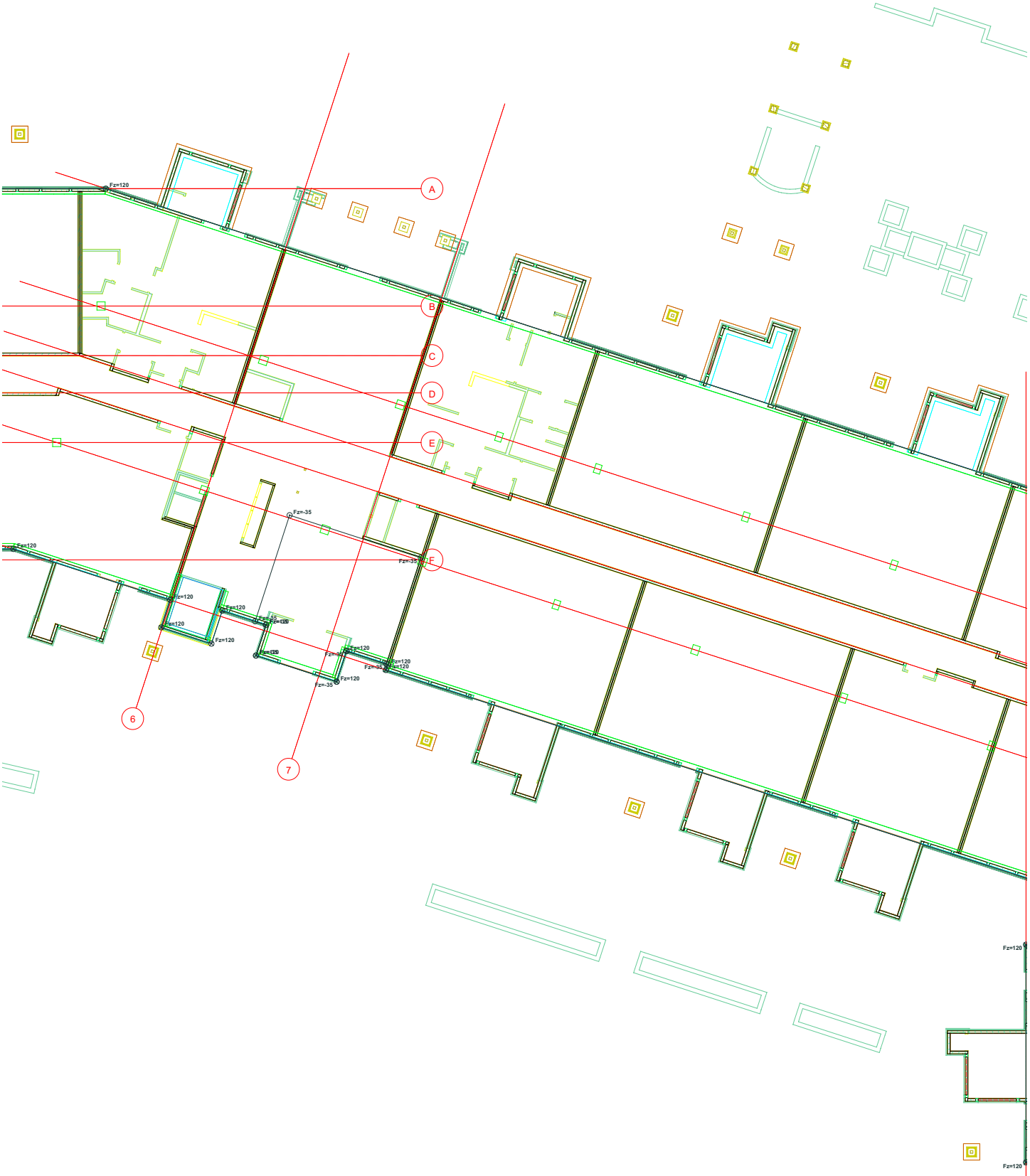
Temporary Construction (At Stressing) Loading: All Loads Pl

Other Dead Loading: All Loads Plan

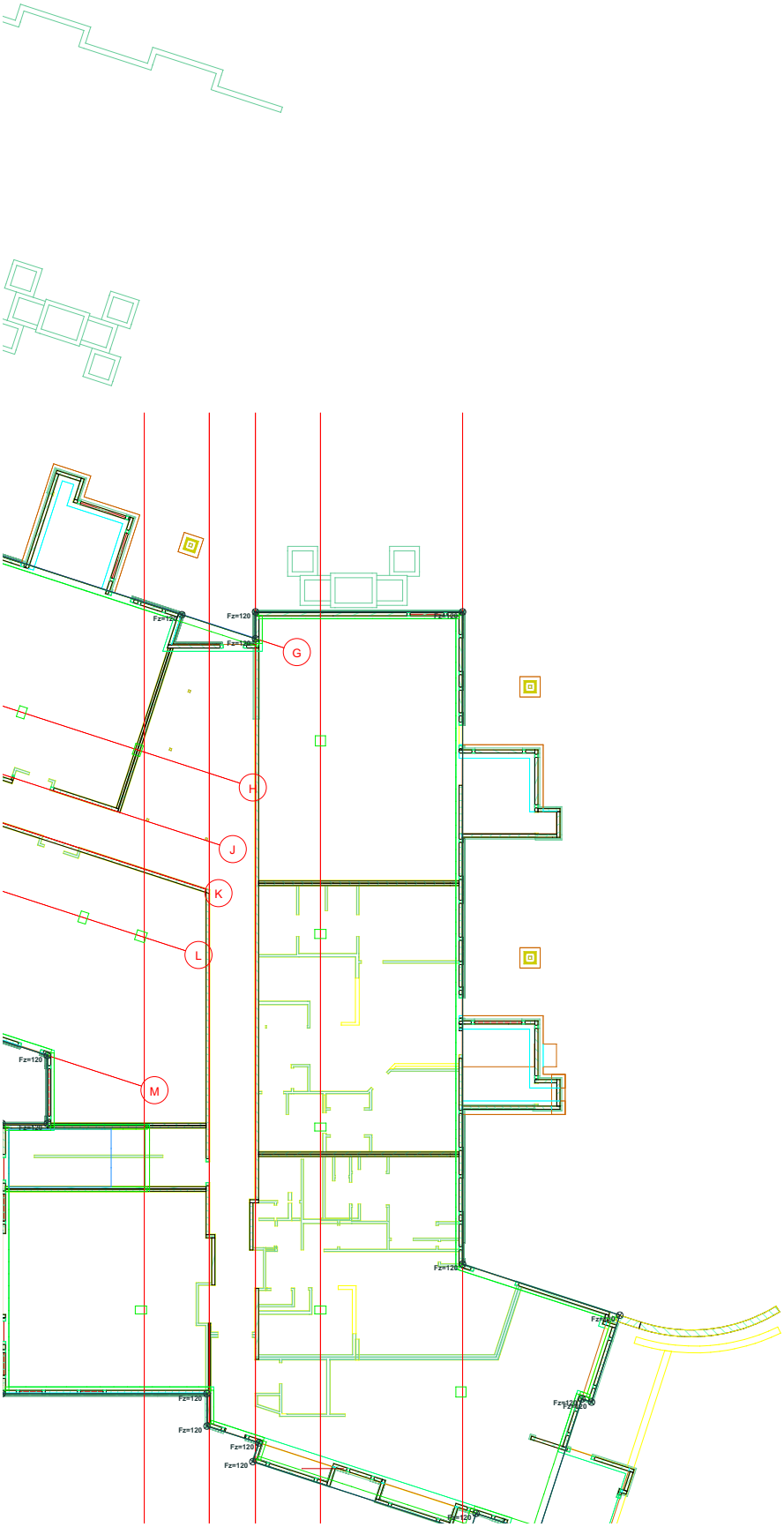
Other Dead Loading: Point Loads; Point Load Icons; Point Load Values; Line Loads; Line Load Icons; Line Load Values; Area Loads; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Notes; User Lines; User Dimensions; A-WALL; I-WALL; A-COLS; S-FNDN-HDLN; S-COLS-SYMB; S-FNDN; 0; A-WALL-HDLN; S-COLS; A-WALL-PATT; S-GRID-IDEN; S-GRID; S-BEAM;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:300



Other Dead Loading: All Loads Plan (2)



Other Dead Loading: All Loads Plan (3)



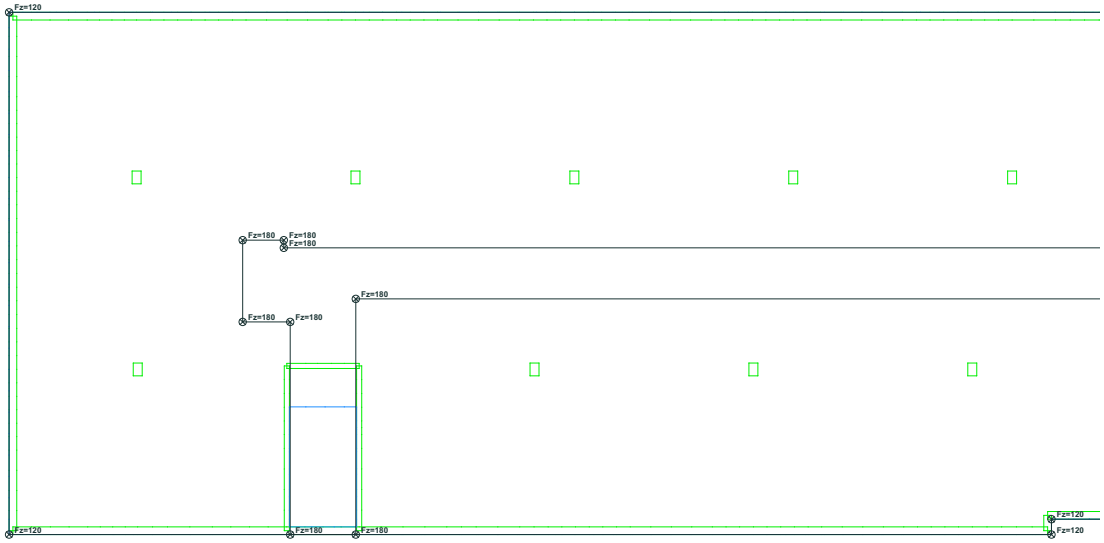
Other Dead Loading: All Loads Plan (4)

Other Dead Loading: All Loads Plan (5)

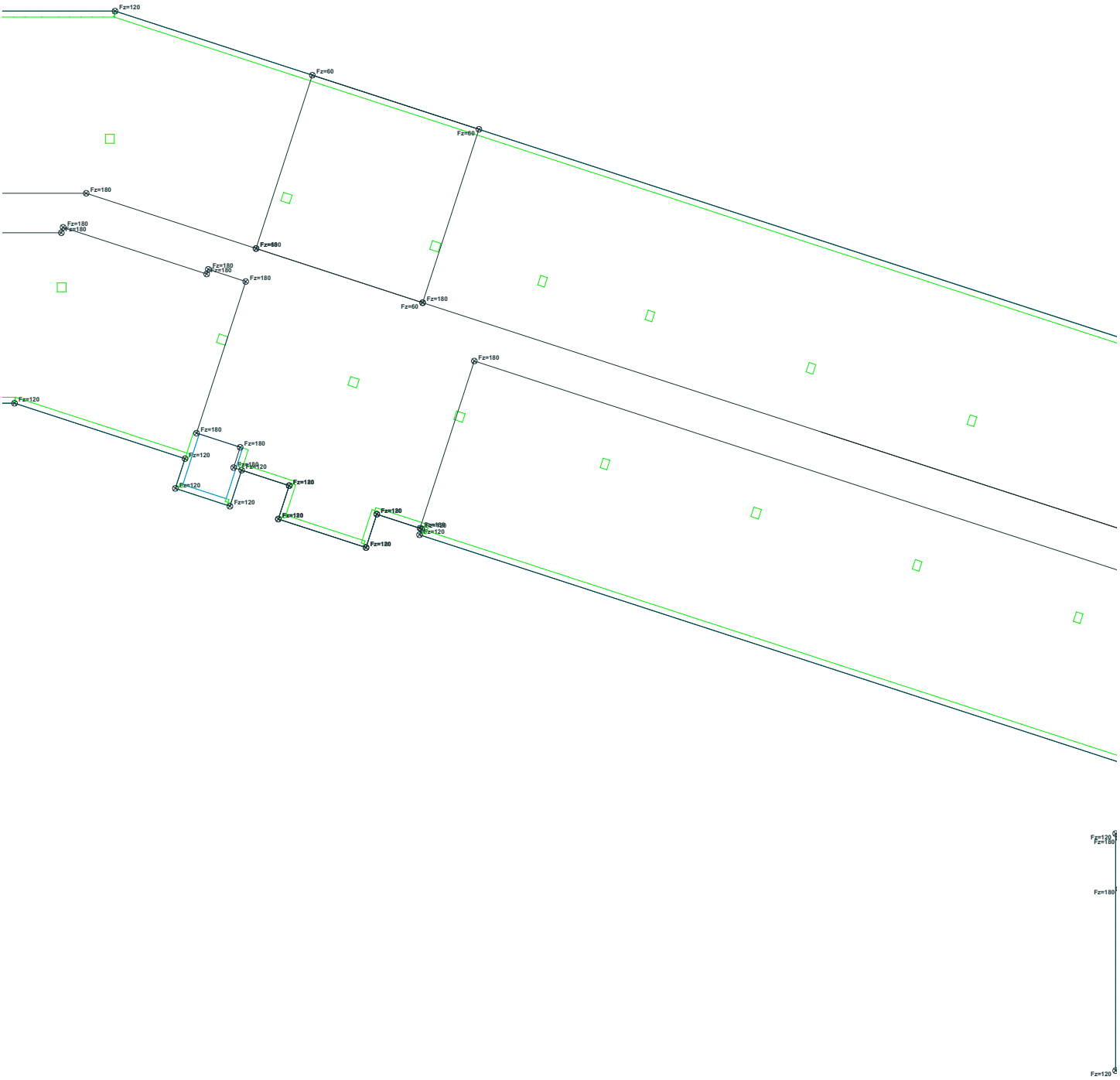
Other Dead Loading: All Loads Plan (6)

Live (Reducible) Loading: All Loads Plan

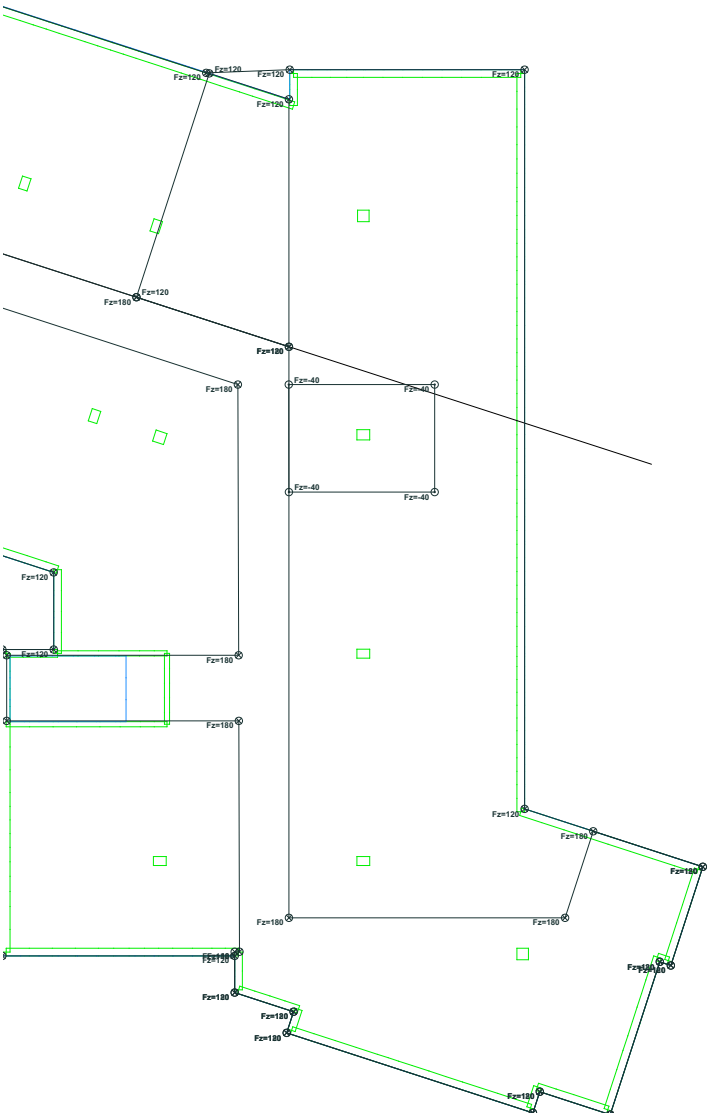
Live (Reducible) Loading: Point Loads; Point Load Icons; Point Load Values; Line Loads; Line Load Icons; Line Load Values; Area Loads; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:300



Live (Reducible) Loading: All Loads Plan (2)



Live (Reducible) Loading: All Loads Plan (3)



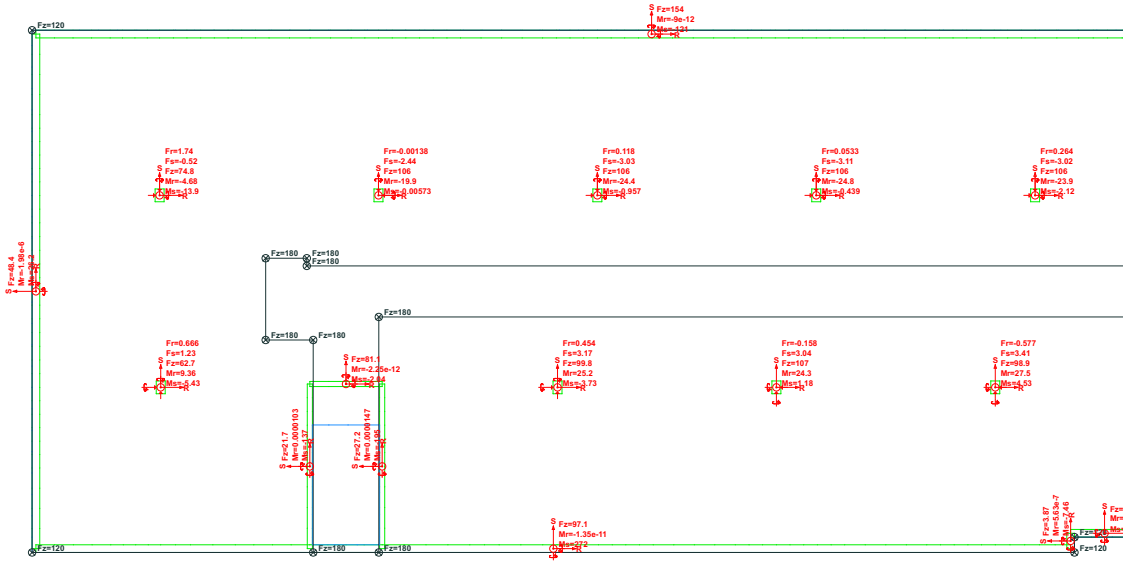
Live (Reducible) Loading: All Loads Plan (4)

Live (Reducible) Loading: All Loads Plan (5)

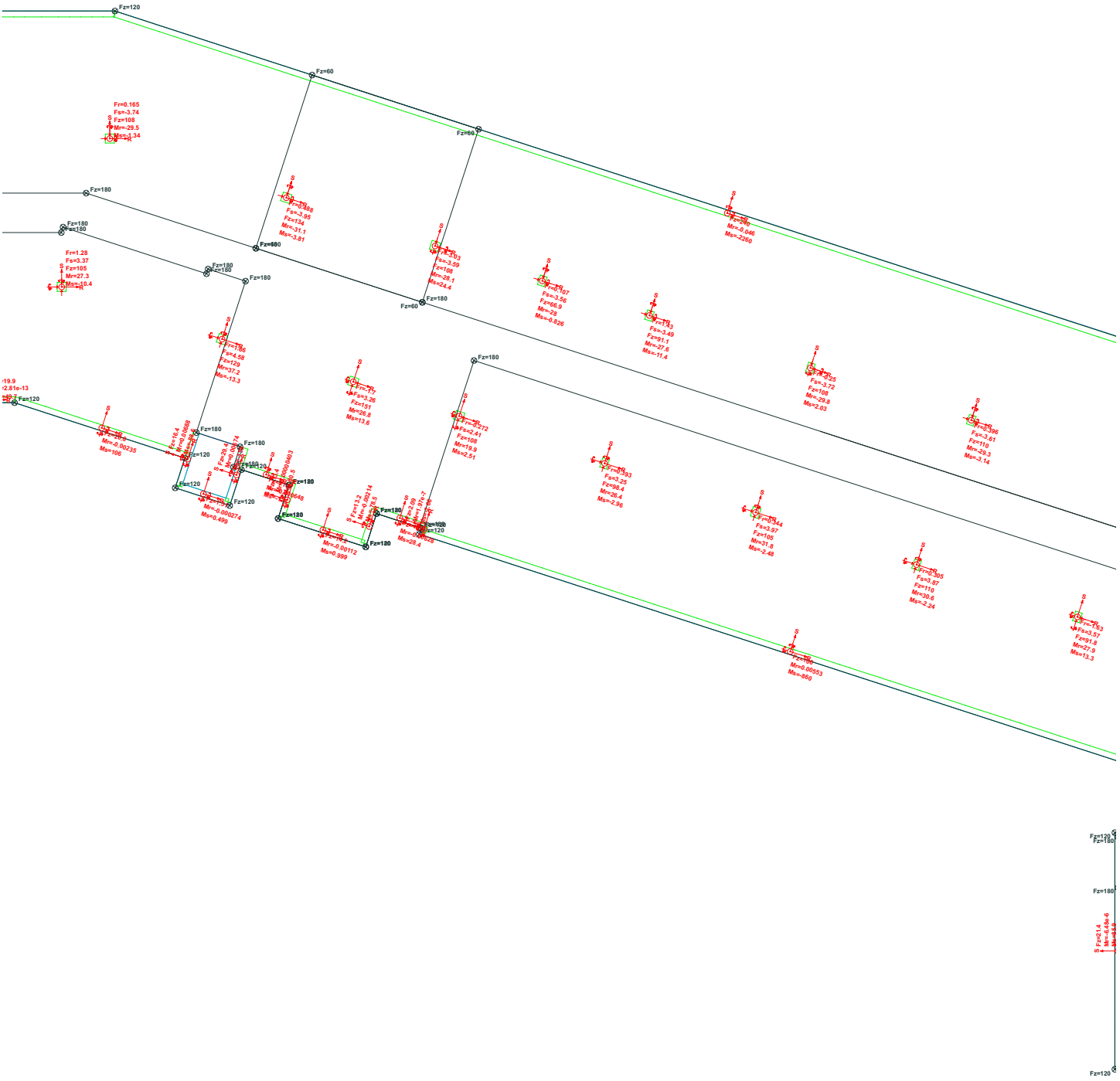
Live (Reducible) Loading: All Loads Plan (6)

Live (Reducible) Loading: Std Reactions Plan

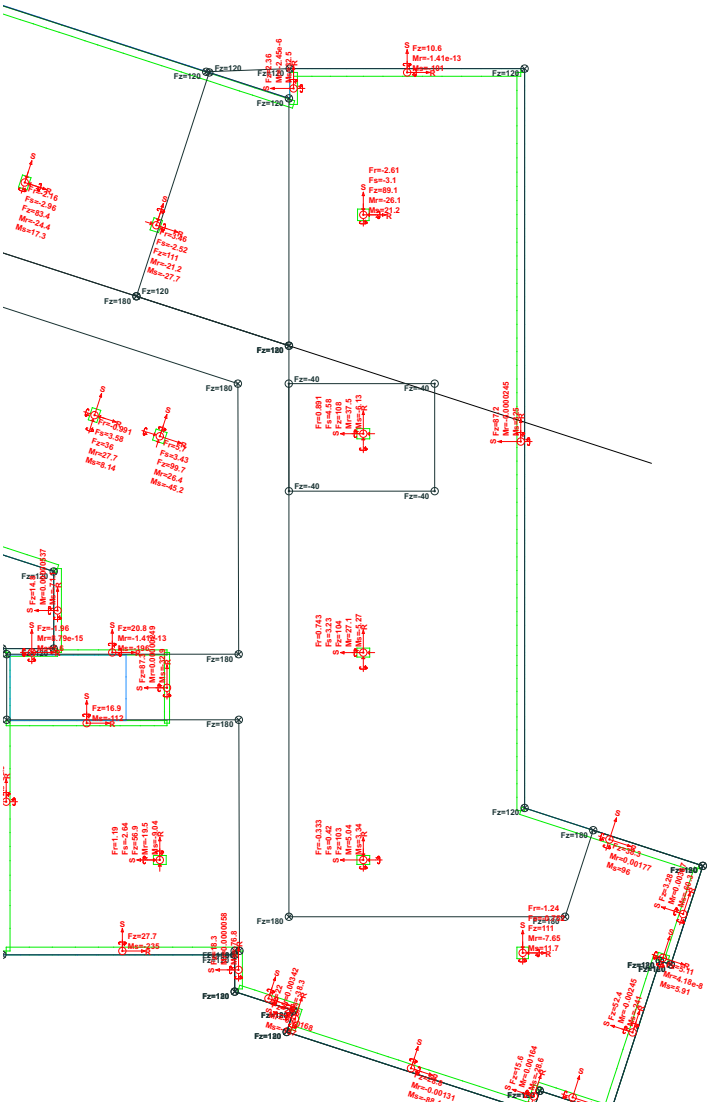
Live (Reducible) Loading: User Lines; User Notes; User Dimensions; Point Loads; Point Load Values; Point Load Icons; Line Loads; Line Load Values; Line Load Icons; Area Loads; Area Load Values; Area Load Icons;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:300
Live (Reducible) Loading - Reaction Plot: (Wall Below,Column Below,Point Spring,Line Spring,Point Support,Line Support)(Fr,Fs,Fz,Mr,Ms,Mz)(Standard Context)



Live (Reducible) Loading: Std Reactions Plan (2)



Live (Reducible) Loading: Std Reactions Plan (3)



Live (Reducible) Loading: Std Reactions Plan (4)

Live (Reducible) Loading: Std Reactions Plan (5)

Live (Reducible) Loading: Std Reactions Plan (6)

Live (Storage) Loading: All Loads Plan

Live (Storage) Loading: Point Loads; Point Load Icons; Point Load Values; Line Loads; Line Load Icons; Line Load Values; Area Loads; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions; Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
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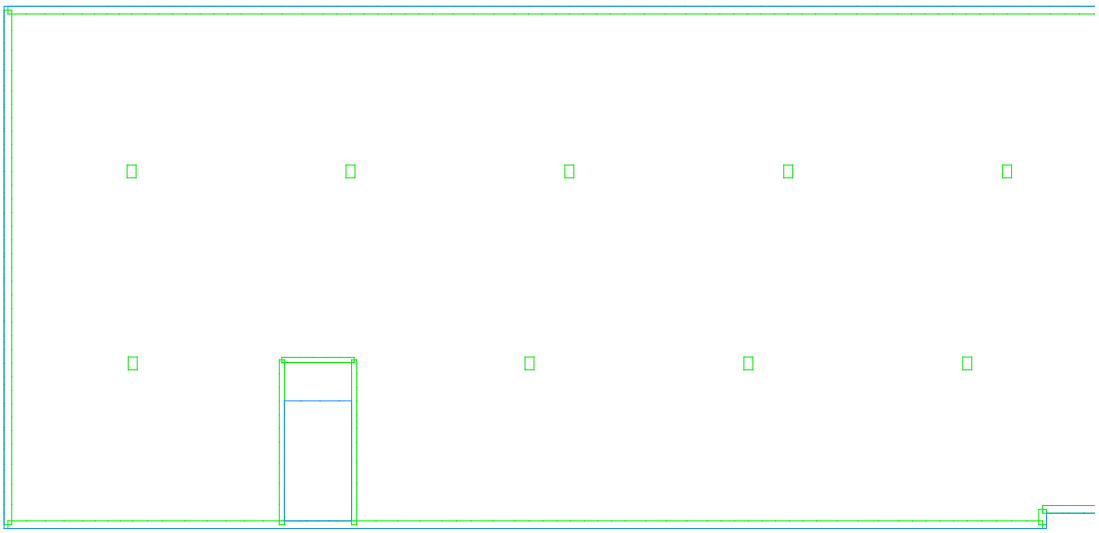
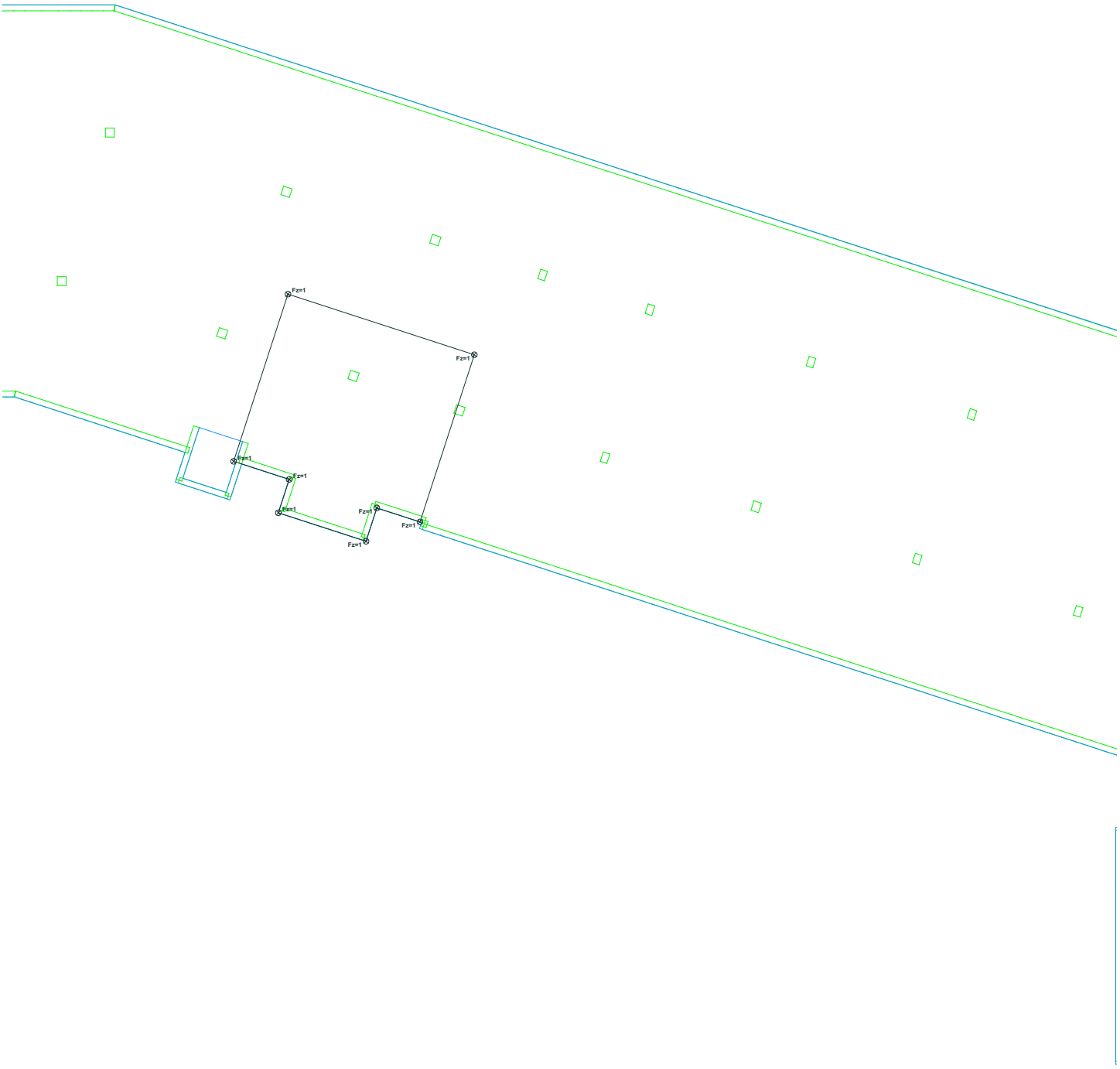
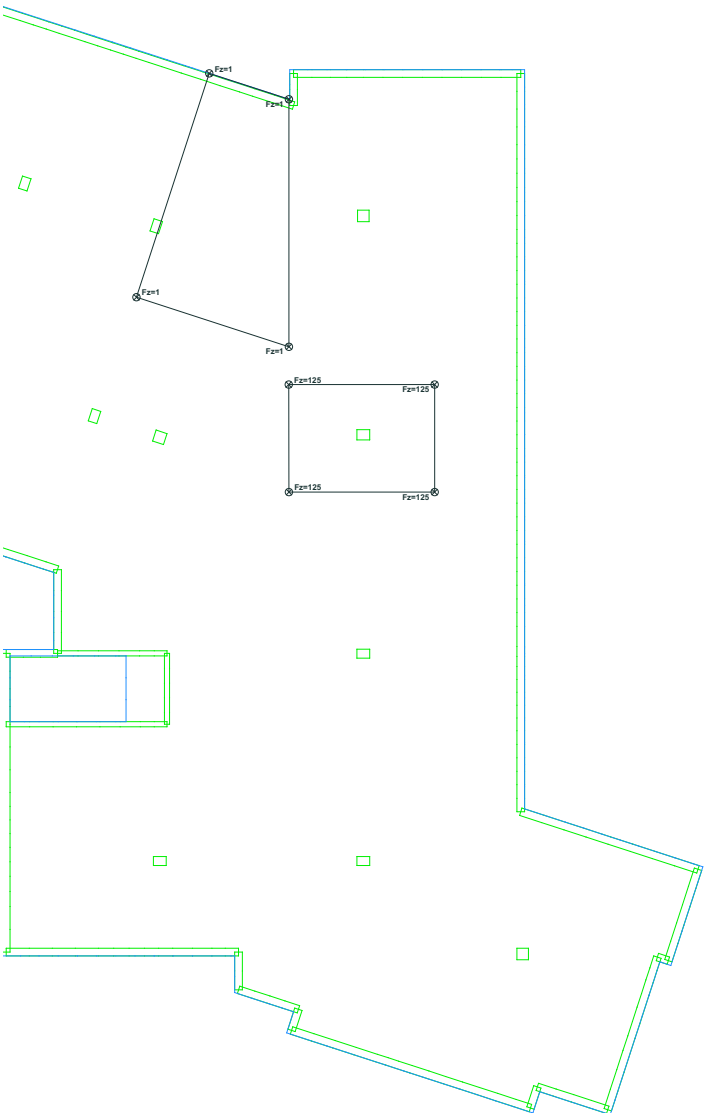


Live (Storage) Loading: All Loads Plan (2)



Live (Storage) Loading: All Loads Plan (3)



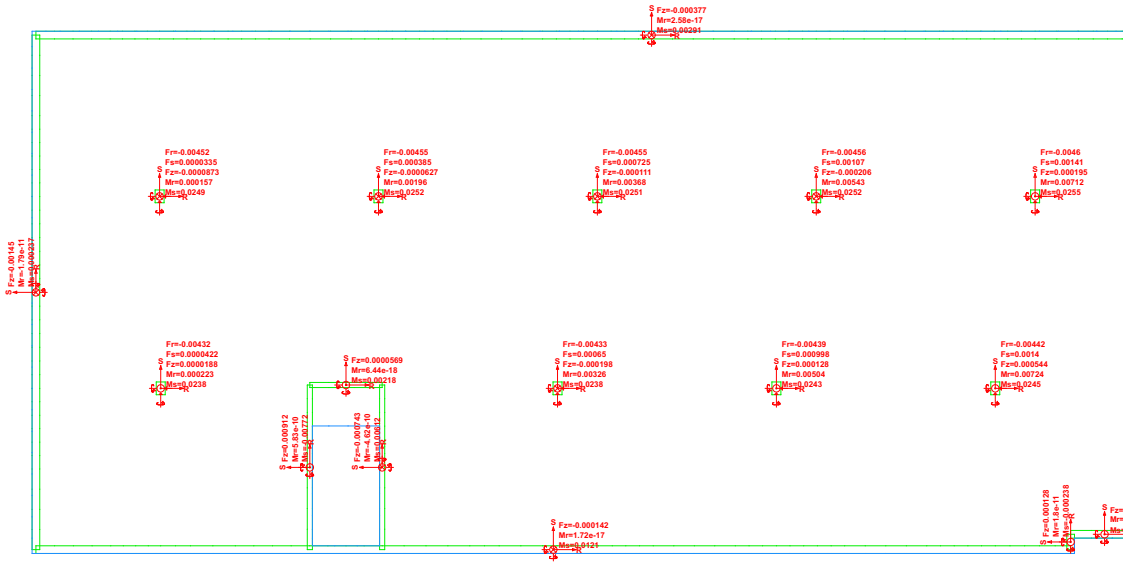
Live (Storage) Loading: All Loads Plan (4)

Live (Storage) Loading: All Loads Plan (5)

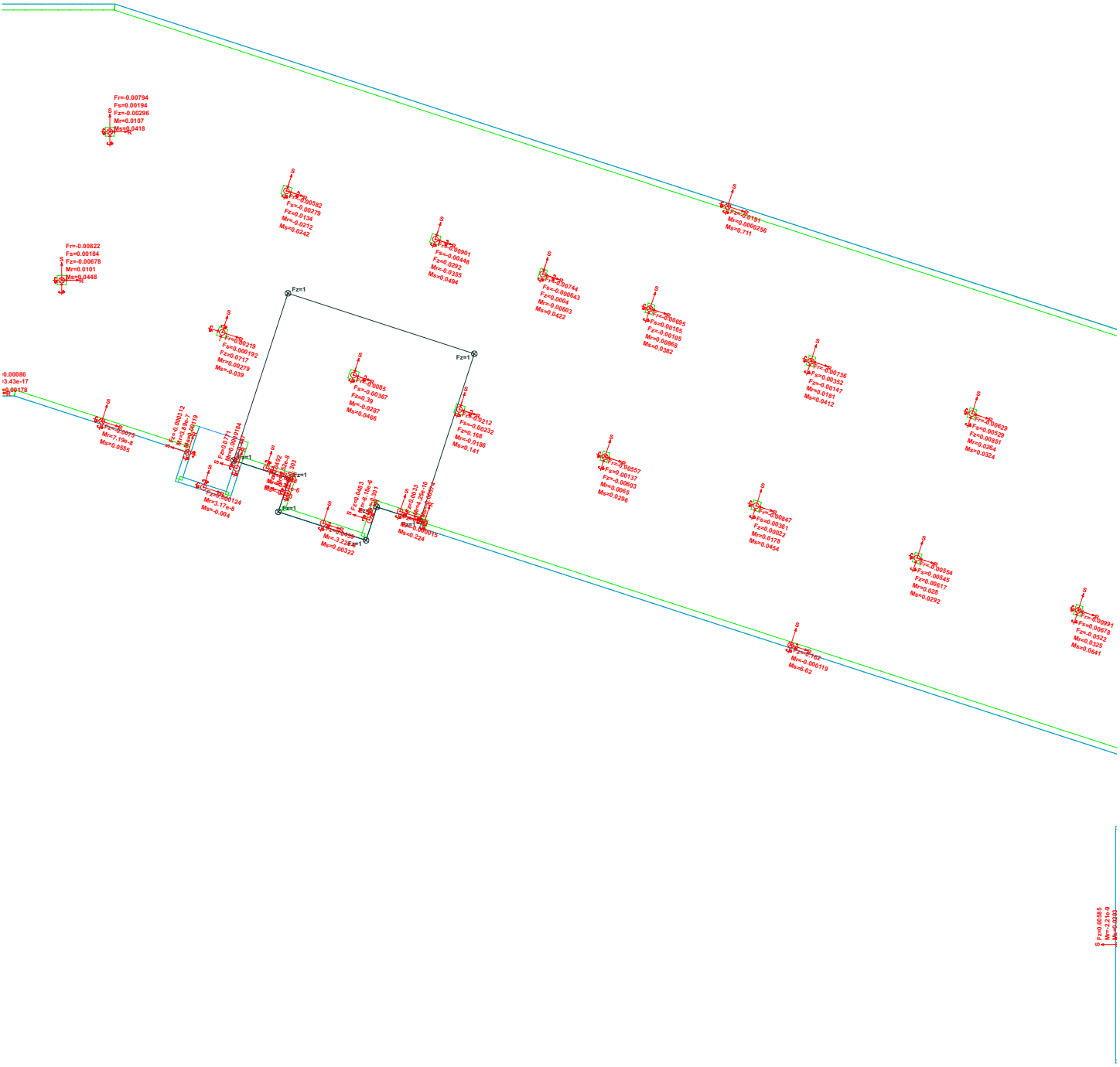
Live (Storage) Loading: All Loads Plan (6)

Live (Storage) Loading: Std Reactions Plan

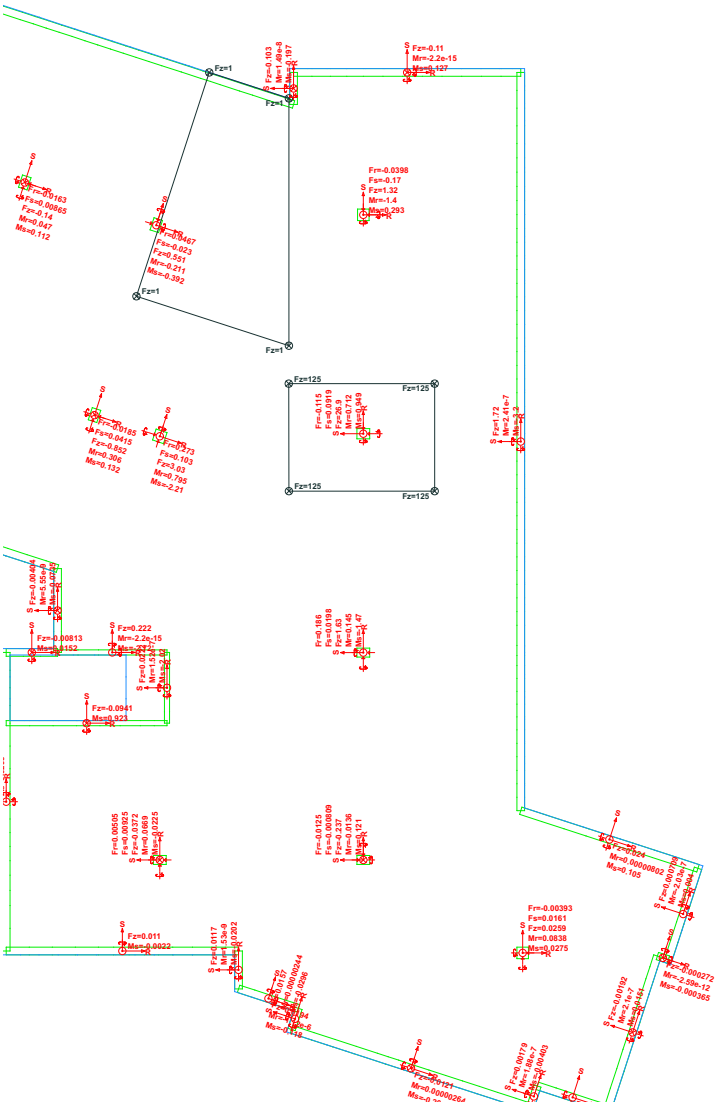
Live (Storage) Loading: User Lines; User Notes; User Dimensions; Point Loads; Point Load Values; Point Load Icons; Line Loads; Line Load Values; Line Load Icons; Area Loads; Area Load Values; Area Load Icons; Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:300
Live (Storage) Loading - Reaction Plot: (Wall Below,Column Below,Point Spring,Line Spring,Point Support,Line Support)(Fr,Fs,Fz,Mr,Ms,Mz)(Standard Context)



Live (Storage) Loading: Std Reactions Plan (2)



Live (Storage) Loading: Std Reactions Plan (3)



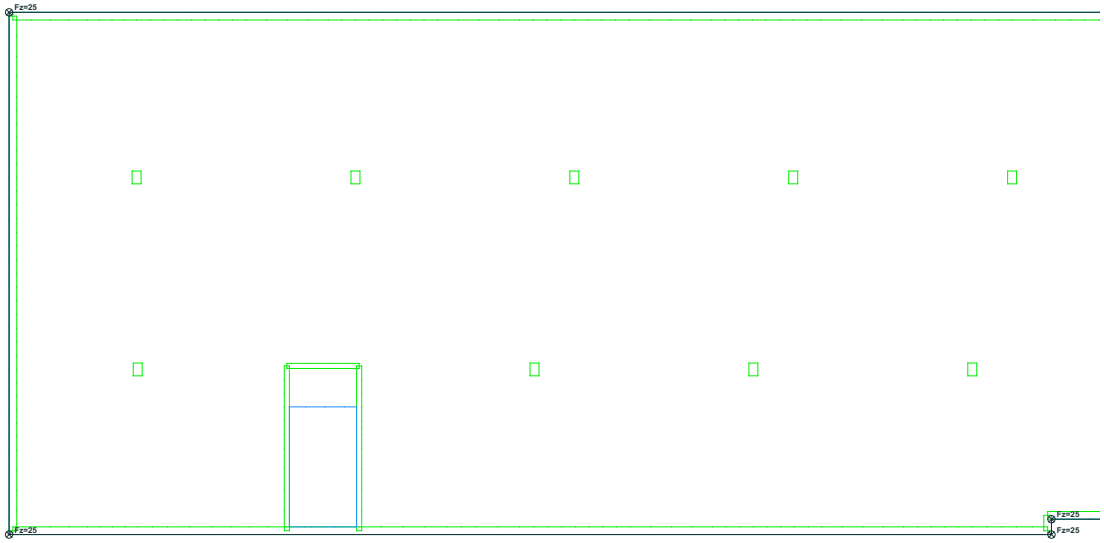
Live (Storage) Loading: Std Reactions Plan (4)

Live (Storage) Loading: Std Reactions Plan (5)

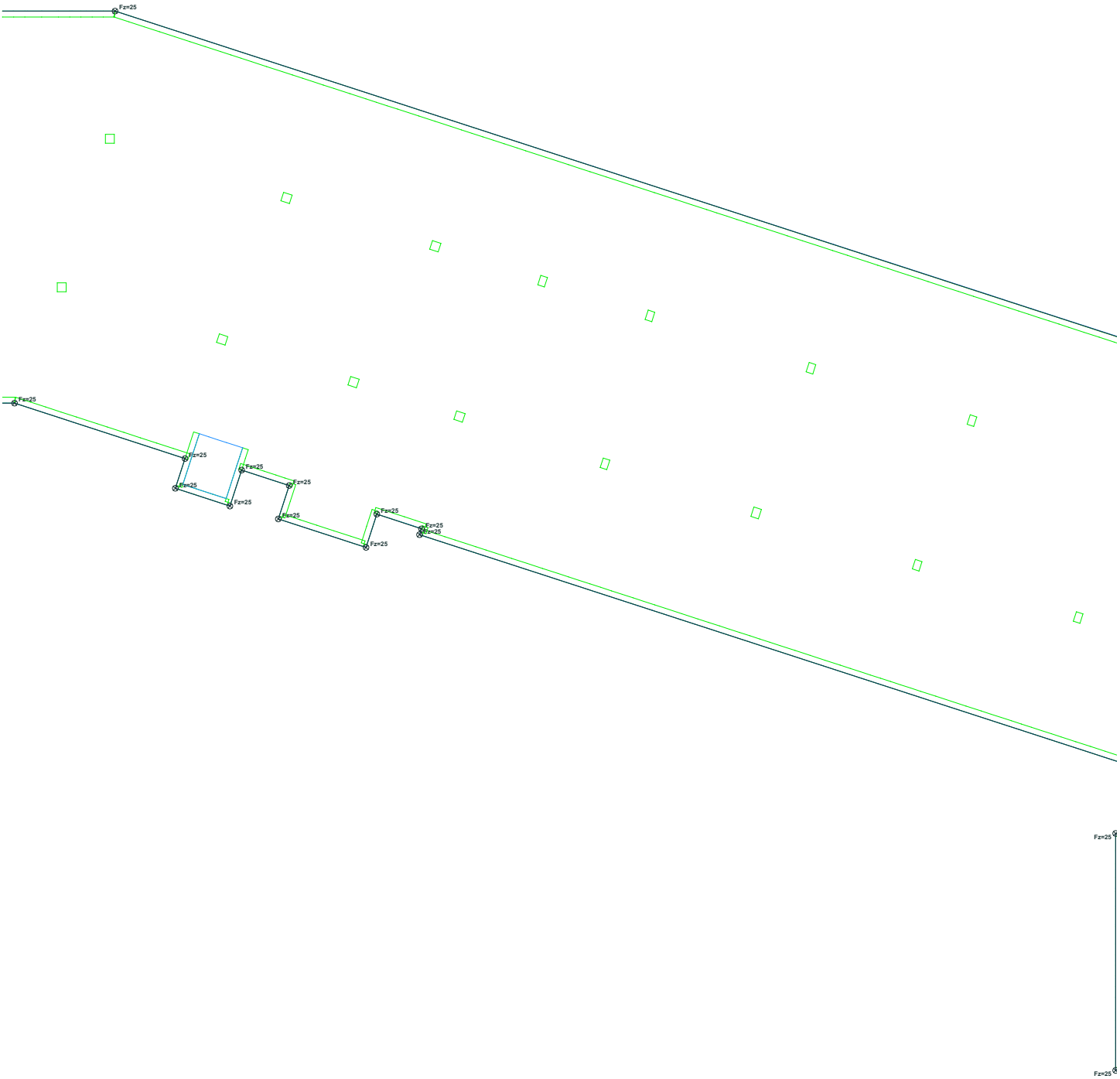
Live (Storage) Loading: Std Reactions Plan (6)

Snow Loading: All Loads Plan

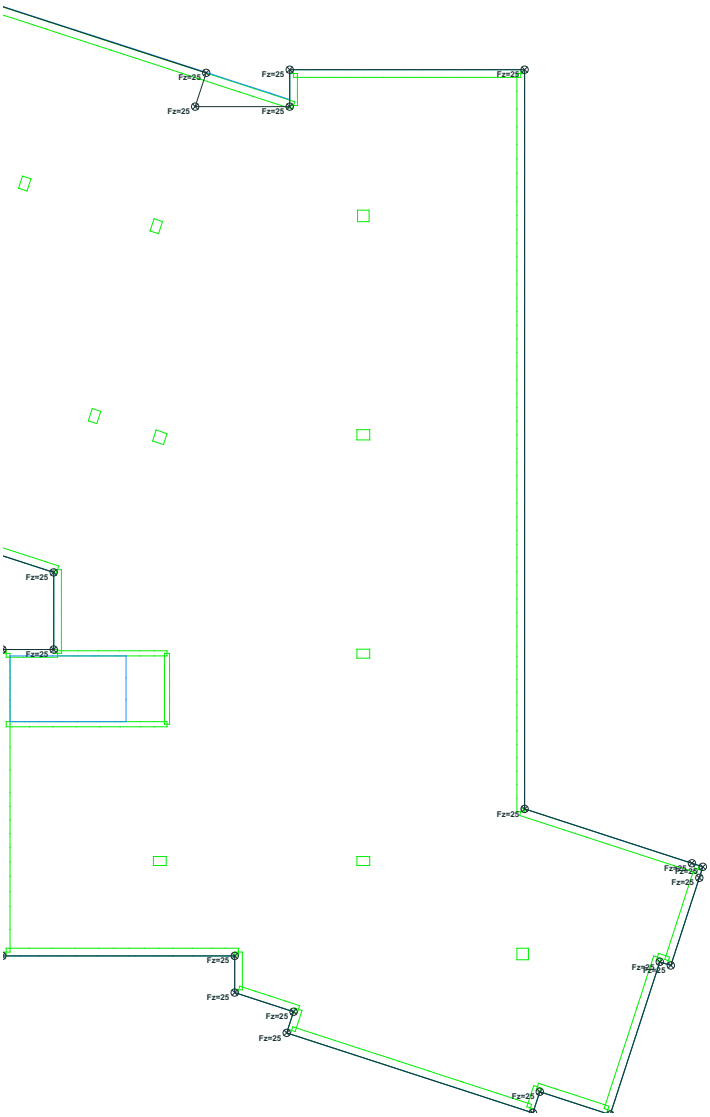
Snow Loading: User Lines; User Notes; User Dimensions; Point Loads; Point Load Icons; Point Load Values; Line Loads; Line Load Icons; Line Load Values; Area Loads; Area Load Icons; Area Load Values; Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:300



Snow Loading: All Loads Plan (2)



Snow Loading: All Loads Plan (3)



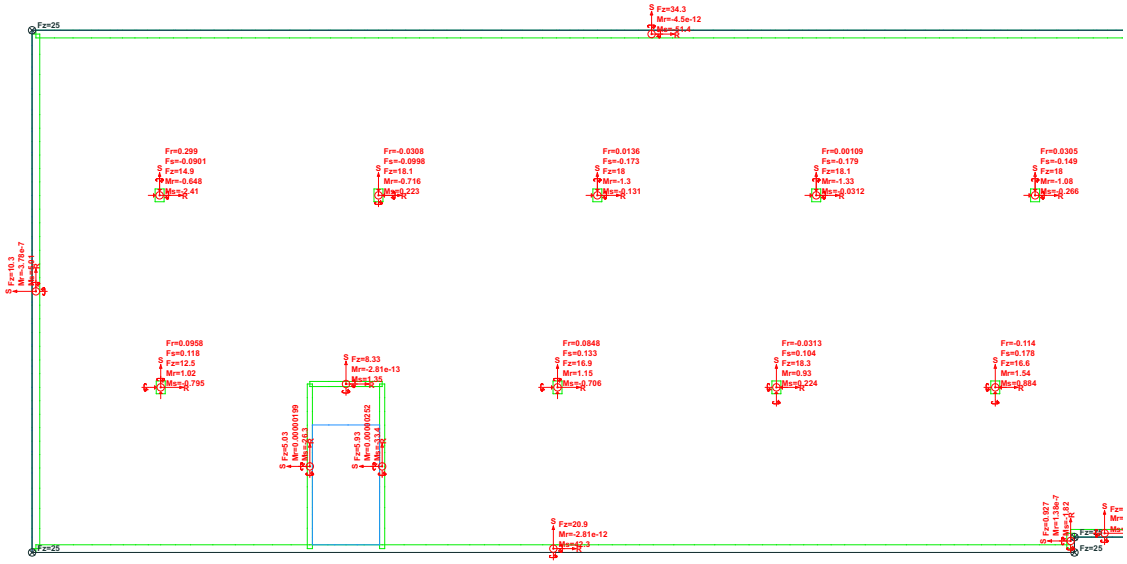
Snow Loading: All Loads Plan (4)

Snow Loading: All Loads Plan (5)

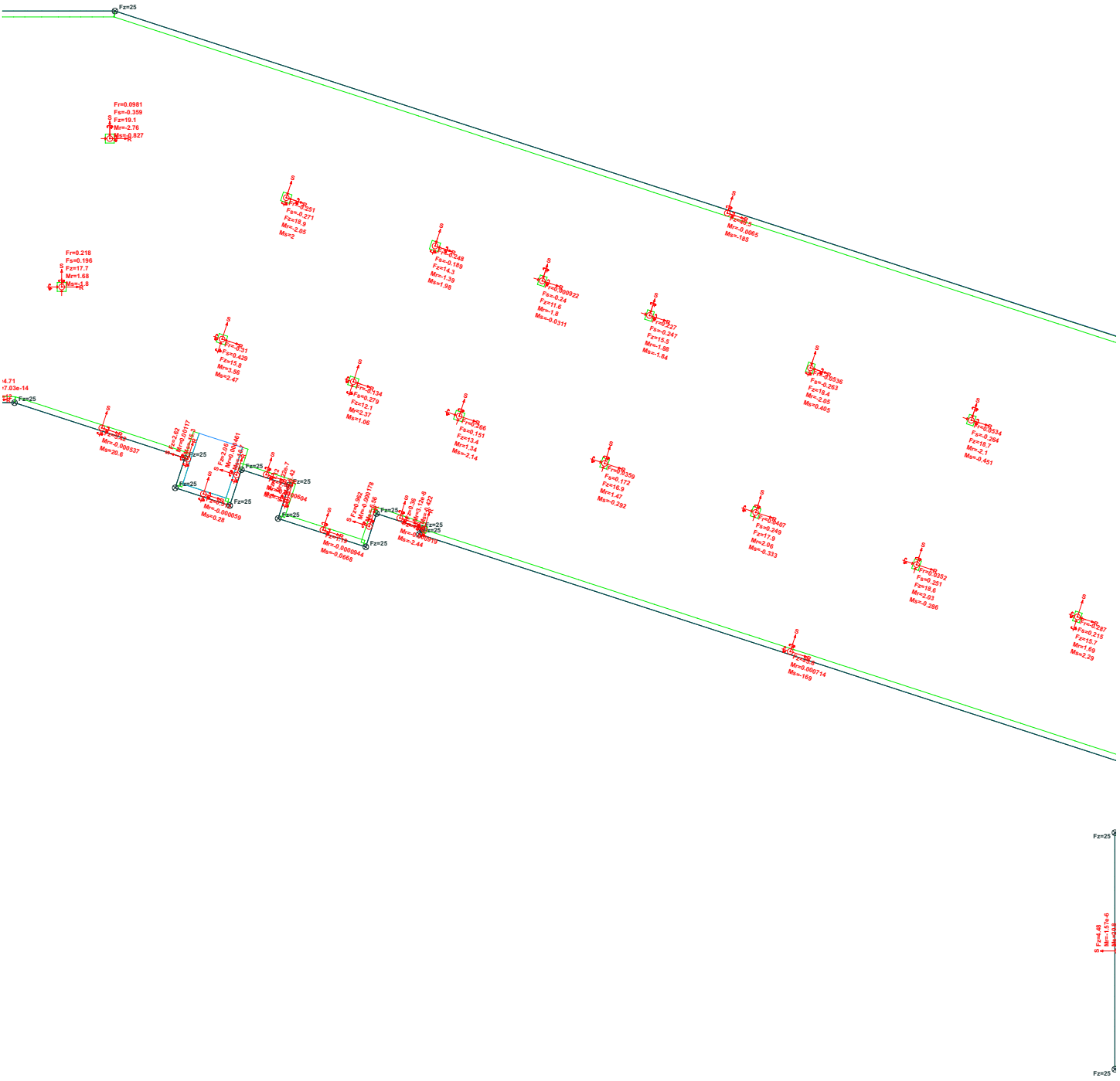
Snow Loading: All Loads Plan (6)

Snow Loading: Std Reactions Plan

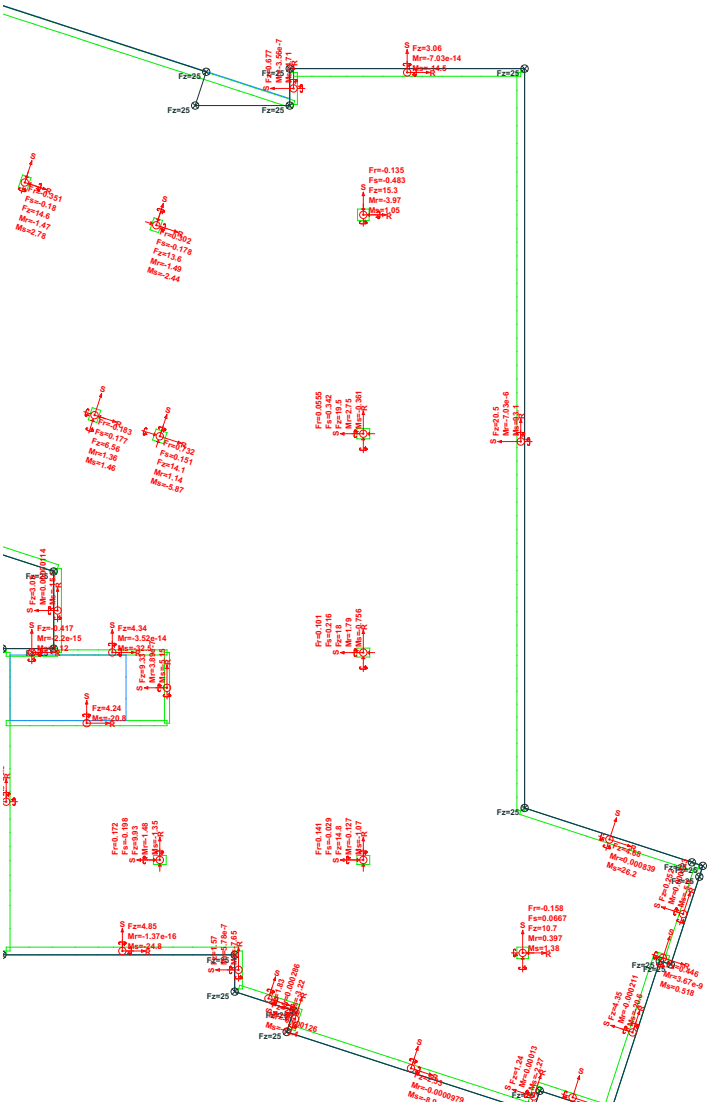
Snow Loading: User Lines; User Notes; User Dimensions; Point Loads; Point Load Values; Point Load Icons; Line Loads; Line Load Values; Line Load Icons; Area Loads; Area Load Values; Area Load Icons;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:300
Snow Loading - Reaction Plot: (Wall Below,Column Below,Point Spring,Line Spring,Point Support,Line Support)(Fr,Fs,Fz,Mr,Ms,Mz)(Standard Context)



Snow Loading: Std Reactions Plan (2)



Snow Loading: Std Reactions Plan (3)



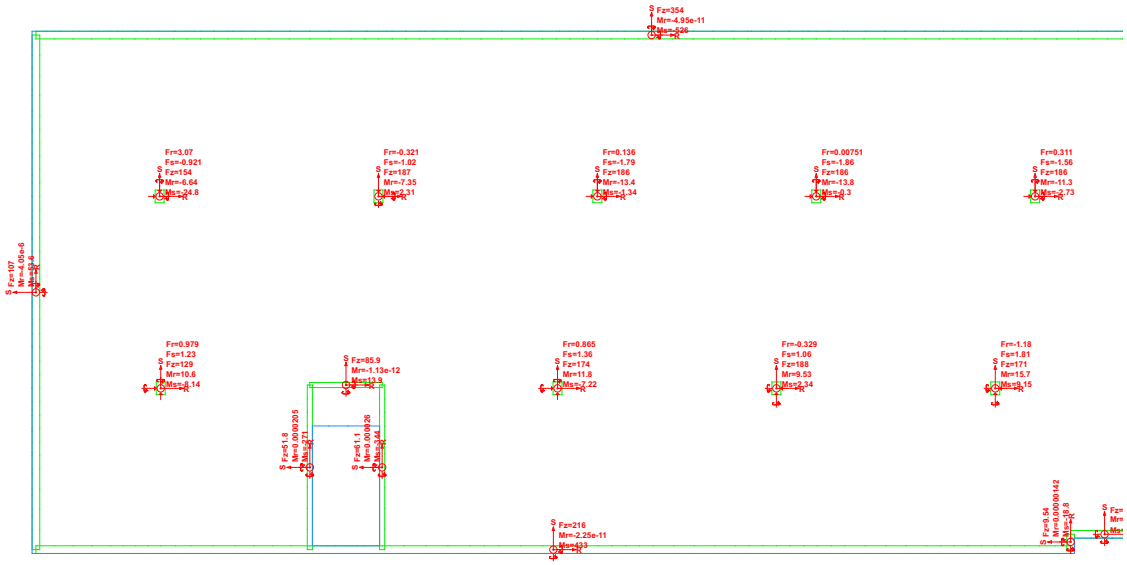
Snow Loading: Std Reactions Plan (4)

Snow Loading: Std Reactions Plan (5)

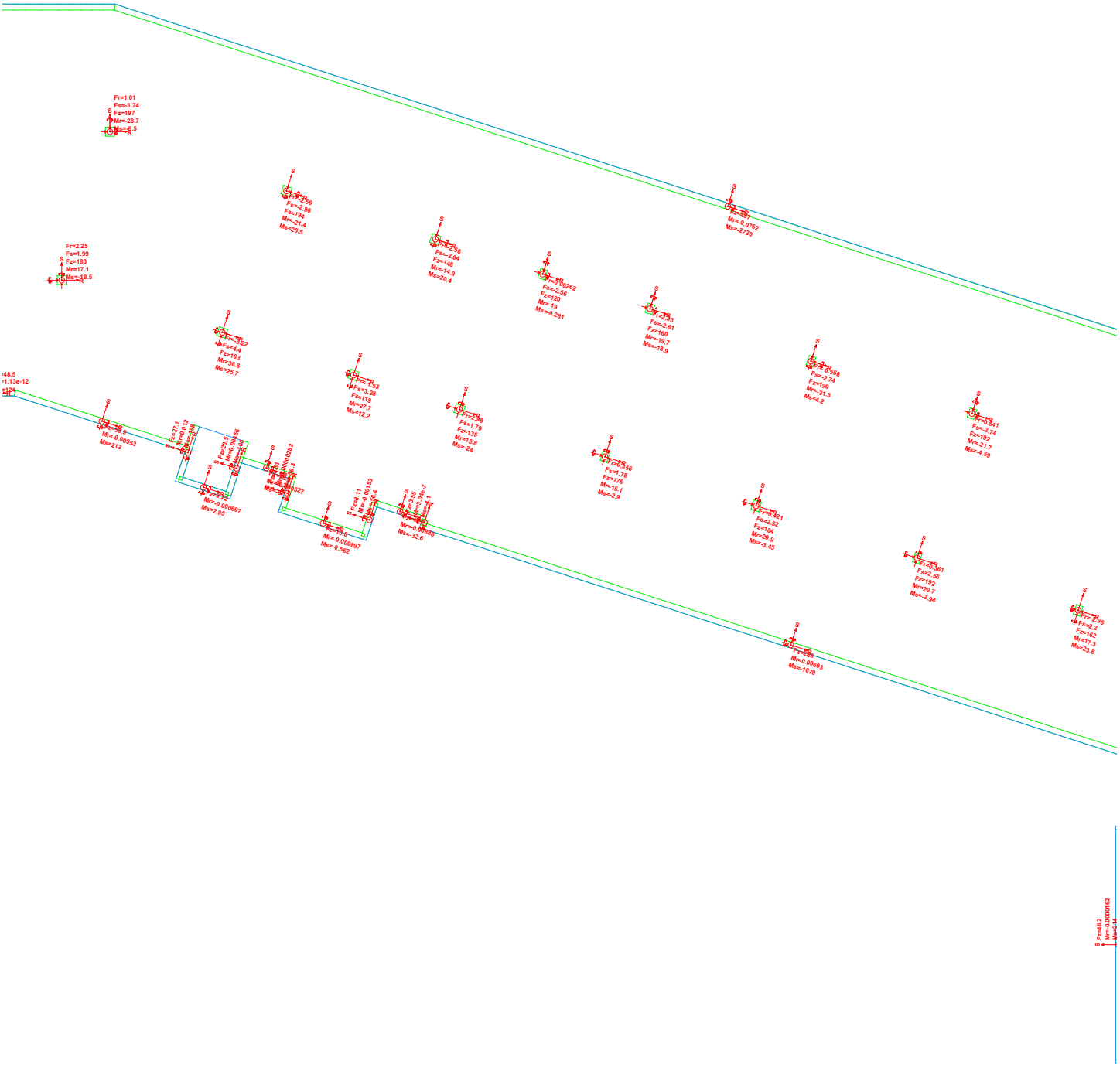
Snow Loading: Std Reactions Plan (6)

All Dead LC: Std Reactions Plan

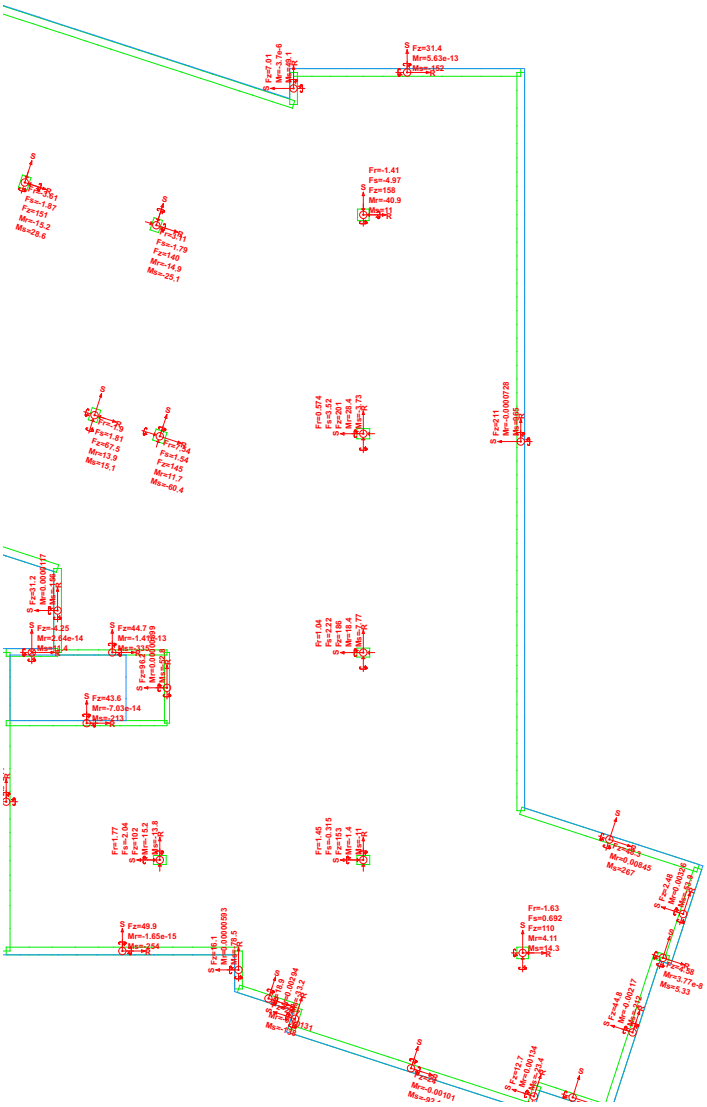
All Dead LC: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:300
All Dead LC - Reaction Plot: (Wall Below,Column Below,Point Spring,Line Spring,Point Support,Line Support)(Fr,Fs,Fz,Mr,Ms,Mz)(Standard Context)



All Dead LC: Std Reactions Plan (2)



All Dead LC: Std Reactions Plan (3)



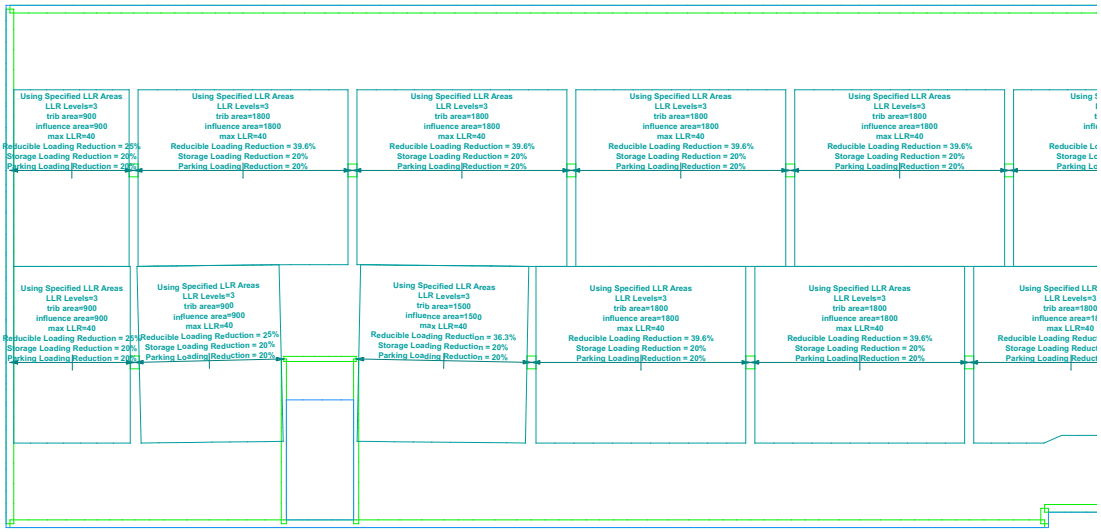
All Dead LC: Std Reactions Plan (4)

All Dead LC: Std Reactions Plan (5)

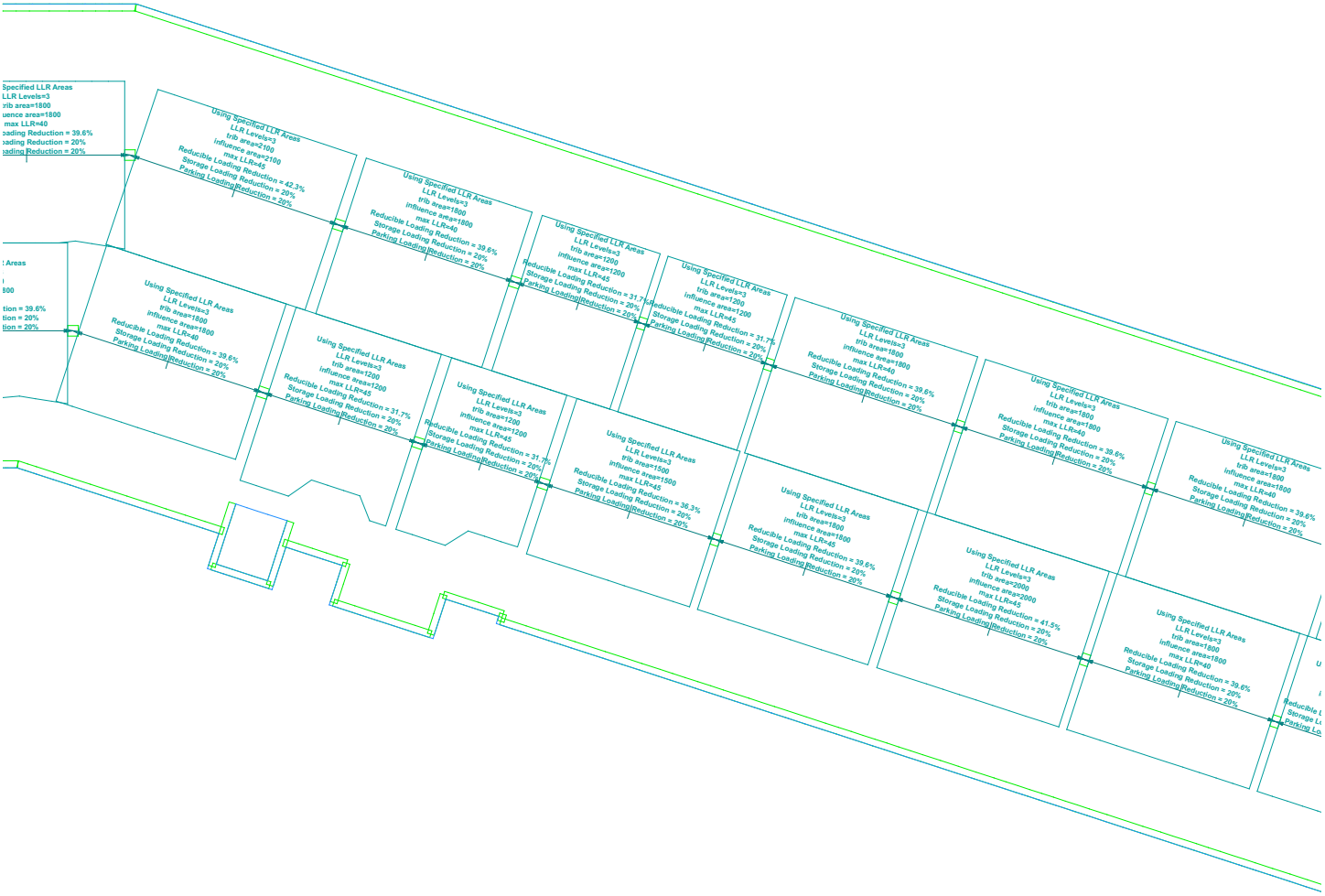
All Dead LC: Std Reactions Plan (6)

Design Strip: Latitude Design Spans Plan

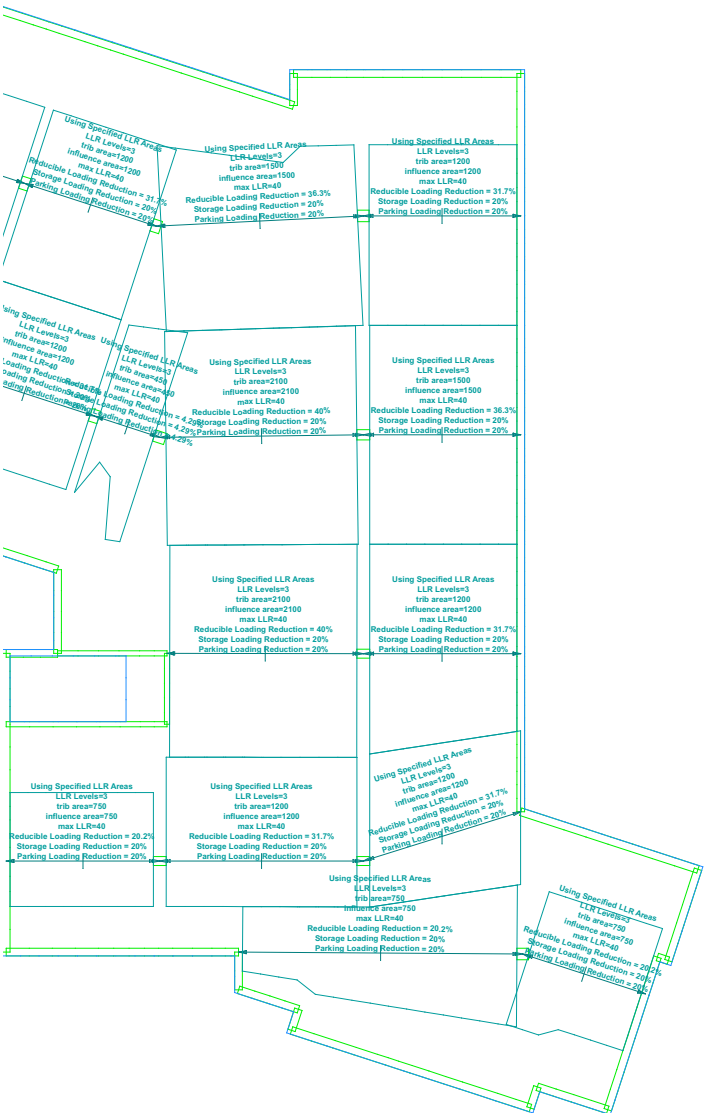
Design Strip: Latitude Span Boundaries; Latitude SSs; Latitude DSs; Latitude Strip Boundaries; Latitude SSSs; SSS LLR Parameters; Latitude Deflection Checks; User Notes; User Lines; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:300



Design Strip: Latitude Design Spans Plan (2)



Design Strip: Latitude Design Spans Plan (3)



Design Strip: Latitude Design Spans Plan (4)

Design Strip: Latitude Design Spans Plan (5)

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Design Strip: Latitude Design Spans Plan (6)

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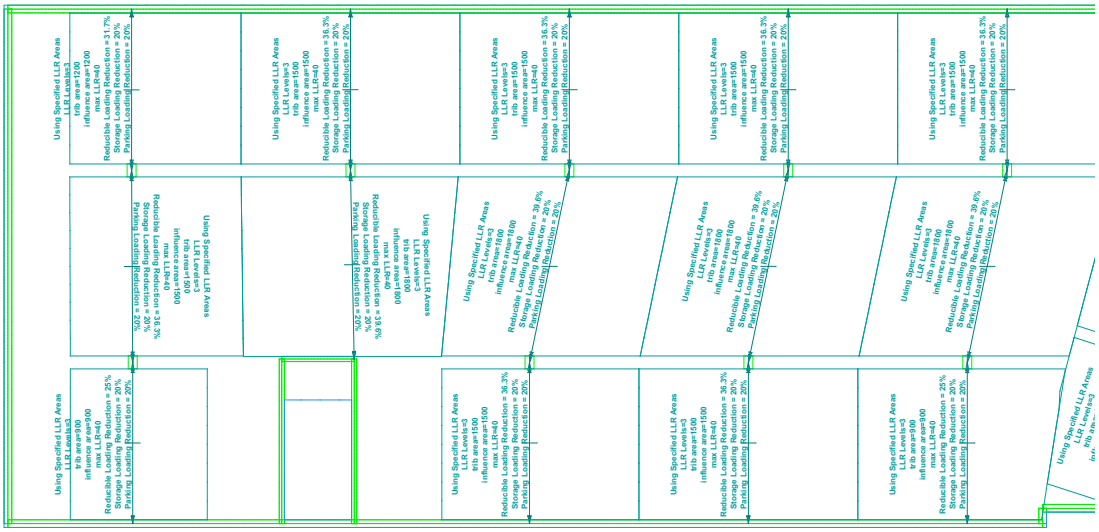
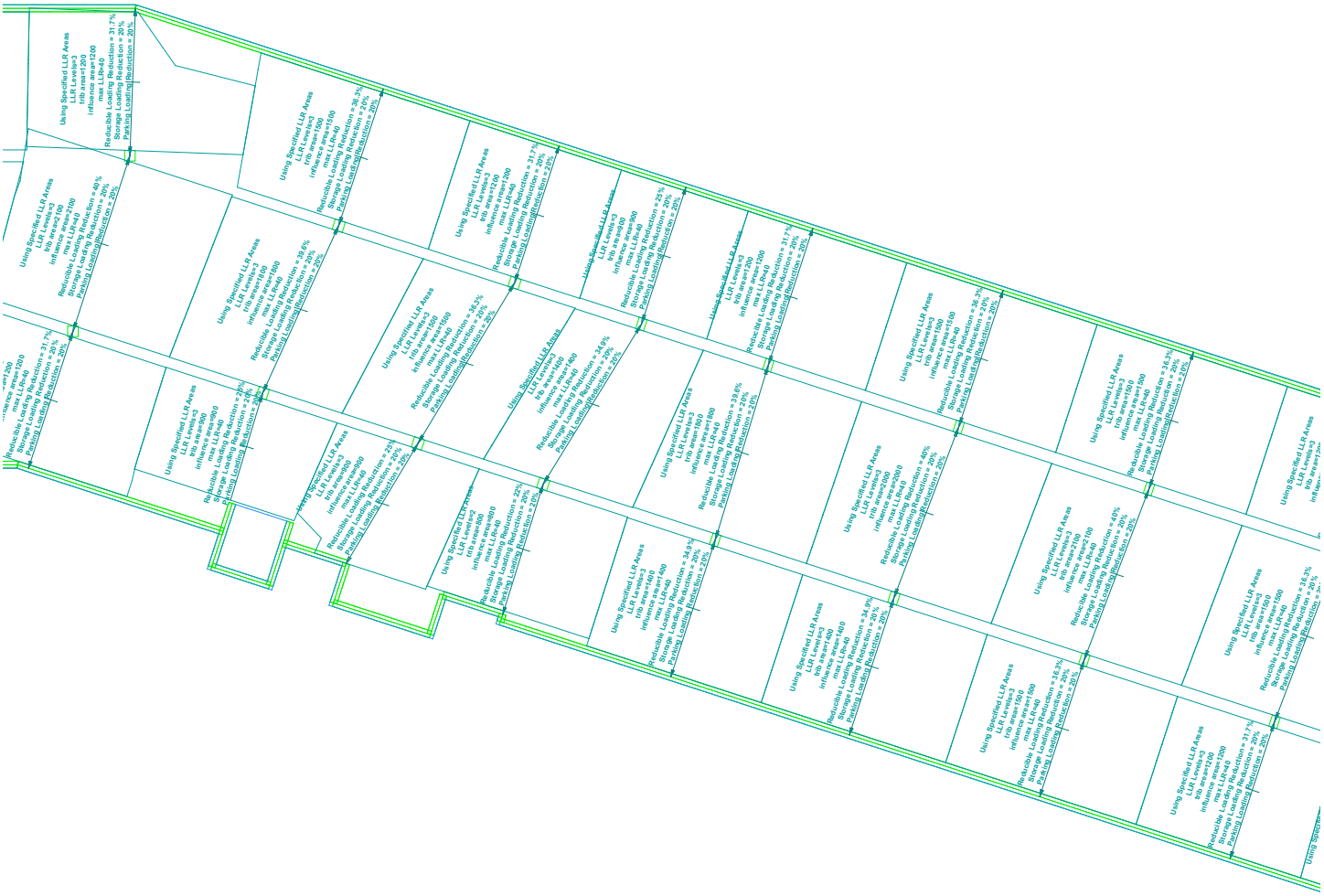
Design Strip: Longitude Design Spans Plan

Design Strip: Longitude Span Boundaries; Longitude SSs; Longitude DSs; Longitude Strip Boundaries; Longitude SSSs; SSS LLR Parameters; Longitude Deflection Checks; User Notes; User Lines; User Dimensions;
Mesh Input: Walls Below;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:300

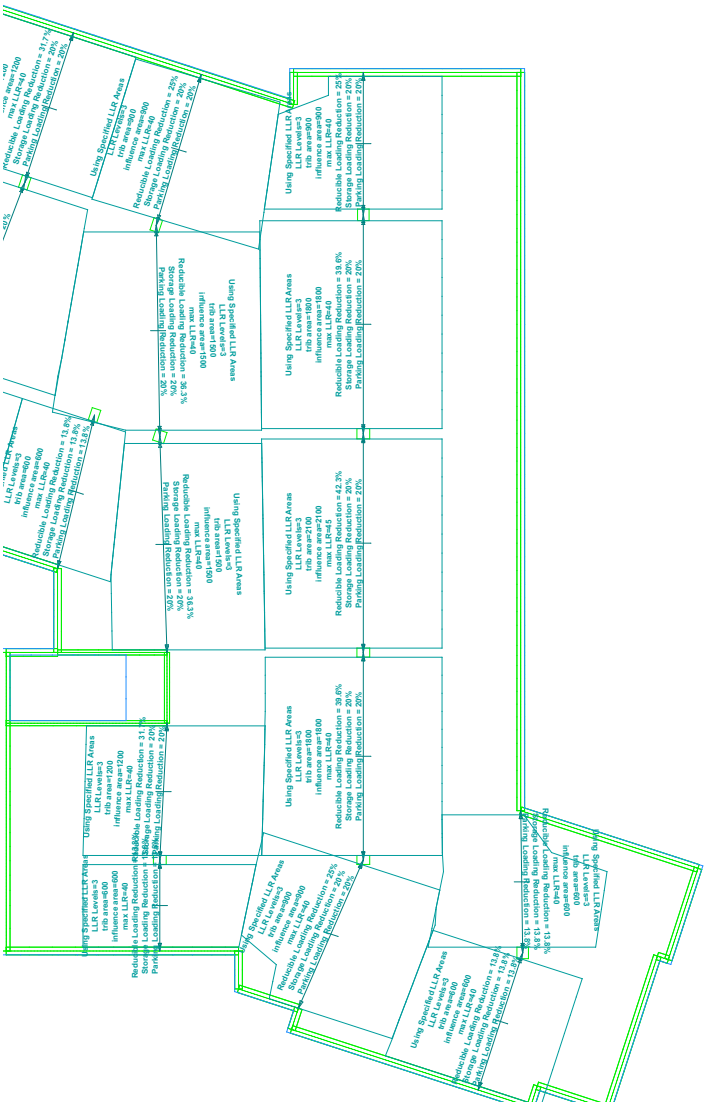


PRRWF20240597

Design Strip: Longitude Design Spans Plan (2)



Design Strip: Longitude Design Spans Plan (3)



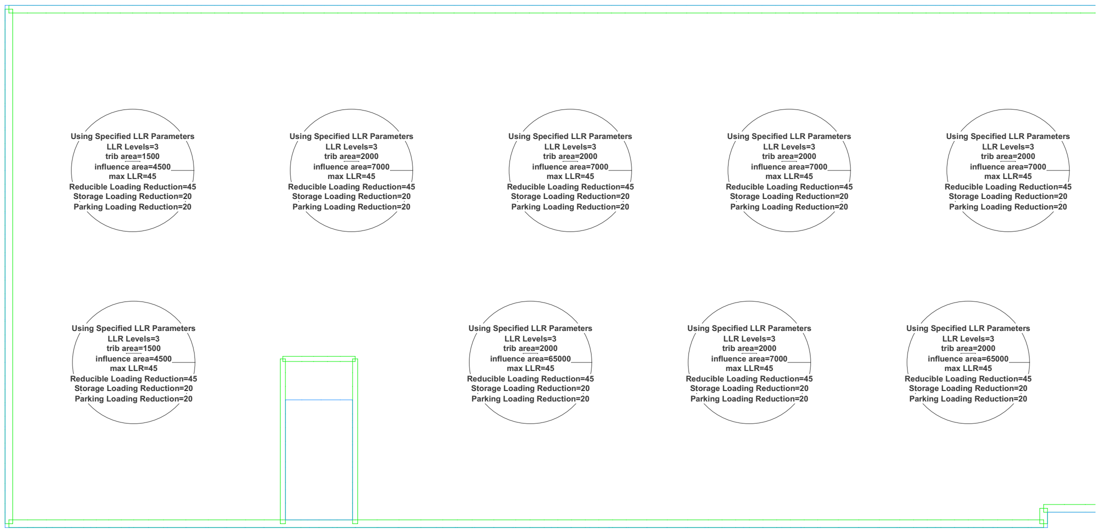
Design Strip: Longitude Design Spans Plan (4)

Design Strip: Longitude Design Spans Plan (5)

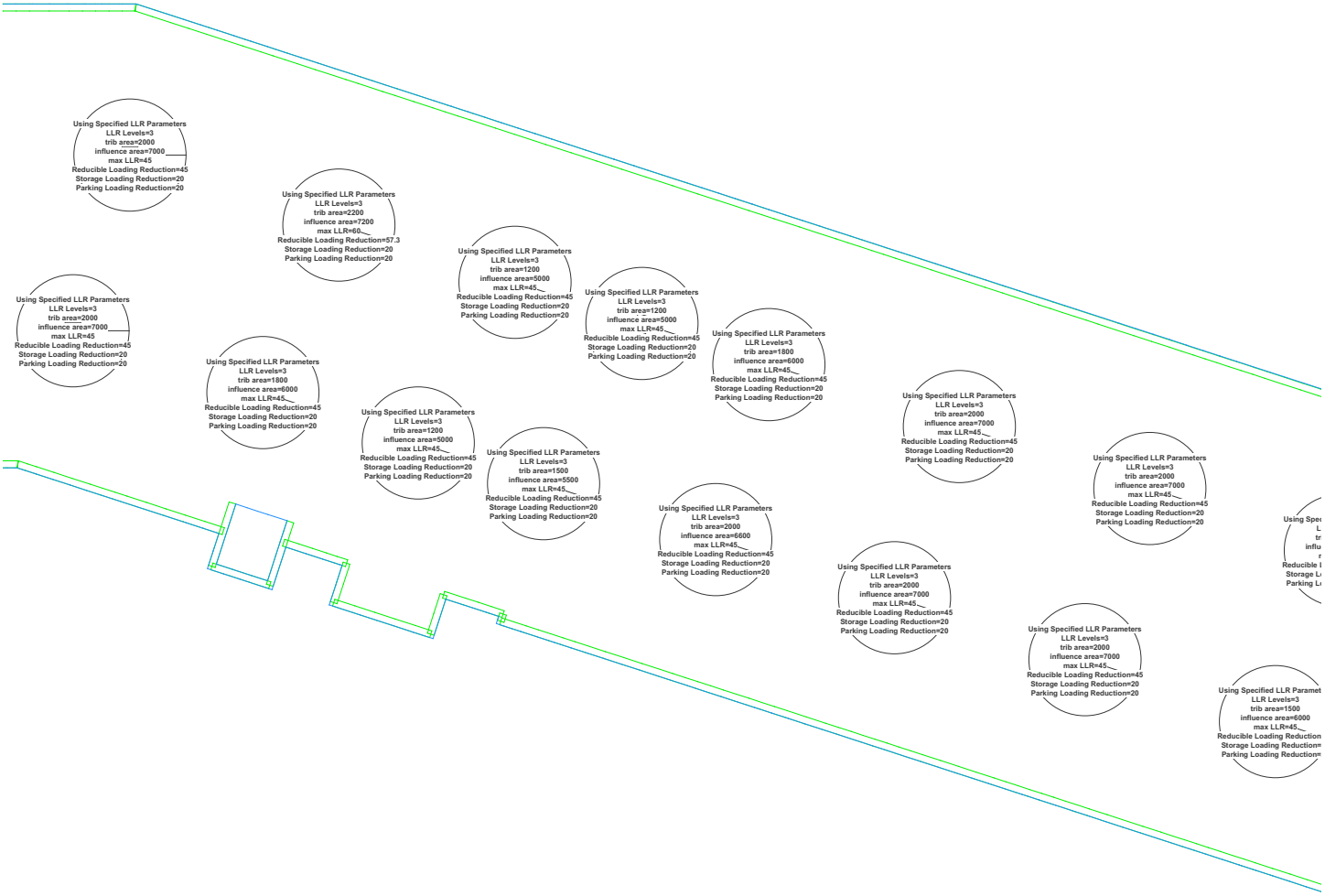
Design Strip: Longitude Design Spans Plan (6)

Design Strip: Punching Checks Plan

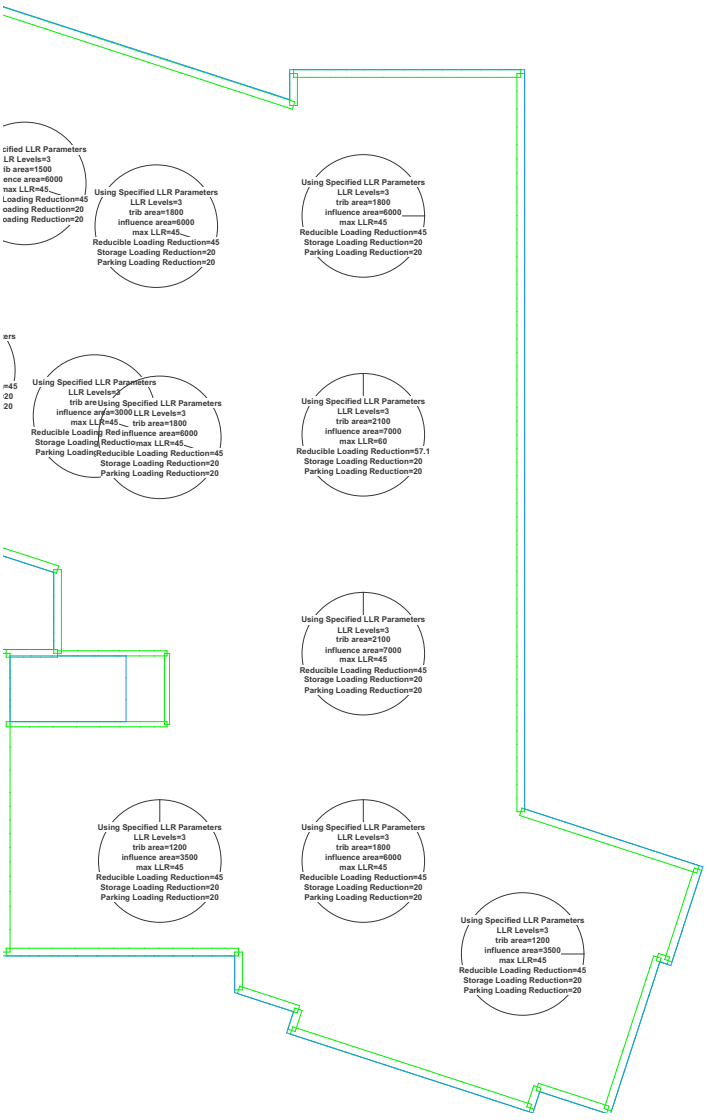
Design Strip: Punching Checks; Punching Check LLR Parameters; Punching Check Sections; User Notes; User Lines; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:300



Design Strip: Punching Checks Plan (2)



Design Strip: Punching Checks Plan (3)



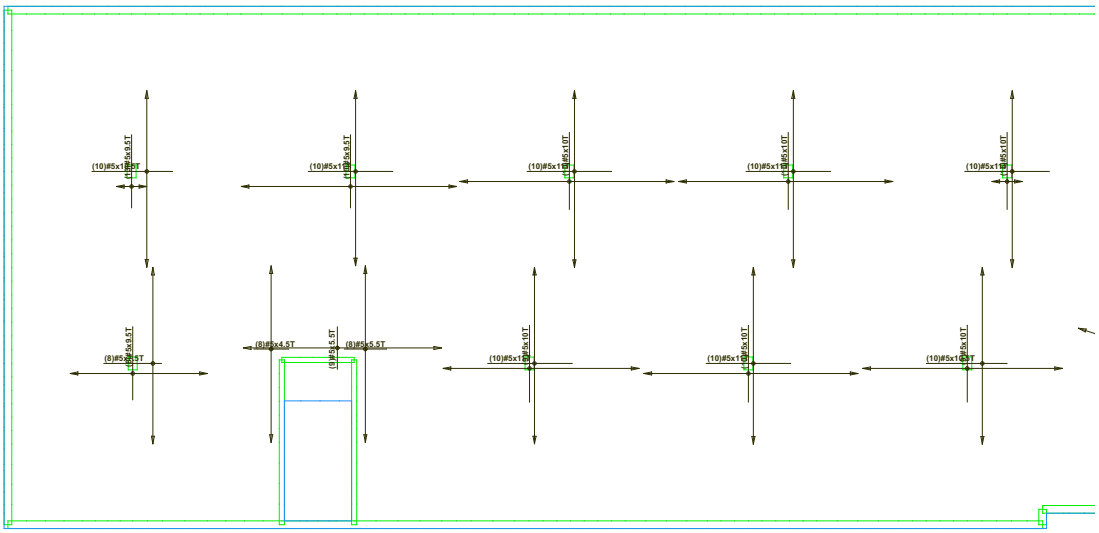
Design Strip: Punching Checks Plan (4)

Design Strip: Punching Checks Plan (5)

Design Strip: Punching Checks Plan (6)

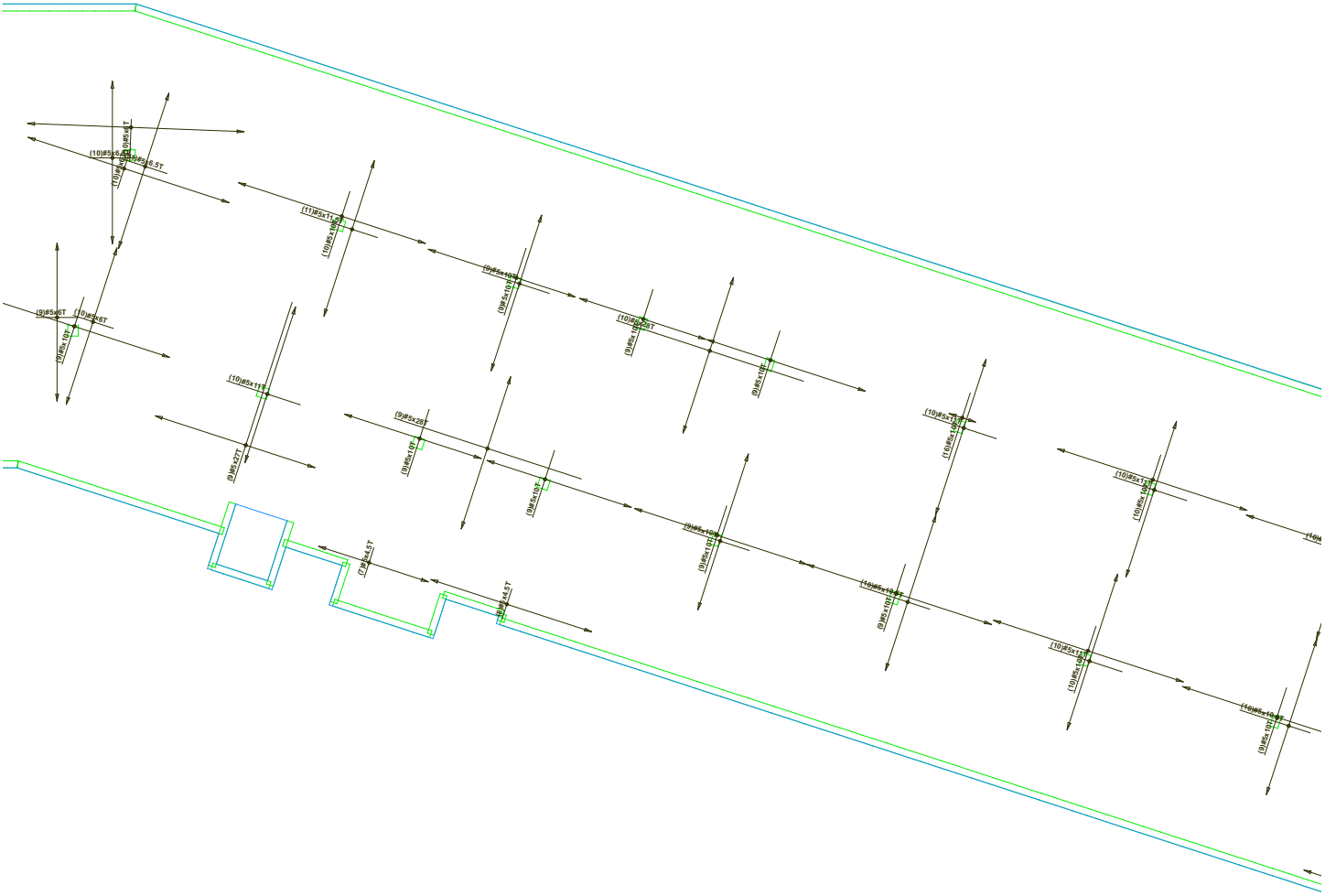
Reinforcement: Top Bars Plan

Reinforcement: User Lines; User Notes; User Dimensions; Latitude User Concentrated Reinf.; Latitude Program Concentrated Reinf.; Latitude User Distributed Reinf.; Latitude Program Distributed Reinf.; Longitude User Concentrated Reinf.; Longitude Program Concentrated Reinf.; Longitude User Distributed Reinf.; Longitude Program Distributed Reinf.; Top Face Concentrate
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:300

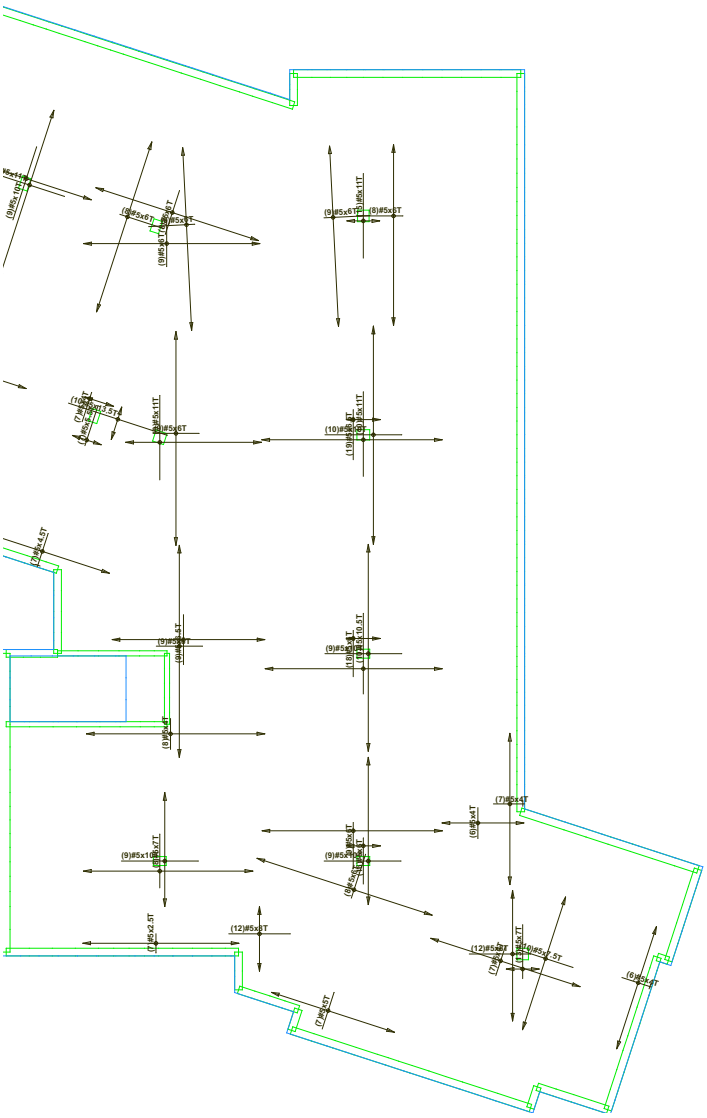


Reinforcement: Top Bars Plan (2)

d Reinf.; Both Faces Concentrated Reinf.; Top Face Distributed Reinf.; Both Faces Distributed Reinf.; Concentrated Reinf. Descriptions; Concentrated Reinf. Extent; Distributed Reinf. Descriptions; Distributed Reinf. Extent;



Reinforcement: Top Bars Plan (3)



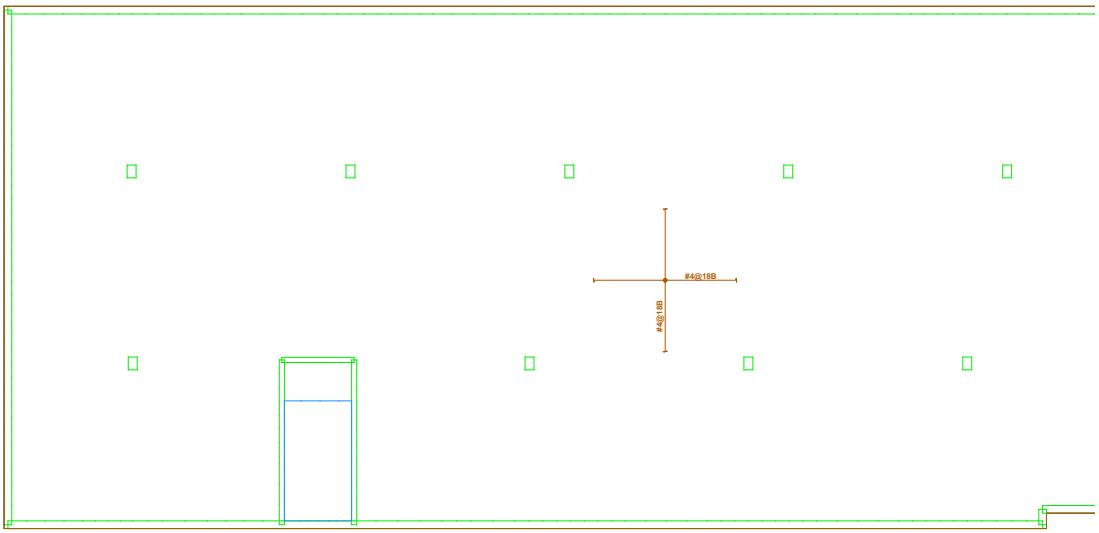
Reinforcement: Top Bars Plan (4)

Reinforcement: Top Bars Plan (5)

Reinforcement: Top Bars Plan (6)

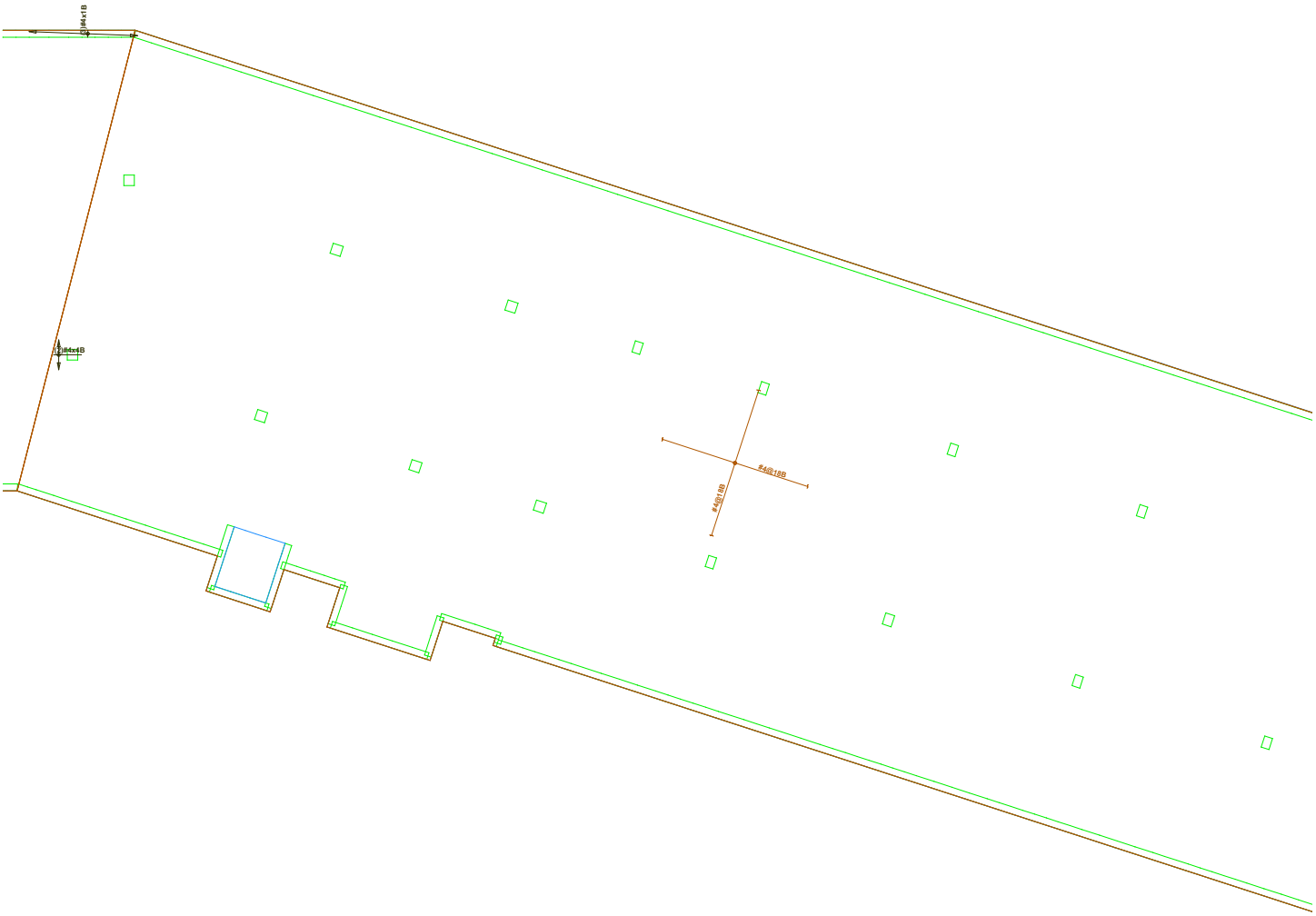
Reinforcement: Bottom Bars Plan

Reinforcement: User Lines; User Notes; User Dimensions; Latitude User Concentrated Reinf.; Latitude Program Concentrated Reinf.; Latitude User Distributed Reinf.; Latitude Program Distributed Reinf.; Longitude User Concentrated Reinf.; Longitude Program Concentrated Reinf.; Longitude User Distributed Reinf.; Longitude Program Distributed Reinf.; Bottom Face Concentr
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:300

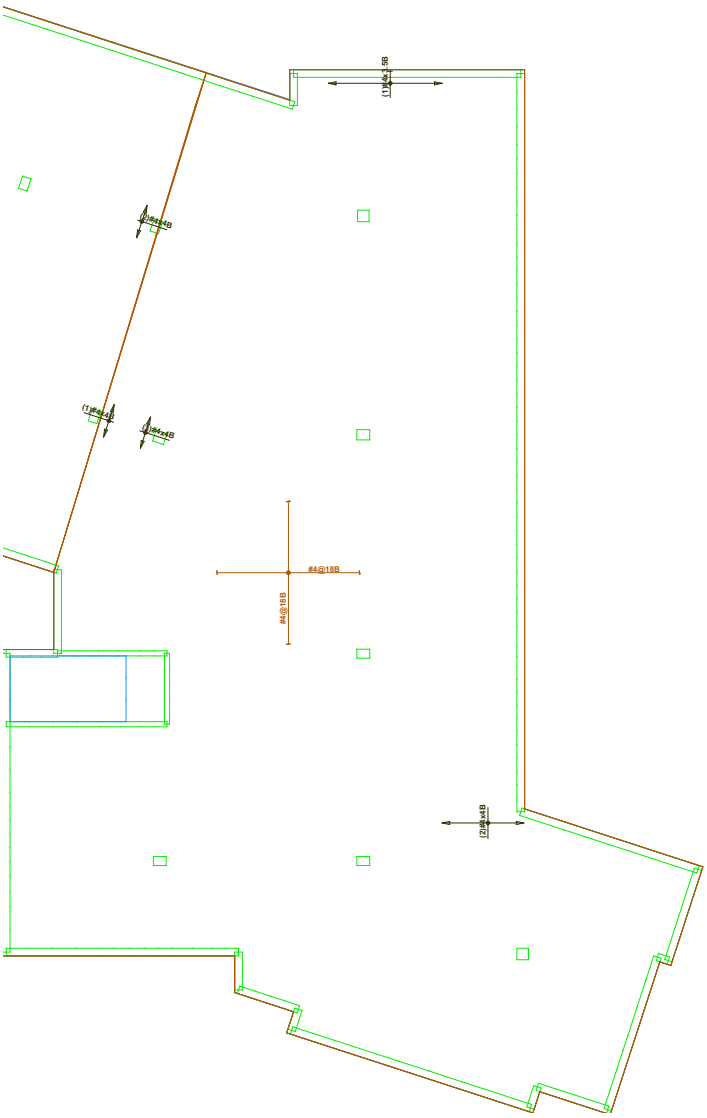


Reinforcement: Bottom Bars Plan (2)

ated Reinf.; Both Faces Concentrated Reinf.; Bottom Face Distributed Reinf.; Both Faces Distributed Reinf.; Concentrated Reinf. Descriptions; Concentrated Reinf. Extent; Distributed Reinf. Descriptions; Distributed Reinf. Extent;



Reinforcement: Bottom Bars Plan (3)



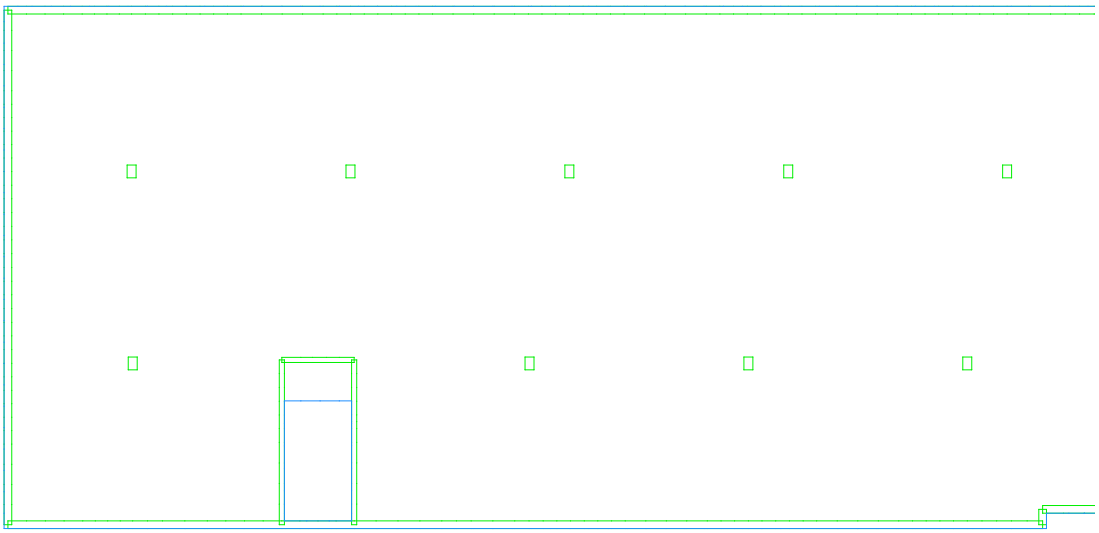
Reinforcement: Bottom Bars Plan (4)

Reinforcement: Bottom Bars Plan (5)

Reinforcement: Bottom Bars Plan (6)

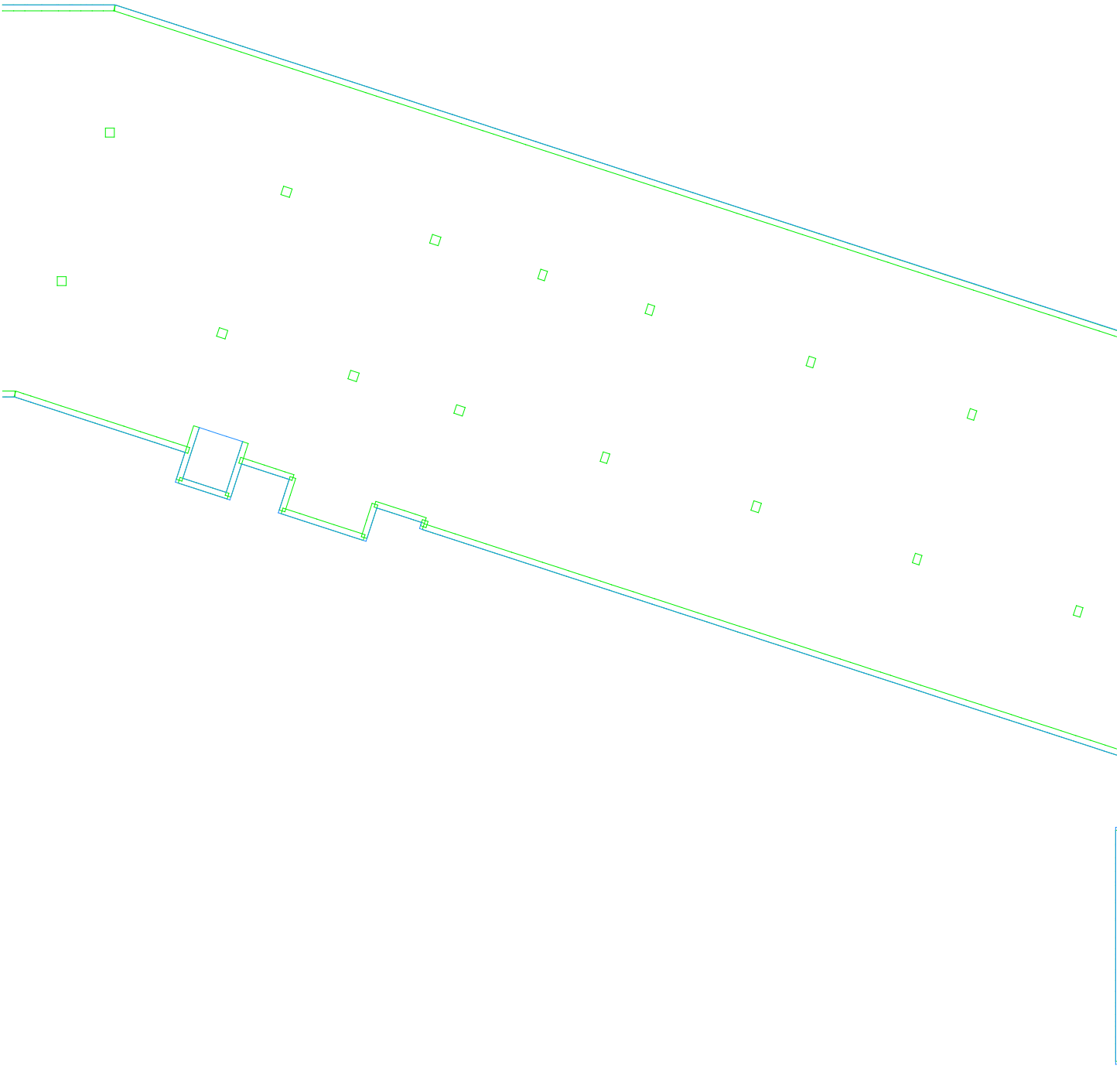
Reinforcement: Shear Bars Plan

Reinforcement: User Lines; User Notes; User Dimensions; Latitude User Transverse Reinf.; Latitude Program Transverse Reinf.; Latitude User Individual Transverse Bars; Latitude Program Individual Transverse Bars; Longitude User Transverse Reinf.; Longitude Program Transverse Reinf.; Longitude User Individual Transverse Bars; Longitude Program Individual Transverse Ba
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:300

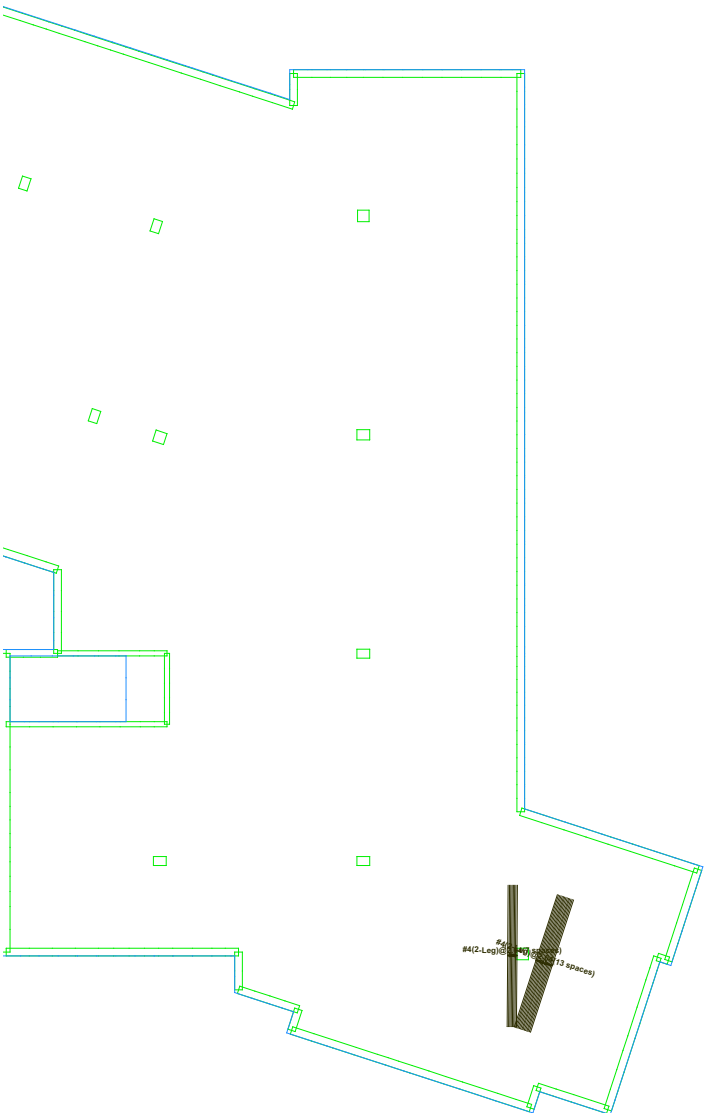


Reinforcement: Shear Bars Plan (2)

ars; Transverse Reinf. Descriptions; Transverse Reinf. Extent;



Reinforcement: Shear Bars Plan (3)



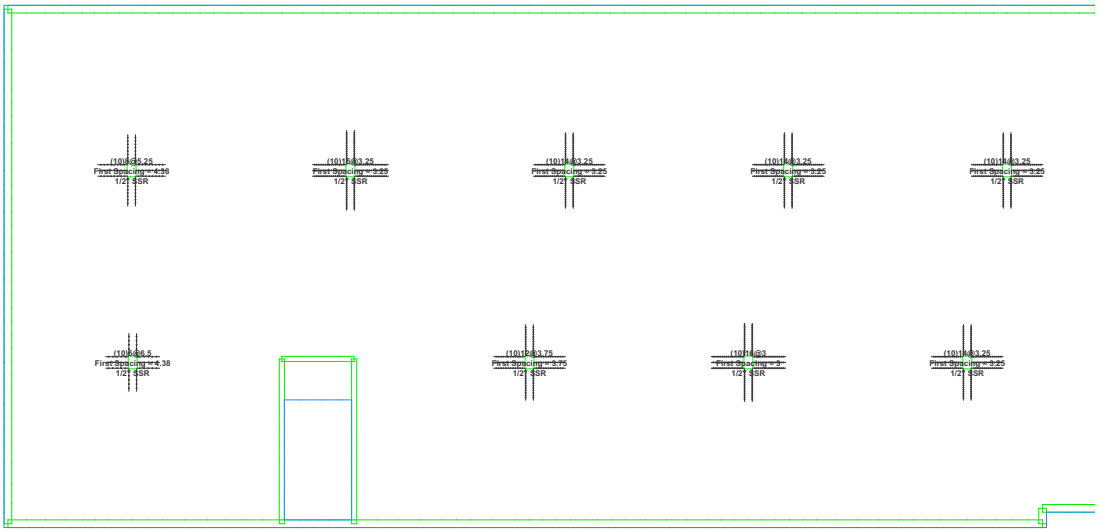
Reinforcement: Shear Bars Plan (4)

Reinforcement: Shear Bars Plan (5)

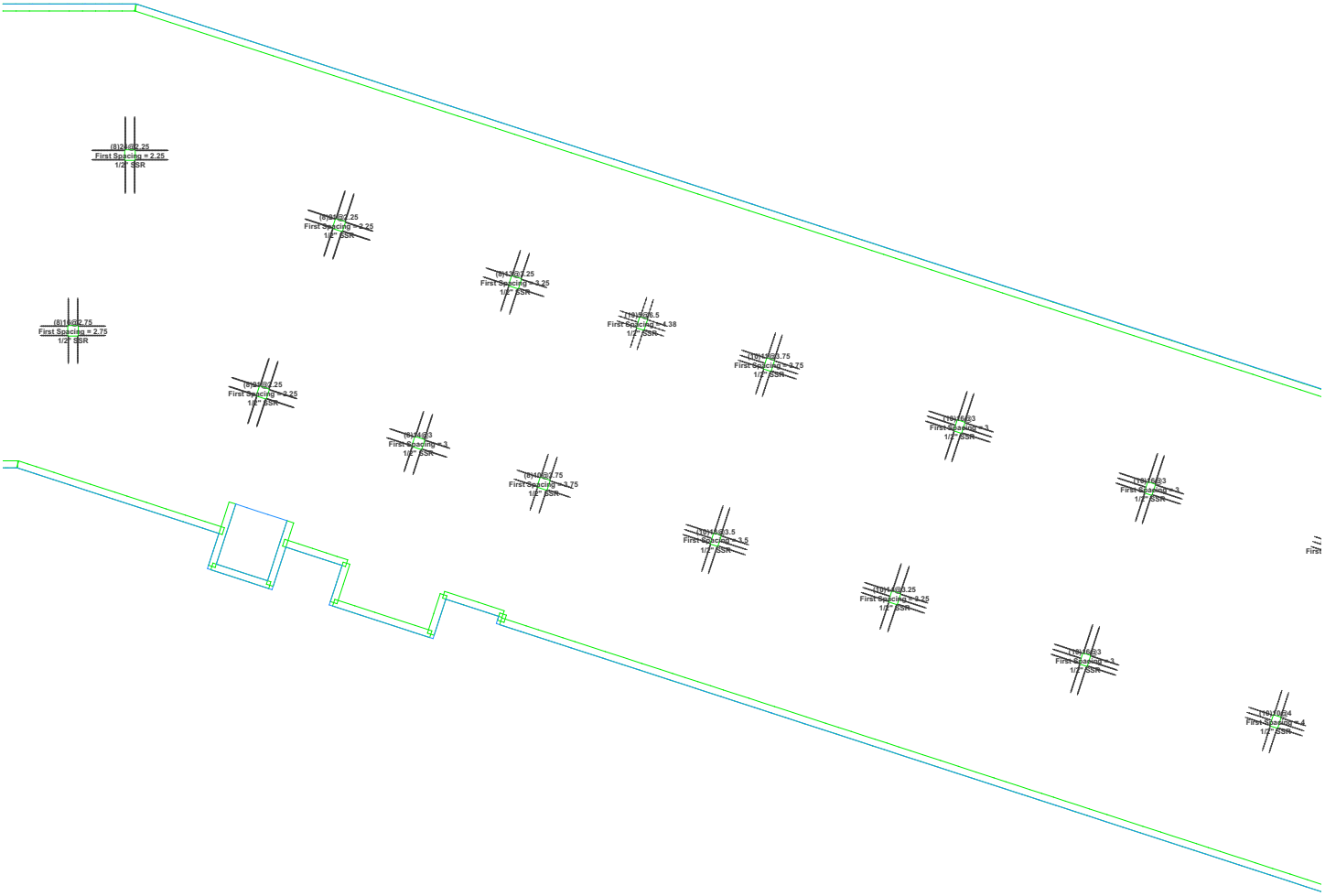
Reinforcement: Shear Bars Plan (6)

Reinforcement: SSR Plan

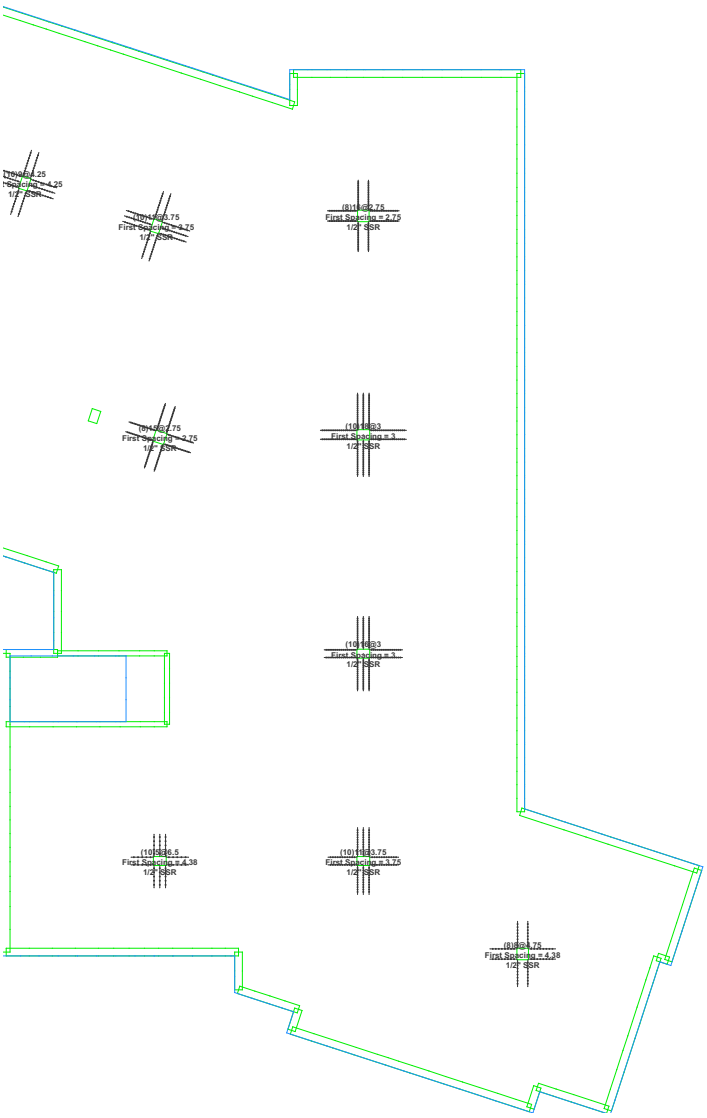
Reinforcement: User Lines; User Notes; User Dimensions; Program SSR Callouts; SSR Callout Details; Program SSR Rails;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:300



Reinforcement: SSR Plan (2)



Reinforcement: SSR Plan (3)



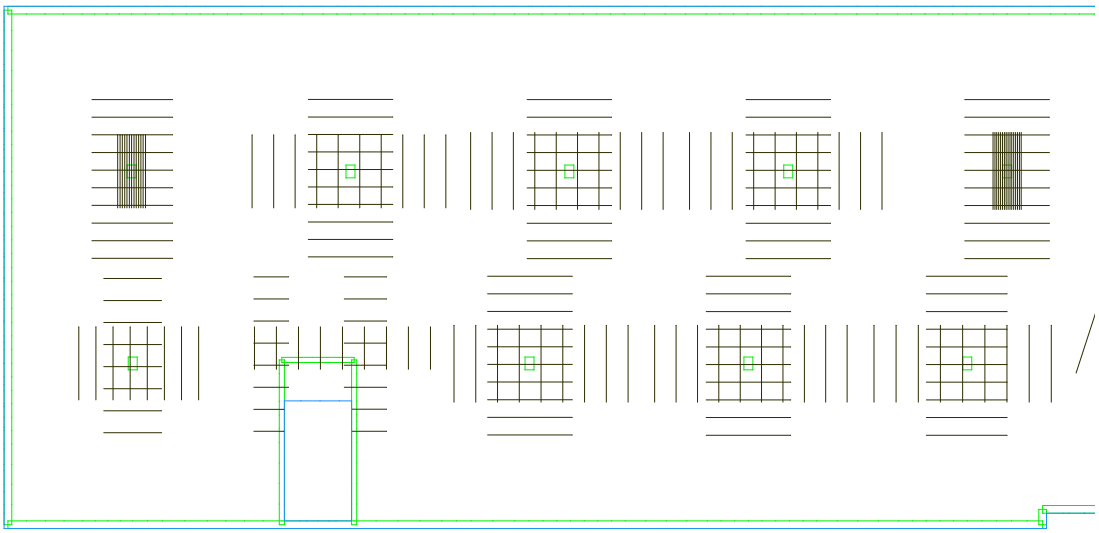
Reinforcement: SSR Plan (4)

Reinforcement: SSR Plan (5)

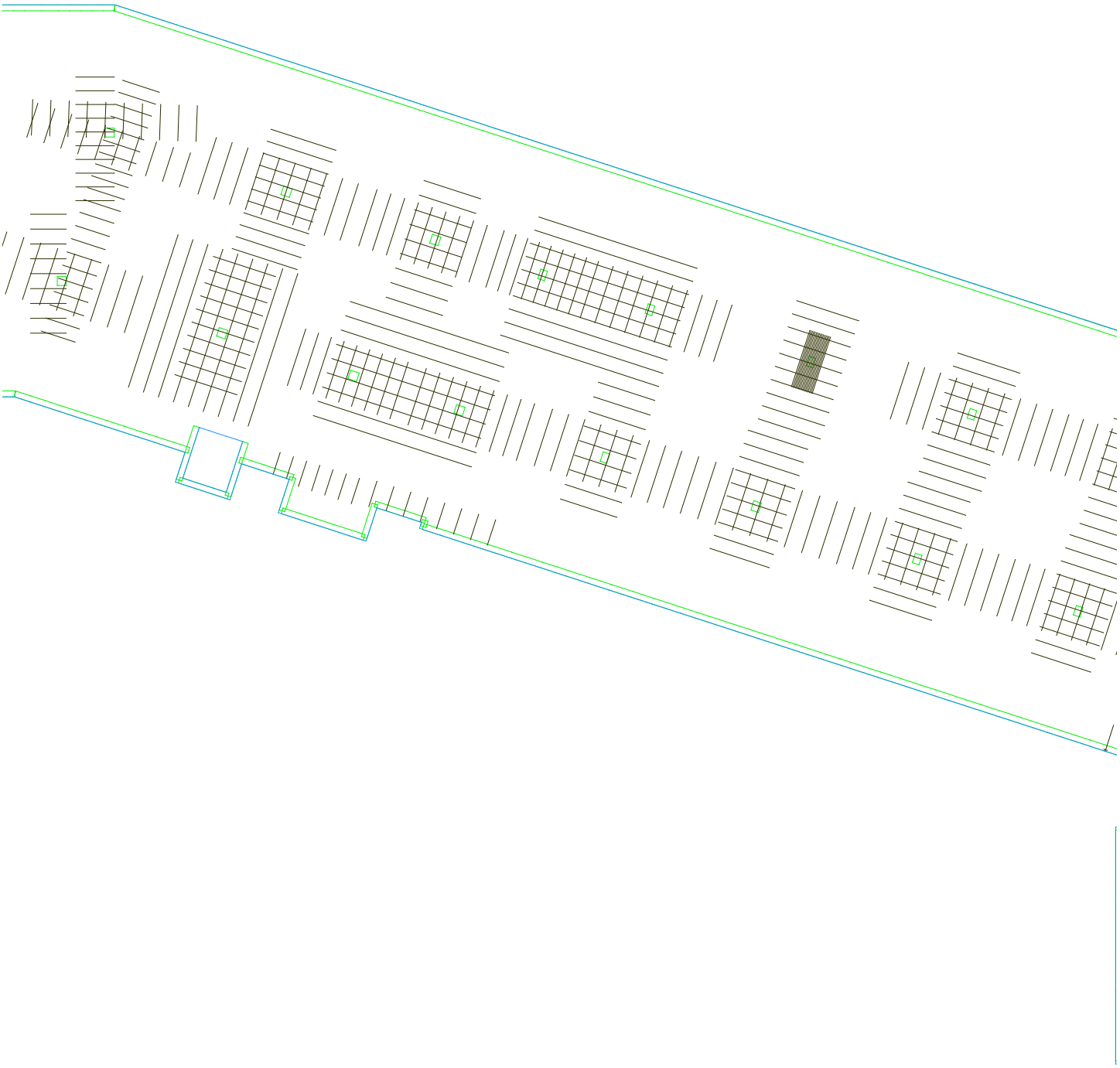
Reinforcement: SSR Plan (6)

Reinforcement: Individual Top Bars Plan

Reinforcement: User Lines; User Notes; User Dimensions; Longitude User Individual Bars; Longitude Program Individual Bars; Latitude User Individual Bars; Latitude Program Individual Bars; Top Face Individual Bars; Both Faces Individual Bars; Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:300



Reinforcement: Individual Top Bars Plan (2)



Reinforcement: Individual Top Bars Plan (3)

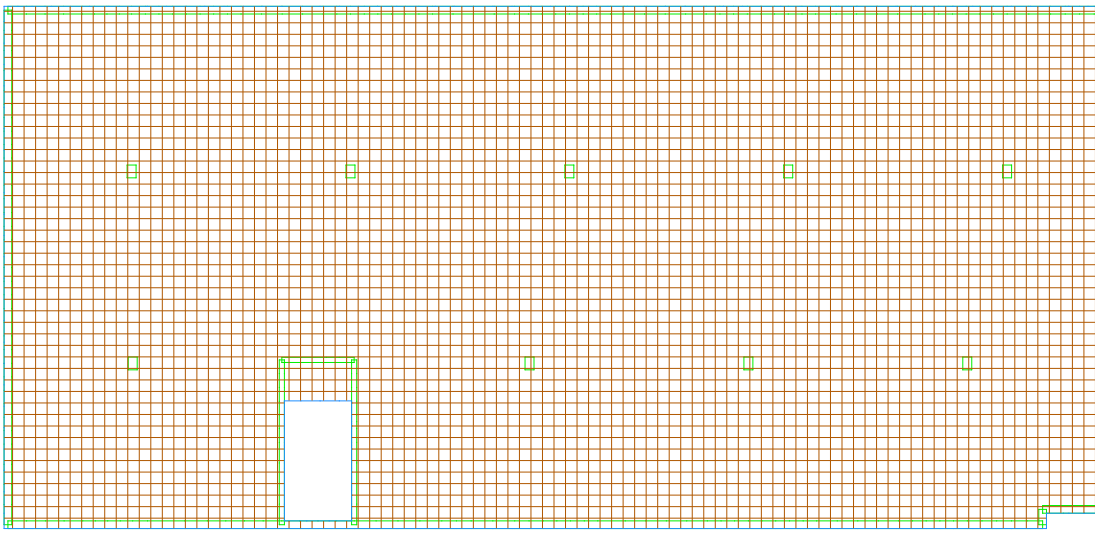
Reinforcement: Individual Top Bars Plan (4)

Reinforcement: Individual Top Bars Plan (5)

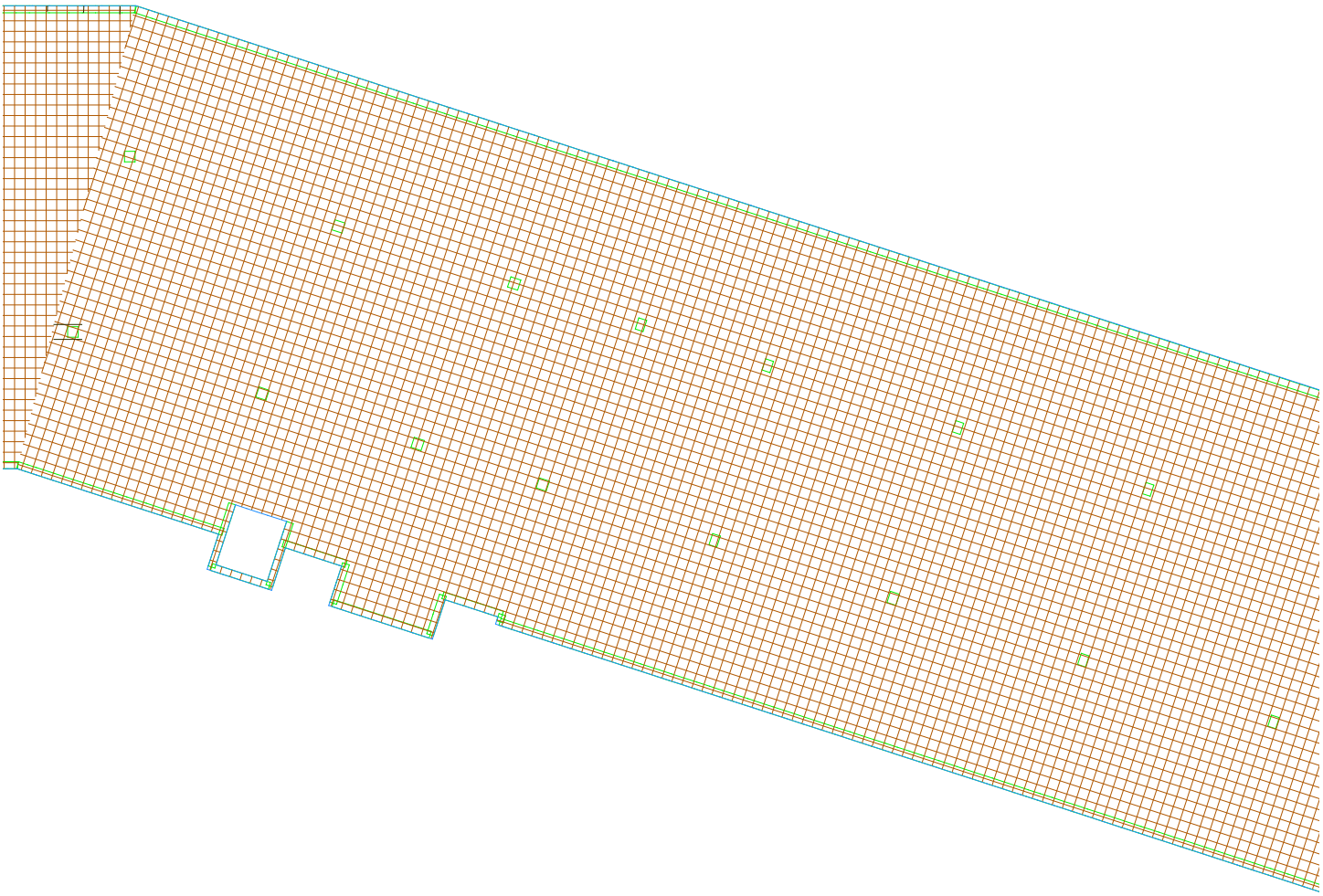
Reinforcement: Individual Top Bars Plan (6)

Reinforcement: Individual Bottom Bars Plan

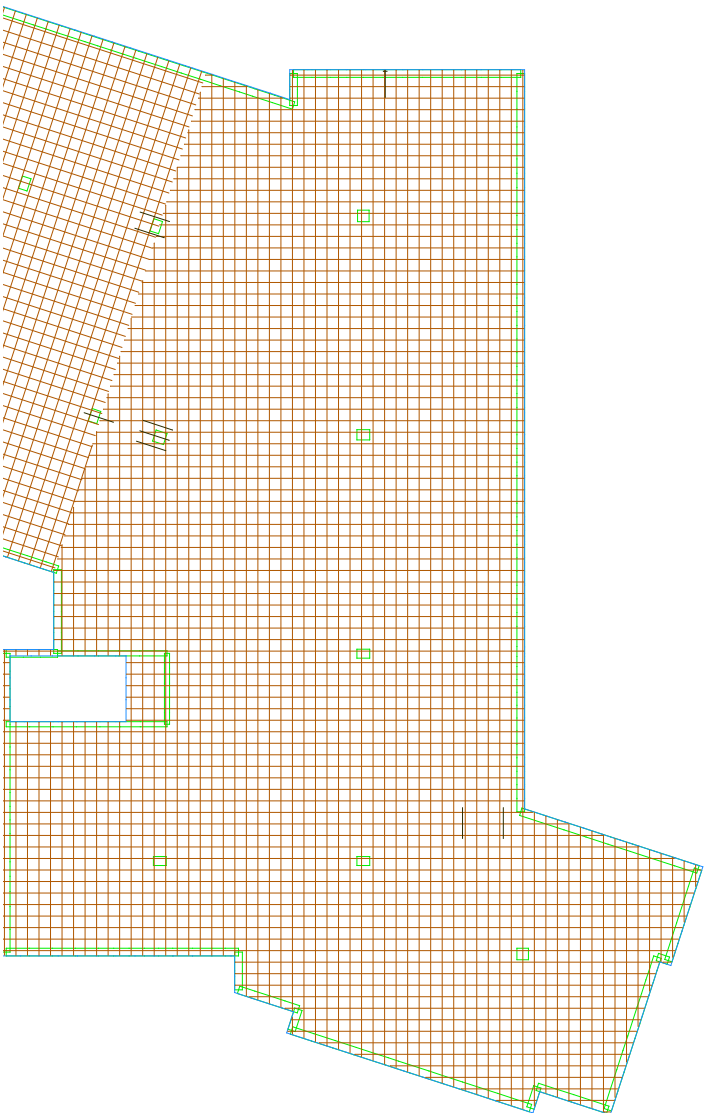
Reinforcement: User Lines; User Notes; User Dimensions; Longitude User Individual Bars; Longitude Program Individual Bars; Latitude User Individual Bars; Latitude Program Individual Bars; Bottom Face Individual Bars; Both Faces Individual Bars; Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:300



Reinforcement: Individual Bottom Bars Plan (2)



Reinforcement: Individual Bottom Bars Plan (3)



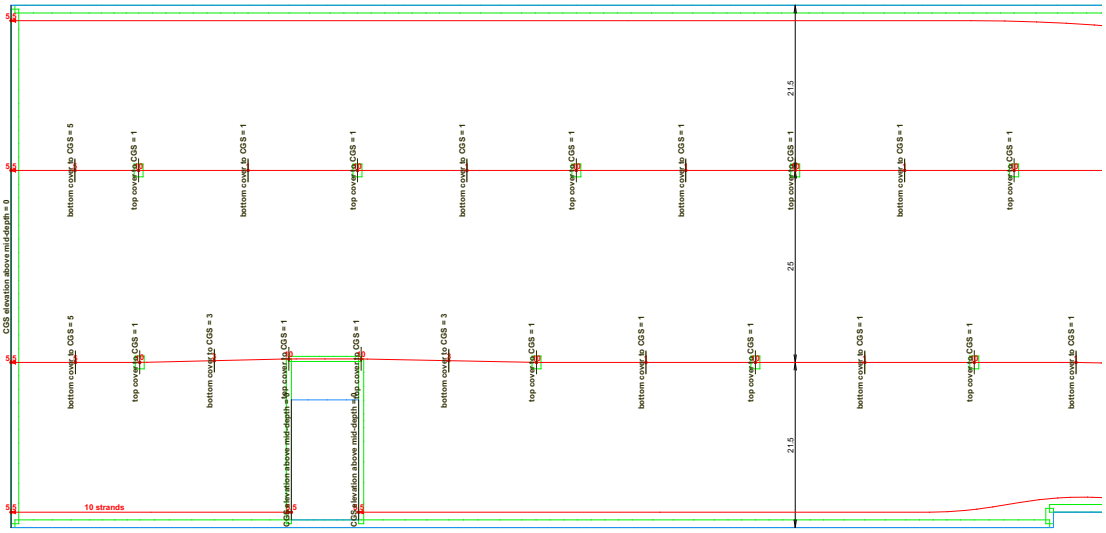
Reinforcement: Individual Bottom Bars Plan (4)

Reinforcement: Individual Bottom Bars Plan (5)

Reinforcement: Individual Bottom Bars Plan (6)

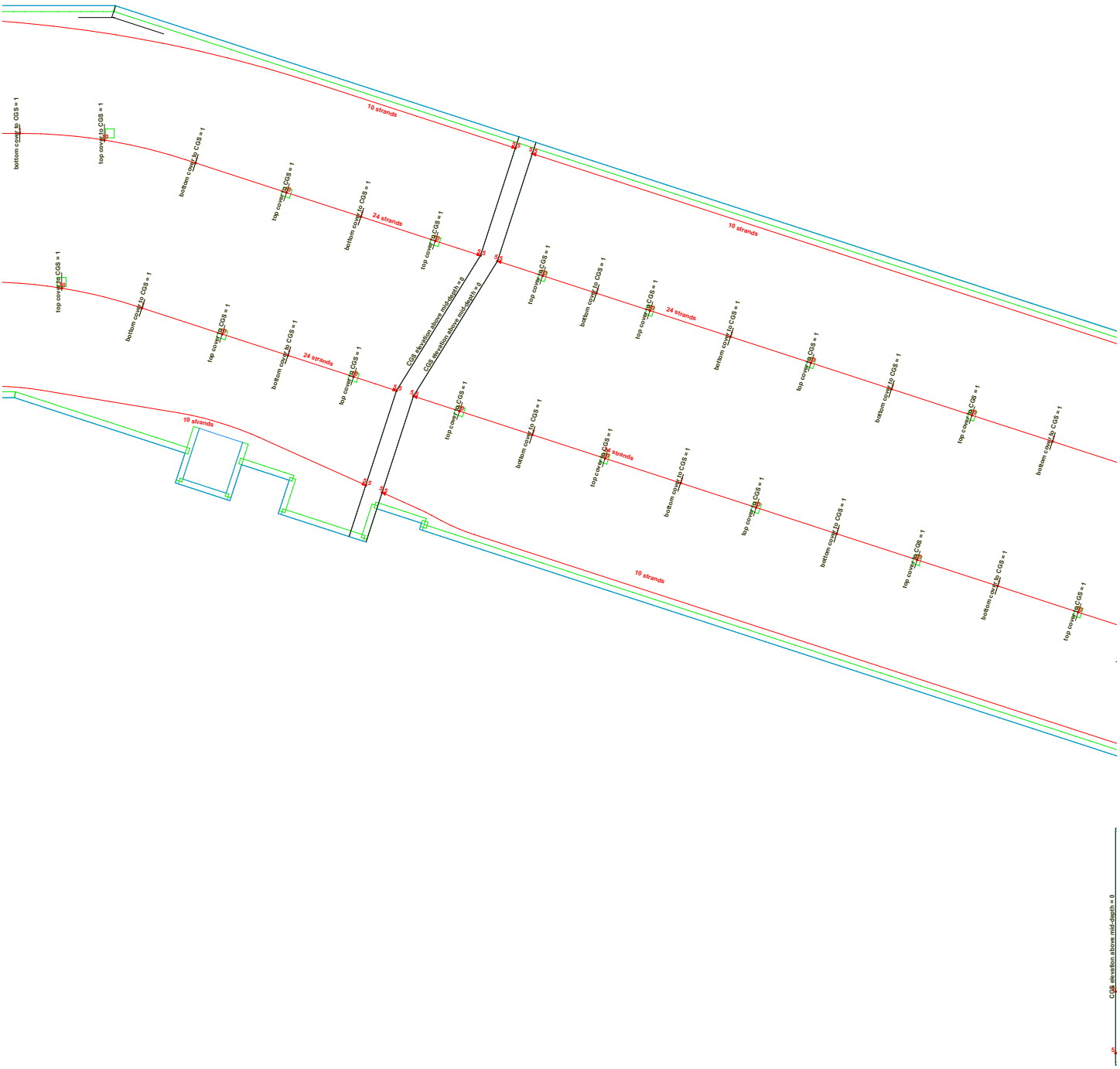
Latitude Tendon Parameters: Standard Plan

Latitude Tendon Parameters: Banded Tendons; Banded Tendon Description; Banded Tendon Fillet Graphics; Distributed Tendon Quadrilateral; Distributed Tendon Description; Distributed Tendon Profile Area Edge; Distributed Tendon Profile Span Changes; Distributed Tendon Profile Concrete Elevation Change; Distributed Tendon Profile Polyline Ends; Distributed Tendon Ove
Mesh Input: Slab Areas;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Manual Latitude Tendon: Tendons; Num Strands; Tendon Points; Profile Values;
Scale = 1:300

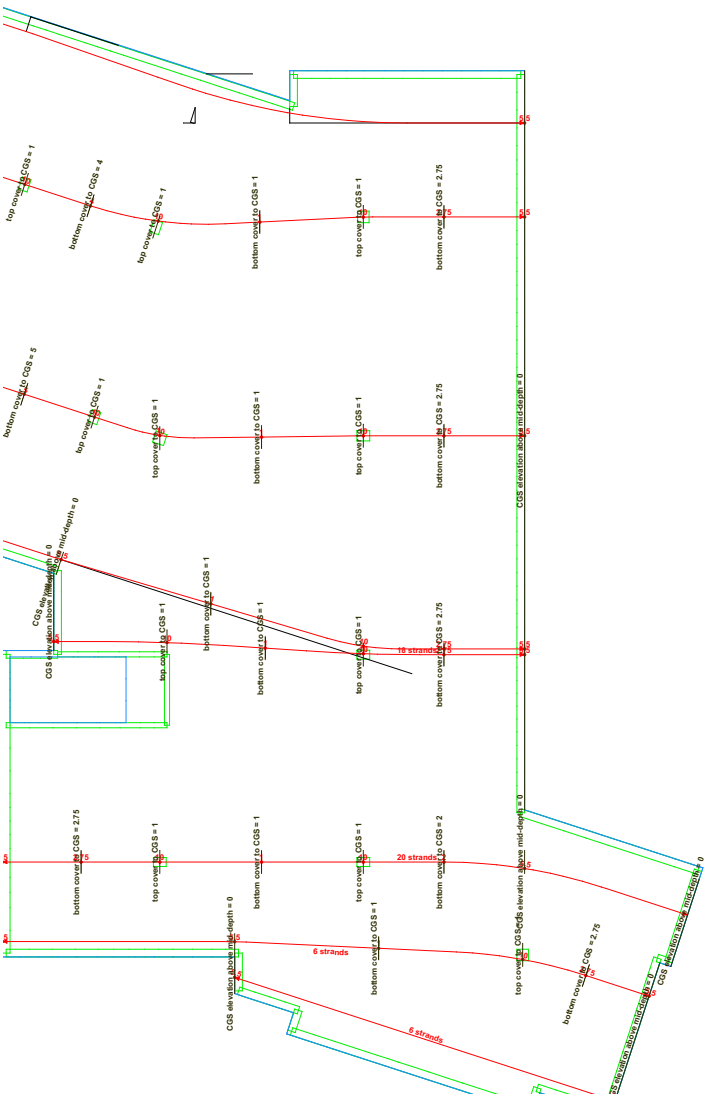


Latitude Tendon Parameters: Standard Plan (2)

rlap Areas; Tendon Void; Tendon Profile Polylines; Tendon Profile Polyline Details; Profile Points; Profile Elevation Values; Profile Nodes; Jack Region; Jack Region Hatching; Jack Region Corner Icon; User Notes; User Lines; User Dimensions;



Latitude Tendon Parameters: Standard Plan (3)



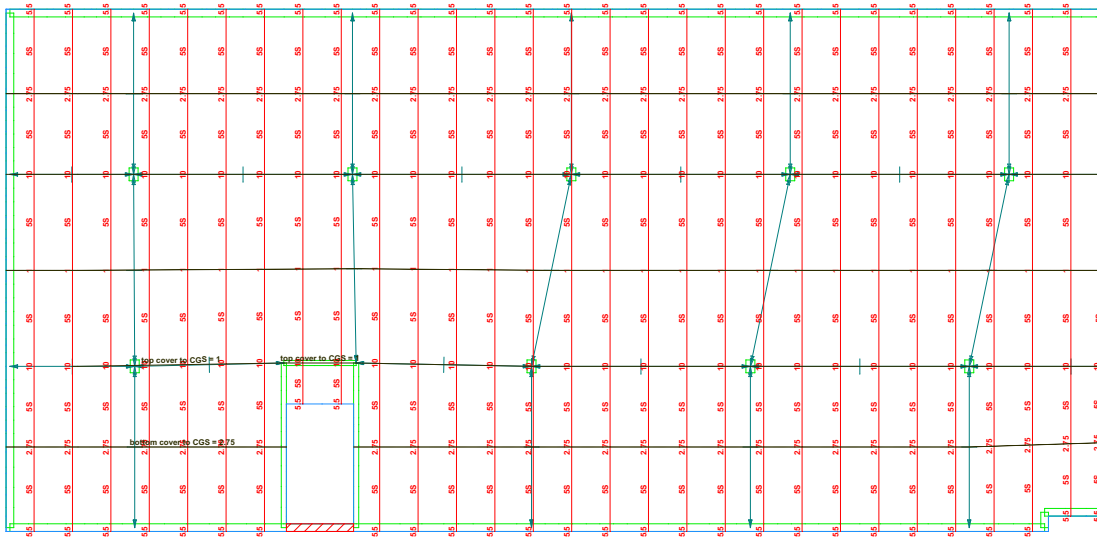
Latitude Tendon Parameters: Standard Plan (4)

Latitude Tendon Parameters: Standard Plan (5)

Latitude Tendon Parameters: Standard Plan (6)

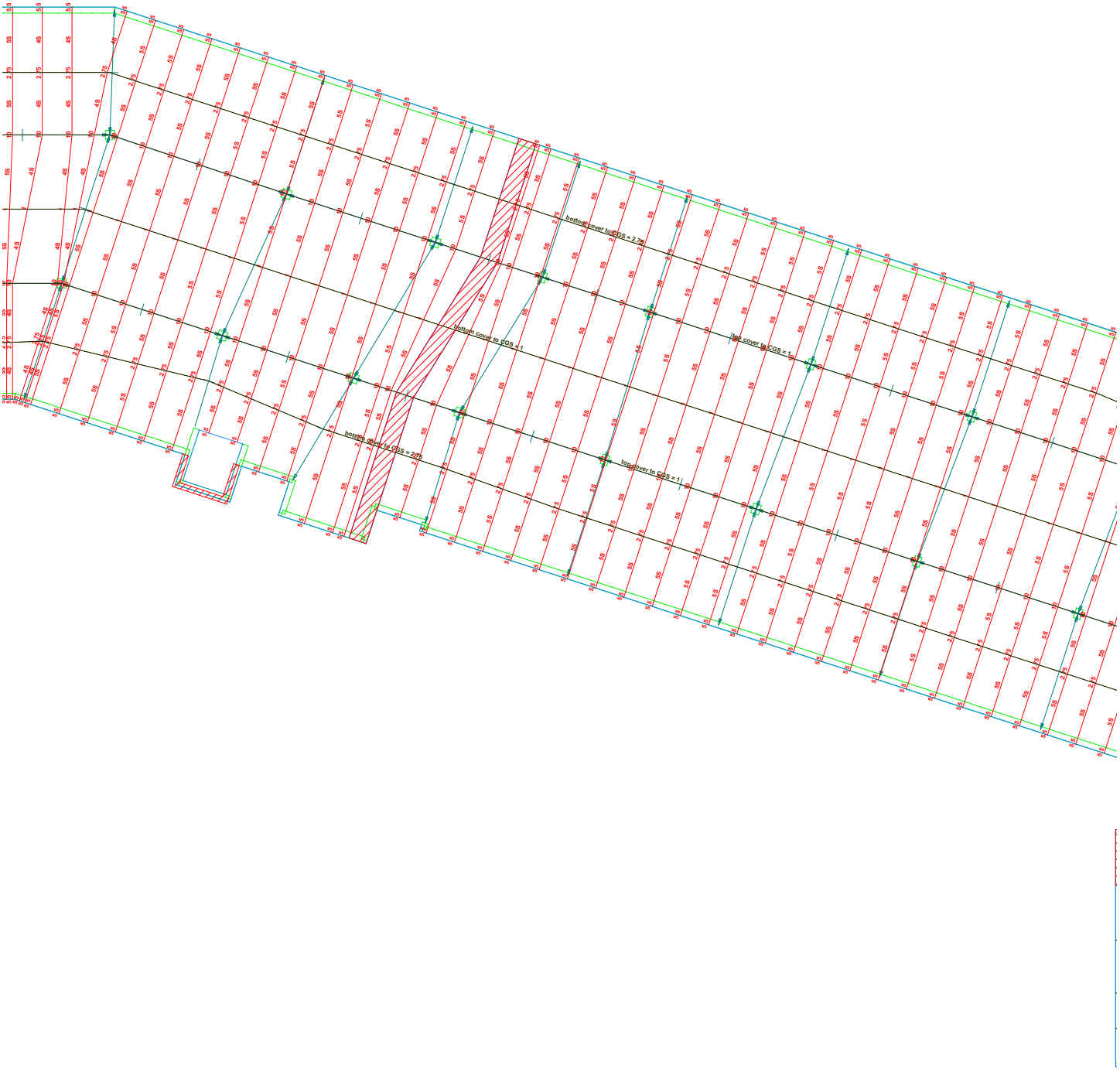
Longitude Tendon Parameters: Standard Plan

Longitude Tendon Parameters: Banded Tendons; Banded Tendon Description; Banded Tendon Fillet Graphics; Distributed Tendon Quadrilateral; Distributed Tendon Description; Distributed Tendon Profile Area Edge; Distributed Tendon Profile Span Changes; Distributed Tendon Profile Concrete Elevation Change; Distributed Tendon Profile Polyline Ends; Distributed Tendon O
Mesh Input: Slab Areas;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Design Strip: Latitude SSs; Longitude SSs;
Manual Longitude Tendon: Tendons; Num Strands; Tendon Points; Profile Values;
Scale = 1:300

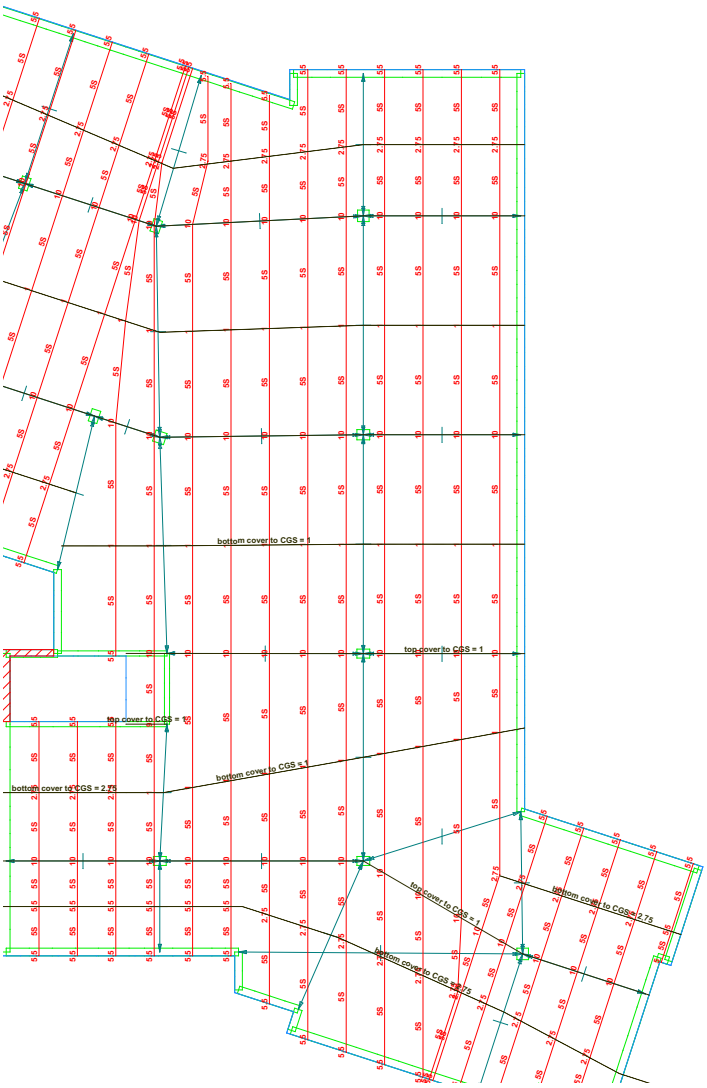


Longitude Tendon Parameters: Standard Plan (2)

Iverlap Areas; Tendon Void; Tendon Profile Polylines; Tendon Profile Polyline Details; Profile Points; Profile Elevation Values; Profile Nodes; Jack Region; Jack Region Hatching; Jack Region Corner Icon; User Notes; User Lines; User Dimensions;



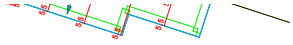
Longitude Tendon Parameters: Standard Plan (3)



Longitude Tendon Parameters: Standard Plan (4)

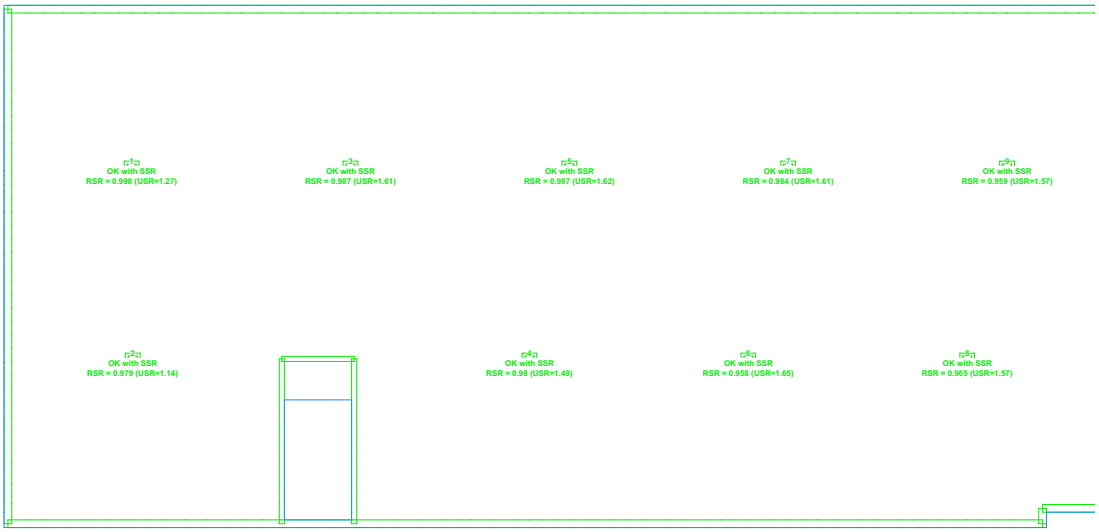
Longitude Tendon Parameters: Standard Plan (5)

Longitude Tendon Parameters: Standard Plan (6)

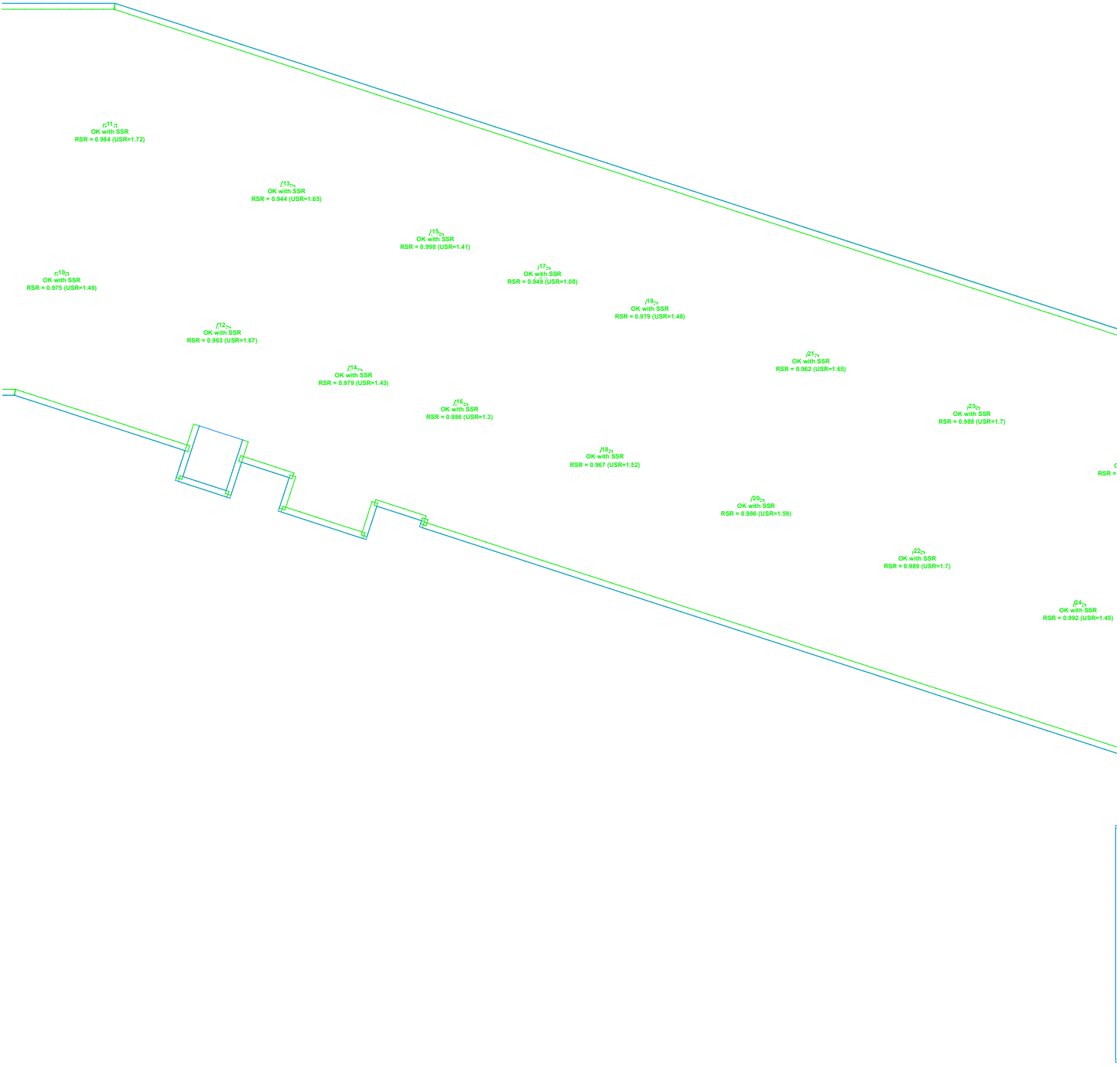


Design Status: Punching Shear Status Plan

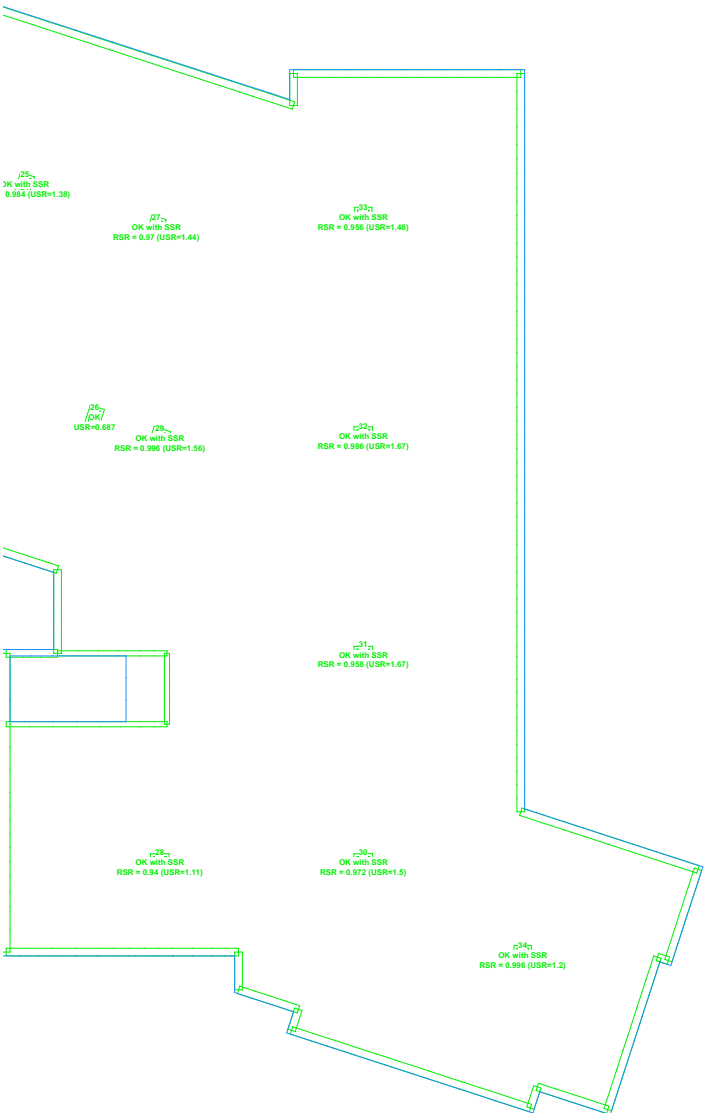
Design Status: PC Designs; PC Design Numbers; PC Design Status; PC Design Stress Ratios; PC Design Sections; PC Design Flexural Section Design; PC Design Flexural Section Analysis; User Notes; User Lines; User Dimensions; Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:300



Design Status: Punching Shear Status Plan (2)



Design Status: Punching Shear Status Plan (3)



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Design Status: Punching Shear Status Plan (4)

Design Status: Punching Shear Status Plan (5)

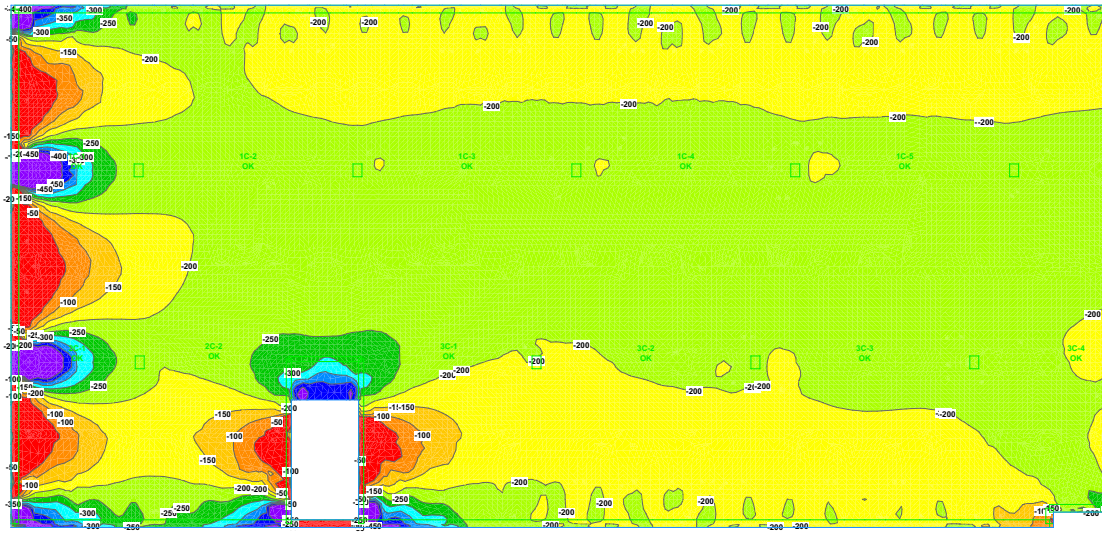
Design Status: Punching Shear Status Plan (6)

Design Status: Latitude Status Plan

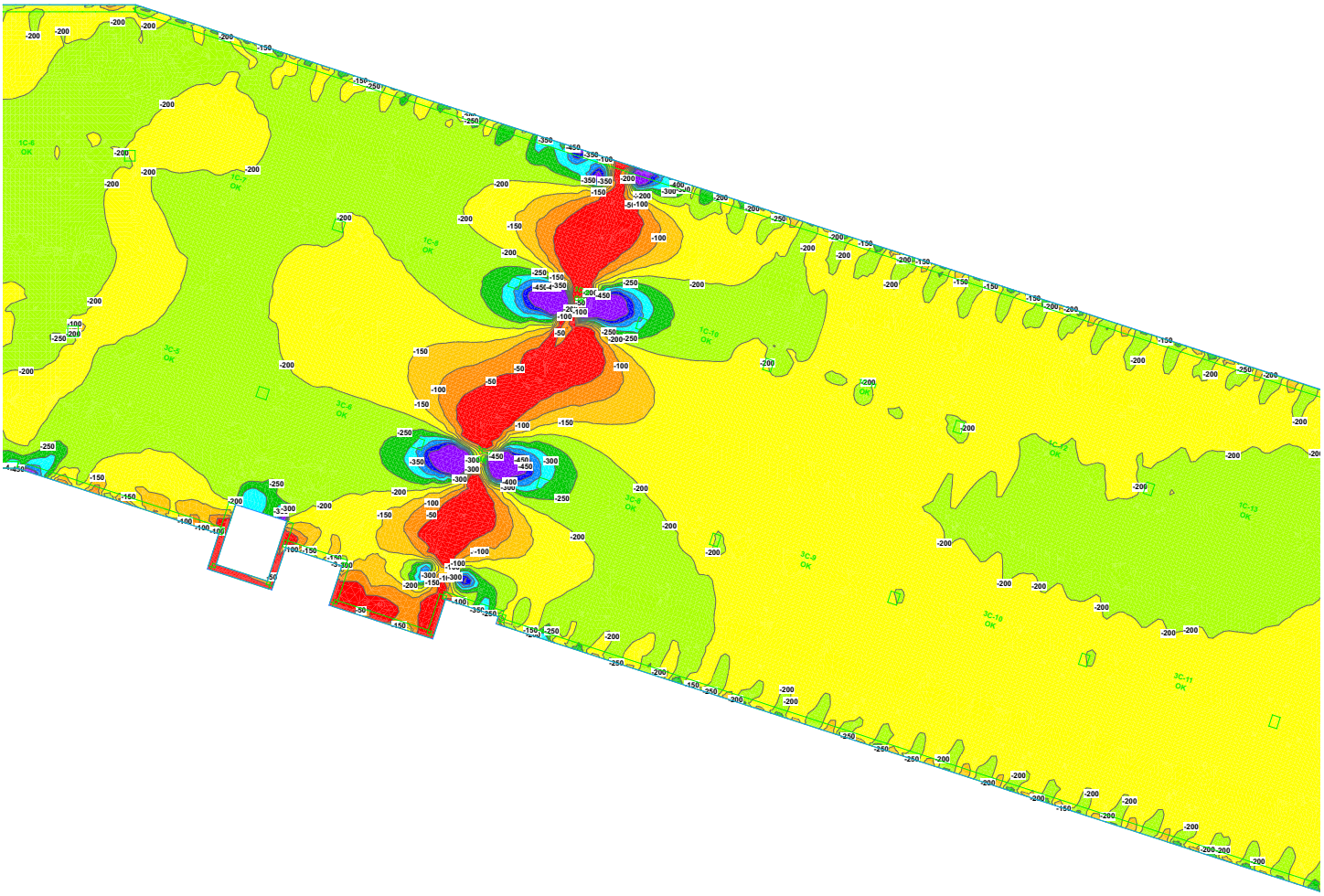
Design Status: User Lines; User Notes; User Dimensions; Latitude Span Designs; Span Design Numbers; Span Design Status; Latitude DS Designs; DS Design Numbers; DS Design Status; Latitude Span Segment Deflection Checks; Latitude Deflection Checks; Span Segment Deflection Check Status; Deflection Check Status; Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:300
Service Design - Axial Stress Plot (Maximum Values) (@Center of Slab) (X-Axis Direction)

-450 -400 -350 -300 -250 -200 -150 -100 -50

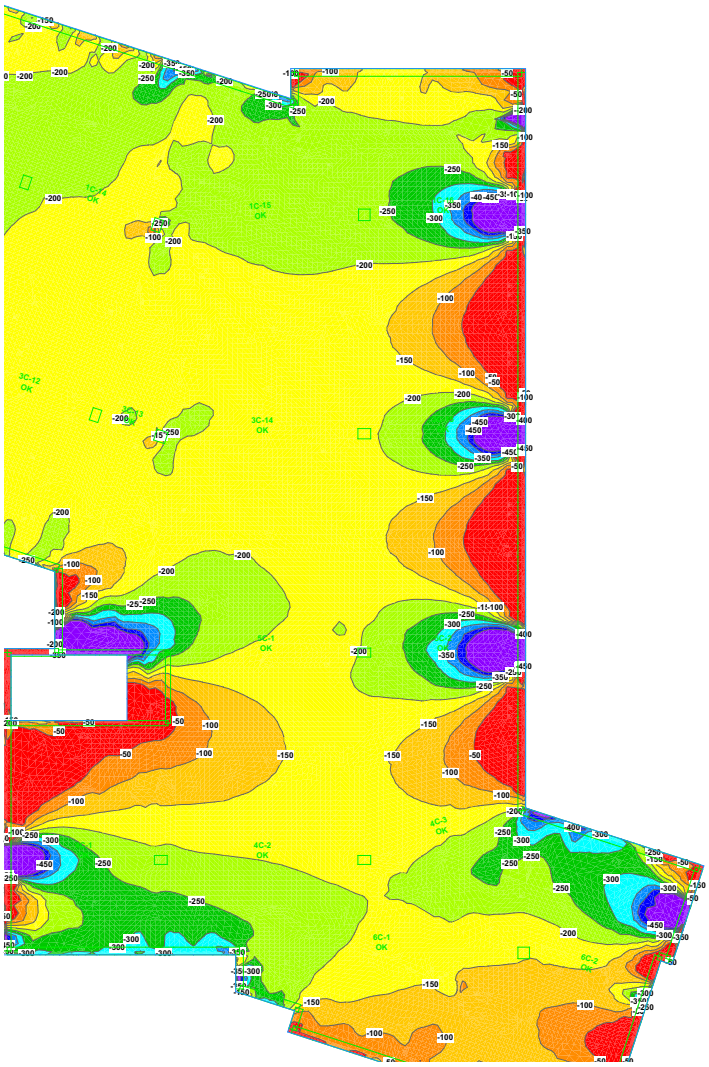
Min Value = -2681 psi @ (640.7,39.04) Max Value = 335.6 psi @ (640.5,35.54)



Design Status: Latitude Status Plan (2)



Design Status: Latitude Status Plan (3)



Design Status: Latitude Status Plan (4)

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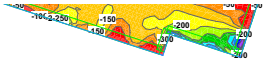
Design Status: Latitude Status Plan (5)

PRRWF20240597

Design Status: Latitude Status Plan (6)

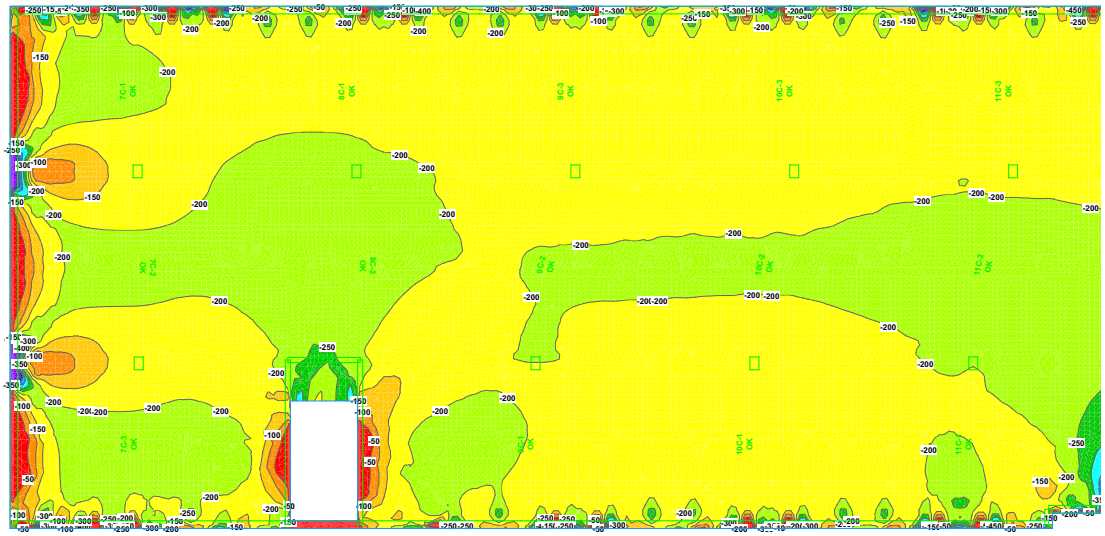


Design Status: Longitude Status Plan

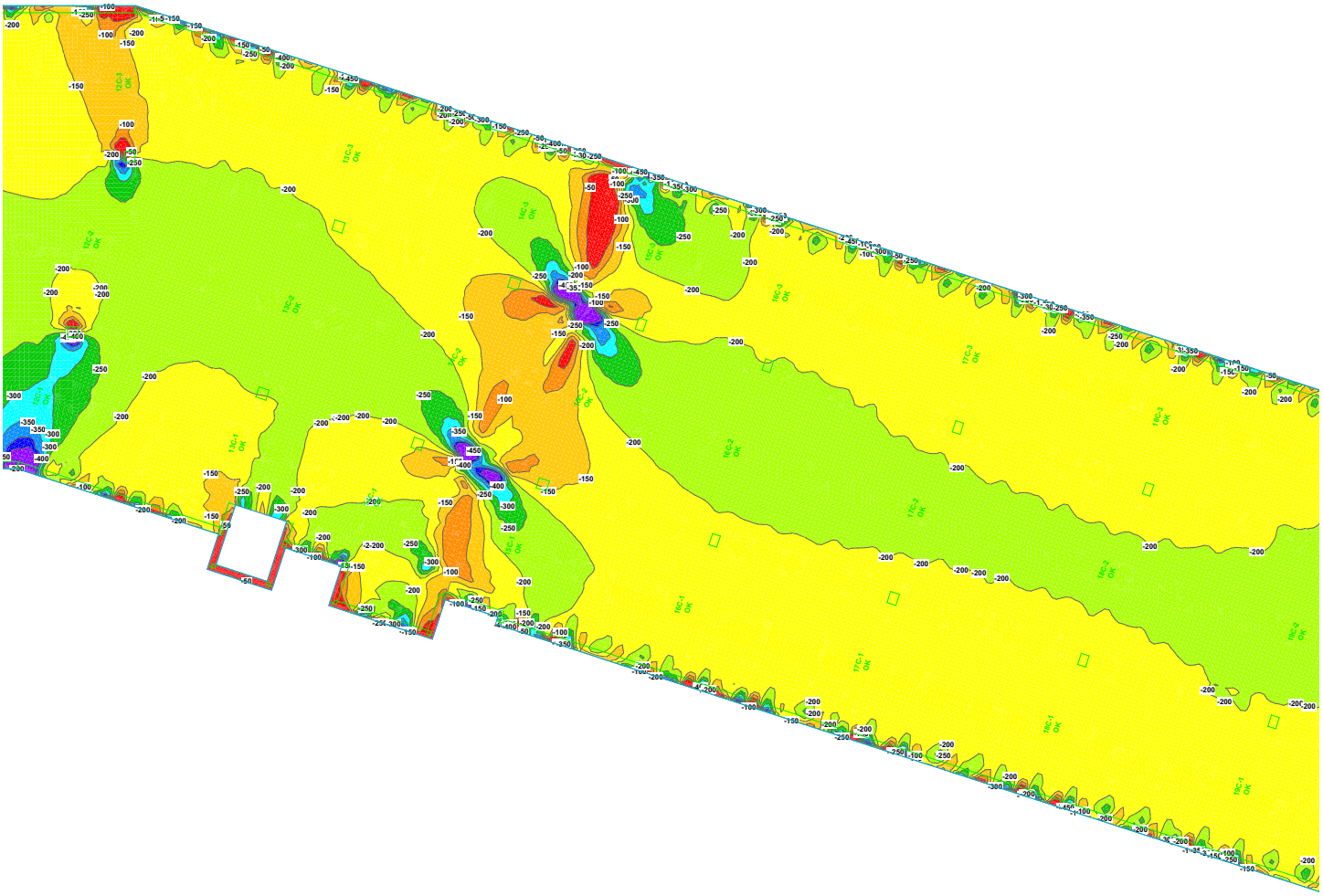
Design Status: User Lines; User Notes; User Dimensions; Longitude Span Designs; Span Design Numbers; Span Design Status; Longitude DS Designs; DS Design Numbers; DS Design Status; Longitude Span Segment Deflection Checks; Longitude Deflection Checks; Span Segment Deflection Check Status; Deflection Check Status; Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:300
Service Design - Axial Stress Plot (Maximum Values) (@Center of Slab) (Y-Axis Direction)

-450 -400 -350 -300 -250 -200 -150 -100 -50

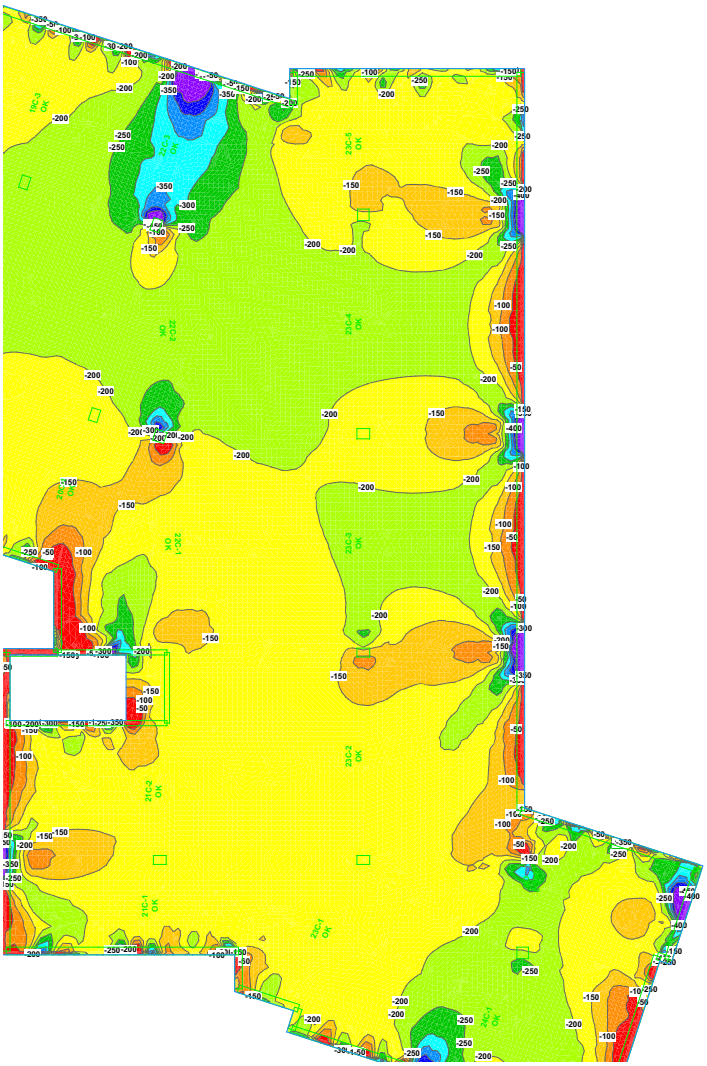
Min Value = -1483 psi @ (640.7,39.04) Max Value = 362.3 psi @ (658.4,-1.504)



Design Status: Longitude Status Plan (2)



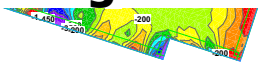
Design Status: Longitude Status Plan (3)



Design Status: Longitude Status Plan (4)

Design Status: Longitude Status Plan (5)

Design Status: Longitude Status Plan (6)



Calc Log

Calculating Through Detailing (Everything Out-of-Date)(Considering Previous Warnings)
Active Calculation Options:
    The structure is not automatically stabilized in the X and Y directions.
    Supports above slab NOT included in self-dead loading.
    Tendon vertical component NOT considered in punch check reactions.
    Design reinforcement.
    6 zero-tension iterations are used to eliminate tension in area springs.
    Creep Factor of 3.35 used in ECR calculations.
    Shrinkage strain of 0.0004 used in ECR calculations.
    ACI 318-19 is used in design.
    IBC 2018 is used for live load reduction calculations.
Assembling Stiffness Matrix.
    46885 Degrees of Freedom
Triangularizing Stiffness Matrix.
Creating Self-Dead Loading.
Generating Program Tendons.
    No Tendons to Generate on Longitude Tendon Parameters layer
Creating Balance Loading.
Detailing User Reinforcement.
Determining Concrete Cross Sections
Determining Tendon Cross Sections
Determining Reinforcing Bar Cross Sections
Solving for Self-Dead Loading.
    Solving for Self-Dead Loading - Pattern: Full Pattern.
        Total Loads: (0,0,-4360) Kips
        Total Reactions: (-6.05e-12,5.88e-11,4360) Kips
        Load-Reaction Tolerance: (-6.05e-12,5.88e-11,2.3e-10) Kips
Solving for Balance Loading.
    Solving for Balance Loading - Pattern: Full Pattern.
        Total Loads: (-0.000642,-0.00166,-3.91e-14) Kips
        Total Reactions: (0.000642,0.00166,-2.1e-10) Kips
        Load-Reaction Tolerance: (1.94e-11,-2.52e-10,-2.1e-10) Kips
Solving for Temporary Construction (At Stressing) Loading.
    Temporary Construction (At Stressing) Loading has No Loads.
Solving for Other Dead Loading.
    Solving for Other Dead Loading - Pattern: Full Pattern.
        Total Loads: (0,0,-3790) Kips
        Total Reactions: (-5.03e-12,5.4e-11,3790) Kips
        Load-Reaction Tolerance: (-5.03e-12,5.4e-11,1.85e-10) Kips
Solving for Live (Reducible) Loading.
    Solving for Live (Reducible) Loading - Pattern: Full Pattern.
        Total Loads: (0,0,-4900) Kips
        Total Reactions: (-1.11e-11,2.53e-11,4900) Kips
        Load-Reaction Tolerance: (-1.11e-11,2.53e-11,1.48e-10) Kips
Solving for Live (Unreducible) Loading.
    Live (Unreducible) Loading has No Loads.
Solving for Live (Storage) Loading.
    Solving for Live (Storage) Loading - Pattern: Full Pattern.
        Total Loads: (0,0,-34.8) Kips
        Total Reactions: (2.52e-13,2.94e-13,34.8) Kips
        Load-Reaction Tolerance: (2.52e-13,2.94e-13,-1.32e-12) Kips
Solving for Live (Parking) Loading.
    Live (Parking) Loading has No Loads.
Solving for Live (Roof) Loading.
    Live (Roof) Loading has No Loads.
Solving for Snow Loading.
    Solving for Snow Loading - Pattern: Full Pattern.
        Total Loads: (0,0,-793) Kips
        Total Reactions: (-1.11e-12,1.07e-11,793) Kips
        Load-Reaction Tolerance: (-1.11e-12,1.07e-11,5.34e-11) Kips
Calculating Precompression in Cross Sections
    Solving for Hyperstatic Loading.
Solving for All Dead LC.
Solving for Dead + Balance LC.
Solving for Initial Service LC.
Solving for Service LC: D + L.

Calc Log (2)

Solving for Service LC: D + Lr.
Solving for Service LC: D + S.
Solving for Service LC: D + 0.75L + 0.75Lr.
Solving for Service LC: D + 0.75L + 0.75S.
Solving for Sustained Service LC.
Solving for Factored LC: 1.4D.
Solving for Factored LC: 1.2D + 1.6L + 0.5Lr.
Solving for Factored LC: 1.2D + f1L + 1.6Lr.
Solving for Factored LC: 1.2D + 1.6L + 0.5S.
Solving for Factored LC: 1.2D + f1L + 1.6S.
Calculating Code Minimum Design envelopes.
Calculating User Minimum Design envelopes.
Calculating Initial Service Design envelopes.
Calculating Service Design envelopes.
Calculating Sustained Service Design envelopes.
Calculating Strength Design envelopes.
Calculating Ductility Design envelopes.
Calculating Code Minimum Design - Pass 0
Calculating User Minimum Design - Pass 0
Calculating Initial Service Design - Pass 0
Calculating Service Design - Pass 0
Calculating Sustained Service Design - Pass 0
Calculating Strength Design - Pass 0
Calculating Ductility Design - Pass 0
Calculating Code Minimum Design - Pass 1
Calculating User Minimum Design - Pass 1
Calculating Initial Service Design - Pass 1
Calculating Service Design - Pass 1
Calculating Sustained Service Design - Pass 1
Calculating Strength Design - Pass 1
Calculating Ductility Design - Pass 1
Calculating Code Minimum Design - Pass 2
Calculating User Minimum Design - Pass 2
Calculating Initial Service Design - Pass 2
Calculating Service Design - Pass 2
Calculating Sustained Service Design - Pass 2
Calculating Strength Design - Pass 2
Calculating Ductility Design - Pass 2
Calculating Code Minimum Design - Final Design Check
Calculating User Minimum Design - Final Design Check
Calculating Initial Service Design - Final Design Check
Calculating Service Design - Final Design Check
Calculating Sustained Service Design - Final Design Check
Calculating Strength Design - Final Design Check
Calculating Ductility Design - Final Design Check
Laying Out Program Reinforcement
Optimizing Program Reinforcement Layout
Converting SSR Designs
Converting Program Transverse Bar Designs
Detailing User Transverse Reinforcement
Detailing Program Reinforcement
Estimating Costs
Deflection Checks are already up to date.
This analysis has been completed successfully, check above for any warnings or errors.

Estimate

Concrete Costs

Materials:	100 per yd³	x	1077 yd³	=	107700
Labor:	50 per yd³	x	1077 yd³	=	53870
Total:	150 per yd³	x	1077 yd³	=	161600

Post-Tensioning Cost

Materials:	1 per pounds	x	32870 pounds	=	32870
Labor:	0.5 per pounds	x	32870 pounds	=	16430
Total:	1.5 per pounds	x	32870 pounds	=	49300

Formwork Cost

Materials:	1 per ft²	x	31740 ft²	=	31740
Labor:	1 per ft²	x	31740 ft²	=	31740
Total:	2 per ft²	x	31740 ft²	=	63470

Mild Steel Reinforcing Cost

Materials:	1000 per tons	x	18.83 tons	=	18830
Labor:	500 per tons	x	18.83 tons	=	9417
Total:	1500 per tons	x	18.83 tons	=	28250

SSR Costs

Materials:	2 per stud	x	4094 studs	=	8188
Labor:	1 per stud	x	4094 studs	=	4094
Total:	3 per stud	x	4094 studs	=	12280

Total Costs

Materials:	6.282 per ft²	x	31740 ft²	=	199400
Labor:	3.641 per ft²	x	31740 ft²	=	115600
Total:	9.923 per ft²	x	31740 ft²	=	314900

PRRWF20240597

AHBL, INC.
2215 N. 30th Street, Suite 300
Tacoma, WA 98403

Project Title: Wesley Bradley Park Ph.2 - Care Center
Engineer: KBG
Project ID: 2220236.20
Project Descr:

General Footing

Project File: 220236_brownstone concrete framing.ec6

DESCRIPTION: F11.0

Code References

Calculations per ACI 318-14, IBC 2018, CBC 2019, ASCE 7-16
Load Combinations Used : IBC 2021

General Information

Material Properties

f'c : Concrete 28 day strength	=	3.0 ksi
fy : Rebar Yield	=	60.0 ksi
Ec : Concrete Elastic Modulus	=	3,122.02 ksi
Concrete Density	=	145.0 pcf
φ Values Flexure	=	0.90
Shear	=	0.750

Analysis Settings

Min Steel % Bending Reinf.	=	
Min Allow % Temp Reinf.	=	0.00180
Min. Overturning Safety Factor	=	1.0 : 1
Min. Sliding Safety Factor	=	1.0 : 1
Add Ftg Wt for Soil Pressure	:	Yes
Use ftg wt for stability, moments & shears	:	Yes
Add Pedestal Wt for Soil Pressure	:	No
Use Pedestal wt for stability, mom & shear	:	No

Soil Design Values

Allowable Soil Bearing	=	3.0 ksf
Soil Density	=	110.0 pcf
Increase Bearing By Footing Weight	=	No
Soil Passive Resistance (for Sliding)	=	350.0 pcf
Soil/Concrete Friction Coeff.	=	0.350

Increases based on footing Depth

Footing base depth below soil surface	=	ft
Allow press. increase per foot of depth	=	ksf
when footing base is below	=	ft

Increases based on footing plan dimension

Allowable pressure increase per foot of depth	=	ksf
when max. length or width is greater than	=	ft

Dimensions

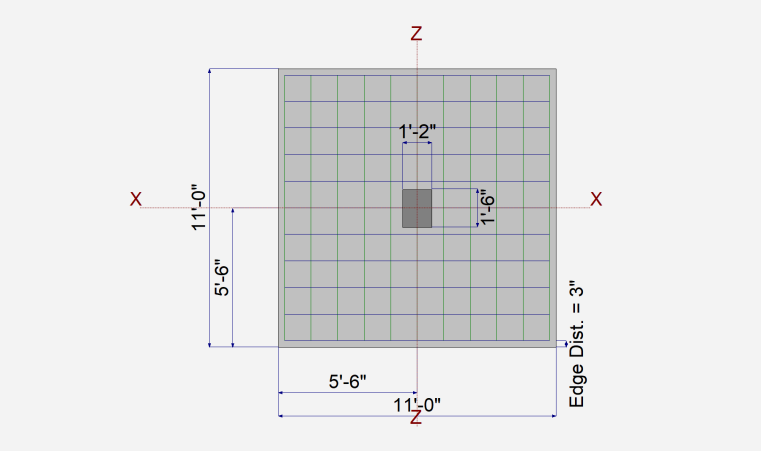
Width parallel to X-X Axis	=	11.0 ft
Length parallel to Z-Z Axis	=	11.0 ft
Footing Thickness	=	26.0 in

Pedestal dimensions...

px : parallel to X-X Axis	=	14.0 in
pz : parallel to Z-Z Axis	=	18.0 in
Height	=	12.0 in

Rebar Centerline to Edge of Concrete...

at Bottom of footing	=	3.0 in



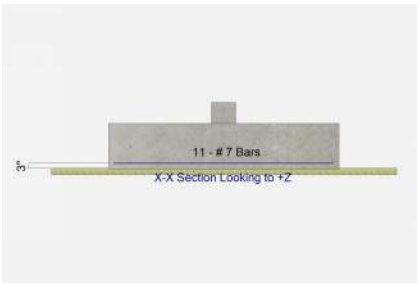
Reinforcing

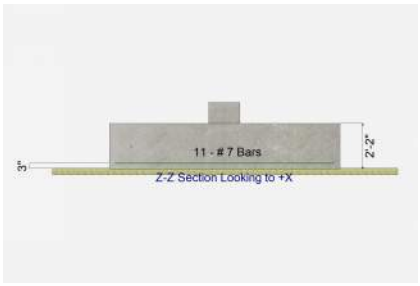
Bars parallel to X-X Axis			
Number of Bars	=		11.0
Reinforcing Bar Size	=	#	7
Bars parallel to Z-Z Axis			
Number of Bars	=		11.0
Reinforcing Bar Size	=	#	7

Bandwidth Distribution Check (ACI 15.4.4.2)

Direction Requiring Closer Separation n/a

# Bars required within zone	n/a
# Bars required on each side of zone	n/a





Applied Loads

		D	Lr	L	S	W	E	H	
P : Column Load	=	200.60		108.0	19.50				k
OB : Overburden	=								ksf
M-xx	=								k-ft
M-zz	=								k-ft
V-x	=								k
V-z	=								k

PRRWF20240597

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General Footing

Project File: 220236_brownstone concrete framing.ec6

DESCRIPTION: F11.0

DESIGN SUMMARY

Design OK

	Min. Ratio	Item	Applied	Capacity	Governing Load Combination
PASS	0.9550	Soil Bearing	2.865 ksf	3.0 ksf	+D+L about Z-Z axis
PASS	n/a	Overturning - X-X	0.0 k-ft	0.0 k-ft	No Overturning
PASS	n/a	Overturning - Z-Z	0.0 k-ft	0.0 k-ft	No Overturning
PASS	n/a	Sliding - X-X	0.0 k	0.0 k	No Sliding
PASS	n/a	Sliding - Z-Z	0.0 k	0.0 k	No Sliding
PASS	n/a	Uplift	0.0 k	0.0 k	No Uplift
PASS	0.6987	Z Flexure (+X)	42.279 k-ft/ft	60.512 k-ft/ft	+1.20D+1.60L+0.50S
PASS	0.6987	Z Flexure (-X)	42.279 k-ft/ft	60.512 k-ft/ft	+1.20D+1.60L+0.50S
PASS	0.6521	X Flexure (+Z)	39.462 k-ft/ft	60.512 k-ft/ft	+1.20D+1.60L+0.50S
PASS	0.6521	X Flexure (-Z)	39.462 k-ft/ft	60.512 k-ft/ft	+1.20D+1.60L+0.50S
PASS	0.4582	1-way Shear (+X)	37.643 psi	82.158 psi	+1.20D+1.60L+0.50S
PASS	0.4582	1-way Shear (-X)	37.643 psi	82.158 psi	+1.20D+1.60L+0.50S
PASS	0.4412	1-way Shear (+Z)	36.248 psi	82.158 psi	+1.20D+1.60L+0.50S
PASS	0.4412	1-way Shear (-Z)	36.248 psi	82.158 psi	+1.20D+1.60L+0.50S
PASS	0.6536	2-way Punching	107.398 psi	164.317 psi	+1.20D+1.60L+0.50S

Detailed Results

Soil Bearing

Rotation Axis & Load Combination...	Gross Allowable	Xecc (in)	Zecc (in)	Actual Soil Bearing Stress @ Location Bottom, -Z	Top, +Z	Left, -X	Right, +X	Actual / Allow Ratio
X-X, D Only	3.0	n/a	0.0	1.972	1.972	n/a	n/a	0.657
X-X, +D+L	3.0	n/a	0.0	2.865	2.865	n/a	n/a	0.955
X-X, +D+S	3.0	n/a	0.0	2.133	2.133	n/a	n/a	0.711
X-X, +D+0.750L	3.0	n/a	0.0	2.641	2.641	n/a	n/a	0.880
X-X, +D+0.750L+0.750S	3.0	n/a	0.0	2.762	2.762	n/a	n/a	0.921
X-X, +0.60D	3.0	n/a	0.0	1.183	1.183	n/a	n/a	0.394
Z-Z, D Only	3.0	0.0	n/a	n/a	n/a	1.972	1.972	0.657
Z-Z, +D+L	3.0	0.0	n/a	n/a	n/a	2.865	2.865	0.955
Z-Z, +D+S	3.0	0.0	n/a	n/a	n/a	2.133	2.133	0.711
Z-Z, +D+0.750L	3.0	0.0	n/a	n/a	n/a	2.641	2.641	0.880
Z-Z, +D+0.750L+0.750S	3.0	0.0	n/a	n/a	n/a	2.762	2.762	0.921
Z-Z, +0.60D	3.0	0.0	n/a	n/a	n/a	1.183	1.183	0.394

Overturning Stability

Rotation Axis & Load Combination...	Overturning Moment	Resisting Moment	Stability Ratio	Status
Footing Has NO Overturning				

All units k

Sliding Stability

Force Application Axis Load Combination...	Sliding Force	Resisting Force	Stability Ratio	Status
Footing Has NO Sliding				

Footing Flexure

Flexure Axis & Load Combination	Mu k-ft	Side	Tension Surface	As Req'd in^2	Gvrn. As in^2	Actual As in^2	Phi*Mn k-ft	Status
X-X, +1.40D	26.183	+Z	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
X-X, +1.40D	26.183	-Z	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
X-X, +1.20D+1.60L	38.553	+Z	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
X-X, +1.20D+1.60L	38.553	-Z	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
X-X, +1.20D+1.60L+0.50S	39.462	+Z	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
X-X, +1.20D+1.60L+0.50S	39.462	-Z	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
X-X, +1.20D+0.50L	27.477	+Z	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
X-X, +1.20D+0.50L	27.477	-Z	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
X-X, +1.20D	22.443	+Z	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
X-X, +1.20D	22.443	-Z	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
X-X, +1.20D+0.50L+1.60S	30.386	+Z	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
X-X, +1.20D+0.50L+1.60S	30.386	-Z	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
X-X, +1.20D+1.60S	25.352	+Z	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK

PRRWF20240597

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General Footing

Project File: 220236_brownstone concrete framing.ec6

DESCRIPTION: F11.0

Footing Flexure

Flexure Axis & Load Combination	Mu k-ft	Side	Tension Surface	As Req'd in^2	Gvrn. As in^2	Actual As in^2	Phi*Mn k-ft	Status
X-X, +1.20D+1.60S	25.352	-Z	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
X-X, +1.20D+0.50L+0.50S	28.386	+Z	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
X-X, +1.20D+0.50L+0.50S	28.386	-Z	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
X-X, +1.20D+0.50L+0.70S	28.750	+Z	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
X-X, +1.20D+0.50L+0.70S	28.750	-Z	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
X-X, +0.90D	16.832	+Z	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
X-X, +0.90D	16.832	-Z	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
Z-Z, +1.40D	28.052	-X	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
Z-Z, +1.40D	28.052	+X	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
Z-Z, +1.20D+1.60L	41.305	-X	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
Z-Z, +1.20D+1.60L	41.305	+X	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
Z-Z, +1.20D+1.60L+0.50S	42.279	-X	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
Z-Z, +1.20D+1.60L+0.50S	42.279	+X	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
Z-Z, +1.20D+0.50L	29.439	-X	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
Z-Z, +1.20D+0.50L	29.439	+X	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
Z-Z, +1.20D	24.045	-X	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
Z-Z, +1.20D	24.045	+X	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
Z-Z, +1.20D+0.50L+1.60S	32.555	-X	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
Z-Z, +1.20D+0.50L+1.60S	32.555	+X	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
Z-Z, +1.20D+1.60S	27.161	-X	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
Z-Z, +1.20D+1.60S	27.161	+X	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
Z-Z, +1.20D+0.50L+0.50S	30.412	-X	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
Z-Z, +1.20D+0.50L+0.50S	30.412	+X	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
Z-Z, +1.20D+0.50L+0.70S	30.802	-X	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
Z-Z, +1.20D+0.50L+0.70S	30.802	+X	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
Z-Z, +0.90D	18.033	-X	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK
Z-Z, +0.90D	18.033	+X	Bottom	0.5616	ACI 7.6.1.1	0.60	60.512	OK

One Way Shear X

Load Combination...	Vu @ -X	Vu @ +X	Vu:Max	Phi Vn	Vu / Phi*Vn	Status
+1.40D	24.98 psi	24.98 psi	24.98 psi	82.16 psi	0.30	OK
+1.20D+1.60L	36.78 psi	36.78 psi	36.78 psi	82.16 psi	0.45	OK
+1.20D+1.60L+0.50S	37.64 psi	37.64 psi	37.64 psi	82.16 psi	0.46	OK
+1.20D+0.50L	26.21 psi	26.21 psi	26.21 psi	82.16 psi	0.32	OK
+1.20D	21.41 psi	21.41 psi	21.41 psi	82.16 psi	0.26	OK
+1.20D+0.50L+1.60S	28.99 psi	28.99 psi	28.99 psi	82.16 psi	0.35	OK
+1.20D+1.60S	24.18 psi	24.18 psi	24.18 psi	82.16 psi	0.29	OK
+1.20D+0.50L+0.50S	27.08 psi	27.08 psi	27.08 psi	82.16 psi	0.33	OK
+1.20D+0.50L+0.70S	27.42 psi	27.42 psi	27.42 psi	82.16 psi	0.33	OK
+0.90D	16.06 psi	16.06 psi	16.06 psi	82.16 psi	0.20	OK

One Way Shear Z

Load Combination...	Vu @ -Z	Vu @ +Z	Vu:Max	Phi Vn	Vu / Phi*Vn	Status
+1.40D	24.05 psi	24.05 psi	24.98 psi	82.16 psi	0.30	OK
+1.20D+1.60L	35.41 psi	35.41 psi	36.78 psi	82.16 psi	0.45	OK
+1.20D+1.60L+0.50S	36.25 psi	36.25 psi	37.64 psi	82.16 psi	0.46	OK
+1.20D+0.50L	25.24 psi	25.24 psi	26.21 psi	82.16 psi	0.32	OK
+1.20D	20.62 psi	20.62 psi	21.41 psi	82.16 psi	0.26	OK
+1.20D+0.50L+1.60S	27.91 psi	27.91 psi	28.99 psi	82.16 psi	0.35	OK
+1.20D+1.60S	23.29 psi	23.29 psi	24.18 psi	82.16 psi	0.29	OK
+1.20D+0.50L+0.50S	26.08 psi	26.08 psi	27.08 psi	82.16 psi	0.33	OK
+1.20D+0.50L+0.70S	26.41 psi	26.41 psi	27.42 psi	82.16 psi	0.33	OK
+0.90D	15.46 psi	15.46 psi	16.06 psi	82.16 psi	0.20	OK

Two-Way "Punching" Shear

All units k

Load Combination...	Vu	Phi*Vn	Vu / Phi*Vn	Status
+1.40D	71.26 psi	164.32 psi	0.4337	OK
+1.20D+1.60L	104.92 psi	164.32 psi	0.6385	OK
+1.20D+1.60L+0.50S	107.40 psi	164.32 psi	0.6536	OK
+1.20D+0.50L	74.78 psi	164.32 psi	0.4551	OK
+1.20D	61.08 psi	164.32 psi	0.3717	OK
+1.20D+0.50L+1.60S	82.70 psi	164.32 psi	0.5033	OK
+1.20D+1.60S	69.00 psi	164.32 psi	0.4199	OK

PRRWF20240597

AHBL, INC.
2215 N. 30th Street, Suite 300
Tacoma, WA 98403

Project Title: Wesley Bradley Park Ph.2 - Care Center
Engineer: KBG
Project ID: 2220236.20
Project Descr:

General Footing

Project File: 220236_brownstone concrete framing.ec6

DESCRIPTION: F11.0

Two-Way "Punching" Shear

All units k

Load Combination...	Vu	Phi*Vn	Vu / Phi*Vn	Status
+1.20D+0.50L+0.50S	77.26 psi	164.32 psi	0.4702	OK
+1.20D+0.50L+0.70S	78.24 psi	164.32 psi	0.4762	OK
+0.90D	45.81 psi	164.32 psi	0.2788	OK

PRRWF20240597

AHBL, INC.
2215 N. 30th Street, Suite 300
Tacoma, WA 98403

Project Title: Wesley Bradley Park Ph.2 - Care Center
Engineer: KBG
Project ID: 2220236.20
Project Descr:

Restrained Retaining Wall

Project File: 220236_brownstone concrete framing.ec6

DESCRIPTION: Typical Basement Wall (3 Story Rev)

Code Reference

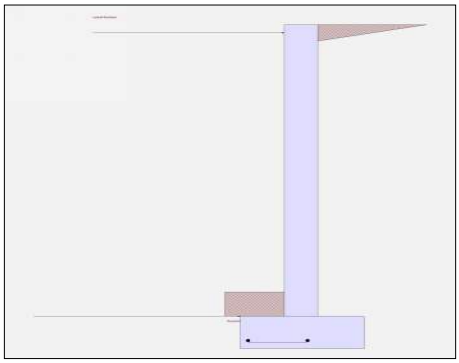
Calculations per IBC 2018 1807.3, CBC 2019, ASCE 7-16

Criteria

Retained Height	=	12.0 ft
Wall height above soil	=	ft
Total Wall Height	=	12.0 ft
Top Support Height	=	11.50 ft
Slope Behind Wall	=	0
Height of Soil over Toe	=	12.0 in

Soil Data

Allow Soil Bearing	=	3,000.0 psf
Equivalent Fluid Pressure Method		
At-Rest Heel Pressure	=	35.0 psf/ft
	=	0.0 psf/ft
Passive Pressure	=	525.0 psf/ft
Soil Density	=	110 pcf
Footing||Soil Frictior	=	0.5250 psf
Soil height to ignore for passive pressure	=	24.0 in



Surcharge Loads

Surcharge Over Heel = 40.0 psf
>>>Used To Resist Sliding & Overturning
Surcharge Over Toe = 40.0 psf
Used for Sliding & Overturning

Axial Load Applied to Stem

Axial Dead Load	=	3,560.0 lbs
Axial Live Load	=	2,030.0 lbs
Axial Load Eccentricity	=	in

Uniform Lateral Load Applied to Stem

Lateral Load	=	100.0 #/ft
...Height to Top	=	12.0 ft
...Height to Bottom	=	ft
Load Type	=	Earth (H) (Service Level)
Wind on Exposed Stem	=	0.00 psf (Strength Level)

Wind acts left-to-right toward retention side.

Adjacent Footing Load

Adjacent Footing Load	=	lbs
Footing Width	=	ft
Eccentricity	=	in
Wall to Ftg CL Dist	=	ft
Footing Type		Line Load
Base Above/Below Soil at Back of Wall	=	ft
Poisson's Ratio	=	0.3

Earth Pressure Seismic Load

K_h Soil Density Multiplier = 0.07273 g Added seismic per unit area = 0.0 psf

Design Summary

Total Bearing Load	=	10,455.0 lbs	
...resultant ecc.	=	0.0 in	
Soil Pressure @ Toe	=	2,613.75 psf	OK
Soil Pressure @ Heel	=	2,613.75 psf	OK
Allowable	=	psf	
Soil Pressure Less Than Allowable			
ACI Factored @ Toe	=	3,339.50 psf	
ACI Factored @ Heel	=	3,339.50 psf	
Footing Shear @ Toe	=	8.302 psi	OK
Footing Shear @ Heel	=	12.960 psi	OK
Allowable	=	82.158 psi	
Reaction at Top	=	1,095.63 lbs	
Reaction at Bottom	=	3,393.34 lbs	

Sliding Calcs
Lateral Sliding Force = 3,393.34 lbs

Vertical component of active lateral soil pressure IS NOT considered in the calculation of soil bearing

Load Factors

Building Code	
Dead Load	1.200
Live Load	1.600
Earth, H	1.600
Wind, W	1.000
Seismic, E	1.000

Concrete Stem Construction

Thickness = 12.00 in Fy = 60000 psi
Wall Weight = 150.0 psf f'c = 4,000.0 psi
Stem is FIXED to top of footing

	@ Top Support	Mmax Between Top & Base	@ Base of Wall
	Stem OK	Stem OK	Stem OK
Design Height Above Ftg =	11.50 ft	6.697 ft	0.00 ft
Rebar Size =	# 6	# 6	# 6
Rebar Spacing =	12.00 in	12.00 in	12.00 in
Rebar Placed at =	Edge	Edge	Center
Rebar Depth 'd' =	9.625 in	10.125 in	6.0 in
Design Data			
fb/FB + fa/Fa =	0.001	0.207	0.752
Mu....Actual =	18.712 ft-#	4,018.57 ft-#	8,451.96 ft-#
Mn * Phi.....Allowable =	18,415.0 ft-#	19,405.0 ft-#	11,237.5 ft-#
Shear Force @ this height =	1,475.58 lbs		4,170.08 lbs
Shear.....Actual =	12.776 psi		57.918 psi
Shear.....Allowable =	94.868 psi		94.868 psi

PRRWF20240597

AHBL, INC.
2215 N. 30th Street, Suite 300
Tacoma, WA 98403

Project Title: Wesley Bradley Park Ph.2 - Care Center
Engineer: KBG
Project ID: 2220236.20
Project Descr:

Restrained Retaining Wall

Project File: 220236_brownstone concrete framing.ec6

DESCRIPTION: Typical Basement Wall (3 Story Rev)

Footing Strengths & Dimensions

Toe Width	=	1.50 ft
Heel Width	=	2.50
Total Footing Width	=	4.0
Footing Thickness	=	16.0 in

f'c = 3,000 psi Fy = 60000 psi
Footing Concrete Density = 150 pcf
Min. As % = 0.0018
Cover @ Top = 2 in @ Btm.= 3 in

Footing Design Results

		Toe	Heel	
Factored Pressure	=	3,339.50	3,339.50	psf
Mu' : Upward	=	3,756.94		ft-#
Mu' : Downward	=	490.50		ft-#
Mu: Design	=	3,266	-1,633	ft-#
Actual 1-Way Shear	=	8.302	12.960	psi
Allow 1-Way Shear	=	82.158	82.158	psi

Other Acceptable Sizes & Spacings:

Toe: # 4 @ 18.00 in -or- phiMn = phi * 5 * lambda * sqrt(fc) * Sm
Heel: None Spec'd -or- phiMn = phi * 5 * lambda * sqrt(fc) * Sm

Min footing T&S reinf Area 1.38 in2
Min footing T&S reinf Area per foot 0.35 in2 /ft

If one layer of horizontal bars:	If two layers of horizontal bars:
#4@ 6.94 in	#4@ 13.89 in
#5@ 10.76 in	#5@ 21.53 in
#6@ 15.28 in	#6@ 30.56 in

Summary of Forces on Footing : Slab RESISTS sliding, stem is FIXED at footing

Forces acting on footing for soil pressure

>>> Sliding Forces are restrained by the adjacent slab

Load & Moment Summary For Footing : For Soil Pressure Calcs

Moment @ Top of Footing Applied from Stem			=		-5,692.94 ft-#
Surcharge Over Heel	=	60.0 lbs	3.250 ft		195.0 ft-#
Adjacent Footing Load	=	0.0 lbs	0.0 ft		0.0 ft-#
Axial Dead Load on Stem	=	5,590.0 lbs	2.0 ft		11,180.0 ft-#
Soil Over Toe	=	165.0 lbs	0.750 ft		123.750 ft-#
Surcharge Over Toe	=	60.0 lbs	0.750 ft		45.0 ft-#
Stem Weight	=	1,800.0 lbs	2.0 ft		3,600.0 ft-#
Soil Over Heel	=	1,980.0 lbs	3.250 ft		6,435.0 ft-#
Footing Weight	=	800.0 lbs	2.001 ft		1,600.50 ft-#
Total Vertical Force	=	10,455.0 lbs	Base Moment	=	17,486.3 ft-#

Stem is specified to be fixed to footing, and top restraint is assumed to react out any tendency for moment at the footing/soil interface, so uniform soil pressure is assumed.

Vertical component of active lateral soil pressure IS NOT considered in the calculation of Sliding Resistance.

PRRWF20240597

AHBL, INC.
2215 N. 30th Street, Suite 300
Tacoma, WA 98403

Project Title: Wesley Bradley Park Ph.2 - Care Center
Engineer: KBG
Project ID: 2220236.20
Project Descr:

Restrained Retaining Wall

Project File: 220236_brownstone concrete framing.ec6

DESCRIPTION: Typical Basement Wall (3 Story Rev)

Rebar Lap & Embedment Lengths Information

PRRWF20240597

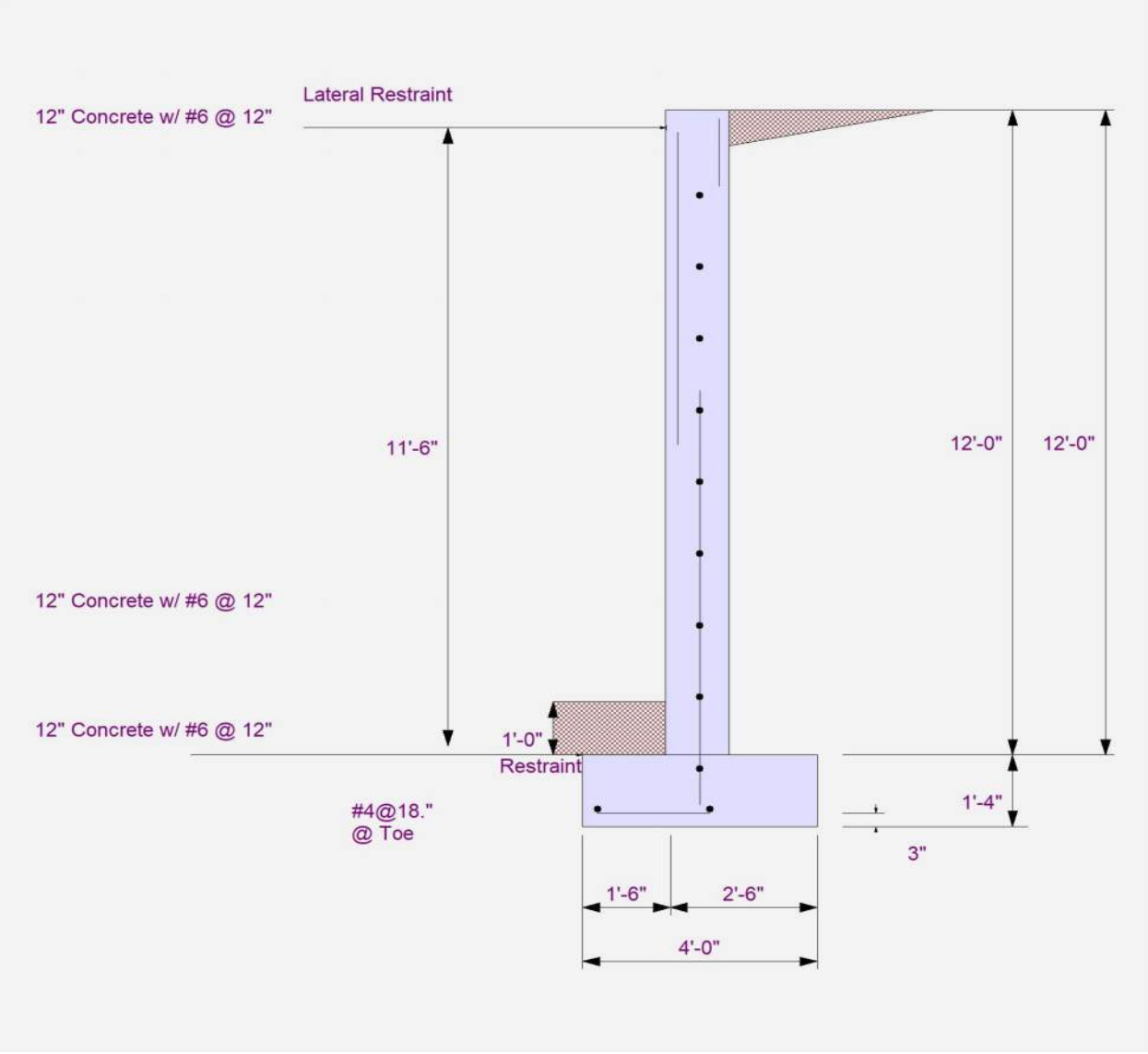
AHBL, INC.
2215 N. 30th Street, Suite 300
Tacoma, WA 98403

Project Title: Wesley Bradley Park Ph.2 - Care Center
Engineer: KBG
Project ID: 2220236.20
Project Descr:

Restrained Retaining Wall

Project File: 220236_brownstone concrete framing.ec6

DESCRIPTION: Typical Basement Wall (3 Story Rev)



PRRWF20240597

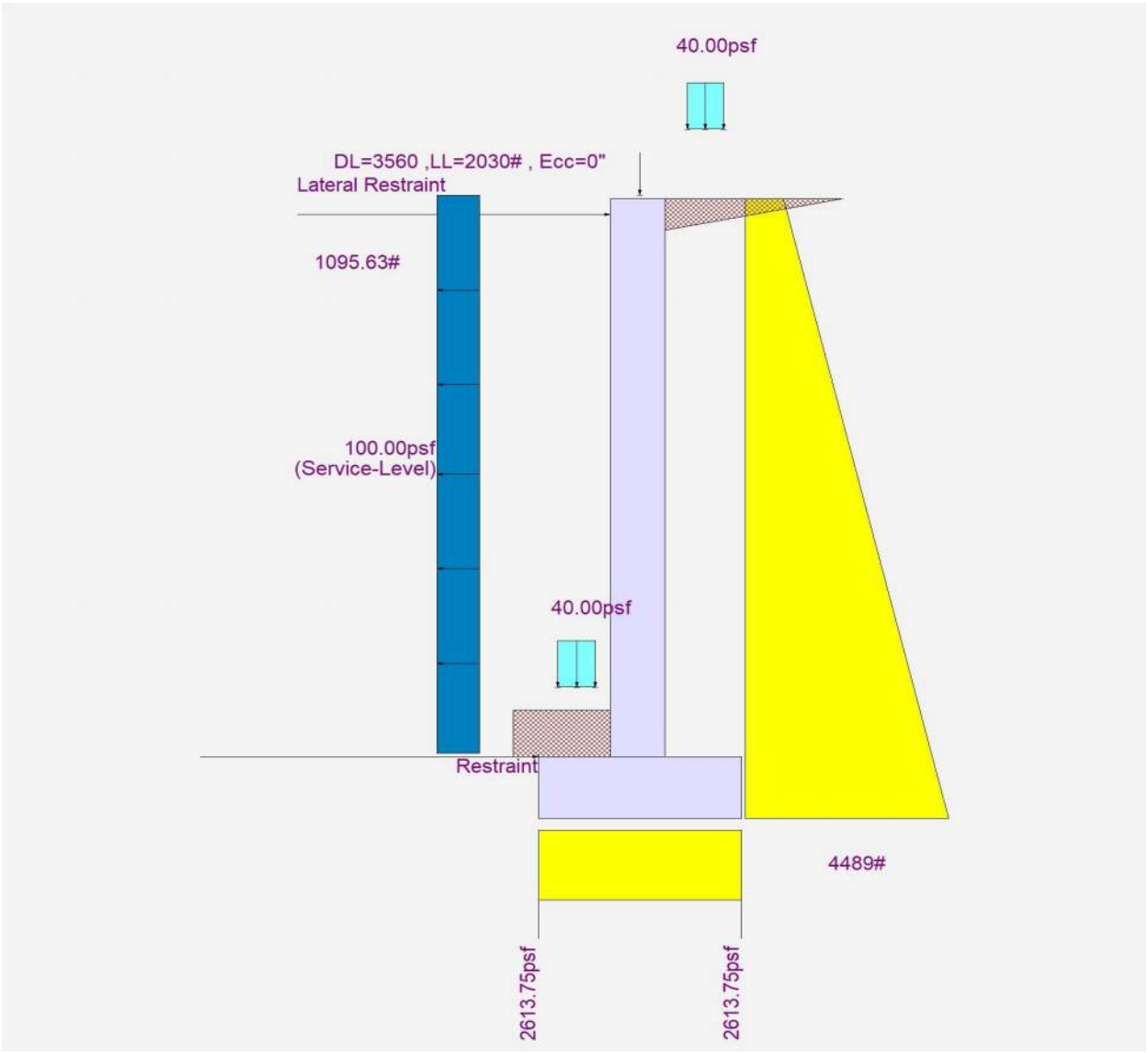
AHBL, INC.
2215 N. 30th Street, Suite 300
Tacoma, WA 98403

Project Title: Wesley Bradley Park Ph.2 - Care Center
Engineer: KBG
Project ID: 2220236.20
Project Descr:

Restrained Retaining Wall

Project File: 220236_brownstone concrete framing.ec6

DESCRIPTION: Typical Basement Wall (3 Story Rev)



PRRWF20240597

AHBL, INC.
2215 N. 30th Street, Suite 300
Tacoma, WA 98403

Project Title: Wesley Bradley Park Ph.2 - Care Center
Engineer: KBG
Project ID: 2220236.20
Project Descr:

Restrained Retaining Wall

Project File: 220236_brownstone concrete framing.ec6

DESCRIPTION: Typical Basement Wall - EQ (3 Story Rev)

Code Reference

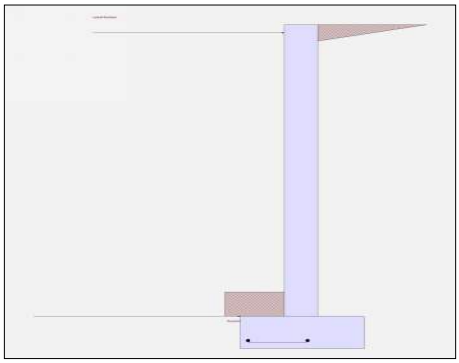
Calculations per IBC 2018 1807.3, CBC 2019, ASCE 7-16

Criteria

Retained Height	=	12.0 ft
Wall height above soil	=	ft
Total Wall Height	=	12.0 ft
Top Support Height	=	11.50 ft
Slope Behind Wall	=	0
Height of Soil over Toe	=	12.0 in

Soil Data

Allow Soil Bearing	=	3,000.0 psf
Equivalent Fluid Pressure Method		
At-Rest Heel Pressure	=	35.0 psf/ft
	=	0.0 psf/ft
Passive Pressure	=	525.0 psf/ft
Soil Density	=	110 pcf
Footing||Soil Frictior	=	0.5250 psf
Soil height to ignore for passive pressure	=	24.0 in



Surcharge Loads

Surcharge Over Heel	=	40.0 psf
>>>Used To Resist Sliding & Overturning		
Surcharge Over Toe	=	40.0 psf
Used for Sliding & Overturning		

Axial Load Applied to Stem

Axial Dead Load	=	3,560.0 lbs
Axial Live Load	=	2,030.0 lbs
Axial Load Eccentricity	=	4.0 in

Uniform Lateral Load Applied to Stem

Lateral Load	=	100.0 #/ft
...Height to Top	=	12.0 ft
...Height to Bottom	=	ft
Load Type	=	Earth (H) (Service Level)
Wind on Exposed Stem	=	0.00 psf (Strength Level)

Wind acts left-to-right toward retention side.

Adjacent Footing Load

Adjacent Footing Load	=	lbs
Footing Width	=	ft
Eccentricity	=	in
Wall to Ftg CL Dist	=	ft
Footing Type		Line Load
Base Above/Below Soil at Back of Wall	=	ft
Poisson's Ratio	=	0.3

Earth Pressure Seismic Load

K_h Soil Density Multiplier = 0.06546 g Added seismic per unit area = 67.206 psf

Design Summary

Total Bearing Load	=	10,455.0 lbs	
...resultant ecc.	=	0.0 in	
Soil Pressure @ Toe	=	2,613.75 psf	OK
Soil Pressure @ Heel	=	2,613.75 psf	OK
Allowable	=	psf	
Soil Pressure Less Than Allowable			
ACI Factored @ Toe	=	2,781.25 psf	
ACI Factored @ Heel	=	2,781.25 psf	
Footing Shear @ Toe	=	6.706 psi	OK
Footing Shear @ Heel	=	7.975 psi	OK
Allowable	=	82.158 psi	
Reaction at Top	=	1,660.09 lbs	
Reaction at Bottom	=	3,632.24 lbs	

Sliding Calcs
Lateral Sliding Force = 3,632.24 lbs

Vertical component of active lateral soil pressure IS NOT considered in the calculation of soil bearing

Load Factors

Building Code	
Dead Load	1.200
Live Load	0.500
Earth, H	1.600
Wind, W	1.000
Seismic, E	1.000

Concrete Stem Construction

Thickness = 12.00 in Fy = 60000 psi
Wall Weight = 150.0 psf f'c = 4,000.0 psi
Stem is FIXED to top of footing

		@ Top Support	Mmax Between Top & Base	@ Base of Wall
		Stem OK	Stem OK	Stem OK
Design Height Above Ftg	=	11.50 ft	6.373 ft	0.00 ft
Rebar Size	=	# 6	# 6	# 6
Rebar Spacing	=	12.00 in	12.00 in	12.00 in
Rebar Placed at	=	Edge	Edge	Center
Rebar Depth 'd'	=	9.625 in	10.125 in	6.0 in
Design Data				
fb/FB + fa/Fa	=	0.097	0.220	0.814
Mu....Actual	=	1,793.05 ft-#	4,275.52 ft-#	9,151.94 ft-#
Mn * Phi.....Allowable	=	18,415.0 ft-#	19,405.0 ft-#	11,237.5 ft-#
Shear Force @ this height	=	2,121.05 lbs		4,628.71 lbs
Shear.....Actual	=	18.364 psi		64.288 psi
Shear.....Allowable	=	94.868 psi		94.868 psi

PRRWF20240597

AHBL, INC.
2215 N. 30th Street, Suite 300
Tacoma, WA 98403

Project Title: Wesley Bradley Park Ph.2 - Care Center
Engineer: KBG
Project ID: 2220236.20
Project Descr:

Restrained Retaining Wall

Project File: 220236_brownstone concrete framing.ec6

DESCRIPTION: Typical Basement Wall - EQ (3 Story Rev)

Footing Strengths & Dimensions

Toe Width	=	1.50 ft
Heel Width	=	2.50
Total Footing Width	=	4.0
Footing Thickness	=	16.0 in

f'c = 3,000 psi Fy = 60000 psi
Footing Concrete Density = 150 pcf
Min. As % = 0.0018
Cover @ Top = 2 in @ Btm.= 3 in

Footing Design Results

		Toe	Heel	
Factored Pressure	=	2,781.25	2,781.25	psf
Mu' : Upward	=	3,128.91		ft-#
Mu' : Downward	=	490.50		ft-#
Mu: Design	=	2,638	-1,005	ft-#
Actual 1-Way Shear	=	6.706	7.975	psi
Allow 1-Way Shear	=	82.158	82.158	psi

Other Acceptable Sizes & Spacings:

Toe: # 4 @ 18.00 in -or- phiMn = phi * 5 * lambda * sqrt(fc) * Sm
Heel: None Spec'd -or- phiMn = phi * 5 * lambda * sqrt(fc) * Sm

Min footing T&S reinf Area 1.38 in2
Min footing T&S reinf Area per foot 0.35 in2 /ft

If one layer of horizontal bars:	If two layers of horizontal bars:
#4@ 6.94 in	#4@ 13.89 in
#5@ 10.76 in	#5@ 21.53 in
#6@ 15.28 in	#6@ 30.56 in

Summary of Forces on Footing : Slab RESISTS sliding, stem is FIXED at footing

Forces acting on footing for soil pressure

>>> Sliding Forces are restrained by the adjacent slab

Load & Moment Summary For Footing : For Soil Pressure Calcs

Moment @ Top of Footing Applied from Stem	=			-5,868.08 ft-#
Surcharge Over Heel	=	60.0 lbs	3.250 ft	195.0 ft-#
Adjacent Footing Load	=	0.0 lbs	0.0 ft	0.0 ft-#
Axial Dead Load on Stem	=	5,590.0 lbs	2.0 ft	11,180.0 ft-#
Soil Over Toe	=	165.0 lbs	0.750 ft	123.750 ft-#
Surcharge Over Toe	=	60.0 lbs	0.750 ft	45.0 ft-#
Stem Weight	=	1,800.0 lbs	2.0 ft	3,600.0 ft-#
Soil Over Heel	=	1,980.0 lbs	3.250 ft	6,435.0 ft-#
Footing Weight	=	800.0 lbs	2.001 ft	1,600.50 ft-#
Total Vertical Force	=	10,455.0 lbs	Base Moment =	17,311.2 ft-#

Stem is specified to be fixed to footing, and top restraint is assumed to react out any tendency for moment at the footing/soil interface, so uniform soil pressure is assumed.

Vertical component of active lateral soil pressure IS NOT considered in the calculation of Sliding Resistance.

PRRWF20240597

AHBL, INC.
2215 N. 30th Street, Suite 300
Tacoma, WA 98403

Project Title: Wesley Bradley Park Ph.2 - Care Center
Engineer: KBG
Project ID: 2220236.20
Project Descr:

Restrained Retaining Wall

Project File: 220236_brownstone concrete framing.ec6

DESCRIPTION: Typical Basement Wall - EQ (3 Story Rev)

Rebar Lap & Embedment Lengths Information

PRRWF20240597

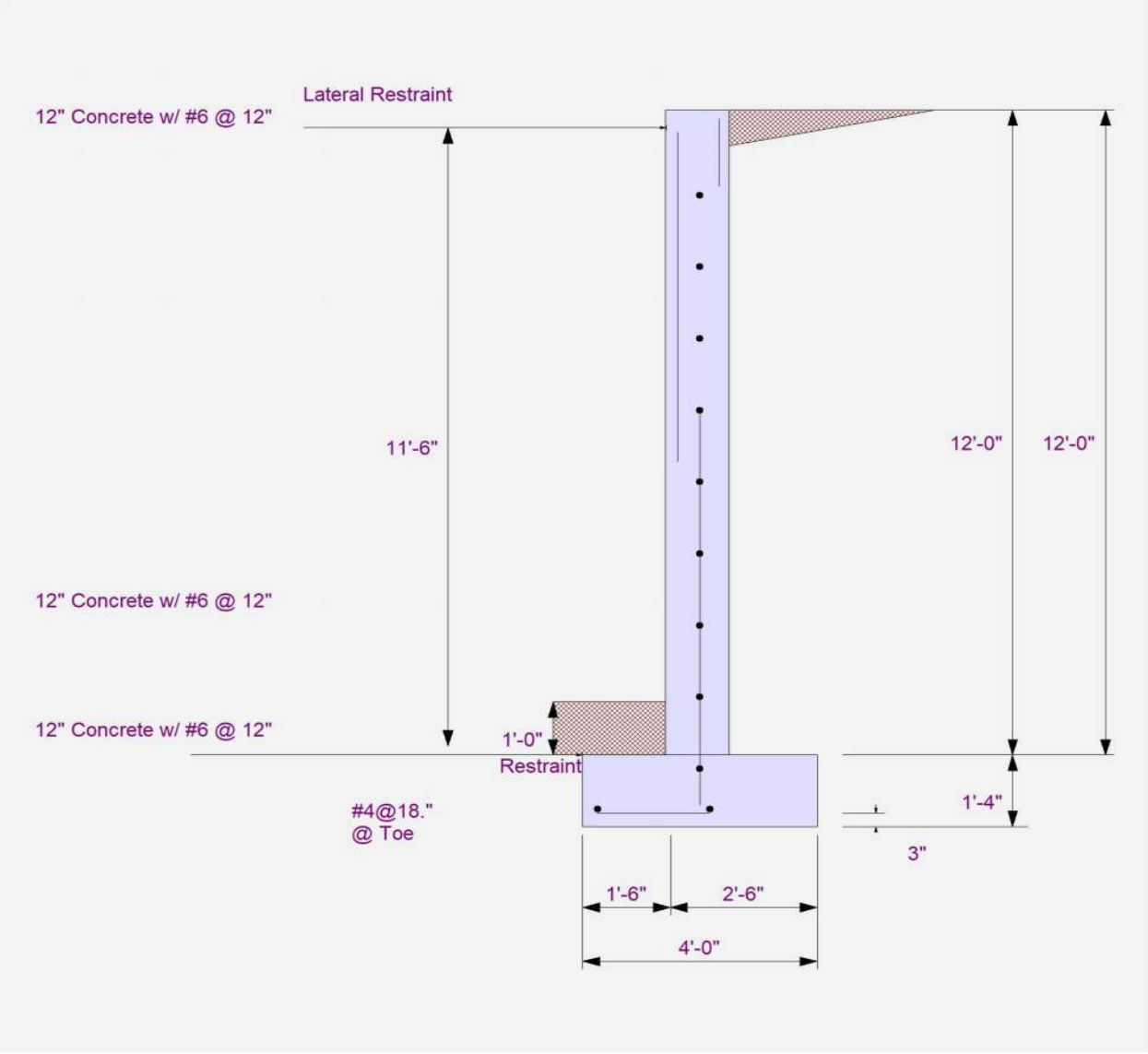
AHBL, INC.
2215 N. 30th Street, Suite 300
Tacoma, WA 98403

Project Title: Wesley Bradley Park Ph.2 - Care Center
Engineer: KBG
Project ID: 2220236.20
Project Descr:

Restrained Retaining Wall

Project File: 220236_brownstone concrete framing.ec6

DESCRIPTION: Typical Basement Wall - EQ (3 Story Rev)



PRRWF20240597

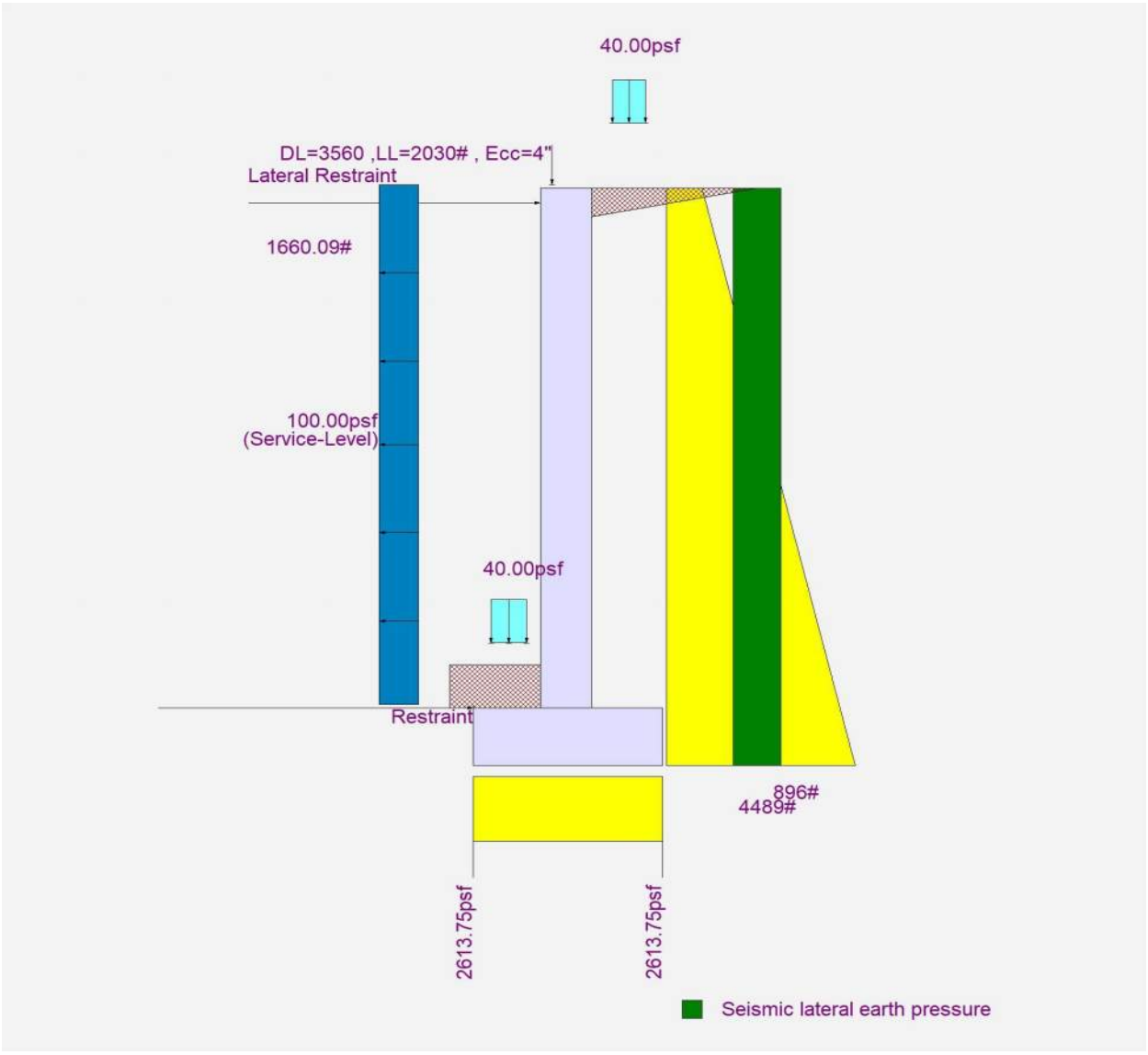
AHBL, INC.
2215 N. 30th Street, Suite 300
Tacoma, WA 98403

Project Title: Wesley Bradley Park Ph.2 - Care Center
Engineer: KBG
Project ID: 2220236.20
Project Descr:

Restrained Retaining Wall

Project File: 220236_brownstone concrete framing.ec6

DESCRIPTION: Typical Basement Wall - EQ (3 Story Rev)



PRRWF20240597

AHBL, INC.
2215 N. 30th Street, Suite 300
Tacoma, WA 98403

Project Title: Wesley Bradley Park Ph.2 - Care Center
Engineer: KBG
Project ID: 2220236.20
Project Descr:

Cantilevered Retaining Wall

Project File: 220236_brownstone concrete framing.ec6

DESCRIPTION: Typical Basement Wall - Construction Backfill (3 Story Rev)

Code References

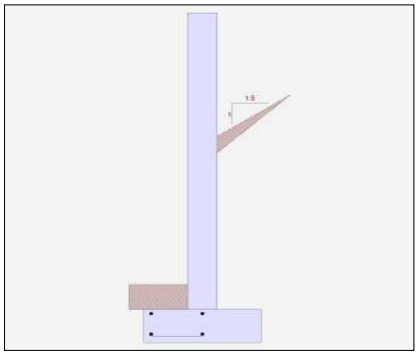
Calculations per IBC 2018 1807.3, CBC 2019, ASCE 7-16

Criteria

Retained Height	=	7.00 ft
Wall height above soil	=	5.00 ft
Slope Behind Wall	=	1.50
Height of Soil over Toe	=	12.00 in
Water table above bottom of footing	=	0.0 ft

Soil Data

Allow Soil Bearing	=	3,000.0 psf
Equivalent Fluid Pressure Method		
Active Heel Pressure	=	35.0 psf/ft
	=	
Passive Pressure	=	525.0 psf/ft
Soil Density, Heel	=	110.00 pcf
Soil Density, Toe	=	110.00 pcf
Footing||Soil Friction	=	0.525
Soil height to ignore for passive pressure	=	24.00 in



Surcharge Loads

Surcharge Over Heel	=	0.0 psf
Used To Resist Sliding & Overturning		
Surcharge Over Toe	=	0.0
Used for Sliding & Overturning		

Axial Load Applied to Stem

Axial Dead Load	=	0.0 lbs
Axial Live Load	=	0.0 lbs
Axial Load Eccentricity	=	0.0 in

Lateral Load Applied to Stem

Lateral Load	=	0.0 #/ft
...Height to Top	=	0.00 ft
...Height to Bottom	=	0.00 ft
Load Type	=	Wind (W) (Service Level)
Wind on Exposed Stem (Strength Level)	=	0.0 psf

Adjacent Footing Load

Adjacent Footing Load	=	0.0 lbs
Footing Width	=	0.00 ft
Eccentricity	=	0.00 in
Wall to Ftg CL Dist	=	0.00 ft
Footing Type		Spread Footing
Base Above/Below Soil at Back of Wall	=	0.0 ft
Poisson's Ratio	=	0.300

PRRWF20240597

AHBL, INC.
2215 N. 30th Street, Suite 300
Tacoma, WA 98403

Project Title: Wesley Bradley Park Ph.2 - Care Center
Engineer: KBG
Project ID: 2220236.20
Project Descr:

Cantilevered Retaining Wall

Project File: 220236_brownstone concrete framing.ec6

DESCRIPTION: Typical Basement Wall - Construction Backfill (3 Story Rev)

Design Summary

Wall Stability Ratios

Overturning	=	2.67	OK
Sliding	=	1.91	OK
Global Stability	=	3.04	

Total Bearing Load	=	4,828	lbs
...resultant ecc.	=	4.30	in

Eccentricity within middle third

Soil Pressure @ Toe	=	1,856 psf	OK
Soil Pressure @ Heel	=	558 psf	OK
Allowable	=	3,000 psf	

Soil Pressure Less Than Allowable

ACI Factored @ Toe	=	2,154 psf	
ACI Factored @ Heel	=	648 psf	
Footing Shear @ Toe	=	5.0 psi	OK
Footing Shear @ Heel	=	10.5 psi	OK
Allowable	=	82.2 psi	

Sliding Calcs

Lateral Sliding Force	=	1,524.4 lbs	
less 100% Passive Force	-	379.2 lbs	
less 100% Friction Force	-	2,534.7 lbs	
Added Force Req'd	=	0.0 lbs	OK
....for 1.5 Stability	=	0.0 lbs	OK

Vertical component of active lateral soil pressure IS considered in the calculation of soil bearing pressures.

Load Factors

Building Code	
Dead Load	1.200
Live Load	1.600
Earth, H	1.600
Wind, W	1.600
Seismic, E	1.000

Stem Construction

		Bottom		
		Stem OK		
Design Height Above Ftg	ft =	0.00		
Wall Material Above "Ht"	=	Concrete		
Design Method	=	SD	SD	SD
Thickness	=	12.00		
Rebar Size	=	# 6		
Rebar Spacing	=	12.00		
Rebar Placed at	=	Center		
Design Data				
fb/FB + fa/Fa	=	**0.284**		
Total Force @ Section				
Service Level	lbs =			
Strength Level	lbs =	1,372.0		
Moment....Actual				
Service Level	ft-# =			
Strength Level	ft-# =	3,201.3		
Moment.....Allowable	=	11,237.5		
Shear.....Actual				
Service Level	psi =			
Strength Level	psi =	19.1		
Shear.....Allowable	psi =	94.9		
Anet (Masonry)	in2 =			
Wall Weight	psf =	150.0		
Rebar Depth 'd'	in =	6.00		

Masonry Data

f'm	psi =	
Fs	psi =	
Solid Grouting	=	
Modular Ratio 'n'	=	
Equiv. Solid Thick.	=	
Masonry Block Type	=	
Masonry Design Method	=	ASD

Concrete Data

f'c	psi =	4,000.0
Fy	psi =	60,000.0

PRRWF20240597

AHBL, INC.
2215 N. 30th Street, Suite 300
Tacoma, WA 98403

Project Title: Wesley Bradley Park Ph.2 - Care Center
Engineer: KBG
Project ID: 2220236.20
Project Descr:

Cantilevered Retaining Wall

Project File: 220236_brownstone concrete framing.ec6

DESCRIPTION: Typical Basement Wall - Construction Backfill (3 Story Rev)

Concrete Stem Rebar Area Details

Bottom Stem	Vertical Reinforcing	Horizontal Reinforcing
As (based on applied moment) :	0.1252 in2/ft	
(4/3) * As :	0.167 in2/ft	Min Stem T&S Reinf Area 3.456 in2
200bd/fy : 200(12)(6)/60000 :	0.24 in2/ft	Min Stem T&S Reinf Area per ft of stem Height : 0.288 in2/ft
0.0018bh : 0.0018(12)(12) :	0.2592 in2/ft	Horizontal Reinforcing Options :
	==========	One layer of : Two layers of :
Required Area :	0.2592 in2/ft	#4@ 8.33 in #4@ 16.67 in
Provided Area :	0.44 in2/ft	#5@ 12.92 in #5@ 25.83 in
Maximum Area :	1.3005 in2/ft	#6@ 18.33 in #6@ 36.67 in

Footing Data

Toe Width	=	1.50 ft
Heel Width	=	2.50
Total Footing Width	=	4.00
Footing Thickness	=	16.00 in
Key Width	=	0.00 in
Key Depth	=	0.00 in
Key Distance from Toe	=	0.00 ft

f'c = 3,000 psi Fy = 60,000 psi
Footing Concrete Density = 150.00 pcf
Min. As % = 0.0018
Cover @ Top 2.00 @ Btm.= 3.00 in

Footing Design Results

		Toe	Heel	
Factored Pressure	=	2,154	648	psf
Mu' : Upward	=	2,212	940	ft-#
Mu' : Downward	=	419	3,389	ft-#
Mu: Design	=	1,793 OK	2,449	ft-# OK
phiMn	=	24,143	5,368	ft-#
Actual 1-Way Shear	=	5.05	10.54	psi
Allow 1-Way Shear	=	82.16	43.82	psi

Toe Reinforcing = # 6 @ 12.00 in
Heel Reinforcing = None Spec'd
Key Reinforcing = None Spec'd
Footing Torsion, Tu = 0.00 ft-lbs
Footing Allow. Torsion, phi Tu = 0.00 ft-lbs

If torsion exceeds allowable, provide supplemental design for footing torsion.

Other Acceptable Sizes & Spacings

Toe: #4@ 6.94 in, #5@ 10.76 in, #6@ 15.27 in, #7@ 20.83 in, #8@ 27.43 in, #9@ 34.72 in, #10@ 44.09 in

Heel: phiMn = phi*5*lambda*sqrt(fc)*Sm

Key: No key defined

Min footing T&S reinf Area 1.38 in2
Min footing T&S reinf Area per foot 0.35 in2 /ft

If one layer of horizontal bars:	If two layers of horizontal bars:
#4@ 6.94 in	#4@ 13.89 in
#5@ 10.76 in	#5@ 21.53 in
#6@ 15.28 in	#6@ 30.56 in

PRRWF20240597

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Project Descr:

Cantilevered Retaining Wall

Project File: 220236_brownstone concrete framing.ec6

DESCRIPTION: Typical Basement Wall - Construction Backfill (3 Story Rev)

Summary of Overturning & Resisting Forces & Moments

Item	.....OVERTURNING..... Force lbs	Distance ft	Moment ft-#	.....RESISTING..... Force lbs	Distance ft	Moment ft-#
HL Act Pres (ab water tbl)	1,524.4	3.11	4,742.7			
HL Act Pres (be water tbl)				Soil Over HL (ab. water tbl)	1,155.0	3.25	3,753.8
Hydrostatic Force				Soil Over HL (bel. water tbl)		3.25	3,753.8
Buoyant Force =				Water Table			
Surcharge over Heel =				Sloped Soil Over Heel =	82.5	3.50	288.8
Surcharge Over Toe =				Surcharge Over Heel =			
Adjacent Footing Load =				Adjacent Footing Load =			
Added Lateral Load =				Axial Dead Load on Stem =			
Load @ Stem Above Soil =				* Axial Live Load on Stem =			
=				Soil Over Toe =	165.0	0.75	123.8
				Surcharge Over Toe =			
				Stem Weight(s) =	1,800.0	2.00	3,600.0
				Earth @ Stem Transitions =			
				Footing Weight =	800.0	2.00	1,600.0
				Key Weight =			
				Vert. Component =	825.4	4.00	3,301.7
Total =	1,524.4	**O.T.M.** =	4,742.7	**Total =**	4,827.9 lbs	**R.M.=**	12,667.9

Resisting/Overturning Ratio = **2.67**
Vertical Loads used for Soil Pressure = 4,827.9 lbs

* Axial live load NOT included in total displayed, or used for overturning resistance, but is included for soil pressure calculation.

Vertical component of active lateral soil pressure IS considered in the calculation of Sliding Resistance.

Vertical component of active lateral soil pressure IS considered in the calculation of Overturning Resistance.

Tilt

Horizontal Deflection at Top of Wall due to settlement of soil

(Deflection due to wall bending not considered)

Soil Spring Reaction Modulus	250.0	pci
Horizontal Defl @ Top of Wall (approximate only)	0.155	in

The above calculation is not valid if the heel soil bearing pressure exceeds that of the toe, because the wall would then tend to rotate into the retained soil.

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DESCRIPTION: Typical Basement Wall - Construction Backfill (3 Story Rev)

Rebar Lap & Embedment Lengths Information

Stem Design Segment: Bottom
Stem Design Height: 0.00 ft above top of footing

Lap Splice length for #6 bar specified in this stem design segment (25.4.2.3a) =	22.20 in
Development length for #6 bar specified in this stem design segment =	17.08 in
Hooked embedment length into footing for #6 bar specified in this stem design segment =	11.50 in
As Provided =	0.4400 in2/ft
As Required =	0.2592 in2/ft

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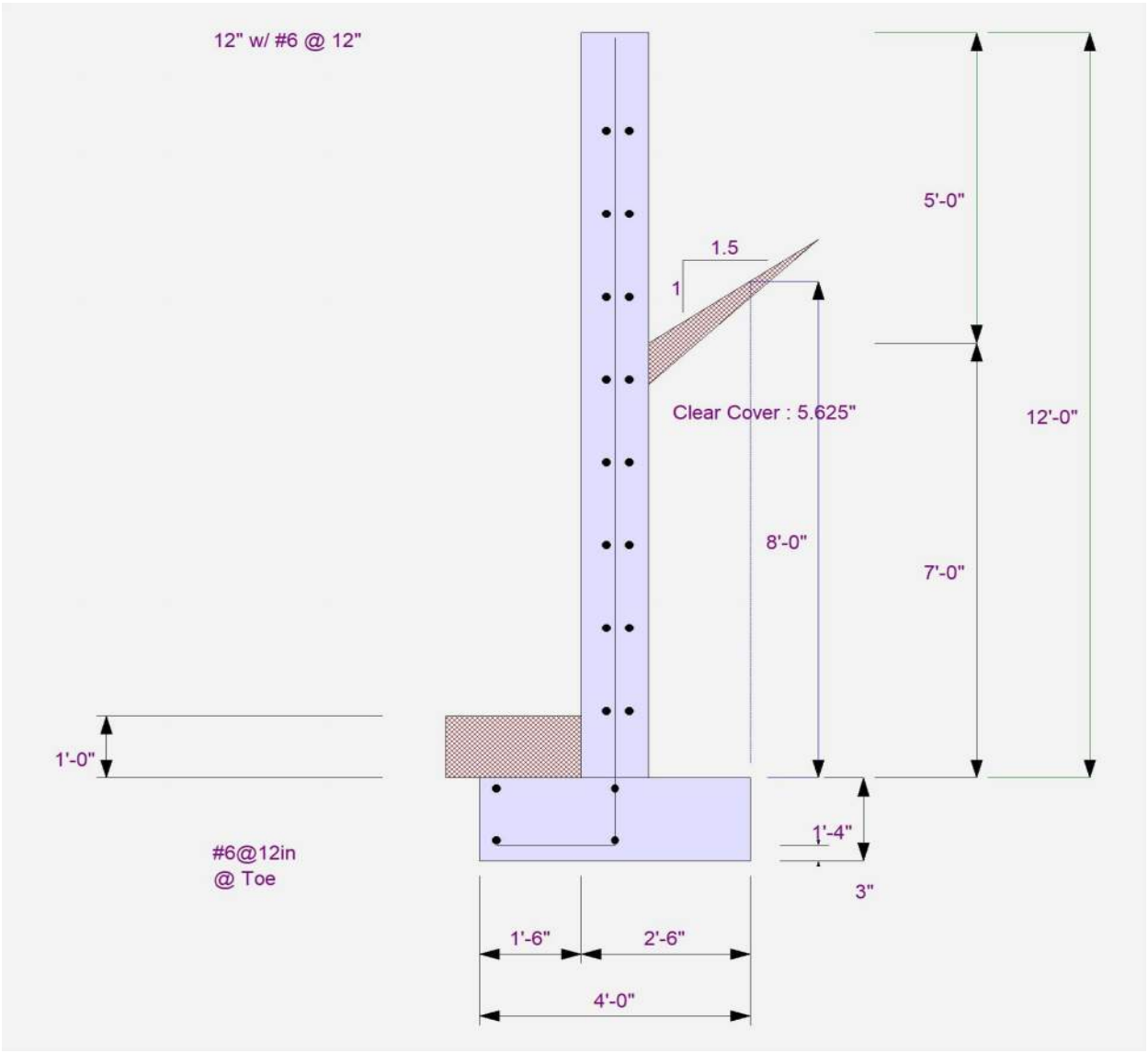
DESCRIPTION: Typical Basement Wall - Construction Backfill (3 Story Rev)



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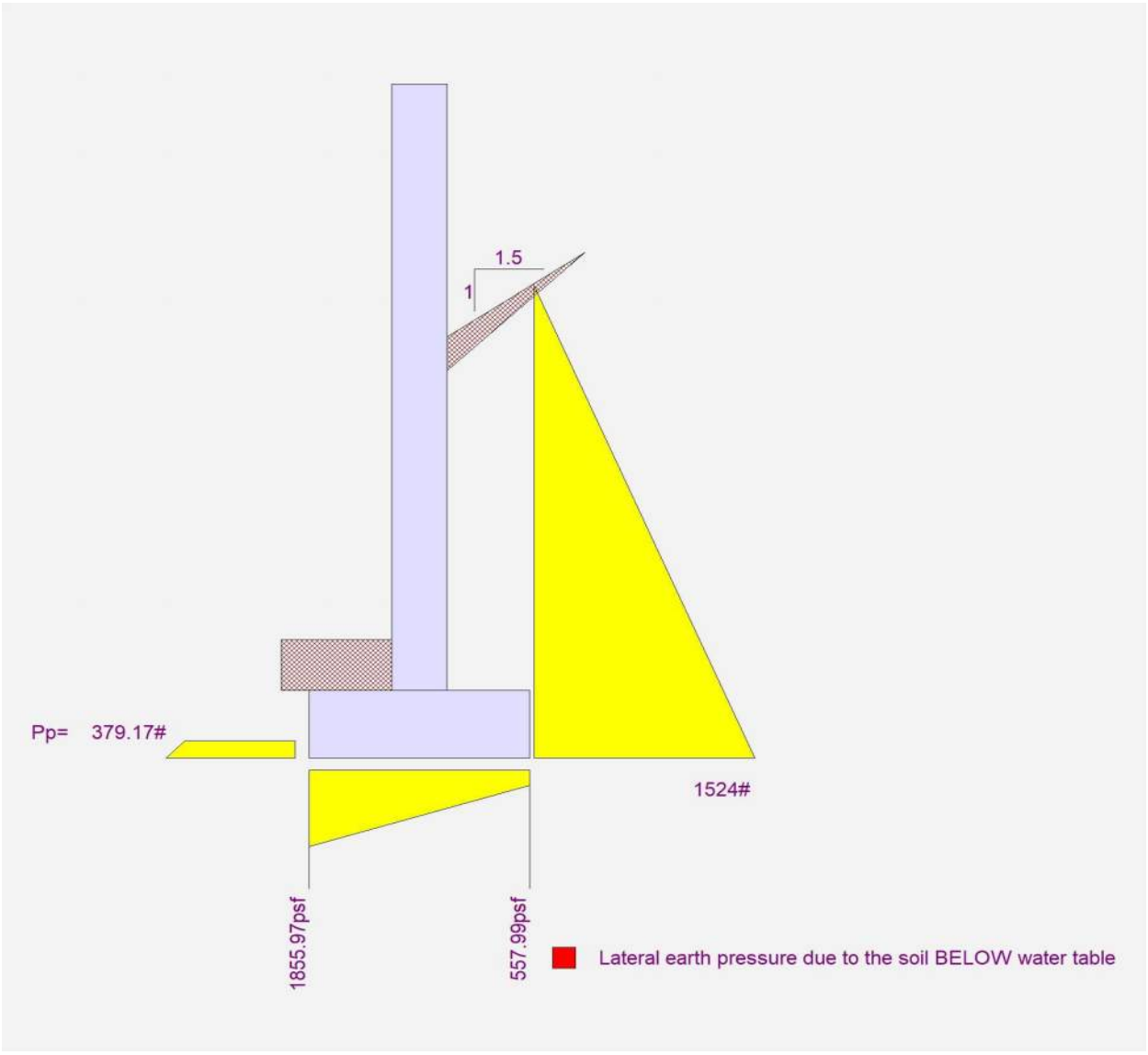


PRRWF20240597

Wesley Bradley Park - Phase II Brownstones (3 Story Revision) LLR Used = 0.8

Concrete Column Reactions DEAD LIVE (reducible)

ID	Location (feet)	Std. Fz (Kips)	Std. Mr (kip-ft)	Std. Ms (kip-ft)	ID	Std. Fz (Kips)	Std. Mr (kip-ft)	Std. Ms (kip-ft)	ID
1	(260,156.1)	-153.7	-6.643	-24.85	1	-74.81	-4.683	-13.93	1
2	(260.1,131.1)	-129.2	10.55	-8.143	2	-62.69	9.357	-5.428	2
3	(288.5,156.1)	-186.9	-7.352	2.315	3	-106	-19.88	-0.00573	3
4	(311.8,131.1)	-173.7	11.84	-7.218	4	-99.85	25.23	-3.726	4
5	(317,156.1)	-185.8	-13.37	-1.335	5	-106.1	-24.44	-0.9572	5
6	(340.3,131.1)	-188.1	9.525	2.342	6	-107.3	24.35	1.178	6
7	(345.5,156.1)	-186.4	-13.79	-0.3001	7	-106.3	-24.82	-0.4386	7
8	(368.8,131.1)	-171.4	15.72	9.145	8	-98.9	27.5	4.533	8
9	(374,156.1)	-185.6	-11.27	-2.725	9	-106.1	-23.92	-2.122	9
10	(395.3,131.1)	-182.7	17.13	-18.51	10	-105.4	27.29	-10.38	10
11	(403.4,156.1)	-197.2	-28.67	-8.497	11	-108.4	-29.54	-1.344	11
12	(422.3,122.4)	-163	36.65	25.67	12	-129.3	37.18	-13.28	12
13	(433.2,146.2)	-194.4	-21.43	20.49	13	-134.4	-31.08	-3.806	13
14	(444.4,115.2)	-118.2	27.72	12.16	14	-150.7	26.76	13.63	14
15	(458.2,138)	-148.1	-14.85	20.43	15	-108.3	-28.14	24.36	15
16	(462.3,109.4)	-134.5	15.76	-24	16	-108.3	19.86	2.512	16
17	(476.3,132.2)	-120.1	-19.04	-0.2805	17	-66.89	-27.95	-0.8257	17
18	(486.8,101.4)	-174.5	15.11	-2.905	18	-98.42	26.35	-2.962	18
19	(494.3,126.3)	-160	-19.73	-18.92	19	-91.08	-27.6	-11.38	19
20	(512.2,93.16)	-184.1	20.93	-3.449	20	-105.3	31.8	-2.476	20
21	(521.4,117.5)	-189.7	-21.29	4.203	21	-108.4	-29.79	2.03	21
22	(539.3,84.35)	-192	20.74	-2.938	22	-109.8	30.63	-2.244	22
23	(548.5,108.7)	-192.4	-21.72	-4.586	23	-110.2	-29.32	-3.139	23
24	(566.4,75.54)	-161.7	17.34	23.61	24	-91.79	27.86	13.29	24
25	(575.6,99.88)	-150.7	-15.23	28.65	25	-83.42	-24.42	17.3	25
26	(584.7,69.59)	-67.5	13.92	15.13	26	-36	27.69	8.139	26
27	(592.8,94.32)	-140.4	-14.93	-25.12	27	-110.7	-21.17	-27.7	27
28	(593.2,11.66)	-102.2	-15.21	-13.81	28	-56.91	-19.5	-9.039	28
29	(593.2,66.83)	-145.3	11.67	-60.43	29	-99.72	26.36	-45.21	29
30	(619.7,11.66)	-152.8	-1.403	-11.03	30	-103	5.037	3.344	30
31	(619.7,38.66)	-185.9	18.38	-7.769	31	-104.1	27.07	-5.268	31
32	(619.7,67.16)	-200.6	28.35	-3.725	32	-108.1	37.54	-6.127	32
33	(619.7,95.66)	-158.1	-40.91	10.99	33	-89.11	-26.13	21.21	33
34	(640.5,-0.4436)	-110.2	4.111	14.31	34	-111.2	-7.65	11.66	34

PRRWF20240597

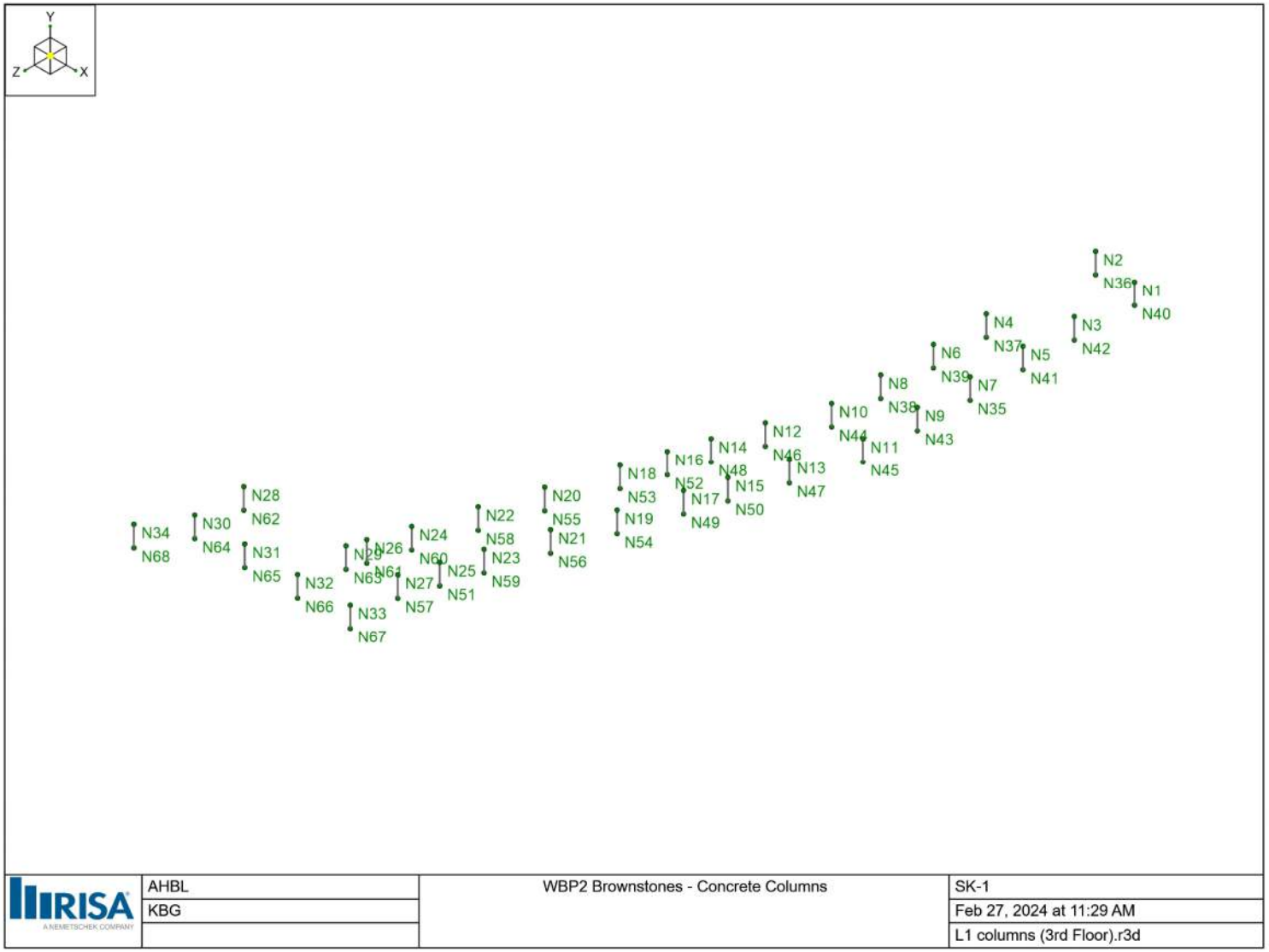
LLR Used = 0.8

Qa (ksf) 3

LIVE (storage)				SNOW			Spread Footing	
Std. Fz (Kips)	Std. Mr (kip-ft)	Std. Ms (kip-ft)	ID	Std. Fz (Kips)	Std. Mr (kip-ft)	Std. Ms (kip-ft)	Min	Use
0.000	0.000	0.025	1	-14.92	-0.648	-2.414	9.0	10.0
0.000	0.000	0.024	2	-12.55	1.020	-0.795	8.0	8.0
0.000	0.002	0.025	3	-18.15	-0.716	0.223	10.0	10.0
0.000	0.003	0.024	4	-16.86	1.154	-0.706	10.0	10.0
0.000	0.004	0.025	5	-18.03	-1.295	-0.131	10.0	10.0
0.000	0.005	0.024	6	-18.26	0.930	0.225	10.0	10.0
0.000	0.005	0.025	7	-18.09	-1.330	-0.031	10.0	10.0
-0.001	0.007	0.024	8	-16.64	1.537	0.884	10.0	10.0
0.000	0.007	0.026	9	-18.02	-1.081	-0.266	10.0	10.0
0.007	0.010	0.045	10	-17.73	1.680	-1.795	10.0	10.0
0.003	0.011	0.042	11	-19.15	-2.764	-0.828	11.0	11.0
-0.072	0.003	-0.039	12	-15.83	3.559	2.472	10.0	10.0
-0.013	-0.021	0.024	13	-18.86	-2.045	2.002	11.0	11.0
-0.390	-0.029	0.047	14	-12.07	2.369	1.063	10.0	10.0
-0.029	-0.036	0.049	15	-14.35	-1.385	1.978	10.0	10.0
-0.168	-0.019	0.141	16	-13.4	1.336	-2.142	9.0	10.0
0.000	-0.006	0.042	17	-11.64	-1.795	-0.031	8.0	8.0
0.006	0.006	0.030	18	-16.94	1.472	-0.292	10.0	10.0
0.001	0.009	0.038	19	-15.53	-1.885	-1.842	10.0	10.0
0.000	0.018	0.045	20	-17.87	2.057	-0.333	10.0	10.0
0.001	0.018	0.041	21	-18.41	-2.049	0.405	10.0	10.0
-0.006	0.028	0.029	22	-18.64	2.027	-0.286	10.0	10.0
-0.009	0.026	0.032	23	-18.68	-2.103	-0.451	10.0	10.0
0.052	0.032	0.064	24	-15.7	1.693	2.292	10.0	10.0
0.140	0.047	0.112	25	-14.63	-1.475	2.782	9.0	10.0
0.852	0.306	0.132	26	-6.563	1.362	1.464	6.0	6.0
-0.551	-0.211	-0.392	27	-13.59	-1.487	-2.442	9.0	10.0
0.037	0.067	-0.023	28	-9.926	-1.478	-1.346	8.0	8.0
-3.026	0.795	-2.213	29	-14.1	1.140	-5.868	9.0	10.0
0.237	-0.014	0.121	30	-14.83	-0.127	-1.070	10.0	10.0
-1.631	0.145	-1.466	31	-18.05	1.792	-0.756	10.0	10.0
-26.880	0.712	0.949	32	-19.48	2.752	-0.361	11.0	11.0
-1.319	-1.402	0.293	33	-15.34	-3.974	1.051	10.0	10.0
-0.026	0.084	0.028	34	-10.7	0.397	1.380	9.0	10.0

Company : AHBL
Designer : KBG
Job Number :
Model Name : WBP2 Brownstones - Concrete Columns

2/27/2024
11:31:24 AM
Checked By : _____



RISA A NEMETSCHEK COMPANY	AHBL	WBP2 Brownstones - Concrete Columns	SK-1
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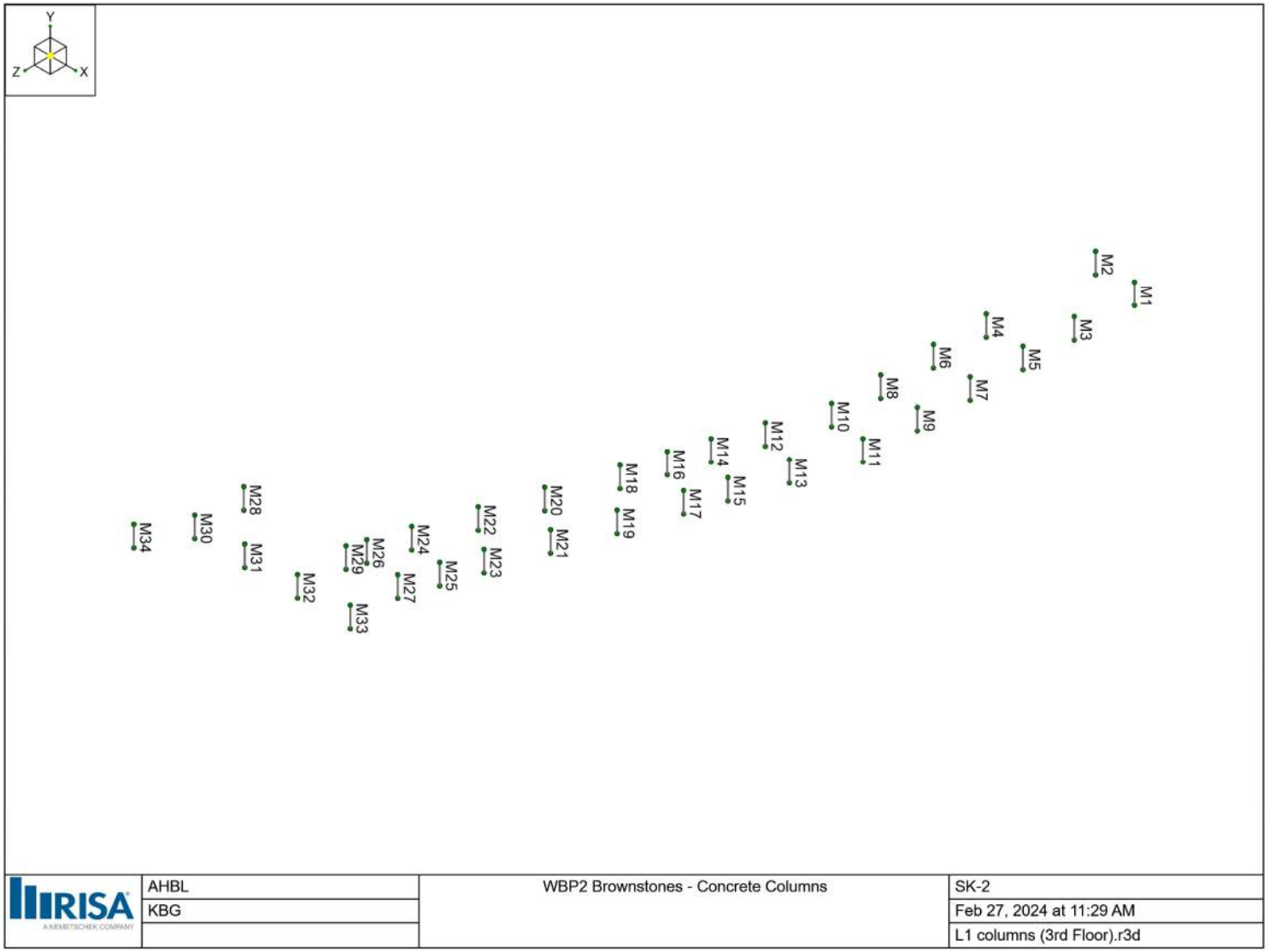
			L1 columns (3rd Floor).r3d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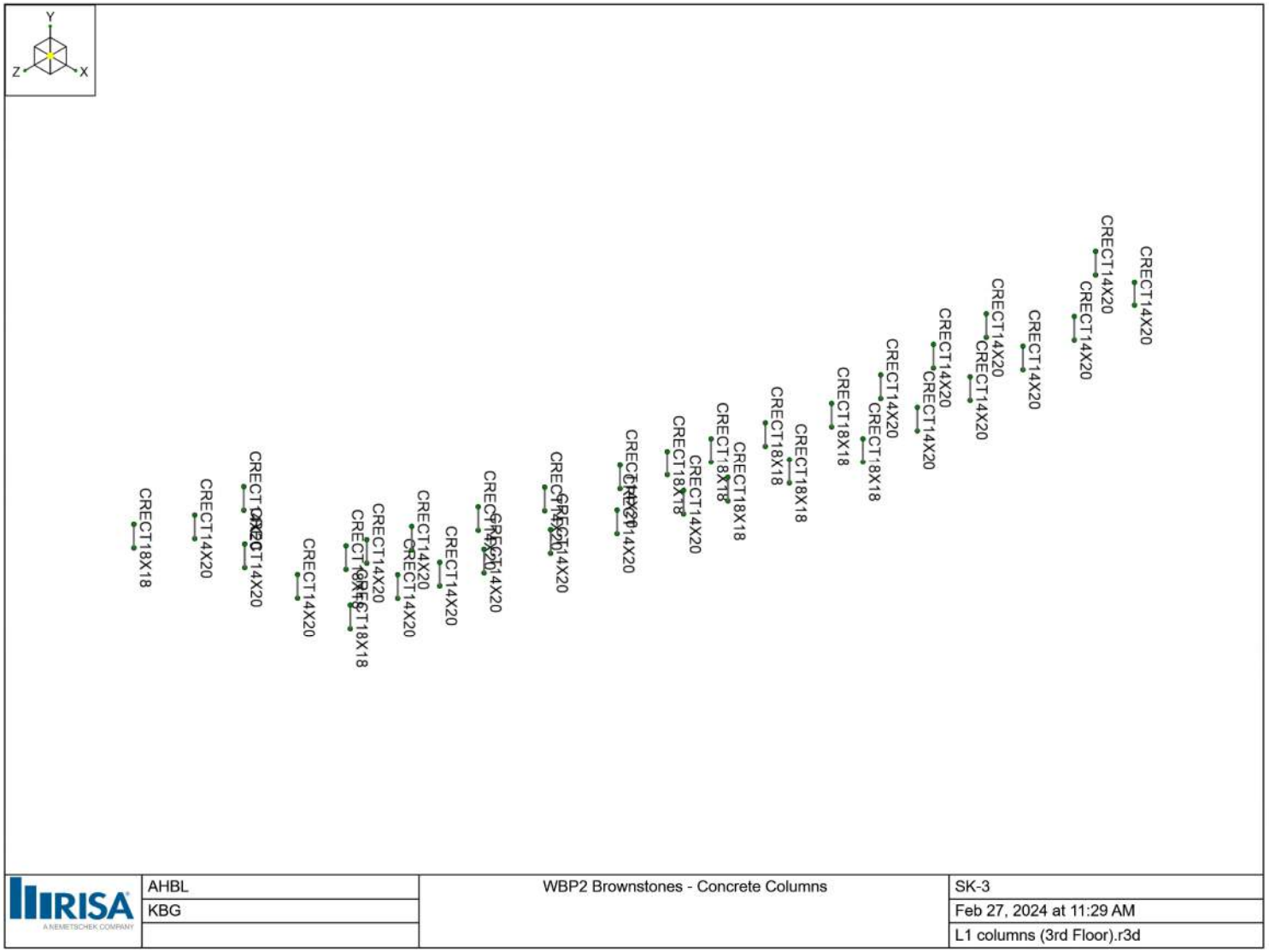
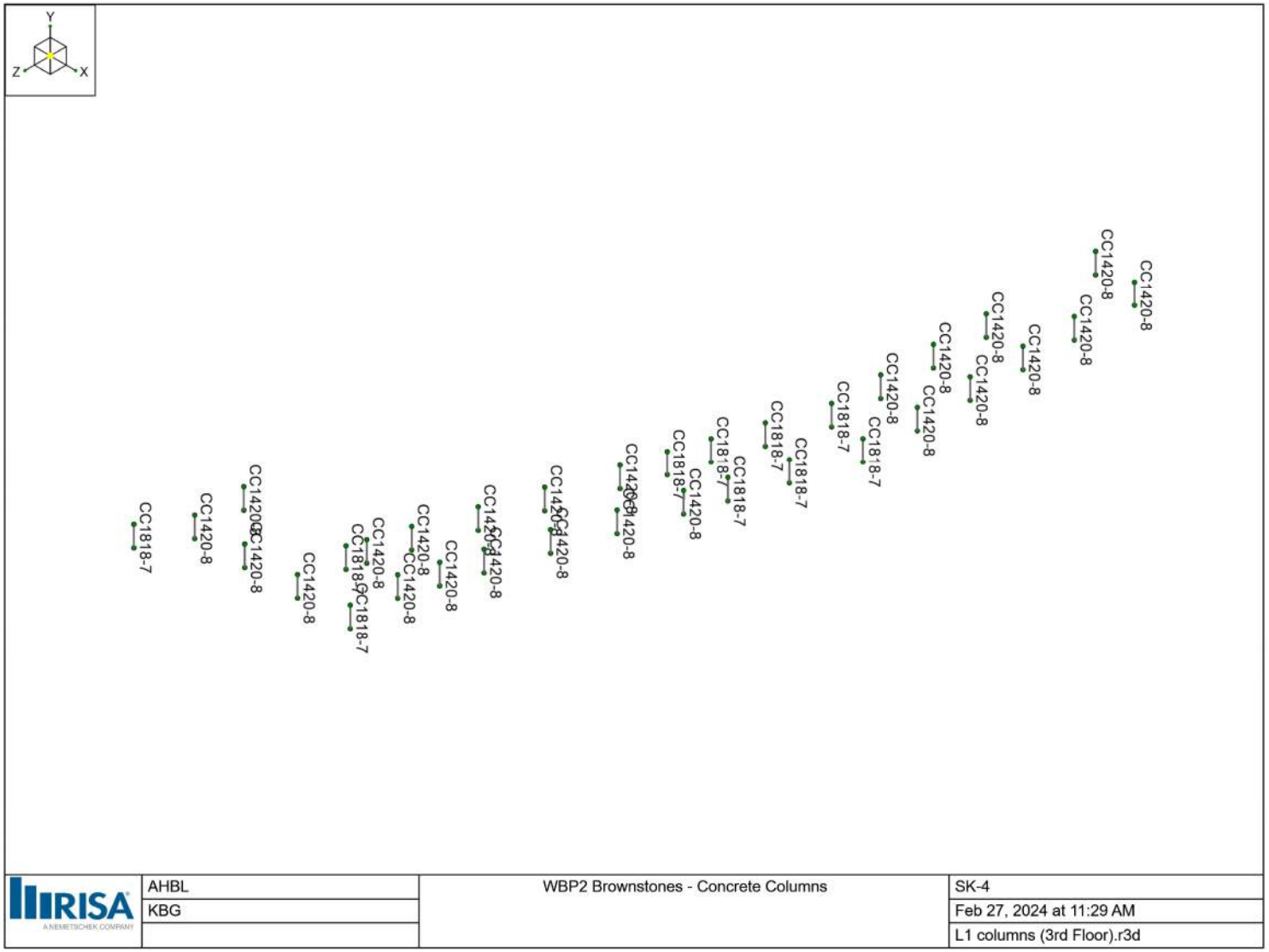
WBP2 Brownstones - Concrete Columns
SK-2
Feb 27, 2024 at 11:29 AM
L1 columns (3rd Floor).r3d



RISA A NEMETSCHEK COMPANY	AHBL	WBP2 Brownstones - Concrete Columns	SK-3
	KBG		Feb 27, 2024 at 11:29 AM
			L1 columns (3rd Floor).r3d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Z
X
CC1420-8
CC1818-7
AHBL
KBG
WBP2 Brownstones - Concrete Columns
SK-4
Feb 27, 2024 at 11:29 AM
L1 columns (3rd Floor).r3d

Company : AHBL
Designer : KBG
Job Number :
Model Name : WBP2 Brownstones - Concrete Columns

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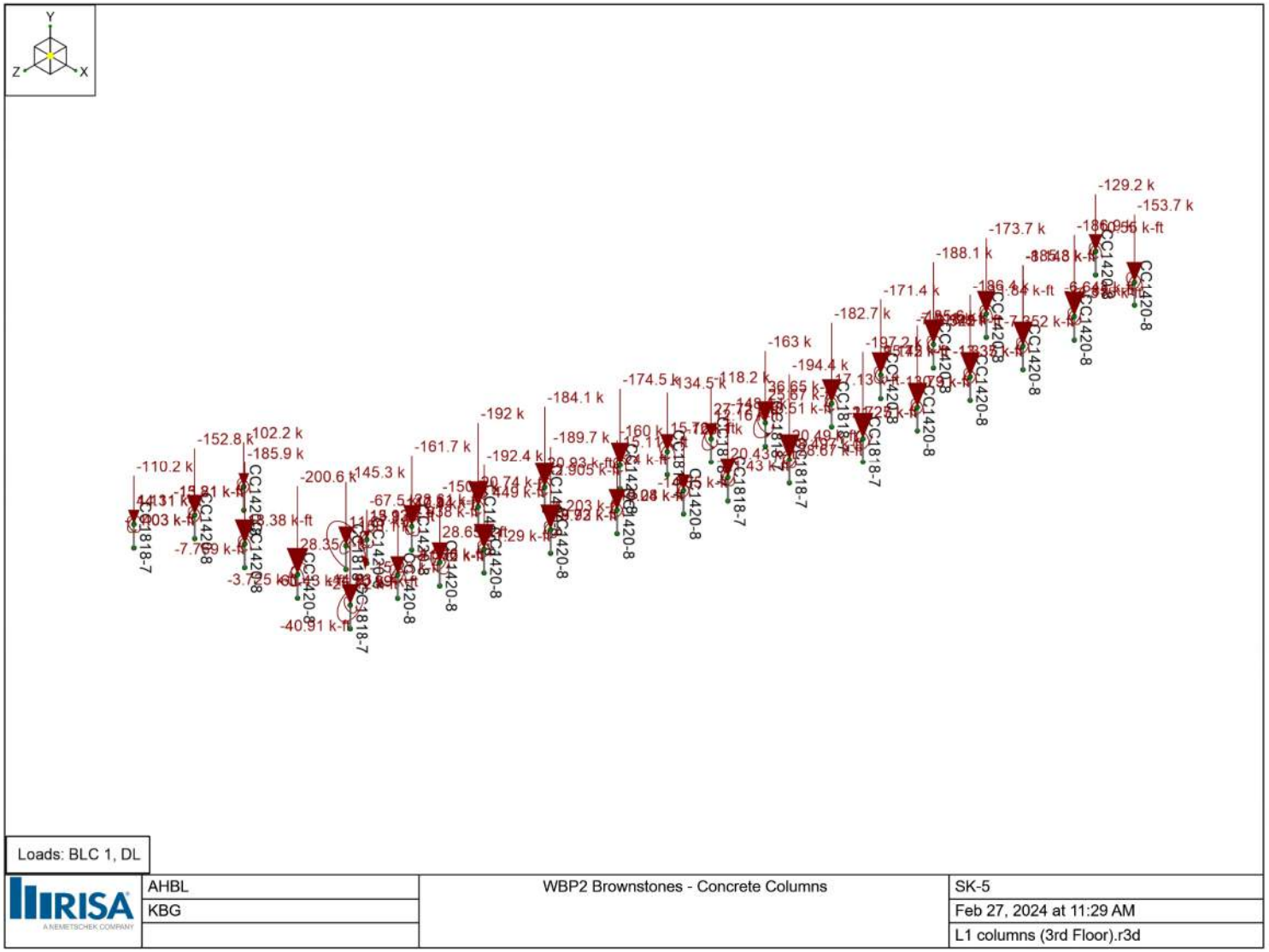
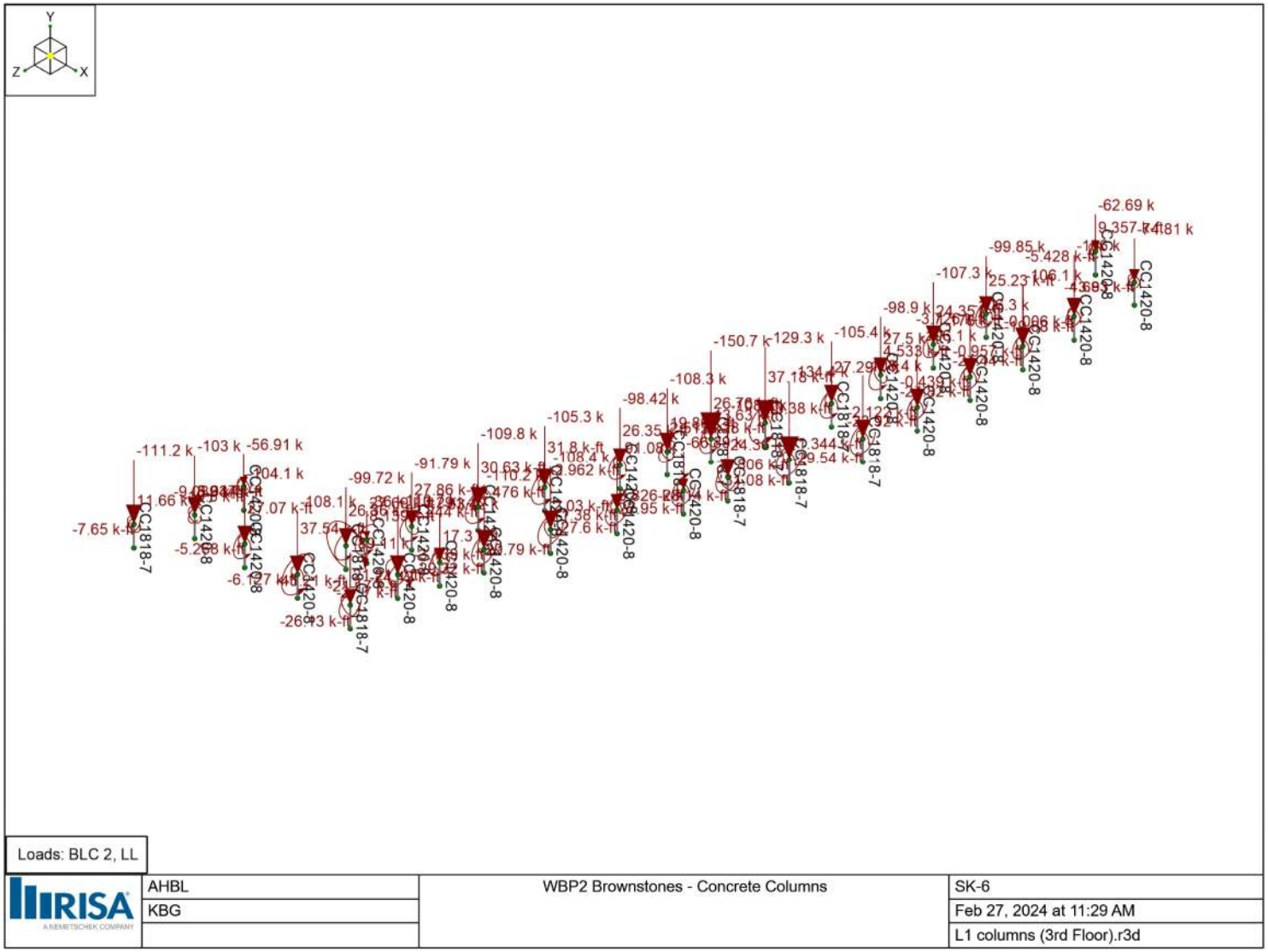
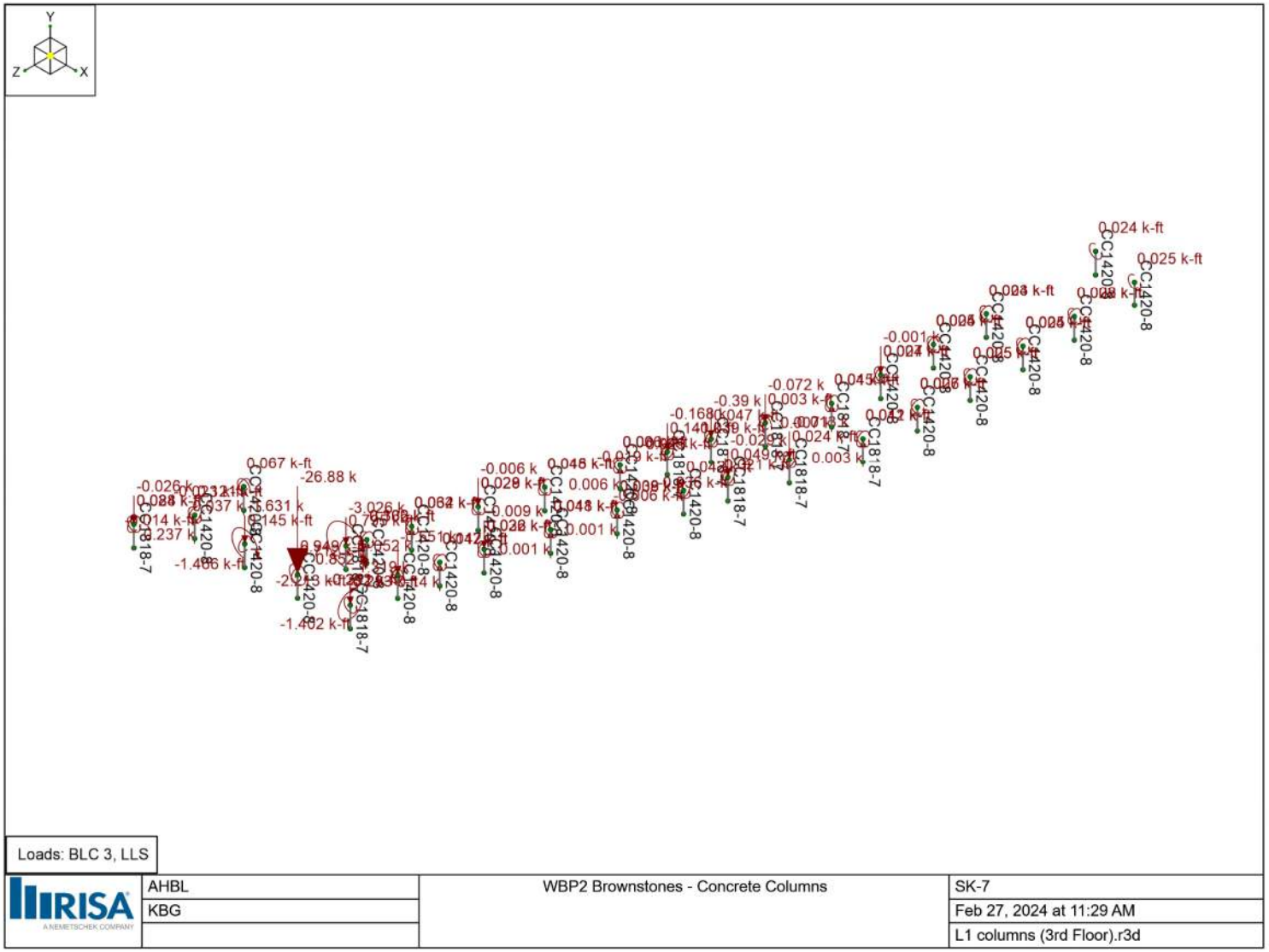



Y
Z
X
-62.69 k
-99.85 k
-107.3 k
-98.9 k
-105.4 k
-150.7 k
129.3 k
-108.3 k
-98.42 k
-105.3 k
-109.8 k
-91.79 k
-99.72 k
-111.2 k
-103 k
-56.91 k
-7.65 k
CC1818-7
CC1420-8
Loads: BLC 2, LL
AHBL
KBG
WBP2 Brownstones - Concrete Columns
SK-6
Feb 27, 2024 at 11:29 AM
L1 columns (3rd Floor).r3d


Y
Z
X
0.024 k-ft
0.025 k-ft
-0.072 k
0.003 k-ft
-0.39 k
-0.001 k
0.067 k-ft
-26.88 k
-0.026 k
-0.631 k
-0.145 k-ft
-0.237 k
-1.486 k-ft
-1.402 k-ft
-0.006 k
0.009 k
0.001 k
0.003 k
Loads: BLC 3, LLS
AHBL
KBG
WBP2 Brownstones - Concrete Columns
SK-7
Feb 27, 2024 at 11:29 AM
L1 columns (3rd Floor).r3d

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Designer : KBG
Job Number :
Model Name : WBP2 Brownstones - Concrete Columns

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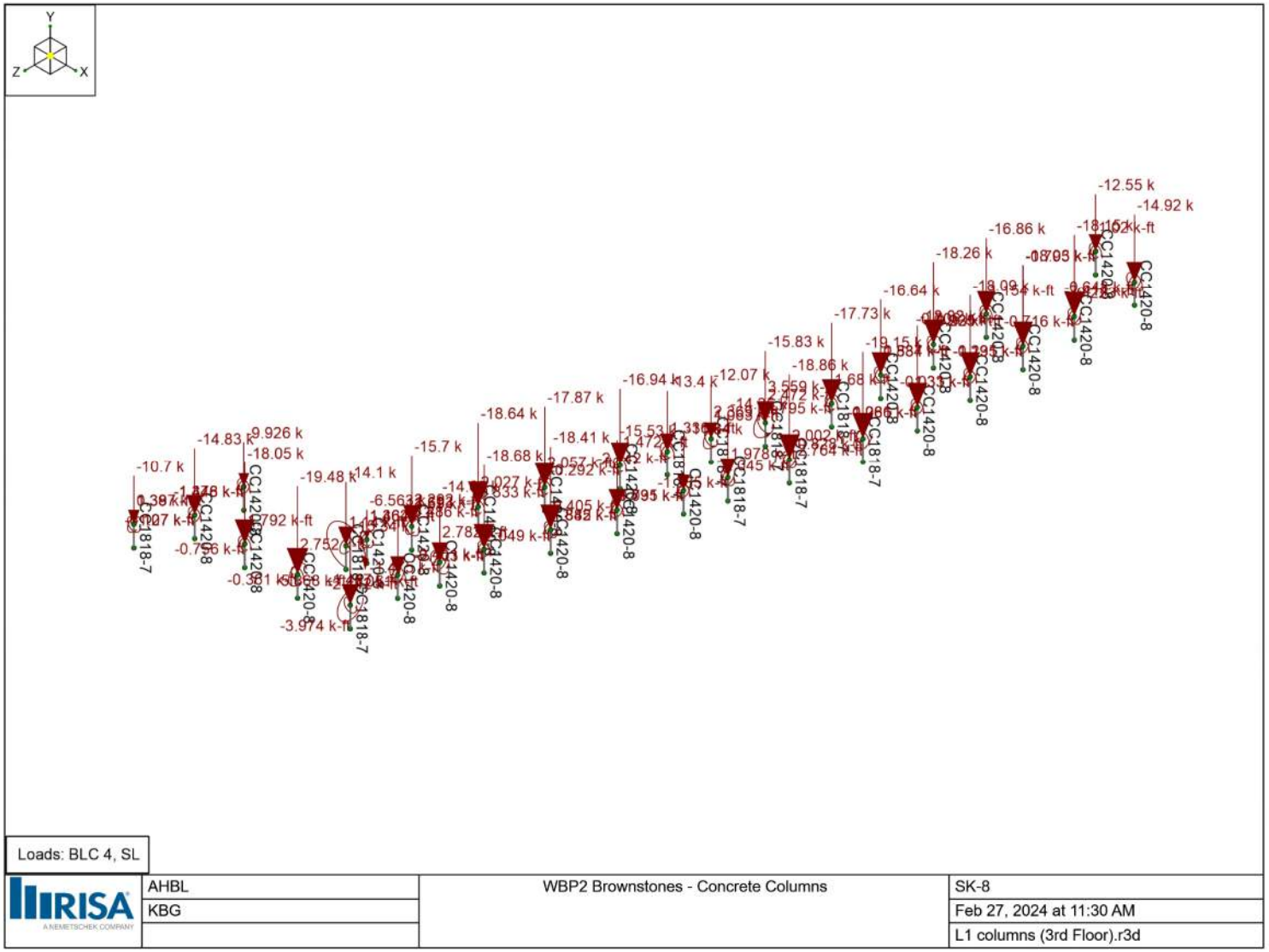
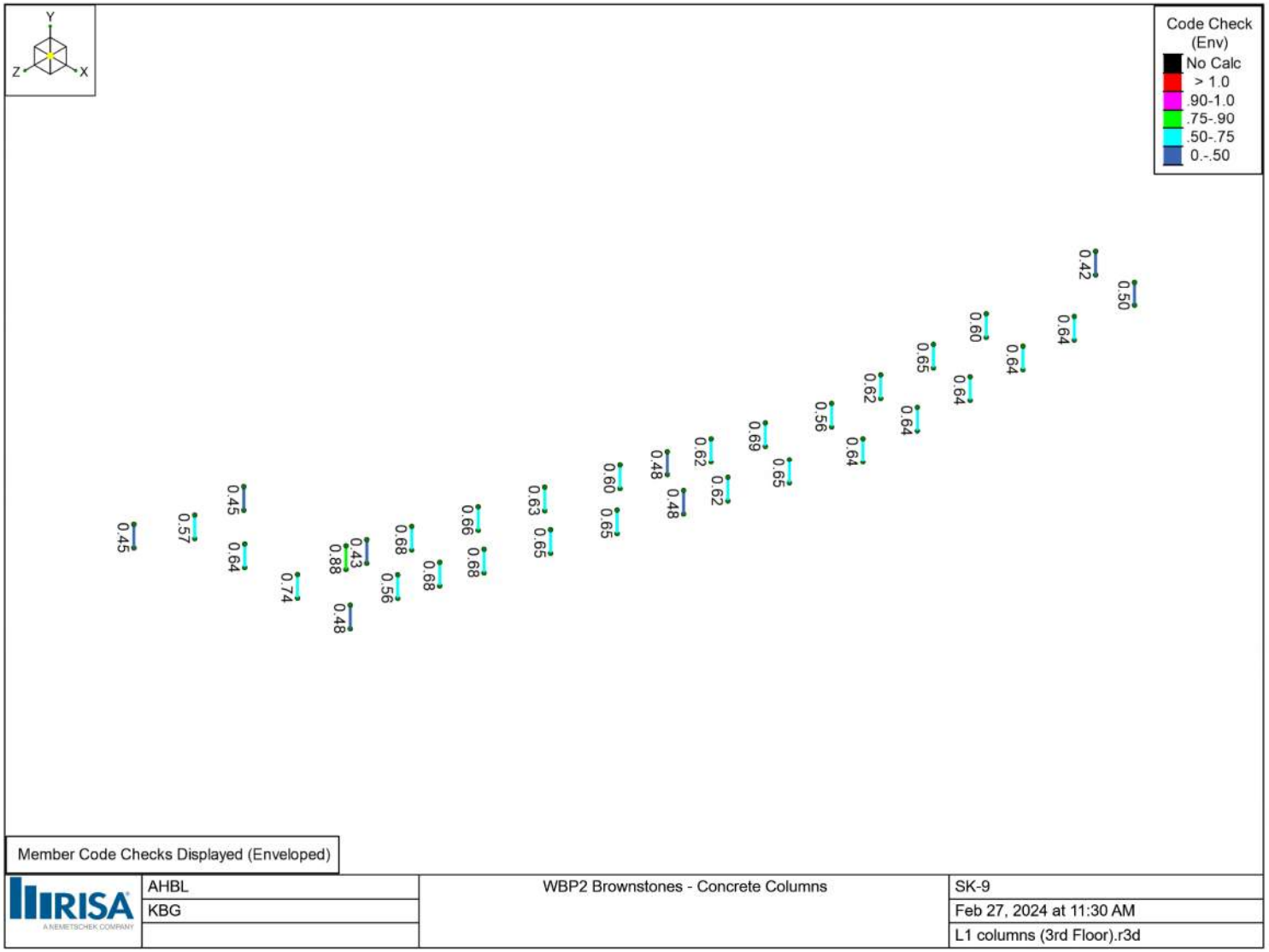
11:31:24 AM
Checked By : _____




Y
Z
X
Code Check (Env)
No Calc
> 1.0
.90-1.0
.75-.90
.50-.75
0.-.50
0.45
0.57
0.45
0.64
0.74
0.88
0.43
0.48
0.56
0.68
0.68
0.66
0.68
0.63
0.65
0.60
0.65
0.48
0.48
0.62
0.62
0.69
0.65
0.56
0.64
0.62
0.64
0.65
0.64
0.60
0.64
0.42
0.50
Member Code Checks Displayed (Enveloped)
AHBL
KBG
WBP2 Brownstones - Concrete Columns
SK-9
Feb 27, 2024 at 11:30 AM
L1 columns (3rd Floor).r3d

Node Coordinates

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
1	N2	131.141076	0	252.757874	
2	N1	156.141076	0	256.757874	
3	N3	156.141076	0	289.266404	
4	N4	131.141076	0	311.805118	
5	N5	156.141076	0	317.000656	
6	N6	131.141076	0	340.305118	
7	N7	156.141076	0	345.500656	
8	N8	131.141076	0	368.805118	
9	N9	156.141076	0	374.000656	
10	N10	131.141076	0	395.305118	
11	N11	156.141076	0	403.417323	
12	N12	122.350066	0	422.326444	
13	N13	146.18143	0	433.153215	
14	N14	115.174869	0	444.443241	
15	N15	138.042651	0	458.201115	
16	N16	109.381234	0	462.274278	
17	N17	132.175197	0	476.260827	
18	N18	103.12336	0	481.534449	
19	N19	123.36811	0	503.366142	
20	N20	93.155184	0	512.213583	
21	N21	114.561024	0	530.471129	
22	N22	84.348097	0	539.31857	
23	N23	105.753937	0	557.576115	
24	N24	75.541339	0	566.423885	
25	N25	99.882874	0	575.646325	
26	N26	69.592848	0	584.730643	
27	N27	94.320417	0	592.765281	
28	N28	11.660433	0	593.226706	
29	N29	66.832349	0	593.226706	
30	N30	11.660433	0	619.726706	
31	N31	38.660433	0	619.726706	
32	N32	67.160433	0	619.726706	
33	N33	95.660433	0	619.726706	
34	N34	-0.44357	0	640.476706	
35	N35	156.141076	-11	345.500656	
36	N36	131.141076	-11	252.757874	
37	N37	131.141076	-11	311.805118	
38	N38	131.141076	-11	368.805118	
39	N39	131.141076	-11	340.305118	

Node Coordinates (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
40	N40	156.141076	-11	256.757874	
41	N41	156.141076	-11	317.000656	
42	N42	156.141076	-11	289.266404	
43	N43	156.141076	-11	374.000656	
44	N44	131.141076	-11	395.305118	
45	N45	156.141076	-11	403.417323	
46	N46	122.350066	-11	422.326444	
47	N47	146.18143	-11	433.153215	
48	N48	115.174869	-11	444.443241	
49	N49	132.175197	-11	476.260827	
50	N50	138.042651	-11	458.201115	
51	N51	99.882874	-11	575.646325	
52	N52	109.381234	-11	462.274278	
53	N53	103.12336	-11	481.534449	
54	N54	123.36811	-11	503.366142	
55	N55	93.155184	-11	512.213583	
56	N56	114.561024	-11	530.471129	
57	N57	94.320417	-11	592.765281	
58	N58	84.348097	-11	539.31857	
59	N59	105.753937	-11	557.576115	
60	N60	75.541339	-11	566.423885	
61	N61	69.592848	-11	584.730643	
62	N62	11.660433	-11	593.226706	
63	N63	66.832349	-11	593.226706	
64	N64	11.660433	-11	619.726706	
65	N65	38.660433	-11	619.726706	
66	N66	67.160433	-11	619.726706	
67	N67	95.660433	-11	619.726706	
68	N68	-0.44357	-11	640.476706	

Node Boundary Conditions

	Node Label	X [k/in]	Y [k/in]	Z [k/in]	Y Rot [k-ft/rad]
1	N46	Reaction	Reaction	Reaction	Reaction
2	N43	Reaction	Reaction	Reaction	Reaction
3	N36	Reaction	Reaction	Reaction	Reaction
4	N58	Reaction	Reaction	Reaction	Reaction
5	N39	Reaction	Reaction	Reaction	Reaction
6	N38	Reaction	Reaction	Reaction	Reaction

Node Boundary Conditions (Continued)

	Node Label	X [k/in]	Y [k/in]	Z [k/in]	Y Rot [k-ft/rad]
7	N67	Reaction	Reaction	Reaction	Reaction
8	N62	Reaction	Reaction	Reaction	Reaction
9	N40	Reaction	Reaction	Reaction	Reaction
10	N42	Reaction	Reaction	Reaction	Reaction
11	N45	Reaction	Reaction	Reaction	Reaction
12	N48	Reaction	Reaction	Reaction	Reaction
13	N53	Reaction	Reaction	Reaction	Reaction
14	N59	Reaction	Reaction	Reaction	Reaction
15	N55	Reaction	Reaction	Reaction	Reaction
16	N57	Reaction	Reaction	Reaction	Reaction
17	N35	Reaction	Reaction	Reaction	Reaction
18	N61	Reaction	Reaction	Reaction	Reaction
19	N65	Reaction	Reaction	Reaction	Reaction
20	N60	Reaction	Reaction	Reaction	Reaction
21	N66	Reaction	Reaction	Reaction	Reaction
22	N54	Reaction	Reaction	Reaction	Reaction
23	N68	Reaction	Reaction	Reaction	Reaction
24	N52	Reaction	Reaction	Reaction	Reaction
25	N47	Reaction	Reaction	Reaction	Reaction
26	N44	Reaction	Reaction	Reaction	Reaction
27	N49	Reaction	Reaction	Reaction	Reaction
28	N56	Reaction	Reaction	Reaction	Reaction
29	N64	Reaction	Reaction	Reaction	Reaction
30	N41	Reaction	Reaction	Reaction	Reaction
31	N50	Reaction	Reaction	Reaction	Reaction
32	N63	Reaction	Reaction	Reaction	Reaction
33	N51	Reaction	Reaction	Reaction	Reaction
34	N37	Reaction	Reaction	Reaction	Reaction
35	N19	Reaction		Reaction	Reaction
36	N20	Reaction		Reaction	Reaction
37	N8	Reaction		Reaction	Reaction
38	N6	Reaction		Reaction	Reaction
39	N21	Reaction		Reaction	Reaction
40	N27	Reaction		Reaction	Reaction
41	N1	Reaction		Reaction	Reaction
42	N5	Reaction		Reaction	Reaction
43	N22	Reaction		Reaction	Reaction
44	N3	Reaction		Reaction	Reaction
45	N23	Reaction		Reaction	Reaction

Node Boundary Conditions (Continued)

	Node Label	X [k/in]	Y [k/in]	Z [k/in]	Y Rot [k-ft/rad]
46	N9	Reaction		Reaction	Reaction
47	N7	Reaction		Reaction	Reaction
48	N24	Reaction		Reaction	Reaction
49	N2	Reaction		Reaction	Reaction
50	N10	Reaction		Reaction	Reaction
51	N26	Reaction		Reaction	Reaction
52	N4	Reaction		Reaction	Reaction
53	N11	Reaction		Reaction	Reaction
54	N30	Reaction		Reaction	Reaction
55	N12	Reaction		Reaction	Reaction
56	N13	Reaction		Reaction	Reaction
57	N29	Reaction		Reaction	Reaction
58	N31	Reaction		Reaction	Reaction
59	N15	Reaction		Reaction	Reaction
60	N28	Reaction		Reaction	Reaction
61	N17	Reaction		Reaction	Reaction
62	N14	Reaction		Reaction	Reaction
63	N32	Reaction		Reaction	Reaction
64	N25	Reaction		Reaction	Reaction
65	N34	Reaction		Reaction	Reaction
66	N18	Reaction		Reaction	Reaction
67	N33	Reaction		Reaction	Reaction
68	N16	Reaction		Reaction	Reaction

Concrete Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e^{5}°F^{-1}]	Density [k/ft^{3}]	f'c [ksi]	Lambda	Flex Steel [ksi]	Shear Steel [ksi]
1	Conc3000NW	3156	1372	0.15	0.6	0.145	3	1	60	60
2	Conc3500NW	3409	1482	0.15	0.6	0.145	3.5	1	60	60
3	Conc4000NW	3644	1584	0.15	0.6	0.145	4	1	60	60
4	Conc3000LW	2085	907	0.15	0.6	0.11	3	0.75	60	60
5	Conc3500LW	2252	979	0.15	0.6	0.11	3.5	0.75	60	60
6	Conc4000LW	2408	1047	0.15	0.6	0.11	4	0.75	60	60

Concrete Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in²]	Iyy [in⁴]	Izz [in⁴]	J [in⁴]
1	CC1818-7	CRECT18X18	Column	Rectangular	Conc4000NW	Type 1	324	8748	8748	12947.04
2	CC1420-8	CRECT14X20	Column	Rectangular	Conc4000NW	Type 2	280	9333.333	4573.333	10225.973

Member Primary Data

	Label	I Node	J Node	Section/Shape	Type	Design List	Material	Design Rule
1	M2	N2	N36	CC1420-8	Column	Rectangular	Conc4000NW	Type 2
2	M1	N1	N40	CC1420-8	Column	Rectangular	Conc4000NW	Type 2
3	M3	N3	N42	CC1420-8	Column	Rectangular	Conc4000NW	Type 2
4	M4	N4	N37	CC1420-8	Column	Rectangular	Conc4000NW	Type 2
5	M5	N5	N41	CC1420-8	Column	Rectangular	Conc4000NW	Type 2
6	M6	N6	N39	CC1420-8	Column	Rectangular	Conc4000NW	Type 2
7	M7	N7	N35	CC1420-8	Column	Rectangular	Conc4000NW	Type 2
8	M8	N8	N38	CC1420-8	Column	Rectangular	Conc4000NW	Type 2
9	M9	N9	N43	CC1420-8	Column	Rectangular	Conc4000NW	Type 2
10	M10	N10	N44	CC1818-7	Column	Rectangular	Conc4000NW	Type 1
11	M11	N11	N45	CC1818-7	Column	Rectangular	Conc4000NW	Type 1
12	M12	N12	N46	CC1818-7	Column	Rectangular	Conc4000NW	Type 1
13	M13	N13	N47	CC1818-7	Column	Rectangular	Conc4000NW	Type 1
14	M14	N14	N48	CC1818-7	Column	Rectangular	Conc4000NW	Type 1
15	M15	N15	N50	CC1818-7	Column	Rectangular	Conc4000NW	Type 1
16	M16	N16	N52	CC1818-7	Column	Rectangular	Conc4000NW	Type 1
17	M17	N17	N49	CC1420-8	Column	Rectangular	Conc4000NW	Type 2
18	M18	N18	N53	CC1420-8	Column	Rectangular	Conc4000NW	Type 2
19	M19	N19	N54	CC1420-8	Column	Rectangular	Conc4000NW	Type 2
20	M20	N20	N55	CC1420-8	Column	Rectangular	Conc4000NW	Type 2
21	M21	N21	N56	CC1420-8	Column	Rectangular	Conc4000NW	Type 2
22	M22	N22	N58	CC1420-8	Column	Rectangular	Conc4000NW	Type 2
23	M23	N23	N59	CC1420-8	Column	Rectangular	Conc4000NW	Type 2
24	M24	N24	N60	CC1420-8	Column	Rectangular	Conc4000NW	Type 2
25	M25	N25	N51	CC1420-8	Column	Rectangular	Conc4000NW	Type 2
26	M26	N26	N61	CC1420-8	Column	Rectangular	Conc4000NW	Type 2
27	M27	N27	N57	CC1420-8	Column	Rectangular	Conc4000NW	Type 2
28	M28	N28	N62	CC1420-8	Column	Rectangular	Conc4000NW	Type 2
29	M29	N29	N63	CC1818-7	Column	Rectangular	Conc4000NW	Type 1
30	M30	N30	N64	CC1420-8	Column	Rectangular	Conc4000NW	Type 2
31	M31	N31	N65	CC1420-8	Column	Rectangular	Conc4000NW	Type 2
32	M32	N32	N66	CC1420-8	Column	Rectangular	Conc4000NW	Type 2

Member Primary Data (Continued)

	Label	I Node	J Node	Section/Shape	Type	Design List	Material	Design Rule
33	M33	N33	N67	CC1818-7	Column	Rectangular	Conc4000NW	Type 1
34	M34	N34	N68	CC1818-7	Column	Rectangular	Conc4000NW	Type 1

Member Advanced Data

	Label	Physical	Deflection Ratio Options	Seismic DR
1	M2	Yes	** NA **	None
2	M1	Yes	** NA **	None
3	M3	Yes	** NA **	None
4	M4	Yes	** NA **	None
5	M5	Yes	** NA **	None
6	M6	Yes	** NA **	None
7	M7	Yes	** NA **	None
8	M8	Yes	** NA **	None
9	M9	Yes	** NA **	None
10	M10	Yes	** NA **	None
11	M11	Yes	** NA **	None
12	M12	Yes	** NA **	None
13	M13	Yes	** NA **	None
14	M14	Yes	** NA **	None
15	M15	Yes	** NA **	None
16	M16	Yes	** NA **	None
17	M17	Yes	** NA **	None
18	M18	Yes	** NA **	None
19	M19	Yes	** NA **	None
20	M20	Yes	** NA **	None
21	M21	Yes	** NA **	None
22	M22	Yes	** NA **	None
23	M23	Yes	** NA **	None
24	M24	Yes	** NA **	None
25	M25	Yes	** NA **	None
26	M26	Yes	** NA **	None
27	M27	Yes	** NA **	None
28	M28	Yes	** NA **	None
29	M29	Yes	** NA **	None
30	M30	Yes	** NA **	None
31	M31	Yes	** NA **	None
32	M32	Yes	** NA **	None
33	M33	Yes	** NA **	None

Member Advanced Data (Continued)

	Label	Physical	Deflection Ratio Options	Seismic DR
34	M34	Yes	** NA **	None

Concrete Column Design Parameters

	Label	Shape	Length [ft]	y sway	z sway	Rebar Design	Flexural Layout	Rebar Design	Shear Layout
1	M2	CC1420-8	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
2	M1	CC1420-8	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
3	M3	CC1420-8	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
4	M4	CC1420-8	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
5	M5	CC1420-8	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
6	M6	CC1420-8	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
7	M7	CC1420-8	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
8	M8	CC1420-8	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
9	M9	CC1420-8	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
10	M10	CC1818-7	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
11	M11	CC1818-7	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
12	M12	CC1818-7	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
13	M13	CC1818-7	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
14	M14	CC1818-7	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
15	M15	CC1818-7	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
16	M16	CC1818-7	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
17	M17	CC1420-8	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
18	M18	CC1420-8	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
19	M19	CC1420-8	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
20	M20	CC1420-8	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
21	M21	CC1420-8	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
22	M22	CC1420-8	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
23	M23	CC1420-8	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
24	M24	CC1420-8	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
25	M25	CC1420-8	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
26	M26	CC1420-8	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
27	M27	CC1420-8	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
28	M28	CC1420-8	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
29	M29	CC1818-7	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
30	M30	CC1420-8	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
31	M31	CC1420-8	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
32	M32	CC1420-8	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
33	M33	CC1818-7	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule
34	M34	CC1818-7	11			Design Rule	Use Design Rule	Design Rule	Use Design Rule

Design Size and Code Check Parameters

	Label	Max Axial/Bending Chk	Max Shear Chk
1	Type 1	1	1
2	Type 2	1	1

Concrete Rebar Parameters

	Label	Optimize Rebar ?	Min Flex Bar	Max Flex Bar	Shear Bar	Legs per Stirrup	Top (Column) Cover [in]	Bottom Cover [in]	Side Cover [in]	Top/Bottom Bars	Add'l Side Bars	Shear Bar Spacing [in]
1	Type 1	Explicit	#7	#10	#4	2	2	1.5	1.5	3	1	4
2	Type 2	Explicit	#8	#10	#4	2	2	1.5	1.5	3	0	4

Node Loads and Enforced Displacements (BLC 1 : DL)

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s²/ft, k*s²*ft)]
1	N1	L	Y	-153.7
2	N2	L	Y	-129.2
3	N3	L	Y	-186.9
4	N4	L	Y	-173.7
5	N5	L	Y	-185.8
6	N6	L	Y	-188.1
7	N7	L	Y	-186.4
8	N8	L	Y	-171.4
9	N9	L	Y	-185.6
10	N10	L	Y	-182.7
11	N11	L	Y	-197.2
12	N12	L	Y	-163
13	N13	L	Y	-194.4
14	N14	L	Y	-118.2
15	N15	L	Y	-148.1
16	N16	L	Y	-134.5
17	N17	L	Y	-120.1
18	N18	L	Y	-174.5
19	N19	L	Y	-160
20	N20	L	Y	-184.1
21	N21	L	Y	-189.7
22	N22	L	Y	-192
23	N23	L	Y	-192.4
24	N24	L	Y	-161.7
25	N25	L	Y	-150.7
26	N26	L	Y	-67.5

Node Loads and Enforced Displacements (BLC 1 : DL) (Continued)

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s²/ft, k*s²*ft)]
27	N27	L	Y	-140.4
28	N28	L	Y	-102.2
29	N29	L	Y	-145.3
30	N30	L	Y	-152.8
31	N31	L	Y	-185.9
32	N32	L	Y	-200.6
33	N33	L	Y	-158.1
34	N34	L	Y	-110.2
35	N1	L	MX	-6.643
36	N2	L	MX	10.55
37	N3	L	MX	-7.352
38	N4	L	MX	11.84
39	N5	L	MX	-13.37
40	N6	L	MX	9.525
41	N7	L	MX	-13.79
42	N8	L	MX	15.72
43	N9	L	MX	-11.27
44	N10	L	MX	17.13
45	N11	L	MX	-28.67
46	N12	L	MX	36.65
47	N13	L	MX	-21.43
48	N14	L	MX	27.72
49	N15	L	MX	-14.85
50	N16	L	MX	15.76
51	N17	L	MX	-19.04
52	N18	L	MX	15.11
53	N19	L	MX	-19.73
54	N20	L	MX	20.93
55	N21	L	MX	-21.29
56	N22	L	MX	20.74
57	N23	L	MX	-21.72
58	N24	L	MX	17.34
59	N25	L	MX	-15.23
60	N26	L	MX	13.92
61	N27	L	MX	-14.93
62	N28	L	MX	-15.21
63	N29	L	MX	11.67
64	N30	L	MX	-1.403
65	N31	L	MX	18.38

Node Loads and Enforced Displacements (BLC 1 : DL) (Continued)

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s²/ft, k*s²*ft)]
66	N32	L	MX	28.35
67	N33	L	MX	-40.91
68	N34	L	MX	4.111
69	N1	L	MZ	-24.85
70	N2	L	MZ	-8.143
71	N3	L	MZ	2.315
72	N4	L	MZ	-7.218
73	N5	L	MZ	-1.335
74	N6	L	MZ	2.342
75	N7	L	MZ	-0.3
76	N8	L	MZ	9.145
77	N9	L	MZ	-2.725
78	N10	L	MZ	-18.51
79	N11	L	MZ	-8.497
80	N12	L	MZ	25.67
81	N13	L	MZ	20.49
82	N14	L	MZ	12.16
83	N15	L	MZ	20.43
84	N16	L	MZ	-24
85	N17	L	MZ	-0.281
86	N18	L	MZ	-2.905
87	N19	L	MZ	-18.92
88	N20	L	MZ	-3.449
89	N21	L	MZ	4.203
90	N22	L	MZ	-2.938
91	N23	L	MZ	-4.586
92	N24	L	MZ	23.61
93	N25	L	MZ	28.65
94	N26	L	MZ	15.13
95	N27	L	MZ	-25.12
96	N28	L	MZ	-13.81
97	N29	L	MZ	-60.43
98	N30	L	MZ	-11.03
99	N31	L	MZ	-7.769
100	N32	L	MZ	-3.725
101	N33	L	MZ	10.99
102	N34	L	MZ	14.31

Node Loads and Enforced Displacements (BLC 2 : LL)

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s²/ft, k*s²*ft)]
1	N1	L	Y	-74.81
2	N2	L	Y	-62.69
3	N3	L	Y	-106
4	N4	L	Y	-99.85
5	N5	L	Y	-106.1
6	N6	L	Y	-107.3
7	N7	L	Y	-106.3
8	N8	L	Y	-98.9
9	N9	L	Y	-106.1
10	N10	L	Y	-105.4
11	N11	L	Y	-108.4
12	N12	L	Y	-129.3
13	N13	L	Y	-134.4
14	N14	L	Y	-150.7
15	N15	L	Y	-108.3
16	N16	L	Y	-108.3
17	N17	L	Y	-66.89
18	N18	L	Y	-98.42
19	N19	L	Y	-91.08
20	N20	L	Y	-105.3
21	N21	L	Y	-108.4
22	N22	L	Y	-109.8
23	N23	L	Y	-110.2
24	N24	L	Y	-91.79
25	N25	L	Y	-83.42
26	N26	L	Y	-36
27	N27	L	Y	-110.7
28	N28	L	Y	-56.91
29	N29	L	Y	-99.72
30	N30	L	Y	-103
31	N31	L	Y	-104.1
32	N32	L	Y	-108.1
33	N33	L	Y	-89.11
34	N34	L	Y	-111.2
35	N1	L	MX	-4.683
36	N2	L	MX	9.357
37	N3	L	MX	-19.88
38	N4	L	MX	25.23
39	N5	L	MX	-24.44

Node Loads and Enforced Displacements (BLC 2 : LL) (Continued)

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s²/ft, k*s²*ft)]
40	N6	L	MX	24.35
41	N7	L	MX	-24.82
42	N8	L	MX	27.5
43	N9	L	MX	-23.92
44	N10	L	MX	27.29
45	N11	L	MX	-29.54
46	N12	L	MX	37.18
47	N13	L	MX	-31.08
48	N14	L	MX	26.76
49	N15	L	MX	-28.14
50	N16	L	MX	19.86
51	N17	L	MX	-27.95
52	N18	L	MX	26.35
53	N19	L	MX	-27.6
54	N20	L	MX	31.8
55	N21	L	MX	-29.79
56	N22	L	MX	30.63
57	N23	L	MX	-29.32
58	N24	L	MX	27.86
59	N25	L	MX	-24.42
60	N26	L	MX	27.69
61	N27	L	MX	-21.17
62	N28	L	MX	-19.5
63	N29	L	MX	26.36
64	N30	L	MX	5.037
65	N31	L	MX	27.07
66	N32	L	MX	37.54
67	N33	L	MX	-26.13
68	N34	L	MX	-7.65
69	N1	L	MZ	-13.93
70	N2	L	MZ	-5.428
71	N3	L	MZ	-0.006
72	N4	L	MZ	-3.726
73	N5	L	MZ	-0.957
74	N6	L	MZ	1.178
75	N7	L	MZ	-0.439
76	N8	L	MZ	4.533
77	N9	L	MZ	-2.122
78	N10	L	MZ	-10.38

Node Loads and Enforced Displacements (BLC 2 : LL) (Continued)

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s²/ft, k*s²*ft)]
79	N11	L	MZ	-1.344
80	N12	L	MZ	-13.28
81	N13	L	MZ	-3.806
82	N14	L	MZ	13.63
83	N15	L	MZ	24.36
84	N16	L	MZ	2.512
85	N17	L	MZ	-0.826
86	N18	L	MZ	-2.962
87	N19	L	MZ	-11.38
88	N20	L	MZ	-2.476
89	N21	L	MZ	2.03
90	N22	L	MZ	-2.244
91	N23	L	MZ	-3.139
92	N24	L	MZ	13.29
93	N25	L	MZ	17.3
94	N26	L	MZ	8.139
95	N27	L	MZ	-27.7
96	N28	L	MZ	-9.039
97	N29	L	MZ	-45.21
98	N30	L	MZ	3.344
99	N31	L	MZ	-5.268
100	N32	L	MZ	-6.127
101	N33	L	MZ	21.21
102	N34	L	MZ	11.66

Node Loads and Enforced Displacements (BLC 3 : LLS)

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s²/ft, k*s²*ft)]
1	N1	L	Y	0
2	N2	L	Y	0
3	N3	L	Y	0
4	N4	L	Y	0
5	N5	L	Y	0
6	N6	L	Y	0
7	N7	L	Y	0
8	N8	L	Y	-0.001
9	N9	L	Y	0
10	N10	L	Y	0.007
11	N11	L	Y	0.003

Node Loads and Enforced Displacements (BLC 3 : LLS) (Continued)

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s²/ft, k*s²*ft)]
12	N12	L	Y	-0.072
13	N13	L	Y	-0.013
14	N14	L	Y	-0.39
15	N15	L	Y	-0.029
16	N16	L	Y	-0.168
17	N17	L	Y	0
18	N18	L	Y	0.006
19	N19	L	Y	0.001
20	N20	L	Y	0
21	N21	L	Y	0.001
22	N22	L	Y	-0.006
23	N23	L	Y	-0.009
24	N24	L	Y	0.052
25	N25	L	Y	0.14
26	N26	L	Y	0.852
27	N27	L	Y	-0.551
28	N28	L	Y	0.037
29	N29	L	Y	-3.026
30	N30	L	Y	0.237
31	N31	L	Y	-1.631
32	N32	L	Y	-26.88
33	N33	L	Y	-1.319
34	N34	L	Y	-0.026
35	N1	L	MX	0
36	N2	L	MX	0
37	N3	L	MX	0.002
38	N4	L	MX	0.003
39	N5	L	MX	0.004
40	N6	L	MX	0.005
41	N7	L	MX	0.005
42	N8	L	MX	0.007
43	N9	L	MX	0.007
44	N10	L	MX	0.01
45	N11	L	MX	0.011
46	N12	L	MX	0.003
47	N13	L	MX	-0.021
48	N14	L	MX	-0.029
49	N15	L	MX	-0.036
50	N16	L	MX	-0.019

Node Loads and Enforced Displacements (BLC 3 : LLS) (Continued)

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s²/ft, k*s²*ft)]
51	N17	L	MX	-0.006
52	N18	L	MX	0.006
53	N19	L	MX	0.009
54	N20	L	MX	0.018
55	N21	L	MX	0.018
56	N22	L	MX	0.028
57	N23	L	MX	0.026
58	N24	L	MX	0.032
59	N25	L	MX	0.047
60	N26	L	MX	0.306
61	N27	L	MX	-0.211
62	N28	L	MX	0.067
63	N29	L	MX	0.795
64	N30	L	MX	-0.014
65	N31	L	MX	0.145
66	N32	L	MX	0.712
67	N33	L	MX	-1.402
68	N34	L	MX	0.084
69	N1	L	MZ	0.025
70	N2	L	MZ	0.024
71	N3	L	MZ	0.025
72	N4	L	MZ	0.024
73	N5	L	MZ	0.025
74	N6	L	MZ	0.024
75	N7	L	MZ	0.025
76	N8	L	MZ	0.024
77	N9	L	MZ	0.026
78	N10	L	MZ	0.045
79	N11	L	MZ	0.042
80	N12	L	MZ	-0.039
81	N13	L	MZ	0.024
82	N14	L	MZ	0.047
83	N15	L	MZ	0.049
84	N16	L	MZ	0.141
85	N17	L	MZ	0.042
86	N18	L	MZ	0.03
87	N19	L	MZ	0.038
88	N20	L	MZ	0.045
89	N21	L	MZ	0.041

Node Loads and Enforced Displacements (BLC 3 : LLS) (Continued)

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s²/ft, k*s²*ft)]
90	N22	L	MZ	0.029
91	N23	L	MZ	0.032
92	N24	L	MZ	0.064
93	N25	L	MZ	0.112
94	N26	L	MZ	0.132
95	N27	L	MZ	-0.392
96	N28	L	MZ	-0.023
97	N29	L	MZ	-2.213
98	N30	L	MZ	0.121
99	N31	L	MZ	-1.466
100	N32	L	MZ	0.949
101	N33	L	MZ	0.293
102	N34	L	MZ	0.028

Node Loads and Enforced Displacements (BLC 4 : SL)

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s²/ft, k*s²*ft)]
1	N1	L	Y	-14.92
2	N2	L	Y	-12.55
3	N3	L	Y	-18.15
4	N4	L	Y	-16.86
5	N5	L	Y	-18.03
6	N6	L	Y	-18.26
7	N7	L	Y	-18.09
8	N8	L	Y	-16.64
9	N9	L	Y	-18.02
10	N10	L	Y	-17.73
11	N11	L	Y	-19.15
12	N12	L	Y	-15.83
13	N13	L	Y	-18.86
14	N14	L	Y	-12.07
15	N15	L	Y	-14.35
16	N16	L	Y	-13.4
17	N17	L	Y	-11.64
18	N18	L	Y	-16.94
19	N19	L	Y	-15.53
20	N20	L	Y	-17.87
21	N21	L	Y	-18.41
22	N22	L	Y	-18.64

Node Loads and Enforced Displacements (BLC 4 : SL) (Continued)

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s²/ft, k*s²*ft)]
23	N23	L	Y	-18.68
24	N24	L	Y	-15.7
25	N25	L	Y	-14.63
26	N26	L	Y	-6.563
27	N27	L	Y	-13.59
28	N28	L	Y	-9.926
29	N29	L	Y	-14.1
30	N30	L	Y	-14.83
31	N31	L	Y	-18.05
32	N32	L	Y	-19.48
33	N33	L	Y	-15.34
34	N34	L	Y	-10.7
35	N1	L	MX	-0.648
36	N2	L	MX	1.02
37	N3	L	MX	-0.716
38	N4	L	MX	1.154
39	N5	L	MX	-1.295
40	N6	L	MX	0.93
41	N7	L	MX	-1.33
42	N8	L	MX	1.537
43	N9	L	MX	-1.081
44	N10	L	MX	1.68
45	N11	L	MX	-2.764
46	N12	L	MX	3.559
47	N13	L	MX	-2.045
48	N14	L	MX	2.369
49	N15	L	MX	-1.385
50	N16	L	MX	1.336
51	N17	L	MX	-1.795
52	N18	L	MX	1.472
53	N19	L	MX	-1.885
54	N20	L	MX	2.057
55	N21	L	MX	-2.049
56	N22	L	MX	2.027
57	N23	L	MX	-2.103
58	N24	L	MX	1.693
59	N25	L	MX	-1.475
60	N26	L	MX	1.362
61	N27	L	MX	-1.487

Node Loads and Enforced Displacements (BLC 4 : SL) (Continued)

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s²/ft, k*s²*ft)]
62	N28	L	MX	-1.478
63	N29	L	MX	1.14
64	N30	L	MX	-0.127
65	N31	L	MX	1.792
66	N32	L	MX	2.752
67	N33	L	MX	-3.974
68	N34	L	MX	0.397
69	N1	L	MZ	-2.414
70	N2	L	MZ	-0.795
71	N3	L	MZ	0.223
72	N4	L	MZ	-0.706
73	N5	L	MZ	-0.131
74	N6	L	MZ	0.225
75	N7	L	MZ	-0.031
76	N8	L	MZ	0.884
77	N9	L	MZ	-0.266
78	N10	L	MZ	-1.795
79	N11	L	MZ	-0.828
80	N12	L	MZ	2.472
81	N13	L	MZ	2.002
82	N14	L	MZ	1.063
83	N15	L	MZ	1.978
84	N16	L	MZ	-2.142
85	N17	L	MZ	-0.031
86	N18	L	MZ	-0.292
87	N19	L	MZ	-1.842
88	N20	L	MZ	-0.333
89	N21	L	MZ	0.405
90	N22	L	MZ	-0.286
91	N23	L	MZ	-0.451
92	N24	L	MZ	2.292
93	N25	L	MZ	2.782
94	N26	L	MZ	1.464
95	N27	L	MZ	-2.442
96	N28	L	MZ	-1.346
97	N29	L	MZ	-5.868
98	N30	L	MZ	-1.07
99	N31	L	MZ	-0.756
100	N32	L	MZ	-0.361

Node Loads and Enforced Displacements (BLC 4 : SL) (Continued)

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s²/ft, k*s²*ft)]
101	N33	L	MZ	1.051
102	N34	L	MZ	1.38

Basic Load Cases

	BLC Description	Category	Y Gravity	Nodal
1	DL	DL	-1	102
2	LL	LL		102
3	LLS	LLS		102
4	SL	SL		102

Load Combinations

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
1	IBC 16-1	Yes	Y	DL	1.4								
2	IBC 16-2 (a)	Yes	Y	DL	1.2	LL	1.6	LLS	1.6				
3	IBC 16-2 (b)	Yes	Y	DL	1.2	LL	1.6	LLS	1.6	SL	0.5	SLN	0.5
4	IBC 16-3 (c)	Yes	Y	DL	1.2	SL	1.6	SLN	1.6	LL	0.5	LLS	1

Envelope Node Reactions

	Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
0	N46	max	-0.863	2	414.817	3	9.568	3	0	4	0	4	0	4
1		min	-3.267	1	233.224	1	4.665	1	0	1	0	1	0	1
2	N43	max	0.614	3	405.212	3	-1.434	1	0	4	0	4	0	4
3		min	0.347	1	264.182	1	-4.757	3	0	1	0	1	0	1
4	N36	max	1.71	3	265.341	3	2.558	3	0	4	0	4	0	4
5		min	1.036	1	185.222	1	1.343	1	0	1	0	1	0	1
6	N58	max	0.656	3	419.131	3	6.814	3	0	4	0	4	0	4
7		min	0.374	1	273.142	1	2.64	1	0	1	0	1	0	1
8	N39	max	-0.298	1	410.252	3	4.624	3	0	4	0	4	0	4
9		min	-0.441	3	267.682	1	1.212	1	0	1	0	1	0	1
10	N38	max	-1.164	1	375.963	3	5.786	3	0	4	0	4	0	4
11		min	-1.701	3	244.302	1	2.001	1	0	1	0	1	0	1
12	N67	max	-1.399	1	346.383	3	-5.207	1	0	4	0	4	0	4
13		min	-4.374	3	226.364	1	-8.648	3	0	1	0	1	0	1
14	N62	max	2.886	3	222.321	3	-1.936	1	0	4	0	4	0	4
15		min	1.758	1	147.422	1	-4.553	3	0	1	0	1	0	1

Envelope Node Reactions (Continued)

	Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
16	N40	max	4.843	3	315.318	3	-0.845	1	0	4	0	4	0	4
17		min	3.163	1	219.522	1	-1.435	3	0	1	0	1	0	1
18	N42	max	-0.255	2	406.677	3	-0.936	1	0	4	0	4	0	4
19		min	-0.295	1	266.002	1	-3.726	3	0	1	0	1	0	1
20	N45	max	1.154	3	423.957	3	-3.649	1	0	4	0	4	0	4
21		min	1.081	1	281.104	1	-7.548	3	0	1	0	1	0	1
22	N48	max	-1.548	1	393.926	3	7.02	3	0	4	0	4	0	4
23		min	-3.364	3	170.504	1	3.528	1	0	1	0	1	0	1
24	N53	max	0.757	3	379.054	3	5.549	3	0	4	0	4	0	4
25		min	0.37	1	248.642	1	1.923	1	0	1	0	1	0	1
26	N59	max	0.973	3	420.276	3	-2.764	1	0	4	0	4	0	4
27		min	0.584	1	273.702	1	-6.726	3	0	1	0	1	0	1
28	N55	max	0.745	3	402.057	3	7.005	3	0	4	0	4	0	4
29		min	0.439	1	262.082	1	2.664	1	0	1	0	1	0	1
30	N57	max	6.937	3	356.998	3	-1.9	1	0	4	0	4	0	4
31		min	3.197	1	200.902	1	-4.806	3	0	1	0	1	0	1
32	N35	max	0.094	3	406.527	3	-1.755	1	0	4	0	4	0	4
33		min	0.038	1	265.302	1	-5.174	3	0	1	0	1	0	1
34	N61	max	-1.926	1	144.24	3	5.653	3	0	4	0	4	0	4
35		min	-2.92	3	98.842	1	1.772	1	0	1	0	1	0	1
36	N65	max	1.861	3	404.996	3	6.045	3	0	4	0	4	0	4
37		min	0.989	1	264.602	1	2.339	1	0	1	0	1	0	1
38	N60	max	-3.005	1	352.392	3	6.026	3	0	4	0	4	0	4
39		min	-4.622	3	230.722	1	2.207	1	0	1	0	1	0	1
40	N66	max	1.176	3	470.15	3	8.782	3	0	4	0	4	0	4
41		min	0.474	1	285.182	1	3.608	1	0	1	0	1	0	1
42	N54	max	3.797	3	349.213	3	-2.511	1	0	4	0	4	0	4
43		min	2.408	1	228.342	1	-6.251	3	0	1	0	1	0	1
44	N68	max	-1.821	1	319.858	3	0.523	1	0	4	0	4	0	4
45		min	-3.324	3	159.304	1	-0.652	2	0	1	0	1	0	1
46	N52	max	3.055	1	345.955	3	4.666	3	0	4	0	4	0	4
47		min	2.232	2	193.324	1	2.006	1	0	1	0	1	0	1
48	N47	max	-1.685	2	462.077	3	-2.727	1	0	4	0	4	0	4
49		min	-2.608	1	277.184	1	-6.955	3	0	1	0	1	0	1
50	N44	max	3.604	3	401.04	3	5.916	3	0	4	0	4	0	4
51		min	2.356	1	260.804	1	2.18	1	0	1	0	1	0	1
52	N49	max	0.146	3	260.686	3	-2.423	1	0	4	0	4	0	4
53		min	0.036	1	172.482	1	-6.225	3	0	1	0	1	0	1
54	N56	max	-0.535	1	414.005	3	-2.71	1	0	4	0	4	0	4

Envelope Node Reactions (Continued)

	Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
55		min	-0.778	3	269.922	1	-6.746	3	0	1	0	1	0	1
56	N64	max	1.404	1	358.917	3	0.578	2	0	4	0	4	0	4
57		min	0.699	2	218.262	1	-0.179	1	0	1	0	1	0	1
58	N41	max	0.287	3	405.457	3	-1.702	1	0	4	0	4	0	4
59		min	0.17	1	264.462	1	-5.072	3	0	1	0	1	0	1
60	N50	max	-2.6	1	362.528	3	-1.89	1	0	4	0	4	0	4
61		min	-5.869	3	212.364	1	-5.781	3	0	1	0	1	0	1
62	N63	max	13.757	3	350.11	3	5.275	3	0	4	0	4	0	4
63		min	7.691	1	208.444	1	1.485	1	0	1	0	1	0	1
64	N51	max	-3.646	1	325.125	3	-1.938	1	0	4	0	4	0	4
65		min	-5.785	3	215.322	1	-5.274	3	0	1	0	1	0	1
66	N37	max	1.358	3	380.352	3	5.014	3	0	4	0	4	0	4
67		min	0.919	1	247.522	1	1.507	1	0	1	0	1	0	1
68	N19	max	-2.408	1	0	4	6.251	3	0	4	0	4	0	4
69		min	-3.797	3	0	1	2.511	1	0	1	0	1	0	1
70	N20	max	-0.439	1	0	4	-2.664	1	0	4	0	4	0	4
71		min	-0.745	3	0	1	-7.005	3	0	1	0	1	0	1
72	N8	max	1.701	3	0	4	-2.001	1	0	4	0	4	0	4
73		min	1.164	1	0	1	-5.786	3	0	1	0	1	0	1
74	N6	max	0.441	3	0	4	-1.212	1	0	4	0	4	0	4
75		min	0.298	1	0	1	-4.624	3	0	1	0	1	0	1
76	N21	max	0.778	3	0	4	6.746	3	0	4	0	4	0	4
77		min	0.535	1	0	1	2.71	1	0	1	0	1	0	1
78	N27	max	-3.197	1	0	4	4.806	3	0	4	0	4	0	4
79		min	-6.937	3	0	1	1.9	1	0	1	0	1	0	1
80	N1	max	-3.163	1	0	4	1.435	3	0	4	0	4	0	4
81		min	-4.843	3	0	1	0.845	1	0	1	0	1	0	1
82	N5	max	-0.17	1	0	4	5.072	3	0	4	0	4	0	4
83		min	-0.287	3	0	1	1.702	1	0	1	0	1	0	1
84	N22	max	-0.374	1	0	4	-2.64	1	0	4	0	4	0	4
85		min	-0.656	3	0	1	-6.814	3	0	1	0	1	0	1
86	N3	max	0.295	1	0	4	3.726	3	0	4	0	4	0	4
87		min	0.255	2	0	1	0.936	1	0	1	0	1	0	1
88	N23	max	-0.584	1	0	4	6.726	3	0	4	0	4	0	4
89		min	-0.973	3	0	1	2.764	1	0	1	0	1	0	1
90	N9	max	-0.347	1	0	4	4.757	3	0	4	0	4	0	4
91		min	-0.614	3	0	1	1.434	1	0	1	0	1	0	1
92	N7	max	-0.038	1	0	4	5.174	3	0	4	0	4	0	4
93		min	-0.094	3	0	1	1.755	1	0	1	0	1	0	1

Envelope Node Reactions (Continued)

	Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
94	N24	max	4.622	3	0	4	-2.207	1	0	4	0	4	0	4
95		min	3.005	1	0	1	-6.026	3	0	1	0	1	0	1
96	N2	max	-1.036	1	0	4	-1.343	1	0	4	0	4	0	4
97		min	-1.71	3	0	1	-2.558	3	0	1	0	1	0	1
98	N10	max	-2.356	1	0	4	-2.18	1	0	4	0	4	0	4
99		min	-3.604	3	0	1	-5.916	3	0	1	0	1	0	1
100	N26	max	2.92	3	0	4	-1.772	1	0	4	0	4	0	4
101		min	1.926	1	0	1	-5.653	3	0	1	0	1	0	1
102	N4	max	-0.919	1	0	4	-1.507	1	0	4	0	4	0	4
103		min	-1.358	3	0	1	-5.014	3	0	1	0	1	0	1
104	N11	max	-1.081	1	0	4	7.548	3	0	4	0	4	0	4
105		min	-1.154	3	0	1	3.649	1	0	1	0	1	0	1
106	N30	max	-0.699	2	0	4	0.179	1	0	4	0	4	0	4
107		min	-1.404	1	0	1	-0.578	2	0	1	0	1	0	1
108	N12	max	3.267	1	0	4	-4.665	1	0	4	0	4	0	4
109		min	0.863	2	0	1	-9.568	3	0	1	0	1	0	1
110	N13	max	2.608	1	0	4	6.955	3	0	4	0	4	0	4
111		min	1.685	2	0	1	2.727	1	0	1	0	1	0	1
112	N29	max	-7.691	1	0	4	-1.485	1	0	4	0	4	0	4
113		min	-13.757	3	0	1	-5.275	3	0	1	0	1	0	1
114	N31	max	-0.989	1	0	4	-2.339	1	0	4	0	4	0	4
115		min	-1.861	3	0	1	-6.045	3	0	1	0	1	0	1
116	N15	max	5.869	3	0	4	5.781	3	0	4	0	4	0	4
117		min	2.6	1	0	1	1.89	1	0	1	0	1	0	1
118	N28	max	-1.758	1	0	4	4.553	3	0	4	0	4	0	4
119		min	-2.886	3	0	1	1.936	1	0	1	0	1	0	1
120	N17	max	-0.036	1	0	4	6.225	3	0	4	0	4	0	4
121		min	-0.146	3	0	1	2.423	1	0	1	0	1	0	1
122	N14	max	3.364	3	0	4	-3.528	1	0	4	0	4	0	4
123		min	1.548	1	0	1	-7.02	3	0	1	0	1	0	1
124	N32	max	-0.474	1	0	4	-3.608	1	0	4	0	4	0	4
125		min	-1.176	3	0	1	-8.782	3	0	1	0	1	0	1
126	N25	max	5.785	3	0	4	5.274	3	0	4	0	4	0	4
127		min	3.646	1	0	1	1.938	1	0	1	0	1	0	1
128	N34	max	3.324	3	0	4	0.652	2	0	4	0	4	0	4
129		min	1.821	1	0	1	-0.523	1	0	1	0	1	0	1
130	N18	max	-0.37	1	0	4	-1.923	1	0	4	0	4	0	4
131		min	-0.757	3	0	1	-5.549	3	0	1	0	1	0	1
132	N33	max	4.374	3	0	4	8.648	3	0	4	0	4	0	4

Envelope Node Reactions (Continued)

	Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
133		min	1.399	1	0	1	5.207	1	0	1	0	1	0	1
134	N16	max	-2.232	2	0	4	-2.006	1	0	4	0	4	0	4
135		min	-3.055	1	0	1	-4.666	3	0	1	0	1	0	1
136	Totals:	max	0	3	12471.31	3	0	1						
137		min	0	4	7836.389	1	0	2						

Envelope Concrete Column Design Results

	Column	Shape	UC Max	Loc[ft]	UC LC	Shear UC	LC	Loc[ft]	Dir	Phi used	Pn[k]	Mny[k-ft]	Mnz[k-ft]	Vny[k]	Vnz[k]
0	M2	CRECT14X20	0.419	11	3	0.019	3	0	z	0.65	974.977			138.418	177.147
1	M1	CRECT14X20	0.498	11	3	0.044	3	0	y	0.65	974.977			145.557	184.644
2	M3	CRECT14X20	0.642	11	3	0.027	3	11	z	0.65	974.977			146.58	185.718
3	M4	CRECT14X20	0.6	11	3	0.036	3	11	z	0.65	974.977			146.58	185.718
4	M5	CRECT14X20	0.64	11	3	0.036	3	11	z	0.65	974.977			146.58	185.718
5	M6	CRECT14X20	0.647	11	3	0.033	3	11	z	0.65	974.977			146.58	185.718
6	M7	CRECT14X20	0.641	11	3	0.037	3	11	z	0.65	974.977			146.58	185.718
7	M8	CRECT14X20	0.616	0	3	0.042	3	11	z	0.65	929.409	158.905	46.708	146.58	185.718
8	M9	CRECT14X20	0.639	11	3	0.034	3	11	z	0.65	974.977			146.58	185.718
9	M10	CRECT18X18	0.561	11	3	0.043	3	11	z	0.65	1099.102			185.321	185.321
10	M11	CRECT18X18	0.644	0	3	0.054	3	11	z	0.65	1002.076	198.272	30.311	185.321	185.321
11	M12	CRECT18X18	0.693	0	3	0.069	3	11	z	0.65	910.775	233.517	23.805	185.321	185.321
12	M13	CRECT18X18	0.647	11	3	0.05	3	11	z	0.65	1099.102			185.321	185.321
13	M14	CRECT18X18	0.624	0	3	0.051	3	11	z	0.65	959.887	190.239	91.172	185.321	185.321
14	M15	CRECT18X18	0.617	0	3	0.043	3	0	y	0.65	893.643	158.646	161.054	183.747	183.747
15	M16	CRECT18X18	0.484	11	3	0.034	3	0	z	0.65	1099.102			181.292	181.292
16	M17	CRECT14X20	0.478	0	3	0.047	3	0	z	0.65	827.679	220.558		137.753	176.449
17	M18	CRECT14X20	0.598	11	3	0.04	3	11	z	0.65	974.977			146.58	185.718
18	M19	CRECT14X20	0.652	0	3	0.045	3	11	z	0.65	815.461	162.303	98.595	146.58	185.718
19	M20	CRECT14X20	0.634	11	3	0.05	3	11	z	0.65	974.977			146.58	185.718
20	M21	CRECT14X20	0.653	11	3	0.048	3	11	z	0.65	974.977			146.58	185.718
21	M22	CRECT14X20	0.661	11	3	0.049	3	11	z	0.65	974.977			146.58	185.718
22	M23	CRECT14X20	0.684	0	3	0.048	3	11	z	0.65	937.261	166.471	24.075	146.58	185.718
23	M24	CRECT14X20	0.677	0	3	0.043	3	11	z	0.65	792.382	150.63	115.548	146.58	185.718
24	M25	CRECT14X20	0.678	0	3	0.053	3	11	y	0.65	729.02	131.582	144.329	146.58	185.718
25	M26	CRECT14X20	0.433	0	3	0.047	3	0	z	0.65	499.221	220.903	114.119	121.118	158.982
26	M27	CRECT14X20	0.563	11	3	0.063	3	11	y	0.65	974.977			146.58	185.718
27	M28	CRECT14X20	0.446	0	3	0.036	3	0	z	0.65	754.051	172.762	109.5	132.272	170.694
28	M29	CRECT18X18	0.881	0	3	0.101	3	0	y	0.65	603.719	101.297	264.193	181.907	181.907
29	M30	CRECT14X20	0.566	11	3	0.014	1	0	y	0.65	974.977			131.604	169.993

Envelope Concrete Column Design Results (Continued)

	Column	Shape	UC Max	Loc[ft]	UC LC	Shear UC	LC	Loc[ft]	Dir	Phi used	Pn[k]	Mny[k-ft]	Mnz[k-ft]	Vny[k]	Vnz[k]
30	M31	CRECT14X20	0.639	11	3	0.043	3	11	z	0.65	974.977			146.58	185.718
31	M32	CRECT14X20	0.742	11	3	0.063	3	11	z	0.65	974.977			146.58	185.718
32	M33	CRECT18X18	0.485	11	3	0.064	3	0	z	0.65	1099.102			181.355	181.355
33	M34	CRECT18X18	0.448	11	3	0.025	3	0	y	0.65	1099.102			177.426	177.426

Concrete Column Bending Reinforcement

	Column	Shape	Span
0	M2	CRECT14X20	1
1	M1	CRECT14X20	1
2	M3	CRECT14X20	1
3	M4	CRECT14X20	1
4	M5	CRECT14X20	1
5	M6	CRECT14X20	1
6	M7	CRECT14X20	1
7	M8	CRECT14X20	1
8	M9	CRECT14X20	1
9	M10	CRECT18X18	1
10	M11	CRECT18X18	1
11	M12	CRECT18X18	1
12	M13	CRECT18X18	1
13	M14	CRECT18X18	1
14	M15	CRECT18X18	1
15	M16	CRECT18X18	1
16	M17	CRECT14X20	1
17	M18	CRECT14X20	1
18	M19	CRECT14X20	1
19	M20	CRECT14X20	1
20	M21	CRECT14X20	1
21	M22	CRECT14X20	1
22	M23	CRECT14X20	1
23	M24	CRECT14X20	1
24	M25	CRECT14X20	1
25	M26	CRECT14X20	1
26	M27	CRECT14X20	1
27	M28	CRECT14X20	1
28	M29	CRECT18X18	1
29	M30	CRECT14X20	1
30	M31	CRECT14X20	1

Concrete Column Bending Reinforcement (Continued)

	Column	Shape	Span
31	M32	CRECT14X20	1
32	M33	CRECT18X18	1
33	M34	CRECT18X18	1

Concrete Column Shear Reinforcement

	Column	Span
0	M2	1
1	M1	1
2	M3	1
3	M4	1
4	M5	1
5	M6	1
6	M7	1
7	M8	1
8	M9	1
9	M10	1
10	M11	1
11	M12	1
12	M13	1
13	M14	1
14	M15	1
15	M16	1
16	M17	1
17	M18	1
18	M19	1
19	M20	1
20	M21	1
21	M22	1
22	M23	1
23	M24	1
24	M25	1
25	M26	1
26	M27	1
27	M28	1
28	M29	1
29	M30	1
30	M31	1
31	M32	1

Concrete Column Shear Reinforcement (Continued)

	Column	Span
32	M33	1
33	M34	1

Company : AHBL
Designer : KBG
Job Number : 2220236.20
Model Name : WBP2 Brownstones - Concrete Lateral

2/27/2024
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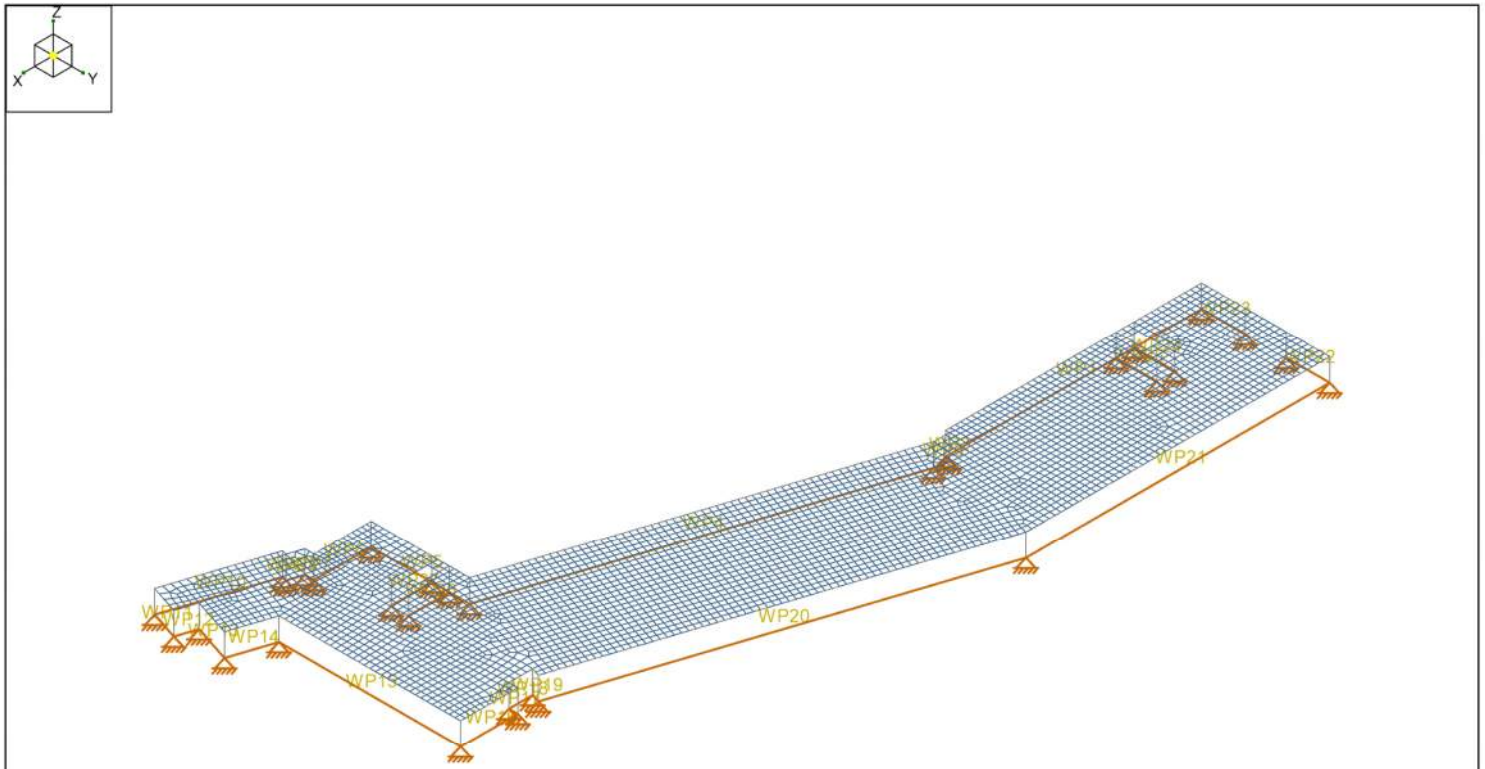
Checked By : _____



RISA	AHBL	WBP2 Brownstones - Concrete Lateral	SK-1
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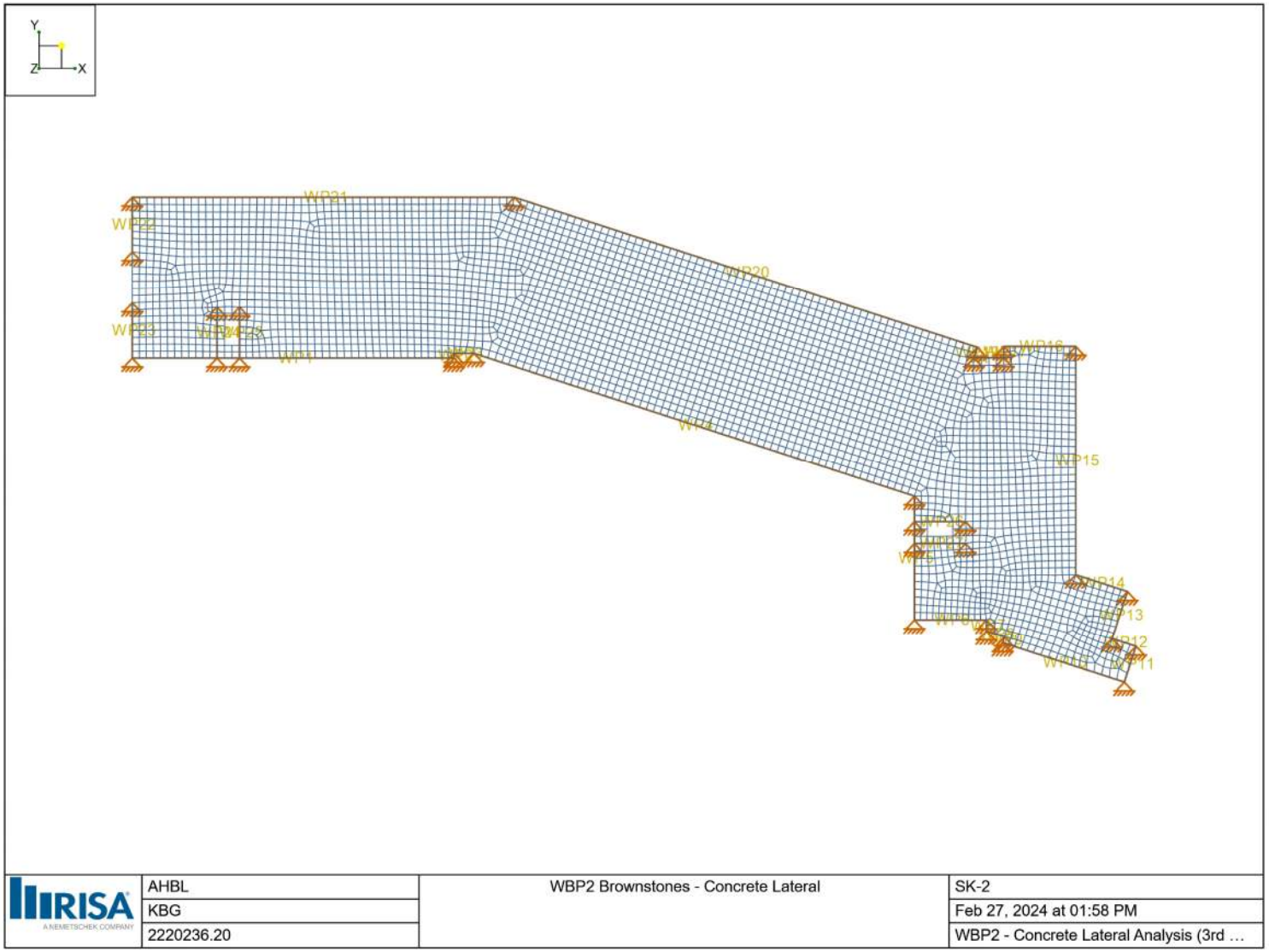
Y
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WP21
WP22
WP20
WP23
WP24
WP1
WP2
WP15
WP14
WP13
WP12
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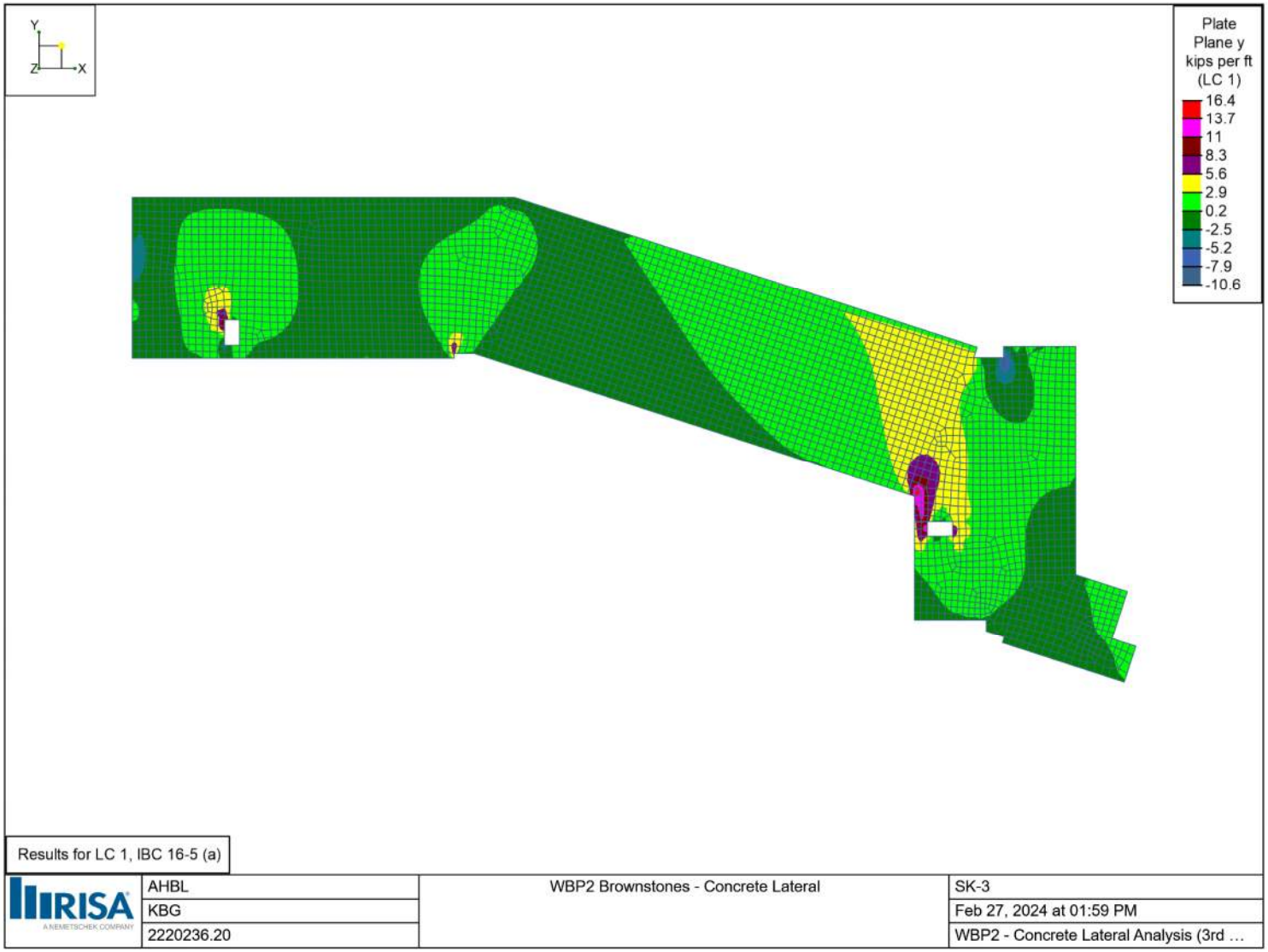
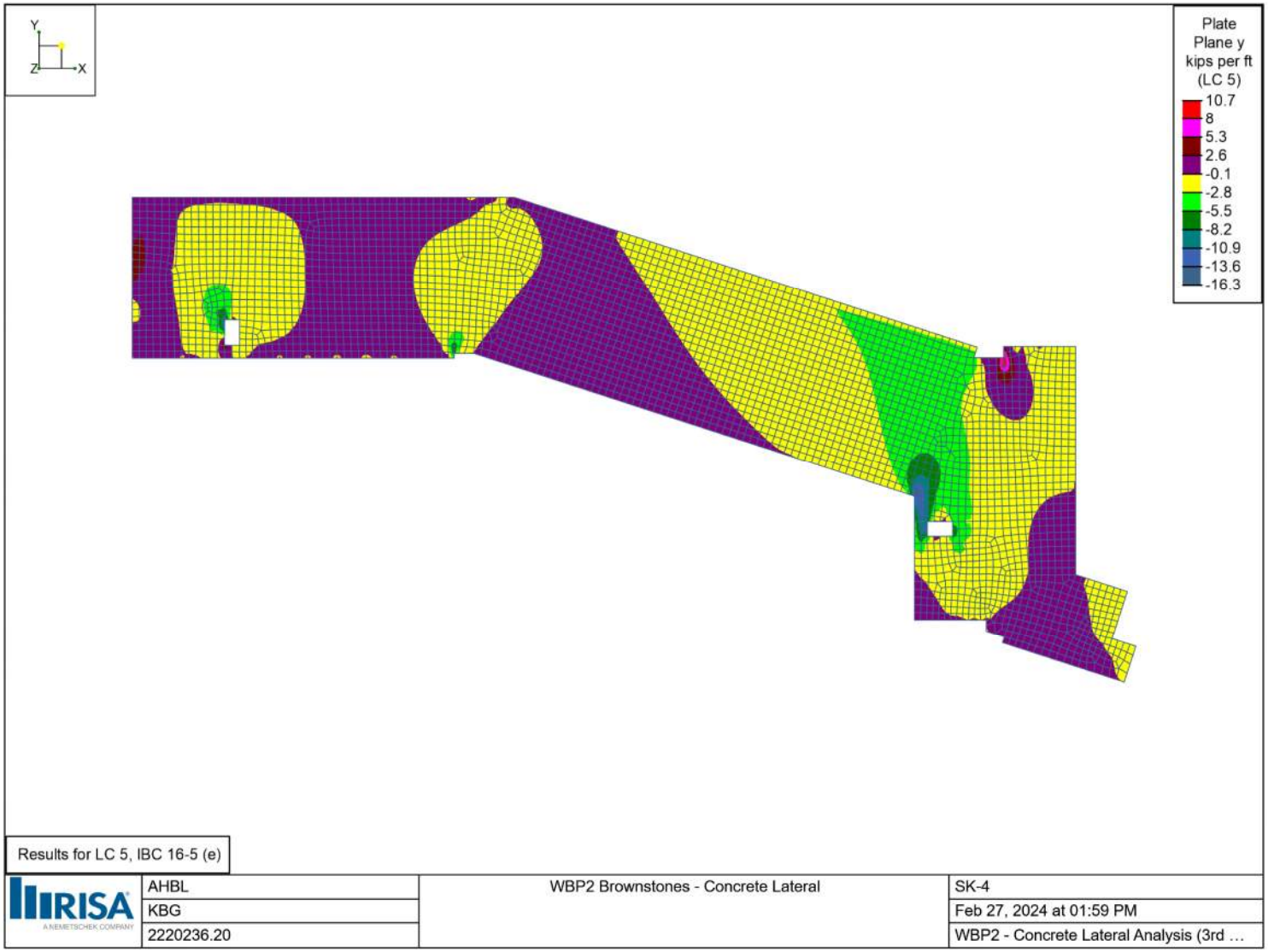
AHBL
KBG
2220236.20
WBP2 Brownstones - Concrete Lateral
SK-2
Feb 27, 2024 at 01:58 PM
WBP2 - Concrete Lateral Analysis (3rd …


Y
Z
X
Plate
Plane y
kips per ft
(LC 1)
16.4
13.7
11
8.3
5.6
2.9
0.2
-2.5
-5.2
-7.9
-10.6
Results for LC 1, IBC 16-5 (a)
AHBL
KBG
2220236.20
WBP2 Brownstones - Concrete Lateral
SK-3
Feb 27, 2024 at 01:59 PM
WBP2 - Concrete Lateral Analysis (3rd …


Y
Z
X
Plate
Plane y
kips per ft
(LC 5)
10.7
8
5.3
2.6
-0.1
-2.8
-5.5
-8.2
-10.9
-13.6
-16.3
Results for LC 5, IBC 16-5 (e)
AHBL
KBG
2220236.20
WBP2 Brownstones - Concrete Lateral
SK-4
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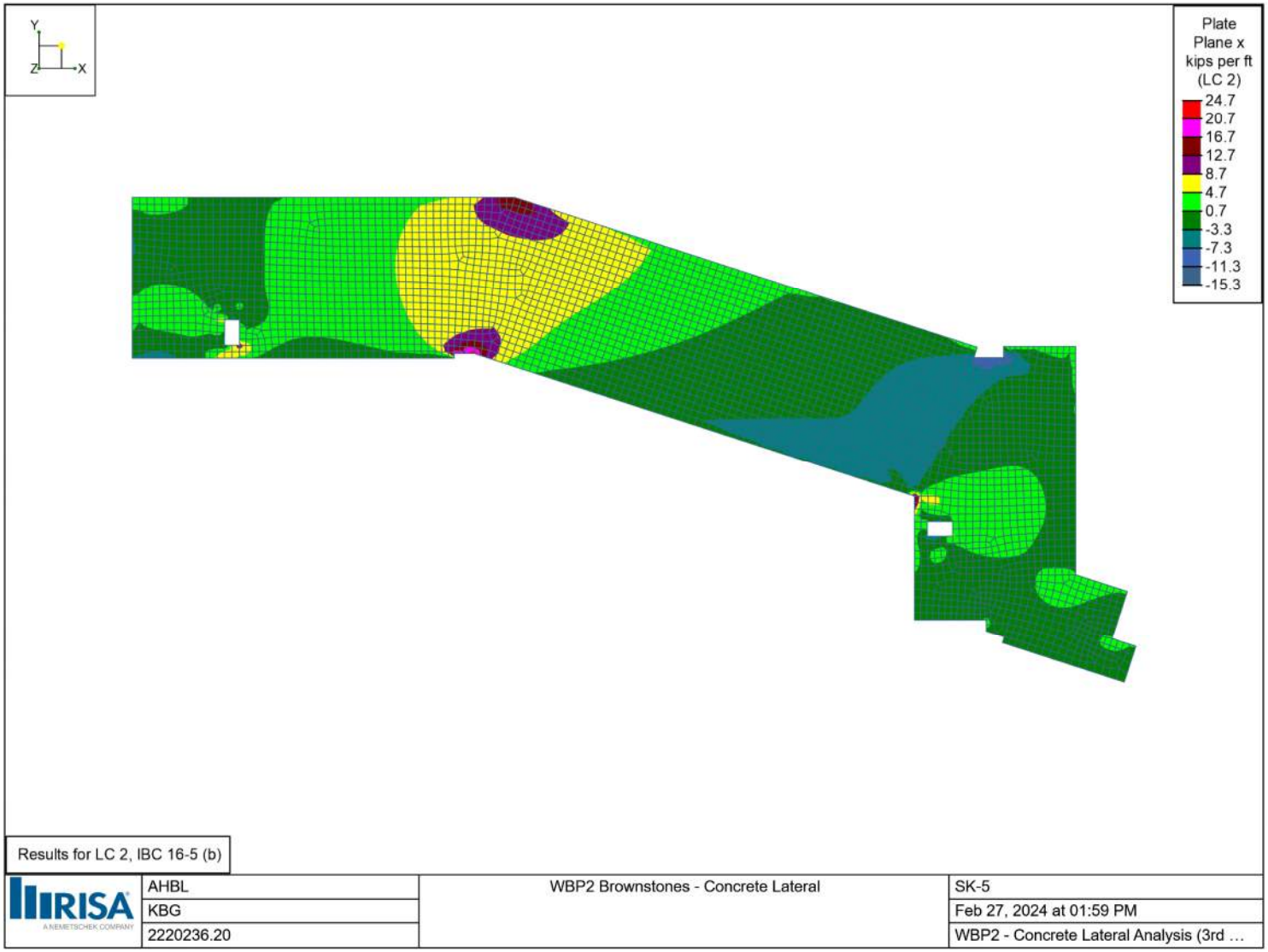
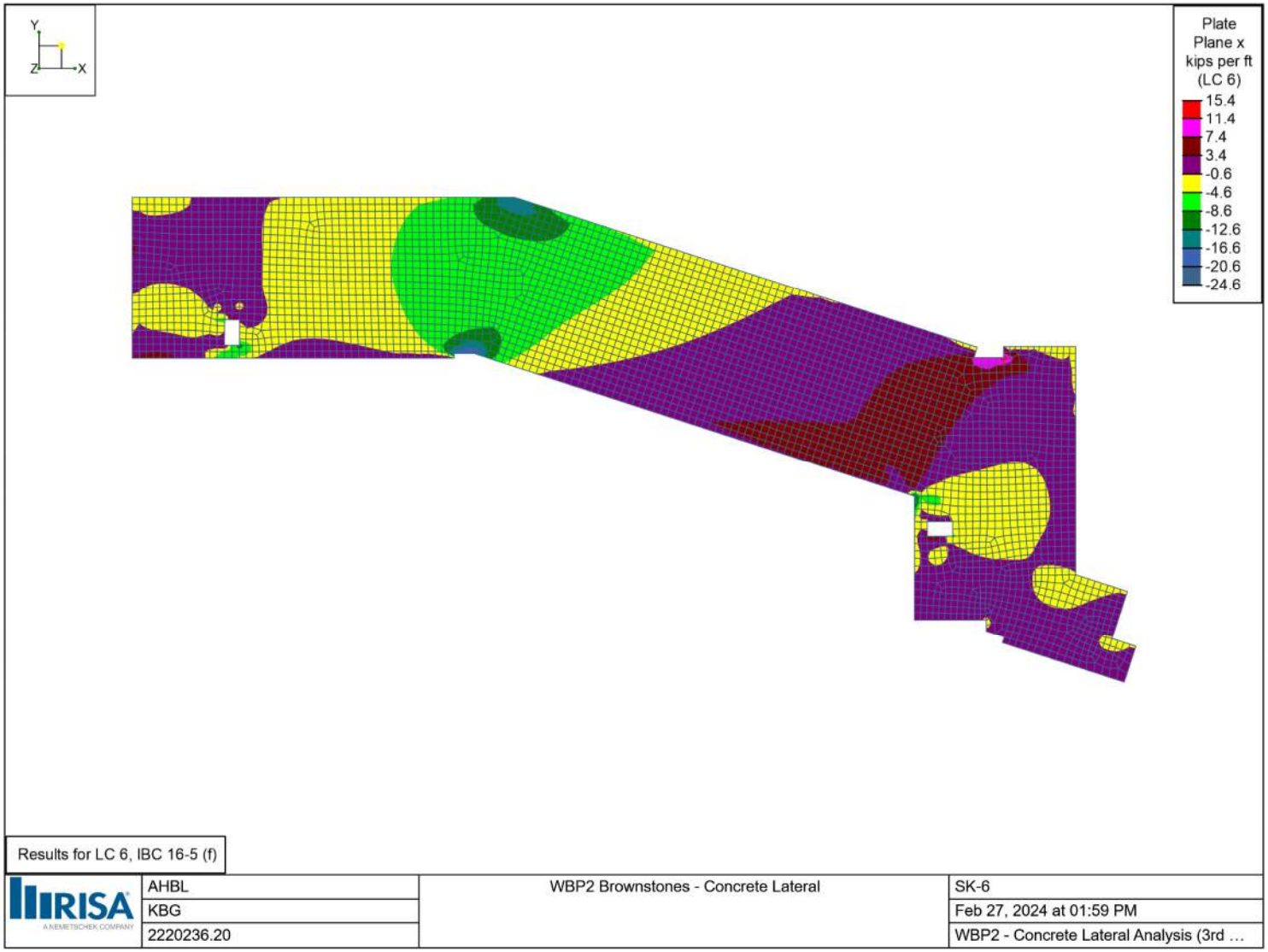
WBP2 - Concrete Lateral Analysis (3rd …


Y
Z
X
Plate
Plane x
kips per ft
(LC 2)
24.7
20.7
16.7
12.7
8.7
4.7
0.7
-3.3
-7.3
-11.3
-15.3
Results for LC 2, IBC 16-5 (b)
AHBL
KBG
2220236.20
WBP2 Brownstones - Concrete Lateral
SK-5
Feb 27, 2024 at 01:59 PM
WBP2 - Concrete Lateral Analysis (3rd …


Y
Z
X
Plate
Plane x
kips per ft
(LC 6)
15.4
11.4
7.4
3.4
-0.6
-4.6
-8.6
-12.6
-16.6
-20.6
-24.6
Results for LC 6, IBC 16-5 (f)
AHBL
KBG
2220236.20
WBP2 Brownstones - Concrete Lateral
SK-6
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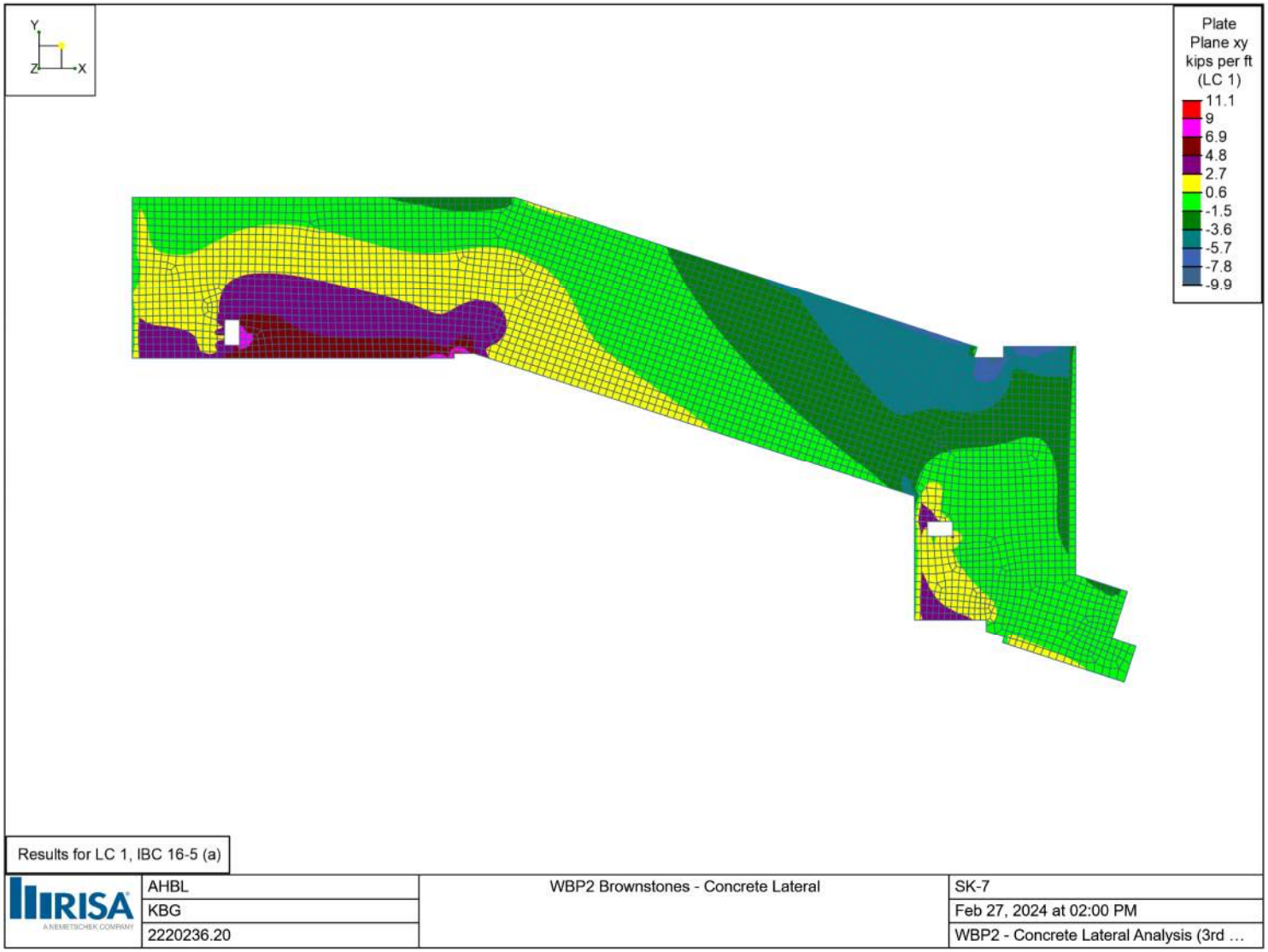
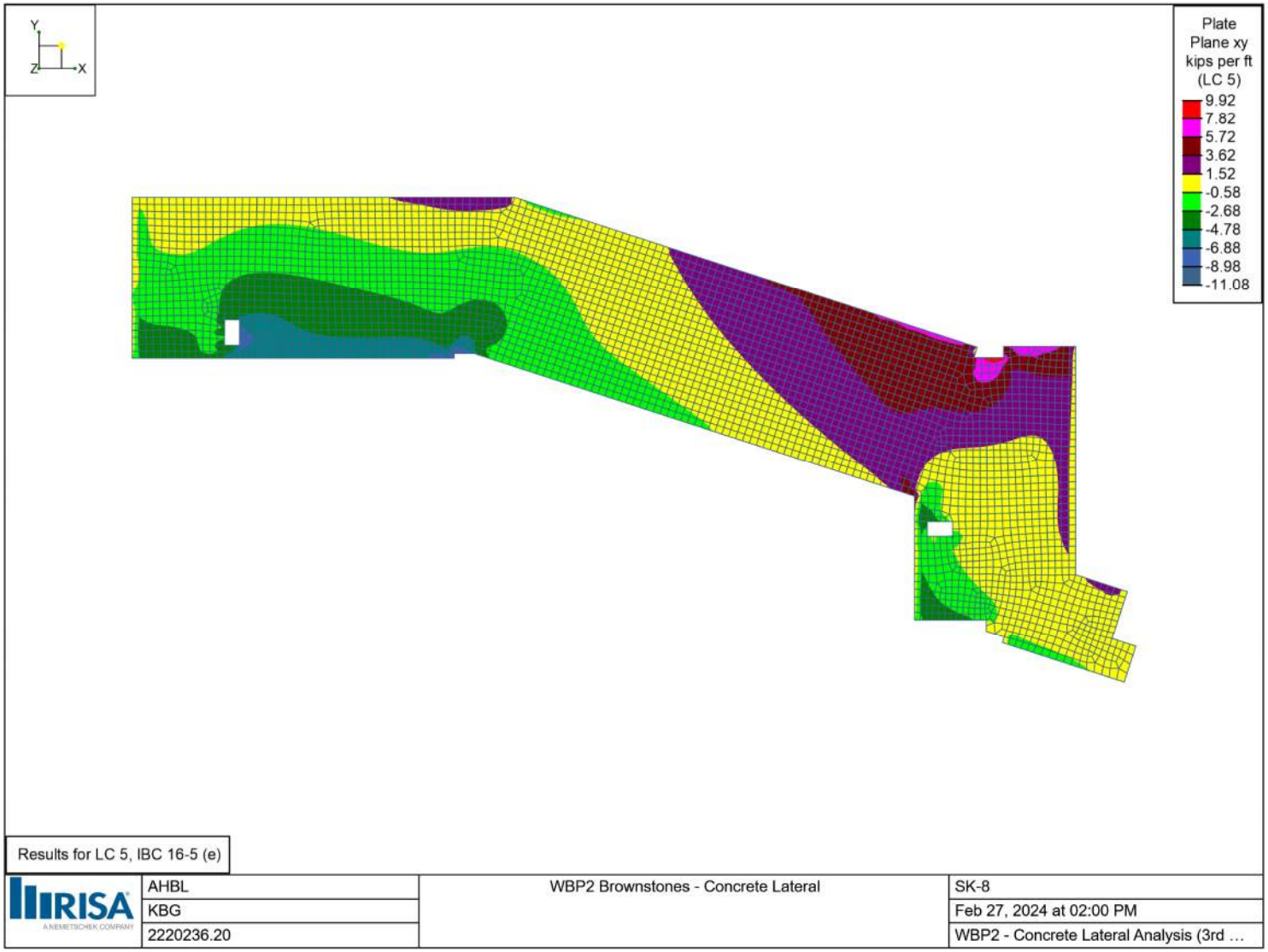
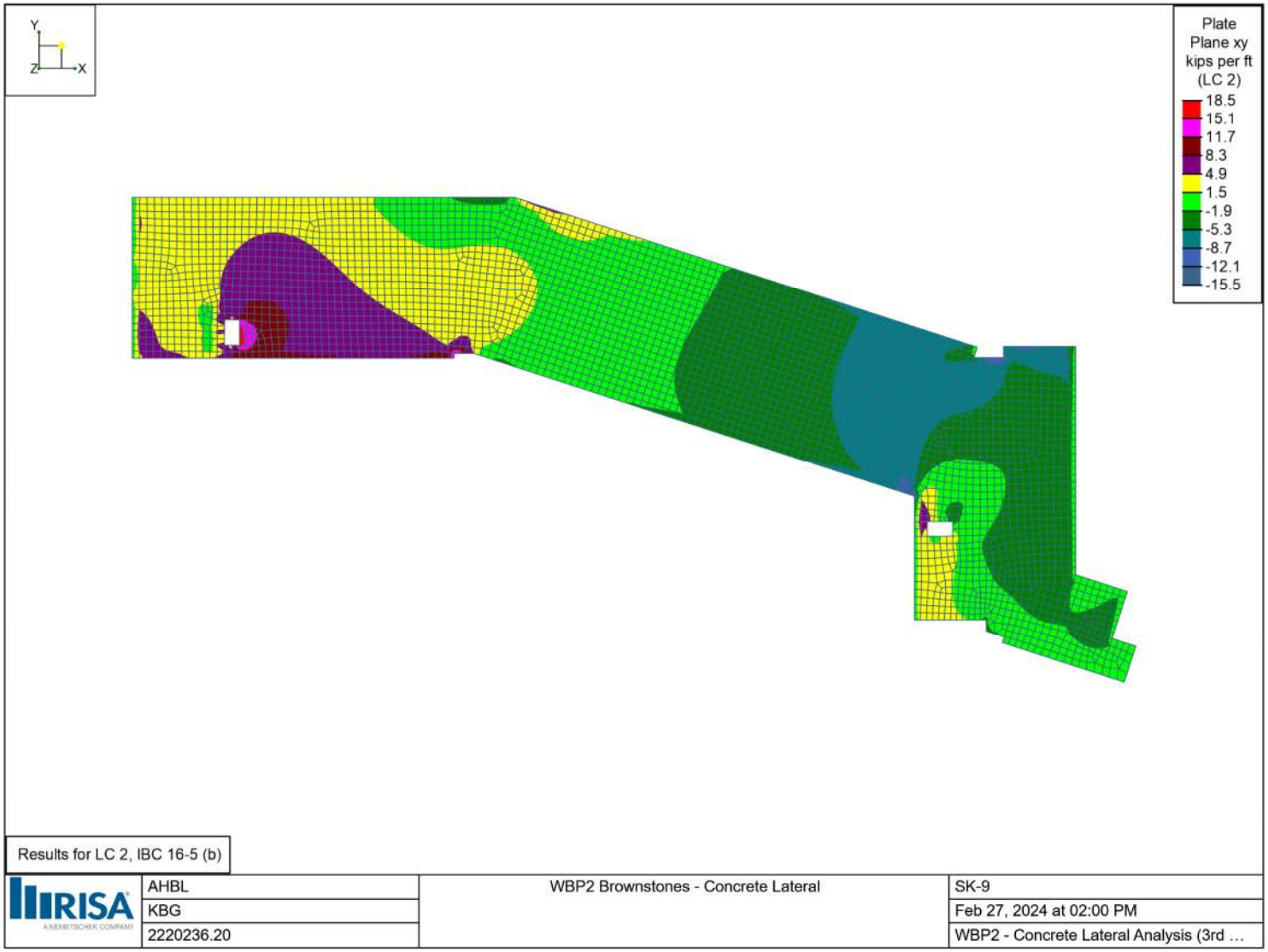
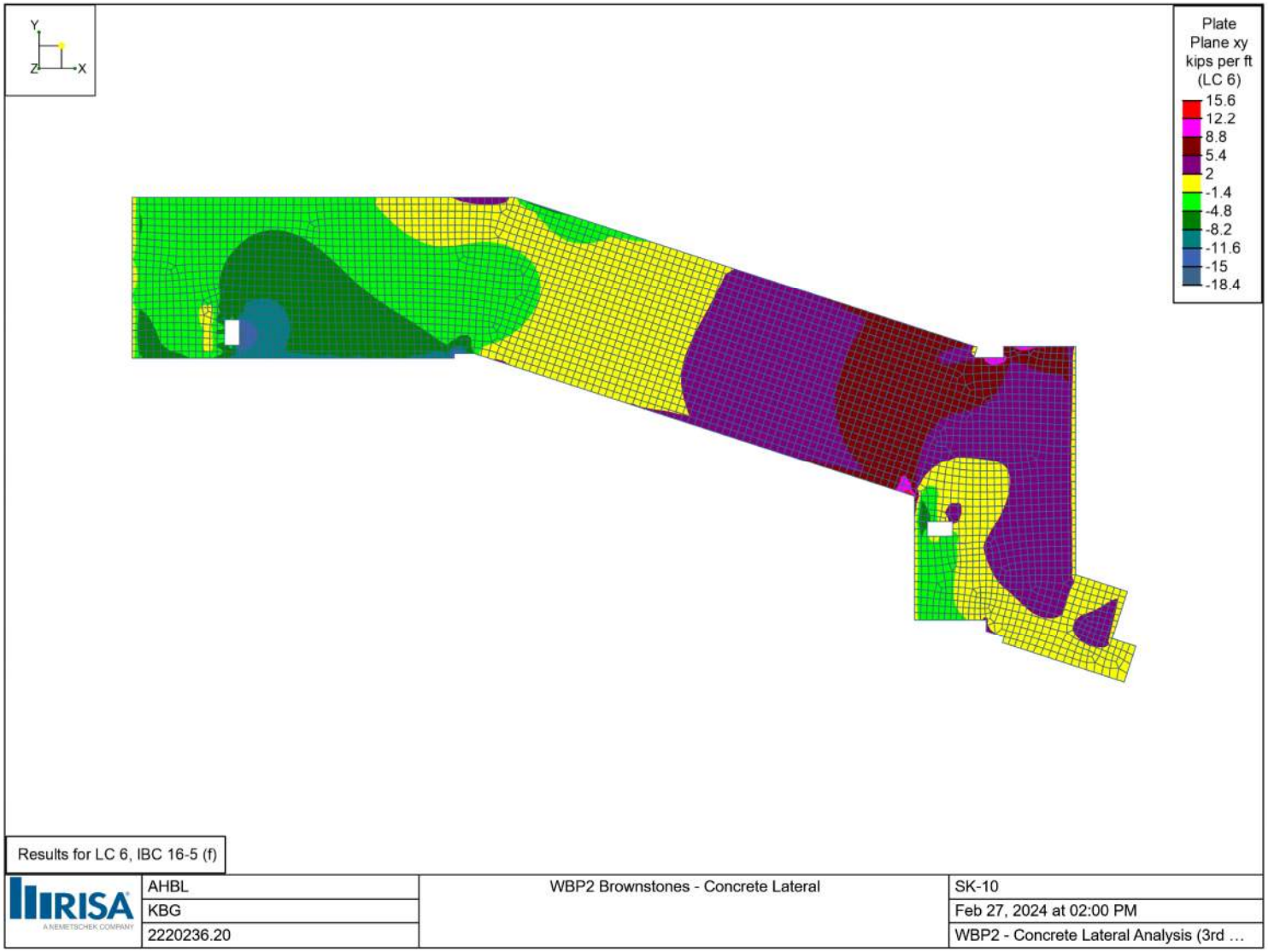
WBP2 - Concrete Lateral Analysis (3rd …


Y
Z
X
Plate
Plane xy
kips per ft
(LC 1)
11.1
9
6.9
4.8
2.7
0.6
-1.5
-3.6
-5.7
-7.8
-9.9
Results for LC 1, IBC 16-5 (a)
AHBL
KBG
2220236.20
WBP2 Brownstones - Concrete Lateral
SK-7
Feb 27, 2024 at 02:00 PM
WBP2 - Concrete Lateral Analysis (3rd …


Y
Z
X
Plate
Plane xy
kips per ft
(LC 5)
9.92
7.82
5.72
3.62
1.52
-0.58
-2.68
-4.78
-6.88
-8.98
-11.08
Results for LC 5, IBC 16-5 (e)
AHBL
KBG
2220236.20
WBP2 Brownstones - Concrete Lateral
SK-8
Feb 27, 2024 at 02:00 PM
WBP2 - Concrete Lateral Analysis (3rd …


Y
Z
X
Plate
Plane xy
kips per ft
(LC 2)
18.5
15.1
11.7
8.3
4.9
1.5
-1.9
-5.3
-8.7
-12.1
-15.5
Results for LC 2, IBC 16-5 (b)
AHBL
KBG
2220236.20
WBP2 Brownstones - Concrete Lateral
SK-9
Feb 27, 2024 at 02:00 PM
WBP2 - Concrete Lateral Analysis (3rd …


Y
Z
X
Plate
Plane xy
kips per ft
(LC 6)
15.6
12.2
8.8
5.4
2
-1.4
-4.8
-8.2
-11.6
-15
-18.4
Results for LC 6, IBC 16-5 (f)
AHBL
KBG
2220236.20
WBP2 Brownstones - Concrete Lateral
SK-10
Feb 27, 2024 at 02:00 PM
WBP2 - Concrete Lateral Analysis (3rd …

Concrete Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [k/ft³]	f'c [psi]	Lambda	Flex Steel [psi]	Shear Steel [psi]
1	Conc3000NW	3156	1372	0.15	0.6	0.145	3000	1	60000	60000
2	Conc3500NW	3409	1482	0.15	0.6	0.145	3500	1	60000	60000
3	Conc4000NW	3644	1584	0.15	0.6	0.145	4000	1	60000	60000
4	Conc3000LW	2085	907	0.15	0.6	0.11	3000	0.75	60000	60000
5	Conc3500LW	2252	979	0.15	0.6	0.11	3500	0.75	60000	60000
6	Conc4000LW	2408	1047	0.15	0.6	0.11	4000	0.75	60000	60000
7	Conc5000NW	4074	1771	0.15	0.6	0.145	5000	1	60000	60000

General Materials Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [k/ft³]	Plate Methodology
1	gen_Conc3NW	3155	1372	0.15	0.6	0.145	Isotropic
2	gen_Conc4NW	3644	1584	0.15	0.6	0.145	Isotropic
3	gen_Conc3LW	2085	906	0.15	0.6	0.11	Isotropic
4	gen_Conc4LW	2408	1047	0.15	0.6	0.11	Isotropic
5	gen_Alum	10100	4077	0.3	1.29	0.173	Isotropic
6	gen_Steel	29000	11154	0.3	0.65	0.49	Isotropic
7	gen_Plywood	1800	38	0	0.3	0	Isotropic
8	RIGID	1e+6		0.3	0	0	Isotropic
9	gen_Ortho				0.65	0.49	Orthotropic
10	gen_Conc5NW	4074	1771	0.15	0.6	0.145	Isotropic

Plate Primary Data

	Label	A Node	B Node	C Node	D Node	Material	Thickness [in]
1	P1	N5909	N5908	N5907	N5906	gen_Conc5NW	11

Plate Advanced Data

	Label	Plane Stress	Rotate
1	P1	Yes	90

Wall Panel Data

	Label	A Node	B Node	C Node	D Node	Material Type	Material Set	Thickness [in]	Design Rule	Panel/Spacing
1	WP1	N5882	N5904	N5892	N5867	Concrete	Conc4000NW	12	Typical 12" Wall	N/A
2	WP2	N5867	N5892	N5898	N5874	Concrete	Conc4000NW	12	Typical 12" Wall	N/A
3	WP3	N5874	N5898	N5885	N5875	Concrete	Conc4000NW	12	Typical 12" Wall	N/A
4	WP4	N5875	N5885	N5899	N5876	Concrete	Conc4000NW	12	Typical 12" Wall	N/A
5	WP5	N5876	N5899	N5888	N5863	Concrete	Conc4000NW	12	Typical 12" Wall	N/A
6	WP6	N5863	N5888	N5896	N5872	Concrete	Conc4000NW	12	Typical 12" Wall	N/A
7	WP7	N5872	N5896	N5897	N5873	Concrete	Conc4000NW	12	Typical 12" Wall	N/A
8	WP8	N5873	N5897	N5889	N5864	Concrete	Conc4000NW	12	Typical 12" Wall	N/A
9	WP9	N5864	N5889	N5886	N5869	Concrete	Conc4000NW	12	Typical 12" Wall	N/A
10	WP10	N5869	N5886	N5894	N5870	Concrete	Conc4000NW	12	Typical 12" Wall	N/A
11	WP11	N5870	N5894	N5900	N5877	Concrete	Conc4000NW	12	Typical 12" Wall	N/A
12	WP12	N5877	N5900	N5891	N5866	Concrete	Conc4000NW	12	Typical 12" Wall	N/A
13	WP13	N5866	N5891	N5887	N5862	Concrete	Conc4000NW	12	Typical 12" Wall	N/A
14	WP14	N5862	N5887	N5890	N5865	Concrete	Conc4000NW	12	Typical 12" Wall	N/A
15	WP15	N5865	N5890	N5893	N5868	Concrete	Conc4000NW	12	Typical 12" Wall	N/A
16	WP16	N5868	N5893	N5901	N5878	Concrete	Conc4000NW	12	Typical 12" Wall	N/A
17	WP17	N5878	N5901	N5902	N5879	Concrete	Conc4000NW	12	Typical 12" Wall	N/A
18	WP18	N5879	N5902	N5895	N5871	Concrete	Conc4000NW	12	Typical 12" Wall	N/A
19	WP19	N5871	N5895	N5903	N5880	Concrete	Conc4000NW	12	Typical 12" Wall	N/A
20	WP20	N5880	N5903	N5884	N5881	Concrete	Conc4000NW	12	Typical 12" Wall	N/A
21	WP21	N5881	N5884	N5905	N5883	Concrete	Conc4000NW	12	Typical 12" Wall	N/A
22	WP22	N5883	N5905	N46	N45	Concrete	Conc4000NW	12	Typical 12" Wall	N/A
23	WP23	N48	N47	N5904	N5882	Concrete	Conc4000NW	12	Typical 12" Wall	N/A
24	WP24	N50	N49	N53	N54	Concrete	Conc4000NW	8	Typical 8" Wall	N/A
25	WP25	N52	N51	N55	N56	Concrete	Conc4000NW	8	Typical 8" Wall	N/A
26	WP26	N57	N58	N62	N61	Concrete	Conc4000NW	8	Typical 8" Wall	N/A
27	WP27	N59	N60	N64	N63	Concrete	Conc4000NW	8	Typical 8" Wall	N/A

Wall Panel Advanced Data

	Label	Seismic Rule	Design Method	SSAF	Stud Bracing	Sheathing Connect Dist [in]
1	WP1	None	N/A	N/A	N/A	N/A
2	WP2	None	N/A	N/A	N/A	N/A
3	WP3	None	N/A	N/A	N/A	N/A
4	WP4	None	N/A	N/A	N/A	N/A
5	WP5	None	N/A	N/A	N/A	N/A
6	WP6	None	N/A	N/A	N/A	N/A
7	WP7	None	N/A	N/A	N/A	N/A

Wall Panel Advanced Data (Continued)

	Label	Seismic Rule	Design Method	SSAF	Stud Bracing	Sheathing Connect Dist [in]
8	WP8	None	N/A	N/A	N/A	N/A
9	WP9	None	N/A	N/A	N/A	N/A
10	WP10	None	N/A	N/A	N/A	N/A
11	WP11	None	N/A	N/A	N/A	N/A
12	WP12	None	N/A	N/A	N/A	N/A
13	WP13	None	N/A	N/A	N/A	N/A
14	WP14	None	N/A	N/A	N/A	N/A
15	WP15	None	N/A	N/A	N/A	N/A
16	WP16	None	N/A	N/A	N/A	N/A
17	WP17	None	N/A	N/A	N/A	N/A
18	WP18	None	N/A	N/A	N/A	N/A
19	WP19	None	N/A	N/A	N/A	N/A
20	WP20	None	N/A	N/A	N/A	N/A
21	WP21	None	N/A	N/A	N/A	N/A
22	WP22	None	N/A	N/A	N/A	N/A
23	WP23	None	N/A	N/A	N/A	N/A
24	WP24	None	N/A	N/A	N/A	N/A
25	WP25	None	N/A	N/A	N/A	N/A
26	WP26	None	N/A	N/A	N/A	N/A
27	WP27	None	N/A	N/A	N/A	N/A

Wall Panel U.C. Parameters

	Label	Max Bending Chk	Max Shear Chk
1	Typical 12" Wall	1	1
2	Typical 8" Wall	1	1

Concrete Wall Panel Rebar Parameters

	Label	Vert Bar Size	Max Vert Bar Space [in]	Min Vert Bar Space [in]	Vert Bar Inc [in]	Horz Bar Size	Max Horz Bar Space [in]	Min Horz Bar Space [in]	Horz Bar Inc [in]	Group Wall
1	Typical 12" Wall	#6	12	12	2	#5	12	12	2	
2	Typical 8" Wall	#5	12	12	2	#5	12	12	2	

Concrete Wall Panel Cover Parameters

	Label	Outer Bars	Location	Int Cover -z [in]	Ext Cover +z [in]	Edge Cover [in]	Transfer In	Transfer Out
1	Typical 12" Wall	Vertical	Each Face	1.5	1.5	2		
2	Typical 8" Wall	Vertical	Centered	NA	NA	2		

Basic Load Cases

	BLC Description	Category	Surface(Plate/Wall)
1	DL	DL	
2	LL	LL	
3	SL	SL	
4	ELX	ELX	3631
5	ELY	ELY	3631

Load Combinations

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
1	IBC 16-5 (a)	Yes	Y	DL	1.2	Sds*DL	0.2	ELX	1	ELY	0.3	LL	0.5	LLS	1
2	IBC 16-5 (b)	Yes	Y	DL	1.2	Sds*DL	0.2	ELY	1	ELX	0.3	LL	0.5	LLS	1
3	IBC 16-5 (c)	Yes	Y	DL	1.2	Sds*DL	0.2	ELX	1	ELY	-0.3	LL	0.5	LLS	1
4	IBC 16-5 (d)	Yes	Y	DL	1.2	Sds*DL	0.2	ELY	1	ELX	-0.3	LL	0.5	LLS	1
5	IBC 16-5 (e)	Yes	Y	DL	1.2	Sds*DL	0.2	ELX	-1	ELY	-0.3	LL	0.5	LLS	1
6	IBC 16-5 (f)	Yes	Y	DL	1.2	Sds*DL	0.2	ELY	-1	ELX	-0.3	LL	0.5	LLS	1
7	IBC 16-5 (g)	Yes	Y	DL	1.2	Sds*DL	0.2	ELX	-1	ELY	0.3	LL	0.5	LLS	1
8	IBC 16-5 (h)	Yes	Y	DL	1.2	Sds*DL	0.2	ELY	-1	ELX	0.3	LL	0.5	LLS	1
9	IBC 16-7 (a)	Yes	Y	DL	0.9	Sds*DL	-0.2	ELX	1	ELY	0.3				
10	IBC 16-7 (b)	Yes	Y	DL	0.9	Sds*DL	-0.2	ELY	1	ELX	0.3				
11	IBC 16-7 (c)	Yes	Y	DL	0.9	Sds*DL	-0.2	ELX	1	ELY	-0.3				
12	IBC 16-7 (d)	Yes	Y	DL	0.9	Sds*DL	-0.2	ELY	1	ELX	-0.3				
13	IBC 16-7 (e)	Yes	Y	DL	0.9	Sds*DL	-0.2	ELX	-1	ELY	-0.3				
14	IBC 16-7 (f)	Yes	Y	DL	0.9	Sds*DL	-0.2	ELY	-1	ELX	-0.3				
15	IBC 16-7 (g)	Yes	Y	DL	0.9	Sds*DL	-0.2	ELX	-1	ELY	0.3				
16	IBC 16-7 (h)	Yes	Y	DL	0.9	Sds*DL	-0.2	ELY	-1	ELX	0.3				
17	ELX		Y	ELX	1										
18	-ELX		Y	ELX	-1										
19	ELY		Y	ELY	1										
20	-ELY		Y	ELY	-1										

Envelope Node Reactions

	Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
0	WP1	max	938.603	14	2.542	10	403.569	14	0	10	4414.329	14	119.042	10
1		min	-938.691	2	-2.644	6	-403.592	2	0	6	-4413.618	2	-119.12	6
2	WP2	max	0.229	16	40.508	14	4.172	14	44.262	10	0	16	0.273	10
3		min	-0.229	4	-40.511	2	-4.172	2	-44.258	6	0	1	-0.273	6
4	WP3	max	96.215	14	2.34	10	149.245	10	0	14	71.096	14	5.763	14

Envelope Node Reactions (Continued)

	Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
5		min	-96.216	2	-2.285	6	-149.229	6	0	2	-71.109	2	-5.769	2
6	WP4	max	901.704	12	291.836	16	171.884	10	661.021	12	2034.415	12	22.967	16
7		min	-901.641	8	-291.794	4	-171.869	6	-660.86	8	-2033.921	8	-23.336	4
8	WP5	max	0.308	10	435.037	14	107.25	14	1641.238	10	0	16	2.02	16
9		min	-0.31	6	-435.061	2	-107.256	2	-1641.223	6	0	1	-2.021	4
10	WP6	max	87.05	13	0.335	10	15.297	12	0	14	1205.58	14	2.251	10
11		min	-87.05	1	-0.334	6	-15.297	8	0	2	-1205.61	2	-2.248	6
12	WP7	max	0.231	9	18.974	16	13.316	10	58.179	10	0	16	0.417	9
13		min	-0.231	5	-18.974	4	-13.315	6	-58.177	6	0	1	-0.417	5
14	WP8	max	24.353	12	7.601	16	3.032	14	14.257	13	43.615	13	0.42	10
15		min	-24.353	8	-7.601	4	-3.032	2	-14.257	1	-43.615	1	-0.42	6
16	WP9	max	2.899	16	9.167	16	1.525	16	14.583	10	4.738	14	0.075	16
17		min	-2.9	4	-9.168	4	-1.526	4	-14.583	6	-4.738	2	-0.075	4
18	WP10	max	112.77	12	36.334	16	38.423	14	171.884	15	529.006	15	6.49	14
19		min	-112.768	8	-36.337	4	-38.424	2	-171.885	3	-529.007	3	-6.489	2
20	WP11	max	8.828	14	27.23	14	20.264	11	194.263	10	63.12	14	0.378	16
21		min	-8.828	2	-27.23	2	-20.264	7	-194.262	6	-63.12	2	-0.378	4
22	WP12	max	17.822	12	5.718	16	12.361	14	29.286	13	90.133	13	0.239	10
23		min	-17.822	8	-5.719	4	-12.362	2	-29.286	1	-90.133	1	-0.239	6
24	WP13	max	23.093	14	71.433	14	9.864	10	439.371	10	142.76	14	0.277	11
25		min	-23.093	2	-71.434	2	-9.863	6	-439.369	6	-142.76	2	-0.277	7
26	WP14	max	57.392	15	18.739	11	23.333	16	162.791	14	501.02	14	0.103	14
27		min	-57.392	3	-18.739	7	-23.334	4	-162.793	2	-501.025	2	-0.103	2
28	WP15	max	0.212	10	488.74	14	45.371	12	4511.784	10	0	16	4.103	16
29		min	-0.21	6	-488.754	2	-45.37	8	-4511.617	6	0	1	-4.106	4
30	WP16	max	210.188	14	0.218	12	90.21	10	0	16	938.08	14	2.898	9
31		min	-210.195	2	-0.213	8	-90.207	6	0	1	-938.135	2	-2.898	5
32	WP17	max	0.108	9	45.635	14	11.536	10	56.605	10	0	16	0.201	14
33		min	-0.108	5	-45.637	2	-11.536	6	-56.603	6	0	1	-0.202	2
34	WP18	max	94.225	14	0.859	10	114.626	14	0	14	490.649	14	2.805	14
35		min	-94.238	2	-0.872	6	-114.63	2	0	2	-490.666	2	-2.802	2
36	WP19	max	5.882	16	18.506	16	14.739	14	129.649	10	42.124	14	0.221	15
37		min	-5.883	4	-18.507	4	-14.738	2	-129.644	6	-42.125	2	-0.221	3
38	WP20	max	470.11	13	154.076	9	2.38	12	1926.913	14	5930.427	14	33.097	16
39		min	-470.114	1	-154.075	5	-2.384	8	-1927.05	2	-5930.849	2	-33.125	4
40	WP21	max	374.517	15	1.445	10	42.516	12	0	16	3744.911	12	81.726	10
41		min	-374.517	3	-1.433	6	-42.514	8	0	1	-3744.87	8	-81.716	6
42	WP22	max	0.159	16	140.61	16	20.81	14	1489.638	12	0	10	0.741	15
43		min	-0.159	4	-140.61	4	-20.809	2	-1489.646	8	0	6	-0.741	3

Envelope Node Reactions (Continued)

	Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
44	WP23	max	0.197	10	162.671	14	21.436	12	1733.853	10	0	16	1.357	10
45		min	-0.196	6	-162.667	2	-21.437	8	-1733.876	6	0	4	-1.358	6
46	WP24	max	0.079	11	179.984	14	80.608	10	1291.347	10	0	16	0.933	11
47		min	-0.08	7	-179.976	2	-80.609	6	-1291.34	6	0	1	-0.933	7
48	WP25	max	0.087	9	243.309	14	109.953	10	1736.373	10	0	16	0.864	9
49		min	-0.086	5	-243.298	2	-109.95	6	-1736.335	6	0	1	-0.865	5
50	WP26	max	48.956	15	0.092	10	22.976	11	0	16	341.859	13	1.099	14
51		min	-48.956	3	-0.092	6	-22.975	7	0	1	-341.857	1	-1.098	2
52	WP27	max	47.048	15	0.073	12	22.225	11	0	16	325.94	15	0.956	14
53		min	-47.048	3	-0.074	8	-22.224	7	0	1	-325.941	3	-0.954	2
54	Totals:	max	2071.531	15	2071.531	14	0	14						
55		min	-2071.531	3	-2071.531	2	0	2						

Envelope Wall Panel Forces

	Wall Label	Elevation [ft]		Axial [k]	LC	x Shear [k]	LC	z Shear [k]	LC	x-x Moment [k-ft]	LC	z-z Moment [k-ft]	LC
0	WP1	-12	max	403.569	14	944.307	14	16.536	12	0.125	16	4413.111	10
1		-12	min	-403.592	2	-944.377	2	-16.536	8	-0.125	4	-4413.822	6
2	WP2	-12	max	4.172	14	41.095	14	0.655	13	0.01	9	44.232	10
3		-12	min	-4.172	2	-41.099	2	-0.655	1	-0.01	5	-44.228	6
4	WP3	-12	max	149.245	10	96.526	14	1.257	14	0.03	16	71.052	10
5		-12	min	-149.229	6	-96.538	2	-1.257	2	-0.03	4	-71.038	6
6	WP4	-12	max	171.884	10	964.305	12	27.778	10	0.048	14	2138.089	16
7		-12	min	-171.869	6	-964.253	8	-27.778	6	-0.048	2	-2138.609	4
8	WP5	-12	max	107.25	14	442.014	10	6.922	11	0.039	9	1641.045	14
9		-12	min	-107.256	2	-441.996	6	-6.922	7	-0.039	5	-1641.06	2
10	WP6	-12	max	15.297	12	91.417	13	4.143	12	0.025	16	1205.578	10
11		-12	min	-15.297	8	-91.417	1	-4.143	8	-0.025	4	-1205.547	6
12	WP7	-12	max	13.316	10	19.46	12	0.347	11	0.042	15	58.125	14
13		-12	min	-13.315	6	-19.459	8	-0.347	7	-0.042	3	-58.127	2
14	WP8	-12	max	3.032	14	26.177	12	0.65	10	0.046	10	45.924	9
15		-12	min	-3.032	2	-26.176	8	-0.65	6	-0.046	6	-45.924	5
16	WP9	-12	max	1.525	16	10.054	12	0.554	11	0.009	15	15.32	14
17		-12	min	-1.526	4	-10.053	8	-0.554	7	-0.009	3	-15.32	2
18	WP10	-12	max	38.423	14	122.948	12	7.44	10	0.004	10	556.189	11
19		-12	min	-38.424	2	-122.945	8	-7.44	6	-0.004	6	-556.187	7
20	WP11	-12	max	20.264	11	30.617	14	1.932	15	0.097	11	204.148	10
21		-12	min	-20.264	7	-30.617	2	-1.932	3	-0.097	7	-204.148	6
22	WP12	-12	max	12.361	14	19.66	16	1.559	14	0.015	10	94.754	13

Envelope Wall Panel Forces (Continued)

	Wall Label	Elevation [ft]		Axial [k]	LC	x Shear [k]	LC	z Shear [k]	LC	x-x Moment [k-ft]	LC	z-z Moment [k-ft]	LC
23		-12	min	-12.362	2	-19.66	4	-1.559	2	-0.015	6	-94.754	1
24	WP13	-12	max	9.864	10	77.654	14	2.504	15	0.002	11	461.942	10
25		-12	min	-9.863	6	-77.655	2	-2.504	3	-0.002	7	-461.94	6
26	WP14	-12	max	23.333	16	63.654	11	3.116	14	0.044	10	526.807	14
27		-12	min	-23.334	4	-63.654	7	-3.116	2	-0.044	6	-526.813	2
28	WP15	-12	max	45.371	12	502.23	14	13.381	15	0.187	13	4511.727	10
29		-12	min	-45.37	8	-502.245	2	-13.381	3	-0.187	1	-4511.56	6
30	WP16	-12	max	90.21	10	211.516	10	4.212	14	0.025	10	937.968	14
31		-12	min	-90.207	6	-211.505	6	-4.212	2	-0.025	6	-938.023	2
32	WP17	-12	max	11.536	10	46.076	10	0.344	11	0.042	15	56.538	14
33		-12	min	-11.536	6	-46.074	6	-0.344	7	-0.042	3	-56.54	2
34	WP18	-12	max	114.626	14	94.664	10	0.688	16	0.007	12	490.6	14
35		-12	min	-114.63	2	-94.66	6	-0.688	4	-0.007	8	-490.617	2
36	WP19	-12	max	14.739	14	19.802	16	0.39	15	0.044	11	136.267	10
37		-12	min	-14.738	2	-19.802	4	-0.39	3	-0.044	7	-136.262	6
38	WP20	-12	max	2.38	12	519.591	9	27.949	14	0.084	10	6235.532	14
39		-12	min	-2.384	8	-519.587	5	-27.949	2	-0.084	6	-6235.976	2
40	WP21	-12	max	42.516	12	396.871	11	21.044	16	0.044	12	3744.716	12
41		-12	min	-42.514	8	-396.871	7	-21.044	4	-0.044	8	-3744.676	8
42	WP22	-12	max	20.81	14	143.73	12	3.148	9	0.074	11	1489.65	16
43		-12	min	-20.809	2	-143.732	8	-3.148	5	-0.074	7	-1489.642	4
44	WP23	-12	max	21.436	12	165.805	10	3.128	11	0.074	9	1733.869	14
45		-12	min	-21.437	8	-165.809	6	-3.128	7	-0.074	5	-1733.845	2
46	WP24	-12	max	80.608	10	182.769	14	2.723	13	0.001	13	1291.258	10
47		-12	min	-80.609	6	-182.77	2	-2.723	1	-0.001	1	-1291.251	6
48	WP25	-12	max	109.953	10	246.232	14	2.869	15	0.065	13	1736.316	10
49		-12	min	-109.95	6	-246.237	2	-2.869	3	-0.065	1	-1736.278	6
50	WP26	-12	max	22.976	11	51.889	15	2.851	12	0.064	10	341.899	9
51		-12	min	-22.975	7	-51.89	3	-2.851	8	-0.064	6	-341.9	5
52	WP27	-12	max	22.225	11	49.837	15	2.717	10	0.001	10	325.918	11
53		-12	min	-22.224	7	-49.837	3	-2.717	6	-0.001	6	-325.917	7

Concrete Wall Reinforcement

	Wall	Region	Thickness[in]	Hor. Bar Size	Vert. Bar Size
0	WP1	R1	12	#5@12in oc (ef)	#6@12in oc (ef)
1	WP2	R1	12	#5@12in oc (ef)	#6@12in oc (ef)
2	WP3	R1	12	#5@12in oc (ef)	#6@12in oc (ef)
3	WP4	R1	12	#5@12in oc (ef)	#6@12in oc (ef)

Concrete Wall Reinforcement (Continued)

	Wall	Region	Thickness[in]	Hor. Bar Size	Vert. Bar Size
4	WP5	R1	12	#5@12in oc (ef)	#6@12in oc (ef)
5	WP6	R1	12	#5@12in oc (ef)	#6@12in oc (ef)
6	WP7	R1	12	#5@12in oc (ef)	#6@12in oc (ef)
7	WP8	R1	12	#5@12in oc (ef)	#6@12in oc (ef)
8	WP9	R1	12	#5@12in oc (ef)	#6@12in oc (ef)
9	WP10	R1	12	#5@12in oc (ef)	#6@12in oc (ef)
10	WP11	R1	12	#5@12in oc (ef)	#6@12in oc (ef)
11	WP12	R1	12	#5@12in oc (ef)	#6@12in oc (ef)
12	WP13	R1	12	#5@12in oc (ef)	#6@12in oc (ef)
13	WP14	R1	12	#5@12in oc (ef)	#6@12in oc (ef)
14	WP15	R1	12	#5@12in oc (ef)	#6@12in oc (ef)
15	WP16	R1	12	#5@12in oc (ef)	#6@12in oc (ef)
16	WP17	R1	12	#5@12in oc (ef)	#6@12in oc (ef)
17	WP18	R1	12	#5@12in oc (ef)	#6@12in oc (ef)
18	WP19	R1	12	#5@12in oc (ef)	#6@12in oc (ef)
19	WP20	R1	12	#5@12in oc (ef)	#6@12in oc (ef)
20	WP21	R1	12	#5@12in oc (ef)	#6@12in oc (ef)
21	WP22	R1	12	#5@12in oc (ef)	#6@12in oc (ef)
22	WP23	R1	12	#5@12in oc (ef)	#6@12in oc (ef)
23	WP24	R1	8	#5@12in oc (ctr)	#5@12in oc (ctr)
24	WP25	R1	8	#5@12in oc (ctr)	#5@12in oc (ctr)
25	WP26	R1	8	#5@12in oc (ctr)	#5@12in oc (ctr)
26	WP27	R1	8	#5@12in oc (ctr)	#5@12in oc (ctr)

ACI 318-19 Wall Panel Concrete Code Checks (In-Plane)

	Wall Panel	Region	Max UC	LC	Shear UC	LC	Pn*phi[k]	Mn*phi[k-ft]	Vn*phi[k]
0	WP1	R1	0.011	10	0.145	10	NC	398940.21	6518.236
1	WP2	R1	0.524	10	0.498	10	NC	84.43	82.545
2	WP3	R1	0.348	14	0.302	14	-429.416	204.417	319.194
3	WP4	R1	0.003	16	0.103	12	NC	822768.464	9377.712
4	WP5	R1	0.028	14	0.176	10	NC	58627.492	2507.296
5	WP6	R1	0.059	10	0.063	13	NC	20345.262	1457.628
6	WP7	R1	0.112	14	0.099	12	NC	520.294	196.632
7	WP8	R1	0.033	9	0.068	12	NC	1400.674	382.801
8	WP9	R1	0.096	10	0.095	12	NC	159.719	105.761
9	WP10	R1	0.009	11	0.047	12	NC	62972.409	2592.548
10	WP11	R1	0.037	10	0.04	14	NC	5510.689	764.641
11	WP12	R1	0.038	13	0.039	12	NC	2526.222	509.343

ACI 318-19 Wall Panel Concrete Code Checks (In-Plane) (Continued)

	Wall Panel	Region	Max UC	LC	Shear UC	LC	Pn*phi[k]	Mn*phi[k-ft]	Vn*phi[k]
12	WP13	R1	0.048	10	0.077	10	NC	9535.202	1008.876
13	WP14	R1	0.046	14	0.058	11	NC	11392.566	1101.146
14	WP15	R1	0.023	10	0.109	10	NC	199770.134	4626.714
15	WP16	R1	0.046	14	0.145	10	NC	20345.262	1457.628
16	WP17	R1	0.109	14	0.236	10	NC	518.505	196.013
17	WP18	R1	0.185	10	0.19	10	-620.268	2654.746	497.975
18	WP19	R1	0.27	10	0.103	12	NC	505.379	191.471
19	WP20	R1	0.007	14	0.053	9	NC	909408.115	9859.509
20	WP21	R1	0.007	12	0.051	15	NC	560443.517	7736.644
21	WP22	R1	0.13	16	0.13	16	NC	11446.509	1106.374
22	WP23	R1	0.15	14	0.148	14	NC	11572.025	1118.4
23	WP24	R1	0.348	10	0.309	10	NC	3714.227	590.538
24	WP25	R1	0.312	10	0.522	14	NC	3714.227	471.772
25	WP26	R1	0.092	9	0.088	11	NC	3714.227	590.538
26	WP27	R1	0.088	11	0.084	11	NC	3714.227	590.538

Company : AHBL
Designer : KBG
Job Number : 2220236.20
Model Name : WBP2 Brownstones - Wood Lateral

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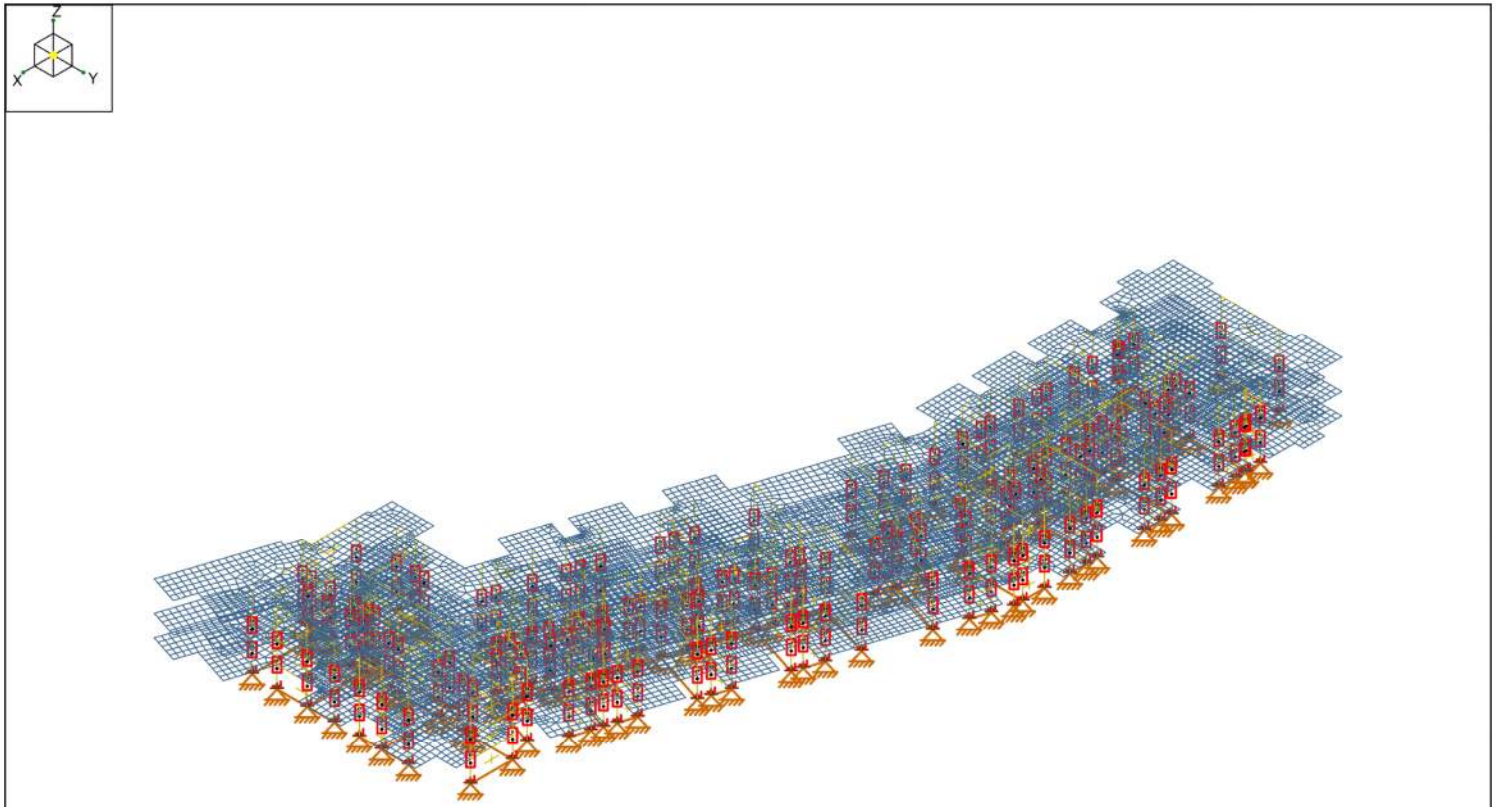

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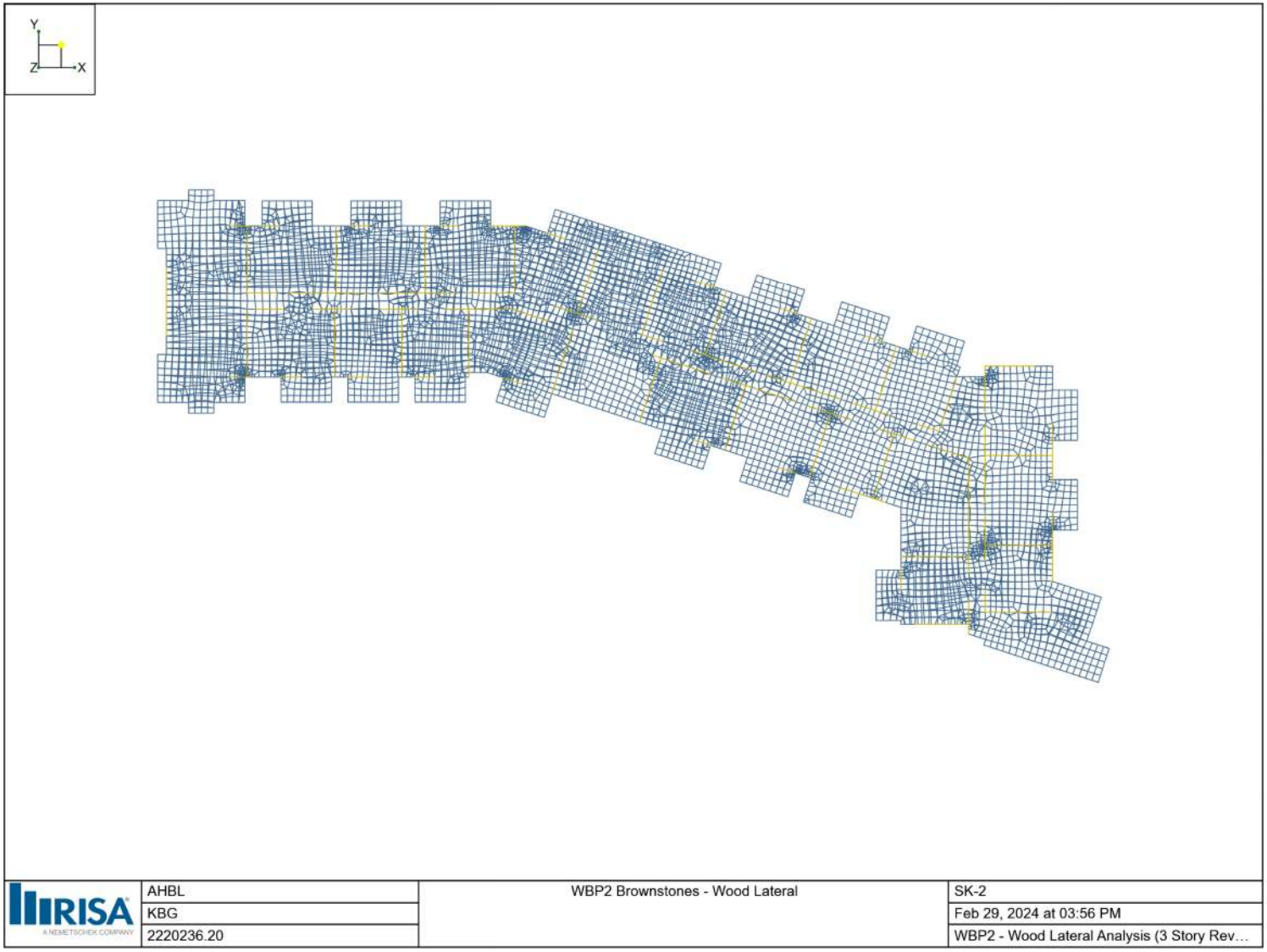

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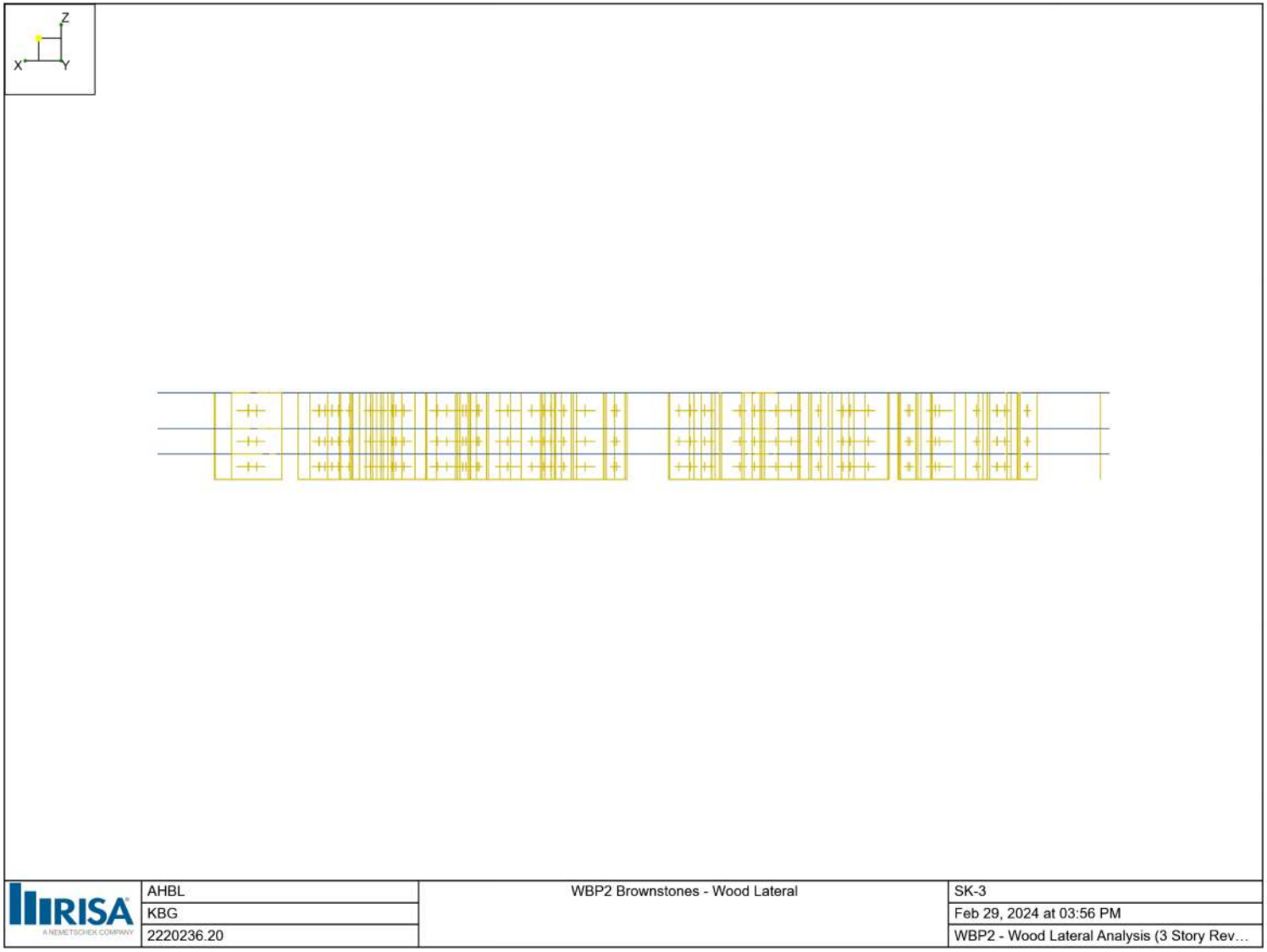
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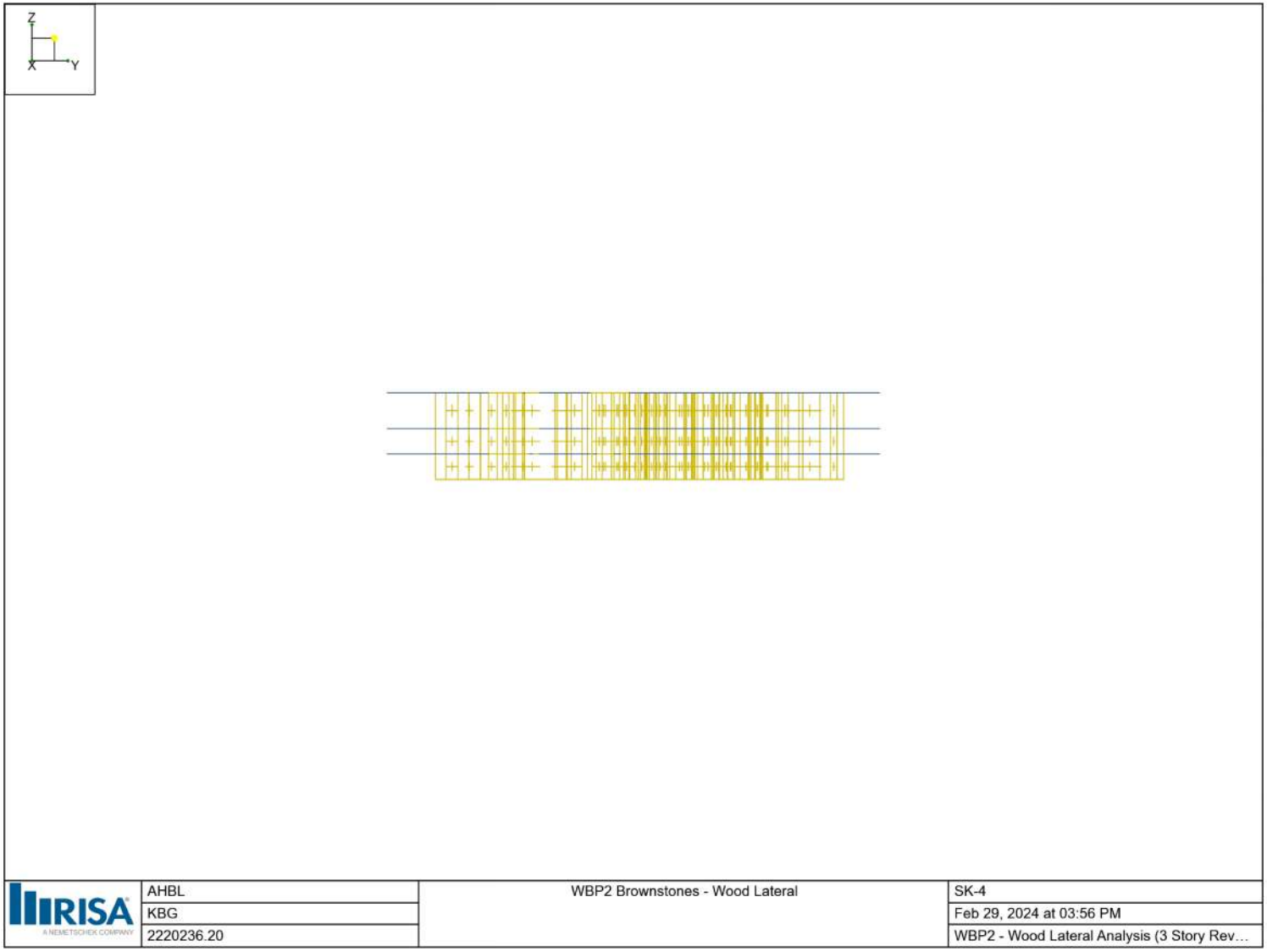
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SK-4
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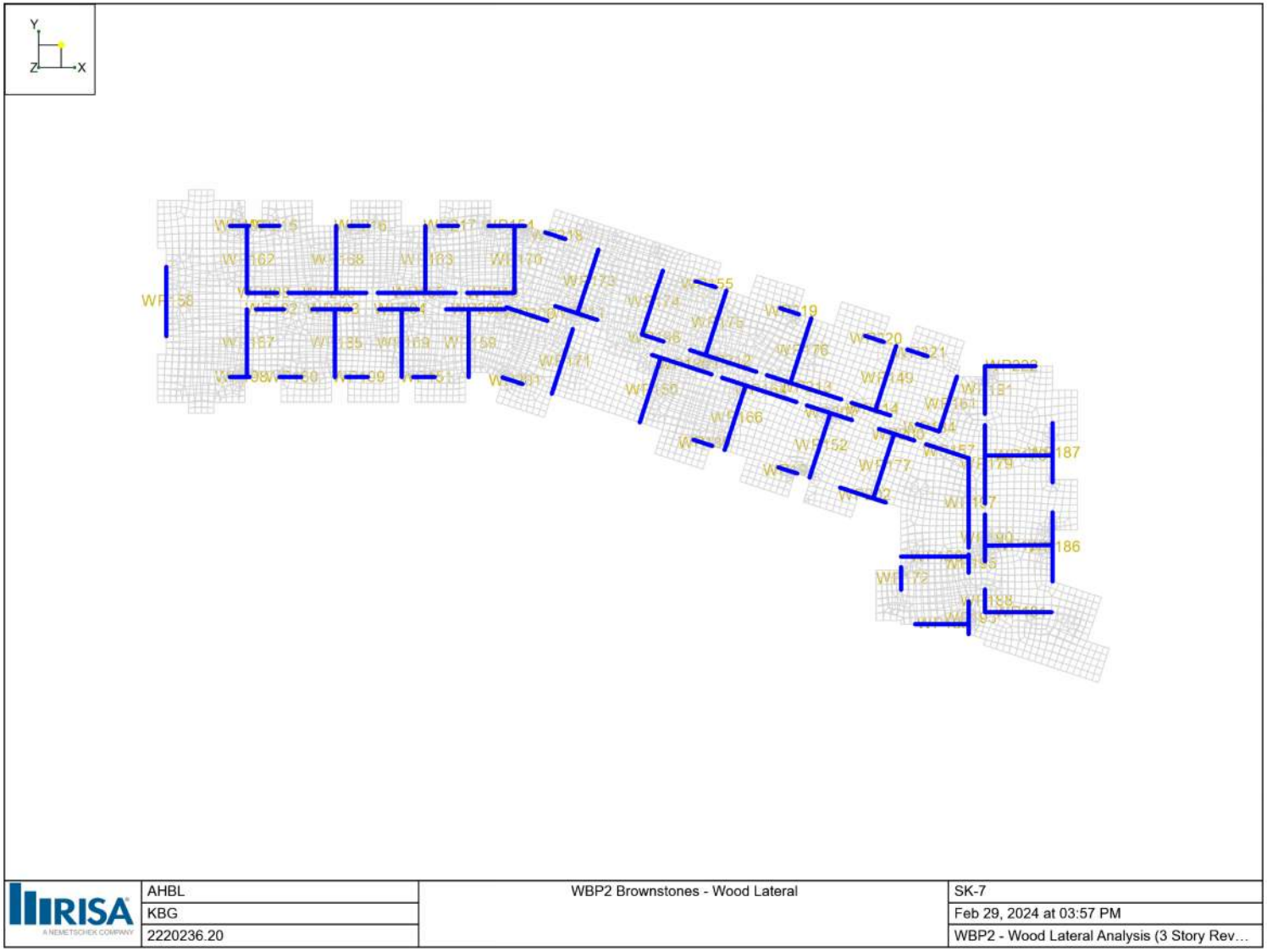

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Wood Properties

	Label	Type	Database	Species	Grade	Cm	Ci	Emod	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [k/ft³]
1	DF	Solid Sawn	Visually Graded	Douglas Fir-Larch	No.2			1	0.3	0.3	0.035
2	SP	Solid Sawn	Visually Graded	Southern Pine	No.1			1	0.3	0.3	0.035
3	HF	Solid Sawn	Visually Graded	Hem-Fir	No.1			1	0.3	0.3	0.035
4	SPF	Solid Sawn	Visually Graded	Spruce-Pine-fir	No.1			1	0.3	0.3	0.035
5	24F-1.8E DF Balanced	Glulam	NDS Table 5A	24F-1.8E_DF_BAL	na			1	0.3	0.3	0.035
6	24F-1.8E DF Unbalanced	Glulam	NDS Table 5A	24F-1.8E_DF_UNBAL	na			1	0.3	0.3	0.035
7	24F-1.8E SP Balanced	Glulam	NDS Table 5A	24F-1.8E_SP_BAL	na			1	0.3	0.3	0.035
8	24F-1.8E SP Unbalanced	Glulam	NDS Table 5A	24F-1.8E_SP_UNBAL	na			1	0.3	0.3	0.035
9	1.3E-1600F_VERSALAM	SCL	Boise Cascade	1.3E-1600F_VERSALAM	na			1	0.3	0.3	0.035
10	1.35E LSL_SolidStart	SCL	Louisiana Pacific	1.35E LSL_SolidStart	na			1	0.3	0.3	0.035
11	1.3E_RIGIDLAM LVL	SCL	Roseburg Forest Products_2012	1.3E_RIGIDLAM LVL	na			1	0.3	0.3	0.035
12	2.0E_DF Parallam PSL	SCL	TrusJoist	2.0E_DF Parallam PSL	na			1	0.3	0.3	0.035
13	LVL_PRL_1.5E_2250F	Custom	N/A	LVL_PRL_1.5E_2250F	na			1	0.3	0.3	0.035
14	LVL_Microlam_1.9E_2600F	Custom	N/A	LVL_Microllam_1.9E_2600F	na			1	0.3	0.3	0.035
15	PSL_Parallam_2.0E_2900F	Custom	N/A	PSL_Parallam_2.0E_2900F	na			1	0.3	0.3	0.035
16	LSL_TimberStrand_1.55E_2325F	Custom	N/A	LSL_TimberStrand_1.55E_2325F	na			1	0.3	0.3	0.035

General Materials Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [k/ft³]	Plate Methodology
1	gen_Conc3NW	3155	1372	0.15	0.6	0.145	Isotropic
2	gen_Conc4NW	3644	1584	0.15	0.6	0.145	Isotropic
3	gen_Conc3LW	2085	906	0.15	0.6	0.11	Isotropic
4	gen_Conc4LW	2408	1047	0.15	0.6	0.11	Isotropic
5	gen_Alum	10100	4077	0.3	1.29	0.173	Isotropic
6	gen_Steel	29000	11154	0.3	0.65	0.49	Isotropic
7	gen_Plywood	1800	38	0	0.3	0	Isotropic
8	RIGID	1e+6		0.3	0	0	Isotropic
9	gen_Ortho				0.65	0.49	Orthotropic

Plate Primary Data

	Label	A Node	B Node	C Node	D Node	Material	Thickness [in]
1	P1	N1236	N1237	N1238	N519	gen_Plywood	0.719

Plate Advanced Data

	Label	Plane Stress	Rotate
1	P1	Yes	0

Wall Panel Data

	Label	A Node	B Node	C Node	D Node	Material Type	Material Set	Thickness [in]	Design Rule	Panel/Spacing
1	WP1	N262	N44	N45	N332	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
2	WP2	N325	N33	N32	N281	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
3	WP3	N260	N34	N35	N280	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
4	WP4	N333	N47	N46	N285	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
5	WP5	N326	N36	N37	N327	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
6	WP6	N335	N49	N48	N334	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
7	WP7	N328	N38	N39	N329	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
8	WP8	N386	N152	N50	N336	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
9	WP9	N283	N40	N41	N276	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
10	WP10	N371	N112	N111	N370	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
11	WP11	N373	N115	N116	N374	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
12	WP12	N376	N120	N121	N305	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
13	WP13	N389	N166	N106	N367	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
14	WP14	N378	N122	N123	N379	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
15	WP15	N365	N100	N101	N256	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
16	WP16	N380	N124	N125	N308	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
17	WP17	N300	N102	N103	N301	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
18	WP18	N381	N126	N127	N299	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
19	WP19	N366	N104	N105	N302	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
20	WP20	N364	N97	N205	N385	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
21	WP21	N344	N60	N61	N257	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
22	WP22	N390	N391	N66	N347	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
23	WP23	N349	N71	N70	N348	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
24	WP24	N339	N56	N55	N340	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
25	WP25	N395	N394	N185	N393	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
26	WP26	N387	N193	N57	N341	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
27	WP27	N342	N58	N59	N343	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
28	WP28	N339	N56	N54	N286	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
29	WP29	N346	N65	N64	N268	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
30	WP30	N345	N63	N62	N287	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
31	WP31	N254	N68	N203	N388	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
32	WP32	N397	N186	N398	N399	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
33	WP33	N278	N51	N52	N337	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
34	WP34	N272	N53	N77	N338	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
35	WP35	N351	N73	N72	N350	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
36	WP36	N267	N17	N16	N317	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
37	WP37	N316	N15	N14	N315	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
38	WP38	N266	N13	N12	N264	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
39	WP39	N314	N11	N10	N261	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
40	WP40	N355	N81	N80	N354	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
41	WP41	N356	N82	N83	N357	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
42	WP42	N288	N85	N84	N358	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
43	WP43	N294	N75	N74	N292	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16

Wall Panel Data (Continued)

	Label	A Node	B Node	C Node	D Node	Material Type	Material Set	Thickness [in]	Design Rule	Panel/Spacing
44	WP44	N270	N19	N20	N269	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
45	WP45	N319	N21	N22	N274	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
46	WP46	N320	N23	N24	N275	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
47	WP47	N321	N25	N26	N322	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
48	WP48	N306	N114	N113	N372	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
49	WP49	N298	N98	N99	N290	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
50	WP50	N304	N107	N108	N368	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
51	WP51	N369	N109	N110	N293	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
52	WP52	N353	N79	N78	N271	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
53	WP53	N352	N76	N77	N338	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
54	WP54	N260	N34	N18	N318	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
55	WP55	N324	N31	N30	N323	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
56	WP56	N279	N29	N28	N273	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
57	WP57	N277	N27	N40	N283	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
58	WP58	N375	N117	N118	N284	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
59	WP59	N376	N120	N119	N377	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
60	WP60	N384	N133	N132	N263	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
61	WP61	N383	N131	N130	N303	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
62	WP62	N382	N128	N129	N307	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
63	WP63	N297	N96	N97	N364	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
64	WP64	N309	N3	N2	N253	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
65	WP65	N255	N4	N5	N310	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
66	WP66	N311	N6	N7	N312	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
67	WP67	N259	N8	N9	N313	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
68	WP68	N330	N42	N43	N331	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
69	WP69	N282	N94	N95	N363	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
70	WP70	N362	N93	N92	N296	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
71	WP71	N258	N91	N90	N361	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
72	WP72	N265	N89	N88	N360	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
73	WP73	N295	N86	N87	N359	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
74	WP74	N388	N203	N69	N291	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
75	WP75	N126	N1058	N1059	N127	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
76	WP76	N166	N822	N1045	N106	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
77	WP77	N11	N627	N982	N10	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
78	WP78	N102	N1041	N758	N103	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
79	WP79	N391	N1140	N1018	N66	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
80	WP80	N42	N1007	N1008	N43	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
81	WP81	N93	N993	N741	N92	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
82	WP82	N29	N995	N660	N28	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
83	WP83	N76	N1026	N723	N77	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
84	WP84	N44	N689	N684	N45	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
85	WP85	N152	N806	N1013	N50	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
86	WP86	N15	N987	N985	N14	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16

Wall Panel Data (Continued)

	Label	A Node	B Node	C Node	D Node	Material Type	Material Set	Thickness [in]	Design Rule	Panel/Spacing
87	WP87	N97	N745	N677	N205	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
88	WP88	N34	N1002	N1003	N35	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
89	WP89	N38	N655	N1006	N39	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
90	WP90	N107	N720	N1046	N108	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
91	WP91	N47	N1012	N1011	N46	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
92	WP92	N100	N751	N754	N101	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
93	WP93	N33	N1001	N1000	N32	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
94	WP94	N36	N675	N681	N37	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
95	WP95	N49	N977	N682	N48	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
96	WP96	N40	N633	N997	N41	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
97	WP97	N112	N750	N1047	N111	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
98	WP98	N73	N1023	N1022	N72	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
99	WP99	N115	N1050	N763	N116	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
100	WP100	N120	N1055	N662	N121	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
101	WP101	N122	N650	N734	N123	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
102	WP102	N124	N1056	N1057	N125	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
103	WP103	N104	N1043	N1044	N105	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
104	WP104	N60	N706	N1017	N61	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
105	WP105	N63	N708	N632	N62	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
106	WP106	N71	N1021	N721	N70	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
107	WP107	N56	N1014	N697	N55	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
108	WP108	N19	N667	N670	N20	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
109	WP109	N394	N945	N781	N185	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
110	WP110	N96	N983	N745	N97	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
111	WP111	N82	N728	N729	N83	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
112	WP112	N193	N656	N991	N57	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
113	WP113	N58	N1015	N701	N59	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
114	WP114	N56	N1014	N691	N54	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
115	WP115	N98	N747	N1040	N99	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
116	WP116	N65	N710	N645	N64	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
117	WP117	N68	N718	N859	N203	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
118	WP118	N3	N975	N630	N2	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
119	WP119	N186	N784	N801	N398	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
120	WP120	N85	N1031	N1030	N84	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
121	WP121	N51	N1005	N974	N52	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
122	WP122	N120	N1055	N1054	N119	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
123	WP123	N53	N663	N723	N77	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
124	WP124	N17	N659	N989	N16	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
125	WP125	N13	N653	N651	N12	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
126	WP126	N79	N1028	N1027	N78	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
127	WP127	N81	N725	N1029	N80	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
128	WP128	N75	N1025	N1024	N74	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
129	WP129	N21	N981	N673	N22	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16

Wall Panel Data (Continued)

	Label	A Node	B Node	C Node	D Node	Material Type	Material Set	Thickness [in]	Design Rule	Panel/Spacing
130	WP130	N23	N978	N988	N24	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
131	WP131	N25	N994	N623	N26	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
132	WP132	N114	N1049	N1048	N113	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
133	WP133	N109	N674	N760	N110	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
134	WP134	N34	N1002	N990	N18	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
135	WP135	N31	N999	N984	N30	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
136	WP136	N27	N986	N633	N40	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
137	WP137	N117	N1051	N1053	N118	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
138	WP138	N133	N1061	N716	N132	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
139	WP139	N131	N772	N1060	N130	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@2 | 16
140	WP140	N128	N770	N625	N129	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
141	WP141	N4	N637	N642	N5	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
142	WP142	N6	N973	N644	N7	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
143	WP143	N8	N980	N979	N9	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
144	WP144	N94	N743	N1039	N95	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
145	WP145	N91	N737	N1035	N90	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
146	WP146	N89	N735	N1034	N88	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
147	WP147	N86	N1032	N1033	N87	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
148	WP148	N203	N859	N1019	N69	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
149	WP149	N1058	N12309	N12310	N1059	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
150	WP150	N822	N12116	N12296	N1045	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
151	WP151	N627	N11949	N12240	N982	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
152	WP152	N1041	N12292	N12060	N758	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
153	WP153	N1140	N12324	N12271	N1018	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
154	WP154	N1007	N12261	N12262	N1008	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
155	WP155	N993	N12250	N12044	N741	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
156	WP156	N995	N12252	N11977	N660	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
157	WP157	N1026	N12279	N12029	N723	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
158	WP158	N689	N12003	N11998	N684	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
159	WP159	N806	N12101	N12266	N1013	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
160	WP160	N987	N12245	N12243	N985	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
161	WP161	N745	N12048	N11991	N677	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
162	WP162	N1002	N12257	N12258	N1003	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
163	WP163	N655	N11973	N12260	N1006	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
164	WP164	N720	N12027	N12297	N1046	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
165	WP165	N1012	N12265	N12264	N1011	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
166	WP166	N751	N12054	N12056	N754	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
167	WP167	N1001	N12256	N12255	N1000	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
168	WP168	N675	N11989	N11995	N681	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
169	WP169	N977	N12235	N11996	N682	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
170	WP170	N633	N11954	N12253	N997	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
171	WP171	N750	N12053	N12298	N1047	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
172	WP172	N1023	N12276	N12275	N1022	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16

Wall Panel Data (Continued)

	Label	A Node	B Node	C Node	D Node	Material Type	Material Set	Thickness [in]	Design Rule	Panel/Spacing
173	WP173	N1050	N12301	N12065	N763	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
174	WP174	N1055	N12306	N11979	N662	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
175	WP175	N650	N11969	N12039	N734	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
176	WP176	N1056	N12307	N12308	N1057	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
177	WP177	N1043	N12294	N12295	N1044	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
178	WP178	N706	N12014	N12270	N1017	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@3 | 16
179	WP179	N708	N12016	N11953	N632	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
180	WP180	N1021	N12274	N12028	N721	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
181	WP181	N1014	N12267	N12009	N697	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
182	WP182	N667	N11983	N11985	N670	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
183	WP183	N945	N12205	N12081	N781	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
184	WP184	N983	N12241	N12048	N745	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
185	WP185	N728	N12033	N12034	N729	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
186	WP186	N656	N11974	N12249	N991	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
187	WP187	N1015	N12268	N12011	N701	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
188	WP188	N1014	N12267	N12005	N691	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
189	WP189	N747	N12050	N12291	N1040	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
190	WP190	N710	N12018	N11964	N645	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
191	WP191	N718	N12025	N12150	N859	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
192	WP192	N975	N12234	N11952	N630	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
193	WP193	N784	N12084	N12096	N801	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
194	WP194	N1031	N12284	N12283	N1030	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
195	WP195	N1005	N12259	N12233	N974	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
196	WP196	N1055	N12306	N12305	N1054	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
197	WP197	N663	N11980	N12029	N723	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
198	WP198	N659	N11976	N12247	N989	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
199	WP199	N653	N11971	N11970	N651	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
200	WP200	N1028	N12281	N12280	N1027	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
201	WP201	N725	N12031	N12282	N1029	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
202	WP202	N1025	N12278	N12277	N1024	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
203	WP203	N981	N12239	N11987	N673	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
204	WP204	N978	N12236	N12246	N988	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
205	WP205	N994	N12251	N11947	N623	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
206	WP206	N1049	N12300	N12299	N1048	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
207	WP207	N674	N11988	N12062	N760	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
208	WP208	N1002	N12257	N12248	N990	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
209	WP209	N999	N12254	N12242	N984	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
210	WP210	N986	N12244	N11954	N633	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
211	WP211	N1051	N12302	N12304	N1053	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
212	WP212	N1061	N12312	N12023	N716	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
213	WP213	N772	N12074	N12311	N1060	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16
214	WP214	N770	N12072	N11948	N625	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
215	WP215	N637	N11957	N11962	N642	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16

Wall Panel Data (Continued)

	Label	A Node	B Node	C Node	D Node	Material Type	Material Set	Thickness [in]	Design Rule	Panel/Spacing
216	WP216	N973	N12232	N11963	N644	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
217	WP217	N980	N12238	N12237	N979	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
218	WP218	N743	N12046	N12290	N1039	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
219	WP219	N737	N12041	N12288	N1035	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
220	WP220	N735	N12040	N12287	N1034	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
221	WP221	N1032	N12285	N12286	N1033	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@6 | 16
222	WP222	N859	N12150	N12272	N1019	Wood	DF	5.5 (stud)	Typical	S1_15/32_8d@4 | 16

Wall Panel Advanced Data

	Label	Seismic Rule	Design Method	SSAF	In-Plane Icr Factor	Out-Plane Icr Factor	Cm In-Plane	Cm Out-Plane	Stud Bracing	Sheathing Connect Dist [in]
1	WP1	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
2	WP2	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
3	WP3	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
4	WP4	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
5	WP5	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
6	WP6	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
7	WP7	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
8	WP8	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
9	WP9	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
10	WP10	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
11	WP11	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
12	WP12	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
13	WP13	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
14	WP14	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
15	WP15	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
16	WP16	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
17	WP17	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
18	WP18	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
19	WP19	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
20	WP20	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
21	WP21	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
22	WP22	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
23	WP23	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
24	WP24	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
25	WP25	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
26	WP26	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
27	WP27	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
28	WP28	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
29	WP29	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
30	WP30	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
31	WP31	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
32	WP32	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
33	WP33	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A

Wall Panel Advanced Data (Continued)

	Label	Seismic Rule	Design Method	SSAF	In-Plane Icr Factor	Out-Plane Icr Factor	Cm In-Plane	Cm Out-Plane	Stud Bracing	Sheathing Connect Dist [in]
34	WP34	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
35	WP35	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
36	WP36	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
37	WP37	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
38	WP38	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
39	WP39	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
40	WP40	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
41	WP41	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
42	WP42	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
43	WP43	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
44	WP44	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
45	WP45	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
46	WP46	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
47	WP47	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
48	WP48	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
49	WP49	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
50	WP50	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
51	WP51	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
52	WP52	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
53	WP53	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
54	WP54	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
55	WP55	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
56	WP56	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
57	WP57	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
58	WP58	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
59	WP59	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
60	WP60	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
61	WP61	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
62	WP62	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
63	WP63	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
64	WP64	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
65	WP65	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
66	WP66	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
67	WP67	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
68	WP68	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
69	WP69	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
70	WP70	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
71	WP71	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
72	WP72	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
73	WP73	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
74	WP74	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
75	WP75	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
76	WP76	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A

Wall Panel Advanced Data (Continued)

	Label	Seismic Rule	Design Method	SSAF	In-Plane Icr Factor	Out-Plane Icr Factor	Cm In-Plane	Cm Out-Plane	Stud Bracing	Sheathing Connect Dist [in]
77	WP77	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
78	WP78	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
79	WP79	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
80	WP80	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
81	WP81	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
82	WP82	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
83	WP83	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
84	WP84	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
85	WP85	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
86	WP86	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
87	WP87	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
88	WP88	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
89	WP89	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
90	WP90	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
91	WP91	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
92	WP92	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
93	WP93	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
94	WP94	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
95	WP95	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
96	WP96	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
97	WP97	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
98	WP98	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
99	WP99	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
100	WP100	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
101	WP101	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
102	WP102	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
103	WP103	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
104	WP104	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
105	WP105	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
106	WP106	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
107	WP107	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
108	WP108	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
109	WP109	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
110	WP110	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
111	WP111	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
112	WP112	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
113	WP113	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
114	WP114	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
115	WP115	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
116	WP116	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
117	WP117	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
118	WP118	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
119	WP119	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A

Wall Panel Advanced Data (Continued)

	Label	Seismic Rule	Design Method	SSAF	In-Plane Icr Factor	Out-Plane Icr Factor	Cm In-Plane	Cm Out-Plane	Stud Bracing	Sheathing Connect Dist [in]
120	WP120	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
121	WP121	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
122	WP122	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
123	WP123	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
124	WP124	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
125	WP125	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
126	WP126	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
127	WP127	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
128	WP128	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
129	WP129	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
130	WP130	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
131	WP131	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
132	WP132	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
133	WP133	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
134	WP134	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
135	WP135	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
136	WP136	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
137	WP137	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
138	WP138	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
139	WP139	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
140	WP140	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
141	WP141	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
142	WP142	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
143	WP143	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
144	WP144	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
145	WP145	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
146	WP146	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
147	WP147	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
148	WP148	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
149	WP149	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
150	WP150	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
151	WP151	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
152	WP152	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
153	WP153	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
154	WP154	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
155	WP155	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
156	WP156	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
157	WP157	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
158	WP158	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
159	WP159	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
160	WP160	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
161	WP161	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
162	WP162	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A

Wall Panel Advanced Data (Continued)

	Label	Seismic Rule	Design Method	SSAF	In-Plane Icr Factor	Out-Plane Icr Factor	Cm In-Plane	Cm Out-Plane	Stud Bracing	Sheathing Connect Dist [in]
163	WP163	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
164	WP164	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
165	WP165	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
166	WP166	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
167	WP167	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
168	WP168	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
169	WP169	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
170	WP170	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
171	WP171	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
172	WP172	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
173	WP173	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
174	WP174	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
175	WP175	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
176	WP176	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
177	WP177	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
178	WP178	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
179	WP179	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
180	WP180	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
181	WP181	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
182	WP182	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
183	WP183	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
184	WP184	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
185	WP185	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
186	WP186	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
187	WP187	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
188	WP188	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
189	WP189	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
190	WP190	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
191	WP191	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
192	WP192	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
193	WP193	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
194	WP194	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
195	WP195	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
196	WP196	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
197	WP197	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
198	WP198	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
199	WP199	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
200	WP200	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
201	WP201	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
202	WP202	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
203	WP203	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
204	WP204	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
205	WP205	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A

Wall Panel Advanced Data (Continued)

	Label	Seismic Rule	Design Method	SSAF	In-Plane Icr Factor	Out-Plane Icr Factor	Cm In-Plane	Cm Out-Plane	Stud Bracing	Sheathing Connect Dist [in]
206	WP206	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
207	WP207	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
208	WP208	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
209	WP209	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
210	WP210	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
211	WP211	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
212	WP212	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
213	WP213	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
214	WP214	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
215	WP215	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
216	WP216	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
217	WP217	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
218	WP218	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
219	WP219	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
220	WP220	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
221	WP221	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A
222	WP222	N/A	Segmented	1	N/A	N/A	N/A	N/A	N/A	N/A

Wall Panel U.C. Parameters

	Label	Max Bending Chk	Max Shear Chk
1	Typical	1	1

Wood Wall Panel Parameters

	Label	Top Plate	Sill Plate	Studs	Min Stud Space [in]	Max Stud Space [in]	Green Lumber?	Header Size	Header Matl
1	Typical	2-2X6	2X6	2X6	16	16		6X8	Same as Wall

Additional Wood Wall Panel Parameters

	Label	Schedule	Min Panel Thick [in]	Max Panel Thick [in]	Double Sided Panel?	Max. Nail Spacing	Min. Nail Spacing	HD Chords	HD Chord Matl	Hold Down	Chord Strap	Eccentricity
1	Typical	AWC 2015 PLY 0.469 (8d)	0.375	0.75	Optimum	6-in.	2-in.	2-2X6	Same as Wall	HDU_DF-SP	CMST_DF-SP	

Basic Load Cases

	BLC Description	Category	Distributed	Surface(Plate/Wall)
1	DL	DL	141	
2	LL	LL		
3	SL	SL		
4	ELX	ELX		16413
5	ELY	ELY		16413

Load Combinations

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
1	IBC 16-12 (b) (a)	Yes	Y	DL	1	Sds*DL	0.14	ELX	0.7	ELY	0.21				
2	IBC 16-12 (b) (b)	Yes	Y	DL	1	Sds*DL	0.14	ELY	0.7	ELX	0.21				
3	IBC 16-12 (b) (c)	Yes	Y	DL	1	Sds*DL	0.14	ELX	0.7	ELY	-0.21				
4	IBC 16-12 (b) (d)	Yes	Y	DL	1	Sds*DL	0.14	ELY	0.7	ELX	-0.21				
5	IBC 16-12 (b) (e)	Yes	Y	DL	1	Sds*DL	0.14	ELX	-0.7	ELY	-0.21				
6	IBC 16-12 (b) (f)	Yes	Y	DL	1	Sds*DL	0.14	ELY	-0.7	ELX	-0.21				
7	IBC 16-12 (b) (g)	Yes	Y	DL	1	Sds*DL	0.14	ELX	-0.7	ELY	0.21				
8	IBC 16-12 (b) (h)	Yes	Y	DL	1	Sds*DL	0.14	ELY	-0.7	ELX	0.21				
9	IBC 16-14 (a)	Yes	Y	DL	1	Sds*DL	0.105	ELX	0.525	ELY	0.158	LL	0.75	LLS	0.75
10	IBC 16-14 (b)	Yes	Y	DL	1	Sds*DL	0.105	ELY	0.525	ELX	0.158	LL	0.75	LLS	0.75
11	IBC 16-14 (c)	Yes	Y	DL	1	Sds*DL	0.105	ELX	0.525	ELY	-0.158	LL	0.75	LLS	0.75
12	IBC 16-14 (d)	Yes	Y	DL	1	Sds*DL	0.105	ELY	0.525	ELX	-0.158	LL	0.75	LLS	0.75
13	IBC 16-14 (e)	Yes	Y	DL	1	Sds*DL	0.105	ELX	-0.525	ELY	-0.158	LL	0.75	LLS	0.75
14	IBC 16-14 (f)	Yes	Y	DL	1	Sds*DL	0.105	ELY	-0.525	ELX	-0.158	LL	0.75	LLS	0.75
15	IBC 16-14 (g)	Yes	Y	DL	1	Sds*DL	0.105	ELX	-0.525	ELY	0.158	LL	0.75	LLS	0.75
16	IBC 16-14 (h)	Yes	Y	DL	1	Sds*DL	0.105	ELY	-0.525	ELX	0.158	LL	0.75	LLS	0.75
17	IBC 16-16 (a)	Yes	Y	DL	0.6	Sds*DL	-0.14	ELX	0.7	ELY	0.21				
18	IBC 16-16 (b)	Yes	Y	DL	0.6	Sds*DL	-0.14	ELY	0.7	ELX	0.21				
19	IBC 16-16 (c)	Yes	Y	DL	0.6	Sds*DL	-0.14	ELX	0.7	ELY	-0.21				
20	IBC 16-16 (d)	Yes	Y	DL	0.6	Sds*DL	-0.14	ELY	0.7	ELX	-0.21				
21	IBC 16-16 (e)	Yes	Y	DL	0.6	Sds*DL	-0.14	ELX	-0.7	ELY	-0.21				
22	IBC 16-16 (f)	Yes	Y	DL	0.6	Sds*DL	-0.14	ELY	-0.7	ELX	-0.21				
23	IBC 16-16 (g)	Yes	Y	DL	0.6	Sds*DL	-0.14	ELX	-0.7	ELY	0.21				
24	IBC 16-16 (h)	Yes	Y	DL	0.6	Sds*DL	-0.14	ELY	-0.7	ELX	0.21				

Envelope Node Reactions

	Node Label		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
0	WP1	max	71.845	3	19523.748	6	51782.541	7	514397.362	18	0	24	12.588	19
1		min	-66.939	23	-19487.878	18	20894.709	19	-516682.258	6	0	1	-17.416	7
2	WP2	max	215.008	1	20109.329	6	13424.225	18	403287.647	20	0	24	2107.476	17
3		min	-215.007	21	-20106.176	18	-13514.223	6	-405022.019	8	0	1	-2136.964	5
4	WP3	max	267.676	3	20502.914	24	7703.152	5	309407.727	18	0	24	2523.59	4
5		min	-183.273	23	-20823.063	4	-2666.861	17	-370440.282	6	0	1	-1311.76	24
6	WP4	max	146.529	19	19385.346	6	17800.675	8	409655.182	2	0	24	1265.771	7
7		min	-160.63	7	-18943.291	18	-11163.6	20	-333108.285	22	0	1	-1066.906	19
8	WP5	max	113.69	19	18733.119	22	17224.467	2	291204.077	18	0	24	433.106	17
9		min	-133.25	7	-19103.287	2	-10688.402	22	-368751.816	6	0	1	-702.186	5
10	WP6	max	143.633	19	18425.377	6	16499.926	8	373321.18	2	0	24	1276.43	7
11		min	-158.309	7	-17996.562	18	-10115.944	20	-297510.853	22	0	1	-1075.85	19
12	WP7	max	109.207	19	17804.211	22	16989.277	2	283894.71	20	0	24	466.978	17
13		min	-129.378	7	-18210.913	2	-10441.734	22	-361011.601	8	0	1	-737.49	5
14	WP8	max	134.804	3	18505.155	6	16776.401	6	369061.689	4	0	24	728.28	23

Envelope Node Reactions (Continued)

	Node Label		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
15		min	-113.781	23	-18097.605	18	-10308.136	18	-292242.668	24	0	1	-1019.162	3
16	WP9	max	119.622	17	19454.172	22	24365.741	3	259624.821	4	0	24	1730.857	23
17		min	-262.88	5	-19488.137	2	-13794.394	23	-255463.403	24	0	1	-2755.699	3
18	WP10	max	5661.044	6	17458.02	6	0.003	8	439393.798	18	143938.52	6	110.169	23
19		min	-5649.997	18	-17425.044	18	-0.003	20	-442997.213	6	-142767.699	18	-113.274	3
20	WP11	max	5902.08	22	18188.518	22	18586.013	2	324262.166	18	130695.995	6	1186.6	19
21		min	-6028.124	2	-18557.111	2	-11990.46	22	-402240.912	6	-105359.165	18	-1266.27	7
22	WP12	max	5635.367	22	17212.777	22	16194.95	4	339403.896	18	128732.373	6	1253.258	3
23		min	-5682.521	2	-17581.586	2	-11570.161	24	-396197.507	6	-110279.011	18	-290.567	23
24	WP13	max	5342.433	22	16438.817	22	1.47	5	434491.405	18	142548.956	6	55.956	22
25		min	-5346.374	2	-16449.932	2	-0.871	17	-438720.576	6	-141174.815	18	-89.446	2
26	WP14	max	5779.332	22	17705.301	22	17490.003	2	291348.726	18	119698.447	6	1255.659	3
27		min	-5830.866	2	-18042.161	2	-11073.815	22	-368393.94	6	-94664.94	18	-510.269	23
28	WP15	max	5959.773	6	18265.988	6	17511.338	6	364425.812	2	95841.192	22	358.914	23
29		min	-5794.266	18	-17856.522	18	-10916.691	18	-294968.859	22	-118409.124	2	-824.933	3
30	WP16	max	5901.705	22	18120.878	22	17636.932	2	292729.679	18	120331.145	6	853.062	3
31		min	-5934.79	2	-18335.543	2	-11239.448	22	-370341.185	6	-95113.638	18	-409.039	23
32	WP17	max	6059.792	6	18637.996	6	17522.564	6	367229.78	2	96722.272	22	1009.886	7
33		min	-5903.883	18	-18134.793	18	-10845.981	18	-297680.543	22	-119320.188	2	-965.856	19
34	WP18	max	5915.705	22	18245.591	22	16959.09	2	296423.499	18	121246.285	6	994.167	19
35		min	-6024.231	2	-18512.995	2	-10741.743	22	-373157.695	6	-96313.833	18	-1280.044	7
36	WP19	max	5967.063	22	18353.859	22	16087.679	2	300387.624	18	117926.328	6	706.917	19
37		min	-6067.258	2	-18576.237	2	-11096.306	22	-362939.917	6	-97601.856	18	-1020.041	7
38	WP20	max	3860.549	22	12009.923	22	15855.57	1	251280.975	20	96500.83	8	171.971	19
39		min	-4003.885	2	-12215.278	2	-11306.927	21	-296999.015	8	-81646.138	20	-990.816	7
40	WP21	max	20702.339	21	109.279	20	8743.854	3	0	24	242350.699	7	529.126	4
41		min	-21046.999	1	-125.304	8	3271.84	23	0	1	-228831.66	19	-85.647	24
42	WP22	max	19517.852	21	236.116	7	9477.628	8	1496.096	17	206349.298	5	627.216	24
43		min	-19900.247	1	-205.966	19	2610.324	20	-1587.126	5	-194514.133	17	-1194.868	4
44	WP23	max	18549.985	5	100.606	23	15365.405	7	0	7	335949.128	21	1138.084	23
45		min	-18269.545	17	-257.712	3	-10317.105	19	0	19	-398712.218	1	-3368.403	3
46	WP24	max	18043.407	21	114.495	4	14407.311	3	0	24	419704.215	5	298.839	24
47		min	-18412.46	1	-45.56	24	-9621.451	23	0	1	-368916.443	17	-1214.226	4
48	WP25	max	14911.211	5	127.661	4	17478.076	5	0	5	245943.717	21	1033.521	2
49		min	-14555.226	17	-94.966	24	-11248.994	17	0	17	-302802.308	1	-655.805	22
50	WP26	max	-6.501	17	16197.247	8	60751.319	1	454747.46	20	0	24	109.214	2
51		min	-31.93	5	-16075.859	20	5722.047	21	-459996.639	8	0	1	-71.186	22
52	WP27	max	-4.725	21	13309.43	24	54818.35	3	366013.818	4	0	24	133.444	23
53		min	-42.404	1	-13325.797	4	1322.37	23	-359658.934	24	0	1	-176.803	3
54	WP28	max	25.931	4	4534.992	8	28196.748	7	78278.283	2	0	24	153.181	5
55		min	8.743	24	-4365.214	20	-4057.286	19	-68059.524	22	0	1	-70.69	17
56	WP29	max	359.804	5	9527.985	8	51140.659	7	261360.016	2	1.024	2	1327.22	5
57		min	-172.561	17	-9424.656	20	1321.624	19	-242100.403	22	-0.949	22	-708.246	17

Envelope Node Reactions (Continued)

	Node Label		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
58	WP30	max	37.109	3	16732.243	8	81341.649	7	467686.179	20	0	24	133.878	19
59		min	5.952	23	-16647.646	20	11768.38	19	-496484.992	8	0	1	-287.103	7
60	WP31	max	73.59	1	9790.992	22	51266.545	5	205008.394	20	0	24	82.534	24
61		min	-33.142	21	-9938.824	2	5053.27	17	-240780.988	8	0	1	-409.733	4
62	WP32	max	16.383	17	5449.945	8	39039.629	1	155423.765	4	0	24	165.208	18
63		min	-48.729	5	-5364.518	20	-2548.711	21	-142892.92	24	0	1	-206.991	6
64	WP33	max	119.651	21	2792.931	8	24710.402	3	46851.108	18	0	24	688.665	1
65		min	-227.762	1	-2693.419	20	-6546.315	23	-54656.681	6	0	1	-444.85	21
66	WP34	max	-3.098	19	20149.001	8	95494.257	8	432102.109	18	0	24	2858.458	2
67		min	-191.58	7	-19617.538	20	18346.001	20	-435832.876	6	0	1	557.434	22
68	WP35	max	13.686	3	3204.889	6	16707.949	6	73422.499	20	0	24	1.463	8
69		min	-13.157	23	-3202.908	18	6741.801	18	-74343.437	8	0	1	-1.062	20
70	WP36	max	3989.898	5	152.961	8	13516.696	6	0	18	76416.125	7	533.808	8
71		min	-3960.206	17	-152.581	20	-13425.976	18	0	6	-76119.049	19	-532.132	20
72	WP37	max	3550.976	7	1.651	18	16155.5	6	0	19	89867.328	7	4.586	4
73		min	-3522.114	19	-1.731	6	6518.885	18	0	7	-89409.282	19	-4.315	24
74	WP38	max	3540.339	7	11.651	2	16155.501	8	0	19	89771.156	7	5.745	20
75		min	-3516.254	19	-11.073	22	6518.884	20	0	7	-89325.227	19	-5.97	8
76	WP39	max	3564.333	7	21.095	4	16155.501	8	0	17	85603.672	7	0.74	22
77		min	-3544.975	19	-20.975	24	6518.884	20	0	5	-85181.154	19	-1.126	2
78	WP40	max	3377.53	7	1079.222	19	15775.466	5	25057.717	7	77990.744	7	2.093	7
79		min	-3362.541	19	-1084.901	7	6365.538	17	-24942.558	19	-77632.32	19	-1.863	19
80	WP41	max	2761.45	23	905.328	3	14599.578	5	20977.474	23	64562.025	23	1.583	3
81		min	-2778.589	3	-901.66	23	5891.056	17	-20993.34	3	-64610.856	3	-0.667	23
82	WP42	max	2767.022	23	912.8	3	14599.579	5	20727.265	23	63791.964	23	0.894	7
83		min	-2798.238	3	-903.598	23	5891.056	17	-20784.053	3	-63966.739	3	-0.272	19
84	WP43	max	12870.048	23	4266.957	3	44694.575	6	105763.141	7	325505.477	7	278.339	8
85		min	-13035.748	3	-4181.571	23	440.93	18	-99585.163	19	-306491.617	19	-170.13	20
86	WP44	max	5588.567	7	3.91	24	25506.249	1	0	24	141063.517	7	8.105	4
87		min	-5501.007	19	-4.519	4	10287.673	21	0	1	-140000.808	19	-7.321	24
88	WP45	max	10894.199	7	8.11	20	43601.686	4	0	24	272504.351	5	171.571	23
89		min	-10769.761	19	-34.686	8	-752.657	24	0	1	-262193.033	17	-187.858	3
90	WP46	max	10792.175	7	16.48	20	42661.596	4	0	24	270031.497	5	163.001	21
91		min	-10697.548	19	-41.757	8	440.526	24	0	1	-260213.151	17	-178.483	1
92	WP47	max	17372.356	7	16.899	18	61303.895	2	0	24	484989.205	23	192.537	5
93		min	-17262.177	19	-47.826	6	7662.838	22	0	1	-501435.436	3	-142.142	17
94	WP48	max	11782.807	7	3826.385	19	38987.97	3	96578.186	7	297237.093	7	21.837	20
95		min	-11760.127	19	-3835.35	7	15717.27	23	-96232.664	19	-296173.686	19	-21.971	8
96	WP49	max	17749.781	7	5705.693	19	56670.246	1	161306.023	7	496448.891	7	20.299	19
97		min	-17545.352	19	-5775.935	7	22865.487	21	-160692.046	19	-494559.265	19	-25.773	7
98	WP50	max	22351.91	23	7278.675	19	79135.959	2	201130.184	23	619015.057	23	247.495	2
99		min	-22430.524	3	-7290.202	7	13949.394	22	-213669.685	3	-657607.673	3	-115.045	22
100	WP51	max	12546.903	23	4101.218	3	51128.73	2	110039.377	7	338666.379	7	123.573	23

Envelope Node Reactions (Continued)

	Node Label		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
101		min	-12695.161	3	-4088.429	23	2714.408	22	-109289.469	19	-336358.4	19	-134.338	3
102	WP52	max	9351.936	23	3063.062	3	33654.84	2	70703.652	23	217603.467	23	24.87	22
103		min	-9433.496	3	-3039.406	23	13574.132	22	-70871.737	3	-218120.777	3	-27.069	2
104	WP53	max	12687.247	7	3999.496	19	54899.496	4	70175.134	7	215976.854	7	-272.854	21
105		min	-12556.468	19	-4268.174	7	1965.649	24	-70073.97	19	-215665.503	19	-1496.906	1
106	WP54	max	8987.201	7	59.989	6	37925.465	3	0	24	152048.028	21	137.71	18
107		min	-8676.252	19	-19.428	18	-4372.935	23	0	1	-168114.65	1	-310.876	6
108	WP55	max	24611.468	7	50.03	2	78678.917	6	0	24	775405.855	7	229.934	2
109		min	-24272.333	19	-13.61	22	14109.019	18	0	1	-745568.266	19	-122.253	22
110	WP56	max	24488.768	7	70.36	2	78427.372	6	0	24	773104.992	7	180.874	3
111		min	-24308.051	19	-33.846	22	14349.086	18	0	1	-743914.883	19	-85.271	23
112	WP57	max	14491.512	21	72.159	3	54864.998	5	0	24	353320.851	7	768.784	3
113		min	-14585.282	1	-20.175	23	704.106	17	0	1	-314932.669	19	-346.895	23
114	WP58	max	12342.993	7	4015.042	3	49349.501	6	106755.117	7	328558.465	7	146.32	3
115		min	-12302.18	19	-3988.591	23	422.882	18	-105455.124	19	-324557.5	19	-135.233	23
116	WP59	max	5994.608	7	1883.38	19	30213.866	8	26768.464	23	82384.86	23	122.726	17
117		min	-5776.506	19	-1918.354	7	-5913.399	20	-29778.612	3	-91649.142	3	-211.523	5
118	WP60	max	20242.736	7	6520.978	19	71528.234	6	193565.44	23	595733.168	23	294.715	17
119		min	-20062.835	19	-6542.72	7	10731.092	18	-208548.654	3	-641846.76	3	-515.552	5
120	WP61	max	22460.827	23	7347.347	3	79542.51	6	222581.435	23	685035.219	23	149.356	17
121		min	-22546.916	3	-7285.722	23	13740.005	18	-234720.738	3	-722396.151	3	-311.311	5
122	WP62	max	10476.647	23	3463.1	3	44879.325	6	86043.445	7	264814.493	7	164.859	3
123		min	-10580.746	3	-3396.484	23	524.321	18	-82784.304	19	-254783.889	19	-130.166	23
124	WP63	max	5704.82	23	1940.454	3	30596.593	5	29285.133	7	90130.371	7	177.989	8
125		min	-5881.433	3	-1848.115	23	-5358.792	17	-26070.12	19	-80235.581	19	-83.841	20
126	WP64	max	4967.115	7	206.588	22	13966.275	20	0	24	82377.148	5	719.825	22
127		min	-4932.652	19	-210.552	2	-13988.52	8	0	1	-81868.628	17	-724.415	2
128	WP65	max	3113.189	7	2.75	24	14576.334	1	0	24	75082.383	7	3.332	2
129		min	-3091.009	19	-3.236	4	5881.675	21	0	1	-74663.563	19	-2.879	22
130	WP66	max	3128.363	7	12.082	2	14576.334	1	0	24	74471.807	7	4.04	2
131		min	-3105.687	19	-11.614	22	5881.676	21	0	1	-74061.765	19	-3.896	22
132	WP67	max	3127.691	7	18.59	20	14576.333	2	0	24	73892.441	7	2.671	8
133		min	-3103.584	19	-18.596	8	5881.677	22	0	1	-73497.865	19	-2.583	20
134	WP68	max	10569.928	23	28.126	21	37370.728	4	0	24	295689.121	5	287.485	21
135		min	-10572.115	3	-70.62	1	-4733.203	24	0	1	-279802.021	17	-383.858	1
136	WP69	max	3322.639	7	1074.832	19	15589.983	2	27547.46	7	84782.364	7	2.113	20
137		min	-3308.069	19	-1080.676	7	6290.694	22	-27473.862	19	-84555.854	19	-2.159	8
138	WP70	max	3278.31	7	1065.025	19	15641.024	4	25800.741	7	79406.514	7	2.84	1
139		min	-3270.515	19	-1069.463	7	6311.288	24	-25738.338	19	-79214.46	19	-2.568	21
140	WP71	max	2888.177	7	942.097	19	14570.159	4	22228.624	7	68412.671	7	1.206	2
141		min	-2882.828	19	-944.604	7	5879.185	24	-22181.342	19	-68267.15	19	-1.019	22
142	WP72	max	2832.879	7	916.184	19	14570.16	4	21832.846	7	67194.591	7	0.526	18
143		min	-2817.918	19	-921.693	7	5879.185	24	-21780.372	19	-67033.092	19	-0.994	6

Envelope Node Reactions (Continued)

	Node Label		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
144	WP73	max	3146.516	7	1016.914	19	15723.095	1	24664.646	7	75909.974	7	5.246	6
145		min	-3133.814	19	-1022.448	7	6344.404	21	-24606.188	19	-75730.059	19	-5.052	18
146	WP74	max	13346.385	23	-7.262	18	14301.055	1	0	24	326887.177	7	917.95	7
147		min	-13724.035	3	-94.291	6	-9862.632	21	0	1	-288599.122	19	101.687	19
148	Totals:	max	459958.375	21	460001.234	6	1.64381e+6	6						
149		min	-459958.375	17	-460001.234	18	663292.607	20						

Envelope Wall Panel Forces

	Wall Label	Elevation [ft]		Axial [lb]	LC	x Shear [lb]	LC	z Shear [lb]	LC	x-x Moment [lb-ft]	LC	z-z Moment [lb-ft]	LC
0	WP1	0	max	51782.541	7	19654.211	6	67.259	5	5.91	23	514393.495	18
1		0	min	20894.709	19	-19618.342	18	-62.353	17	-5.913	3	-516678.373	6
2	WP2	0	max	13424.225	18	20242.203	6	82.135	1	1.326	5	403279.064	20
3		0	min	-13514.223	6	-20239.049	18	-82.133	21	-1.325	17	-405013.435	8
4	WP3	0	max	7703.152	5	20653.579	24	206.755	8	4.797	23	309402.254	18
5		0	min	-2666.861	17	-20973.728	4	-122.352	20	-4.829	3	-370434.968	6
6	WP4	0	max	17800.675	8	19499.456	6	32.419	19	2.942	7	409648.634	2
7		0	min	-11163.6	20	-19057.401	18	-46.52	7	-2.937	19	-333101.517	22
8	WP5	0	max	17224.467	2	18857.53	22	1.8	21	0.958	1	291193.546	18
9		0	min	-10688.402	22	-19227.698	2	-21.36	1	-0.951	21	-368741.47	6
10	WP6	0	max	16499.926	8	18539.487	6	29.523	19	2.94	7	373315.1	2
11		0	min	-10115.944	20	-18110.672	18	-44.199	7	-2.935	19	-297504.56	22
12	WP7	0	max	16989.277	2	17928.621	22	5.185	21	0.959	1	283884.683	20
13		0	min	-10441.734	22	-18335.324	2	-25.356	1	-0.953	21	-361001.778	8
14	WP8	0	max	16776.401	6	18637.954	6	27.96	5	2.867	23	369055.553	4
15		0	min	-10308.136	18	-18230.403	18	-6.938	17	-2.872	3	-292236.328	24
16	WP9	0	max	24365.741	3	19601.795	22	-22.019	18	3.129	5	259618.274	4
17		0	min	-13794.394	23	-19635.76	2	-121.238	6	-3.074	17	-255456.873	24
18	WP10	0	max	0.003	8	18483.981	6	83.969	7	5.327	23	462002.125	18
19		0	min	-0.003	20	-18449.205	18	-83.653	19	-5.327	3	-465790.962	6
20	WP11	0	max	18586.013	2	19270.283	22	17.6	17	3.725	7	340943.348	18
21		0	min	-11990.46	22	-19659.785	2	-23.573	5	-3.723	19	-422935.249	6
22	WP12	0	max	16194.95	4	18239.121	22	66.997	6	0.973	19	356860.177	18
23		0	min	-11570.161	24	-18604.451	2	2.126	18	-1.001	7	-416576.695	6
24	WP13	0	max	1.47	5	17439.116	22	55.285	23	1.706	7	456844.31	18
25		0	min	-0.871	17	-17450.905	2	-55.598	3	-1.706	19	-461291.13	6
26	WP14	0	max	17490.003	2	18770.173	22	51.257	5	3.719	23	306336.372	18
27		0	min	-11073.815	22	-19106.471	2	3.827	17	-3.732	3	-387346.672	6
28	WP15	0	max	17511.338	6	19344.071	6	30.45	7	1.204	19	383169.362	2
29		0	min	-10916.691	18	-18903.5	18	0.424	19	-1.211	7	-310137.779	22
30	WP16	0	max	17636.932	2	19187.702	22	34.136	7	0.897	19	307783.596	18
31		0	min	-11239.448	22	-19402.084	2	0.734	19	-0.906	7	-389389.27	6
32	WP17	0	max	17522.564	6	19740.823	6	5.323	24	0.392	7	386119.097	2
33		0	min	-10845.981	18	-19214.07	18	-12.543	4	-0.39	19	-312990.439	22

Envelope Wall Panel Forces (Continued)

	Wall Label	Elevation [ft]		Axial [lb]	LC	x Shear [lb]	LC	z Shear [lb]	LC	x-x Moment [lb-ft]	LC	z-z Moment [lb-ft]	LC
34	WP18	0	max	16959.09	2	19311.02	22	23.858	17	0.847	3	311667.479	18
35		0	min	-10741.743	22	-19598.873	2	-44.44	5	-0.842	23	-392350.731	6
36	WP19	0	max	16087.675	2	19416.129	22	9.21	19	1.081	7	315837.6	18
37		0	min	-11096.297	22	-19658.585	2	-35.783	7	-1.073	19	-381609.17	6
38	WP20	0	max	15855.57	1	12707.918	22	0.457	17	3.135	7	264209.819	20
39		0	min	-11306.927	21	-12947.515	2	-73.32	5	-3.106	19	-312280.73	8
40	WP21	0	max	8743.854	3	20832.536	21	30.681	2	3.635	20	228824.771	19
41		0	min	3271.84	23	-21177.196	1	-14.655	22	-3.64	8	-242343.981	7
42	WP22	0	max	9585.706	3	19608.045	21	47.804	18	0.625	6	186278.681	17
43		0	min	2256.382	23	-19988.577	1	-77.368	6	-0.581	18	-194406.304	5
44	WP23	0	max	15365.405	7	18694.273	5	257.409	1	0.054	21	398703.026	1
45		0	min	-10317.105	19	-18413.834	17	-100.303	21	-0.122	1	-335939.795	21
46	WP24	0	max	14407.311	3	18140.939	21	22.641	18	0.978	6	368906.338	17
47		0	min	-9621.451	23	-18509.992	1	-91.575	6	-0.951	18	-419694.294	5
48	WP25	0	max	17478.076	5	15019.205	5	-3.555	18	1.464	6	302793.572	1
49		0	min	-11248.994	17	-14663.22	17	-29.14	6	-1.455	18	-245934.803	21
50	WP26	0	max	60751.319	1	16314.925	8	102.109	23	3.153	3	454736.339	20
51		0	min	5722.047	21	-16193.536	20	-140.54	3	-3.136	23	-459985.458	8
52	WP27	0	max	54818.35	3	13427.272	24	113.117	21	3.042	1	366004.182	4
53		0	min	1322.37	23	-13443.639	4	-160.247	1	-3.021	21	-359649.308	24
54	WP28	0	max	28196.748	7	4582.606	8	72.836	7	0.6	21	78276.893	2
55		0	min	-4057.286	19	-4412.828	20	-38.162	19	-0.616	1	-68058.052	22
56	WP29	0	max	51140.659	7	9718.549	8	550.378	5	0.644	23	261356.245	2
57		0	min	1321.624	19	-9615.221	20	-363.134	17	-0.736	3	-242096.586	22
58	WP30	0	max	81341.649	7	16865.165	8	159.415	5	0.407	23	467678.301	20
59		0	min	11768.38	19	-16780.568	20	-116.355	17	-0.428	3	-496477.069	8
60	WP31	0	max	51266.545	5	9869.951	22	67.385	7	1.342	21	205004.803	20
61		0	min	5053.27	17	-10017.783	2	-26.936	19	-1.362	1	-240777.466	8
62	WP32	0	max	39039.629	1	5510.493	8	31.536	23	1.624	5	155422.732	4
63		0	min	-2548.711	21	-5425.067	20	-63.882	3	-1.609	17	-142891.848	24
64	WP33	0	max	24710.402	3	2857.597	8	184.317	21	4.334	7	46854.274	18
65		0	min	-6546.315	23	-2758.085	20	-292.428	1	-4.281	19	-54659.79	6
66	WP34	0	max	95494.257	8	20284.482	8	42.932	21	0.147	7	432092.662	18
67		0	min	18346.001	20	-19753.018	20	-237.61	1	-0.055	19	-435823.154	6
68	WP35	0	max	16707.949	6	3264.488	6	46.759	5	0.881	23	73421.78	20
69		0	min	6741.801	18	-3262.507	18	-46.23	17	-0.881	3	-74342.717	8
70	WP36	0	max	13516.696	6	4048.672	5	211.355	20	1.95	8	76115.314	19
71		0	min	-13425.976	18	-4018.98	17	-211.735	8	-1.95	20	-76412.375	7
72	WP37	0	max	16155.5	6	3587.173	7	35.144	4	0.501	18	89408.02	19
73		0	min	6518.885	18	-3558.311	19	-35.064	24	-0.501	6	-89866.052	7
74	WP38	0	max	16155.501	8	3576.536	7	24.851	20	0.503	2	89323.966	19
75		0	min	6518.884	20	-3552.451	19	-25.428	8	-0.503	22	-89769.882	7
76	WP39	0	max	16155.501	8	3600.53	7	15.355	18	0.508	4	85179.878	19

Envelope Wall Panel Forces (Continued)

	Wall Label	Elevation [ft]		Axial [lb]	LC	x Shear [lb]	LC	z Shear [lb]	LC	x-x Moment [lb-ft]	LC	z-z Moment [lb-ft]	LC
77		0	min	6518.884	20	-3581.172	19	-15.474	6	-0.507	24	-85602.387	7
78	WP40	0	max	15775.466	5	3586.369	7	34.37	2	0.889	22	81538.181	19
79		0	min	6365.538	17	-3570.361	19	-33.549	22	-0.889	2	-81914.642	7
80	WP41	0	max	14599.578	5	2941.02	23	12.405	2	1.703	22	67932.697	3
81		0	min	5891.056	17	-2958.453	3	-10.598	22	-1.704	2	-67881.362	23
82	WP42	0	max	14599.579	5	2949.693	23	15.567	2	0.895	22	67256.23	3
83		0	min	5891.056	17	-2982.225	3	-14.672	22	-0.896	2	-67072.477	23
84	WP43	0	max	44694.575	6	13613.687	23	57.94	18	1.058	6	322256.513	19
85		0	min	440.93	18	-13797.663	3	-87.943	6	-1.044	18	-342248.957	7
86	WP44	0	max	25506.249	1	5631.206	7	47.158	4	1.13	18	139999.189	19
87		0	min	10287.673	21	-5543.646	19	-46.549	24	-1.13	6	-141061.854	7
88	WP45	0	max	43601.686	4	10972.475	7	82.98	2	0.697	22	262187.048	17
89		0	min	-752.657	24	-10848.037	19	-56.405	22	-0.71	2	-272498.304	5
90	WP46	0	max	42661.596	4	10870.451	7	73.962	2	0.696	22	260207.196	17
91		0	min	440.526	24	-10775.824	19	-48.686	22	-0.708	2	-270025.495	5
92	WP47	0	max	61303.895	2	17479.187	7	103.284	4	3.215	18	501430.088	3
93		0	min	7662.838	22	-17369.008	19	-72.357	24	-3.23	6	-484983.806	23
94	WP48	0	max	38987.97	3	12474.346	7	76.2	2	1.232	22	311408.023	19
95		0	min	15717.27	23	-12450.005	19	-74.682	22	-1.232	2	-312526.143	7
96	WP49	0	max	56670.246	1	18784.513	7	49.986	2	2.42	18	520003.545	19
97		0	min	22865.487	21	-18568.383	19	-46.355	22	-2.422	6	-521990.307	7
98	WP50	0	max	79135.959	2	23671.815	23	131.761	2	5.43	22	691432.428	3
99		0	min	13949.394	22	-23743.019	3	-96.505	22	-5.446	2	-650853.79	23
100	WP51	0	max	51128.73	2	13288.924	23	91.686	2	3.108	22	353658.43	19
101		0	min	2714.408	22	-13433.878	3	-58.035	22	-3.124	2	-356085.254	7
102	WP52	0	max	33654.84	2	9909.405	23	45.018	2	0.431	22	229340.351	3
103		0	min	13574.132	22	-9994.283	3	-42.313	22	-0.433	2	-228796.461	23
104	WP53	0	max	54899.496	4	13475.469	7	249.163	2	0.322	18	226757.893	19
105		0	min	1965.649	24	-13268.065	19	-34.049	22	-0.417	6	-227085.158	7
106	WP54	0	max	37925.465	3	9038.279	7	70.506	18	2.241	4	168112.825	1
107		0	min	-4372.935	23	-8727.33	19	-111.067	6	-2.221	24	-152046.052	21
108	WP55	0	max	78678.917	6	24744.617	7	100.081	20	0.428	2	745556.586	19
109		0	min	14109.019	18	-24405.482	19	-136.5	8	-0.412	22	-775394.003	7
110	WP56	0	max	78427.372	6	24621.917	7	79.076	20	0.436	2	743903.185	19
111		0	min	14349.086	18	-24441.2	19	-115.59	8	-0.419	22	-773093.201	7
112	WP57	0	max	54864.998	5	14578.418	21	94.147	20	0.357	2	314925.844	19
113		0	min	704.106	17	-14672.188	1	-146.132	8	-0.332	22	-353314.067	7
114	WP58	0	max	49349.501	6	13058.756	7	81.924	18	0.822	2	341254.338	19
115		0	min	422.882	18	-13028.115	19	-119.692	6	-0.804	22	-345461.187	7
116	WP59	0	max	30213.866	8	6342.277	7	35.968	18	0.642	2	96363.242	3
117		0	min	-5913.399	20	-6124.042	19	-70.103	6	-0.625	22	-86622.094	23
118	WP60	0	max	71528.234	6	21388.102	7	58.493	18	2.646	6	674864.507	3
119		0	min	10731.092	18	-21210.287	19	-93.408	6	-2.63	18	-626377.727	23

Envelope Wall Panel Forces (Continued)

	Wall Label	Elevation [ft]		Axial [lb]	LC	x Shear [lb]	LC	z Shear [lb]	LC	x-x Moment [lb-ft]	LC	z-z Moment [lb-ft]	LC
120	WP61	0	max	79542.51	6	23775.948	23	98.247	18	5.445	6	759554.999	3
121		0	min	13740.005	18	-23876.867	3	-130.253	6	-5.43	18	-720271.445	23
122	WP62	0	max	44879.325	6	11105.574	23	65.733	18	1.864	6	267888.275	19
123		0	min	524.321	18	-11225.163	3	-96.92	6	-1.85	18	-278435.134	7
124	WP63	0	max	30596.593	5	6045.461	23	36.68	18	0.388	2	84361.995	19
125		0	min	-5358.792	17	-6241.964	3	-69.924	6	-0.372	22	-94766.089	7
126	WP64	0	max	13966.275	20	5034.617	7	278.054	2	4.069	20	81870.517	17
127		0	min	-13988.52	8	-5000.154	19	-274.09	22	-4.071	8	-82379.02	5
128	WP65	0	max	14576.334	1	3149.386	7	39.433	4	0.502	18	74662.52	19
129		0	min	5881.675	21	-3127.206	19	-38.947	24	-0.502	6	-75081.33	7
130	WP66	0	max	14576.334	1	3164.56	7	24.417	20	0.511	2	74060.717	19
131		0	min	5881.676	21	-3141.884	19	-24.885	8	-0.511	22	-74470.749	7
132	WP67	0	max	14576.333	2	3163.888	7	18.001	2	0.515	20	73496.819	19
133		0	min	5881.677	22	-3139.782	19	-17.995	22	-0.515	8	-73891.383	7
134	WP68	0	max	37370.728	4	10619.413	23	104.958	2	1.153	22	279795.711	17
135		0	min	-4733.203	24	-10621.6	3	-62.464	22	-1.172	2	-295682.809	5
136	WP69	0	max	15589.983	2	3531.746	7	30.077	2	0.525	18	88906.068	19
137		0	min	6290.694	22	-3516.084	19	-29.021	22	-0.525	6	-89144.227	7
138	WP70	0	max	15641.024	4	3484.437	7	11.485	2	1.666	22	83287.613	19
139		0	min	6311.288	24	-3475.652	19	-9.673	22	-1.667	2	-83489.547	7
140	WP71	0	max	14570.159	4	3074.815	7	12.352	4	1.688	22	71777.112	19
141		0	min	5879.185	24	-3068.953	19	-11.621	24	-1.688	2	-71930.12	7
142	WP72	0	max	14570.16	4	3015.144	7	13.468	2	1.689	22	70479.582	19
143		0	min	5879.185	24	-2999.212	19	-12.852	22	-1.689	2	-70649.384	7
144	WP73	0	max	15723.095	1	3346.25	7	21.812	2	0.531	18	79626.172	19
145		0	min	6344.404	21	-3332.459	19	-20.473	22	-0.532	6	-79815.339	7
146	WP74	0	max	14301.055	1	13436.447	23	146.345	4	3.573	24	288588.742	19
147		0	min	-9862.632	21	-13814.098	3	-44.793	24	-3.611	4	-326876.985	7
148	WP75	11.33	max	11059.302	2	15100.438	22	193.436	23	781.295	23	172929.292	18
149		11.33	min	-6219.773	22	-15584.036	2	-233.04	3	-819.16	3	-235500.948	6
150	WP76	11.33	max	1.03	5	14196.272	6	391.649	7	1123.574	7	260934.366	18
151		11.33	min	-0.589	17	-14065.392	18	-391.08	19	-1119.924	19	-265517.083	6
152	WP77	11.33	max	9826.542	8	2314.123	7	129.697	4	242.679	4	45019.499	19
153		11.33	min	3965.094	20	-2301.44	19	-129.603	24	-241.328	24	-45222.689	7
154	WP78	11.33	max	11948.683	6	16219.283	6	157.832	7	840.806	7	229826.773	2
155		11.33	min	-6509.933	18	-15339.521	18	-156.457	19	-788.62	19	-169881.169	22
156	WP79	11.33	max	7753.426	8	19412.106	21	129.497	2	227.082	22	111433.192	17
157		11.33	min	2139.764	20	-19604.412	1	-121.739	22	-232.697	2	-119811.67	5
158	WP80	11.33	max	22540.646	4	9507.347	23	293.275	2	178.477	8	157503.198	17
159		11.33	min	-4003.391	24	-9551.462	3	-187.788	22	-94.135	20	-171466.675	5
160	WP81	11.33	max	9513.613	4	2259.925	7	139.043	18	290.985	18	44323.555	19
161		11.33	min	3838.825	24	-2250.6	19	-140.492	6	-311.513	6	-44425.953	7
162	WP82	11.33	max	47269.735	6	23531.489	7	179.324	20	564.369	20	465554.171	19

Envelope Wall Panel Forces (Continued)

	Wall Label	Elevation [ft]		Axial [lb]	LC	x Shear [lb]	LC	z Shear [lb]	LC	x-x Moment [lb-ft]	LC	z-z Moment [lb-ft]	LC
163		11.33	min	8496.317	18	-23354.061	19	-198.836	8	-574.864	8	-487246.61	7
164	WP83	11.33	max	33919.643	4	10373.211	7	359.363	2	609.658	4	126046.536	19
165		11.33	min	891.371	24	-10009.208	19	32.455	22	102.654	24	-127400.082	7
166	WP84	11.33	max	31496.597	7	15075.687	6	323.986	23	764.364	23	293598.631	18
167		11.33	min	12709.153	19	-15005.131	18	-328.684	3	-819.953	3	-295477.095	6
168	WP85	11.33	max	11048.011	6	14681.644	6	240.027	7	703.759	7	221761.835	4
169		11.33	min	-6027.531	18	-14035.454	18	-170.818	19	-603.35	19	-162635.385	24
170	WP86	11.33	max	9826.541	6	2790.713	7	112.608	2	19.478	18	49503.578	19
171		11.33	min	3965.095	18	-2780.011	19	-112.305	22	-20.382	6	-49634.607	7
172	WP87	11.33	max	10229.623	1	11812.25	22	161.189	23	628.217	23	158754.444	18
173		11.33	min	-6675.196	21	-12151.694	2	-308.011	3	-807.194	3	-196294.38	6
174	WP88	11.33	max	4593.039	5	18490.549	24	271.526	7	777.733	7	195387.097	18
175		11.33	min	-726.25	17	-18978.476	4	-118.113	19	-548.046	19	-241169.421	6
176	WP89	11.33	max	11138.79	2	14113.177	22	112.331	23	556.598	23	159074.571	20
177		11.33	min	-6082.842	22	-14758.775	2	-169.572	3	-650.163	3	-217776.299	8
178	WP90	11.33	max	47709.81	2	18701.971	23	296.21	2	898.516	2	419973.067	3
179		11.33	min	8150.542	22	-18743.717	3	-219.44	22	-845.369	22	-388732.978	23
180	WP91	11.33	max	12069.134	8	18132.8	6	102.308	23	558.447	23	253532.01	2
181		11.33	min	-6814.159	20	-17330.715	18	-149.202	3	-618.855	3	-193267.861	22
182	WP92	11.33	max	11599.814	6	16036.287	6	305.065	7	1038.444	7	231061.529	2
183		11.33	min	-6420.165	18	-15180.842	18	-194.417	19	-840.526	19	-174929.361	22
184	WP93	11.33	max	8422.178	18	17712.974	6	217.739	23	611.895	21	241822.609	20
185		11.33	min	-8502.493	6	-17613.029	18	-224.17	3	-631.685	1	-243646.3	8
186	WP94	11.33	max	11177.825	2	13684.009	22	118.089	23	596.816	23	159176.715	18
187		11.33	min	-6122.914	22	-14340.437	2	-181.968	3	-711.518	3	-218072.521	6
188	WP95	11.33	max	11024.682	8	14915.723	6	94.441	23	536.527	23	223220.258	2
189		11.33	min	-6036.741	20	-14271.189	18	-140.166	3	-587.923	3	-164040.839	22
190	WP96	11.33	max	17774.993	3	18328.317	6	65.467	23	402.778	23	156033.311	4
191		11.33	min	-9313.386	23	-18184.553	18	-350.383	3	-836.785	3	-149113.332	24
192	WP97	11.33	max	0.002	8	13184.884	6	254.48	7	537.37	23	254457.49	18
193		11.33	min	-0.002	20	-13046.326	18	-253.976	19	-540.955	3	-257852.269	6
194	WP98	11.33	max	10162.567	6	2144.604	8	135.342	23	149.651	23	37310.624	20
195		11.33	min	4100.683	18	-2116.719	20	-135.873	3	-155.649	3	-38209.113	8
196	WP99	11.33	max	12899.077	2	18022.544	22	135.123	23	750.2	23	200139.813	18
197		11.33	min	-7494.362	22	-18686.998	2	-145.814	3	-754.025	3	-267970.991	6
198	WP100	11.33	max	10288.772	4	14445.217	22	314.713	7	956.617	7	206176.689	18
199		11.33	min	-6750.954	24	-14745.434	2	-141.783	19	-725.499	19	-253081.073	6
200	WP101	11.33	max	12029.911	2	15267.252	22	264.023	7	891.587	7	168000.412	18
201		11.33	min	-6794.673	22	-15793.579	2	-115.979	19	-761.278	19	-234481.704	6
202	WP102	11.33	max	11741.651	2	15400.857	22	275.222	7	877.645	7	171084.654	18
203		11.33	min	-6684.594	22	-15917.52	2	-171.784	19	-743.483	19	-234350.933	6
204	WP103	11.33	max	10554.858	2	15140.204	22	223.361	23	716.59	23	172941.498	18
205		11.33	min	-6544.19	22	-15504.763	2	-258.497	3	-744.806	3	-226212.662	6

Envelope Wall Panel Forces (Continued)

	Wall Label	Elevation [ft]		Axial [lb]	LC	x Shear [lb]	LC	z Shear [lb]	LC	x-x Moment [lb-ft]	LC	z-z Moment [lb-ft]	LC
206	WP104	11.33	max	7012.976	5	21279.615	23	108.851	4	184.913	7	150162.026	19
207		11.33	min	2624.992	17	-21334.577	3	-64.972	24	-118.142	19	-159205.097	7
208	WP105	11.33	max	49545.984	7	13459.807	8	511.959	7	1176.447	7	275116.201	20
209		11.33	min	6382.998	19	-13302.253	20	-380.562	19	-896.309	19	-297653.315	8
210	WP106	11.33	max	9914.536	7	14330.109	7	241.264	4	348.685	7	242664.893	1
211		11.33	min	-5847.788	19	-13880.231	19	-73.364	24	-225.431	19	-192857.682	21
212	WP107	11.33	max	9517.725	3	13168.634	21	64.19	20	76.672	23	202888.881	17
213		11.33	min	-5745.817	23	-13817.25	1	-208.941	8	-255.852	3	-242264.983	5
214	WP108	11.33	max	15619.05	1	3935.933	7	73.311	18	43.815	24	77679.92	19
215		11.33	min	6299.627	21	-3926.074	19	-73.545	6	-50.713	4	-77752.276	7
216	WP109	11.33	max	12197.5	5	14203.706	5	79.76	21	173.017	21	184464.826	3
217		11.33	min	-7111.906	17	-13608.255	17	-197.495	1	-314.72	1	-137712.441	23
218	WP110	11.33	max	18160.573	5	3628.776	23	19.452	20	-17.63	24	37330.073	19
219		11.33	min	-3474.986	17	-3848.796	3	-75.797	8	-94.118	4	-45766.047	7
220	WP111	11.33	max	8880.156	5	1933.524	7	153.787	18	277.584	18	34887.64	19
221		11.33	min	3583.219	17	-1928.337	19	-155.113	6	-298.06	6	-35033.814	7
222	WP112	11.33	max	36755.31	1	14823.119	8	217.802	23	51.736	20	274445.249	20
223		11.33	min	2460.681	21	-14816.423	20	-309.377	3	-139.905	8	-277667.213	8
224	WP113	11.33	max	33291.203	3	10567.786	8	640.338	23	690.804	23	213197.33	4
225		11.33	min	-358.362	23	-10544.382	20	-719.061	3	-718.605	3	-208053.855	24
226	WP114	11.33	max	16763.05	7	3422.361	8	66.847	7	93.669	7	40601.886	2
227		11.33	min	-2822.26	19	-3165.523	20	-38.847	19	-55.514	19	-32648.147	22
228	WP115	11.33	max	34702.59	1	14550.539	23	281.474	18	793.715	18	311162.957	3
229		11.33	min	14001.801	21	-14577.119	3	-282.838	6	-834.864	6	-310702.46	23
230	WP116	11.33	max	30714.093	7	7271.293	8	107.153	7	122.544	2	151267.441	2
231		11.33	min	-72.606	19	-7235.044	20	1.829	19	0.722	22	-134234.184	22
232	WP117	11.33	max	31051.838	5	7755.346	22	421.652	7	786.854	7	113610.355	20
233		11.33	min	2705.877	17	-7809.489	2	-314.84	19	-625.539	19	-141991.17	8
234	WP118	11.33	max	8174.64	20	2848.742	7	117.888	3	285.07	8	32393.936	17
235		11.33	min	-8218.826	8	-2833.143	19	-93.983	23	-265.512	20	-32613.415	5
236	WP119	11.33	max	23589.525	1	4704.433	24	226.967	18	316.932	17	92045.826	4
237		11.33	min	-2515.119	21	-4716.183	4	-280.405	6	-368.46	5	-81163.29	24
238	WP120	11.33	max	8880.156	5	1866.913	7	132.33	18	270.41	18	33990.34	19
239		11.33	min	3583.22	17	-1865.031	19	-132.997	6	-280.551	6	-34175.151	7
240	WP121	11.33	max	14247.127	3	1799.026	24	217.403	19	154.862	17	18691.026	18
241		11.33	min	-4099.548	23	-1859.821	4	-269.006	7	-191.902	5	-24187.641	6
242	WP122	11.33	max	17867.646	8	3832.038	7	131.005	17	314.379	18	46748.145	1
243		11.33	min	-3692.807	20	-3631.181	19	-173.95	5	-410.159	6	-39039.833	21
244	WP123	11.33	max	58793.765	8	19749.454	8	93.348	23	374.679	23	276114.825	18
245		11.33	min	10928.305	20	-19131.714	20	-347.608	3	-791.674	3	-278795.709	6
246	WP124	11.33	max	8504.153	6	2932.982	5	59.2	21	362.816	24	35283.634	19
247		11.33	min	-8423.323	18	-2912.96	17	-75.011	1	-386.387	4	-35296.311	7
248	WP125	11.33	max	9826.542	8	2790.168	7	114.958	4	135.686	2	49488.765	19

Envelope Wall Panel Forces (Continued)

	Wall Label	Elevation [ft]		Axial [lb]	LC	x Shear [lb]	LC	z Shear [lb]	LC	x-x Moment [lb-ft]	LC	z-z Moment [lb-ft]	LC
249		11.33	min	3965.094	20	-2777.126	19	-114.073	24	-129.143	22	-49661.802	7
250	WP126	11.33	max	20608.934	2	5979.254	7	159.659	18	363.082	18	117145.44	19
251		11.33	min	8311.839	22	-5971.583	19	-161.42	6	-393.731	6	-117563.179	7
252	WP127	11.33	max	9595.387	5	2096.195	7	94.824	18	57.113	18	41530.407	19
253		11.33	min	3871.822	17	-2089.041	19	-95.77	6	-66.417	6	-41725.501	7
254	WP128	11.33	max	26566.6	6	9948.27	23	149.07	18	470.277	18	171966.48	19
255		11.33	min	-87.368	18	-9988.726	3	-230.21	6	-541.036	6	-189677.356	7
256	WP129	11.33	max	26171.884	4	7685.754	7	80.095	2	119.382	8	141338.073	17
257		11.33	min	-1123.57	24	-7652.061	19	-27.953	22	-69.121	20	-148430.14	5
258	WP130	11.33	max	25507.956	4	7674.679	7	72.078	8	218.799	2	140224.705	17
259		11.33	min	-192.609	24	-7632.423	19	-11.705	20	-166.992	22	-147138.573	5
260	WP131	11.33	max	36804.84	2	13236.79	7	59.007	4	157.173	4	300218.812	3
261		11.33	min	4368.029	22	-13207.351	19	-25.645	24	-132.608	24	-286693.186	23
262	WP132	11.33	max	23875.56	3	8988.96	7	98.199	18	96.058	17	171320.828	19
263		11.33	min	9623.707	23	-8939.486	19	-99.977	6	-113.274	5	-172163.403	7
264	WP133	11.33	max	30603.59	2	10205.444	7	179.908	1	491.973	2	204160.937	19
265		11.33	min	1017.489	22	-10174.432	19	-97.596	21	-476.342	22	-207692.211	7
266	WP134	11.33	max	22817.043	3	6375.68	7	8.153	23	206.695	22	90837.513	1
267		11.33	min	-3023.034	23	-6057.61	19	-56.061	3	-305.306	2	-78101.772	21
268	WP135	11.33	max	47310.246	6	23661.392	7	19.646	24	191.407	8	467539.135	19
269		11.33	min	8456.842	18	-23525.336	19	-30.053	4	-184.02	20	-488100.265	7
270	WP136	11.33	max	33467.17	5	13820.057	21	76.697	20	127.137	23	189596.784	19
271		11.33	min	-251.784	17	-14092.683	1	-160.305	8	-294.456	3	-218382.642	7
272	WP137	11.33	max	29791.034	6	9695.597	7	292.66	17	207.638	18	196165.491	19
273		11.33	min	-678.306	18	-9656.931	19	-395.45	5	-311.185	6	-199426.603	7
274	WP138	11.33	max	43259.368	6	21656.824	23	340.195	17	885.837	18	431483.636	3
275		11.33	min	5806.692	18	-21724.022	3	-406.185	5	-936.962	6	-390087.147	23
276	WP139	11.33	max	48026.34	6	24181.109	23	276.481	17	803.269	18	484595.351	3
277		11.33	min	7956.603	18	-24201.149	3	-341.543	5	-900.246	6	-454526.986	23
278	WP140	11.33	max	26685.529	6	8144.964	7	108.868	17	366.046	18	144859.61	19
279		11.33	min	85.549	18	-8123.729	19	-207.8	5	-510.348	6	-154248.301	7
280	WP141	11.33	max	8866.018	1	2119.51	7	88.959	18	28.832	24	39649.43	17
281		11.33	min	3577.514	21	-2108.893	19	-89.174	6	-34.34	4	-39816.952	5
282	WP142	11.33	max	8866.017	1	2055.033	7	124.994	2	137.106	2	38874.019	19
283		11.33	min	3577.514	21	-2046.139	19	-124.288	22	-131.8	22	-39027.138	7
284	WP143	11.33	max	8866.017	2	1972.439	7	132.359	20	210.924	20	38334.087	19
285		11.33	min	3577.515	22	-1965.215	19	-132.582	8	-210.993	8	-38455.53	7
286	WP144	11.33	max	9482.567	2	2756.194	7	104.596	18	94.989	18	49499.793	19
287		11.33	min	3826.299	21	-2748.06	19	-105.629	6	-106.951	6	-49560.499	7
288	WP145	11.33	max	8862.262	4	1978.939	7	139.907	18	283.321	18	37420.909	19
289		11.33	min	3575.999	24	-1974.104	19	-140.547	6	-291.603	6	-37507.502	7
290	WP146	11.33	max	8862.262	4	1964.378	23	137.77	18	262.758	18	36918.055	3
291		11.33	min	3575.999	24	-1964.963	3	-137.818	6	-269.736	6	-36907.359	23

Envelope Wall Panel Forces (Continued)

	Wall Label	Elevation [ft]		Axial [lb]	LC	x Shear [lb]	LC	z Shear [lb]	LC	x-x Moment [lb-ft]	LC	z-z Moment [lb-ft]	LC
292	WP147	11.33	max	9563.532	1	2212.075	23	141.754	18	187.502	18	42298.064	19
293		11.33	min	3858.967	21	-2212.74	3	-142.661	6	-202.667	6	-42330.99	7
294	WP148	11.33	max	9456.29	1	10663.357	21	381.371	2	422.558	4	166924.37	19
295		11.33	min	-6008.118	21	-11086.427	1	-133.595	22	-77.213	24	-197679.9	7
296	WP149	22.67	max	5462.524	2	9237.62	22	234.433	19	1114.786	19	73336.59	18
297		22.67	min	-2736.269	22	-9703.523	2	-259.097	7	-1140.484	7	-108302.493	6
298	WP150	22.67	max	0.366	5	6874.438	6	132.644	23	905.326	19	103850.808	18
299		22.67	min	-0.201	17	-6680.358	18	-132.799	3	-907.929	7	-106953.48	6
300	WP151	22.67	max	3497.583	8	1337.316	7	74.331	2	331.716	8	19818.91	19
301		22.67	min	1411.305	20	-1333.605	19	-74.314	22	-331.437	20	-19878.28	7
302	WP152	22.67	max	6020.416	6	10239.871	6	232.03	19	1221.111	3	104566.272	2
303		22.67	min	-2894.125	18	-9330.273	18	-237.045	7	-1216.1	23	-70639.682	22
304	WP153	22.67	max	4334.756	8	14170.454	21	153.698	2	685.457	24	43138.692	17
305		22.67	min	1154.64	20	-14343.689	1	-149.995	22	-702.559	4	-49346.078	5
306	WP154	22.67	max	8332.336	4	4639.947	23	312.159	8	812.074	8	61449.589	17
307		22.67	min	-2484.156	24	-4745.124	3	-233.579	20	-756.505	20	-68235.58	5
308	WP155	22.67	max	3386.201	4	1329.858	23	74.397	18	346.972	22	19740.507	3
309		22.67	min	1366.361	24	-1330.067	3	-74.653	6	-351.076	2	-19737.167	23
310	WP156	22.67	max	17393.742	6	12961.798	7	558.826	24	2248.119	24	201877.907	19
311		22.67	min	2231.53	18	-12892.237	19	-574.255	4	-2263.761	4	-213033.019	7
312	WP157	22.67	max	13486.172	4	6449.382	7	417.827	8	1416.016	6	58204.391	19
313		22.67	min	-719.094	24	-6277.051	19	-257.338	20	-1091.209	18	-59061.406	7
314	WP158	22.67	max	11210.653	7	8102.385	6	137.911	21	519.267	19	125833.303	18
315		22.67	min	4523.597	17	-8034.985	18	-138.056	1	-521.584	7	-126911.664	6
316	WP159	22.67	max	5540.751	6	9494.719	6	142.261	1	1044.3	1	103860.651	4
317		22.67	min	-2772.682	18	-8841.542	18	-115.618	21	-1008.218	21	-71934.122	24
318	WP160	22.67	max	3497.582	6	1286.125	7	83.241	18	188.816	24	19049.557	19
319		22.67	min	1411.305	18	-1285.52	19	-83.512	6	-193.151	4	-19059.24	7
320	WP161	22.67	max	5019.902	1	7240.207	22	72.319	19	1011.786	19	71137.555	18
321		22.67	min	-3110.951	21	-7557.469	2	-127.881	7	-1097.875	7	-90844.351	6
322	WP162	22.67	max	2463.399	5	10952.801	24	292.022	3	1430.593	1	82518.245	17
323		22.67	min	-399.032	17	-11344.734	4	-223.442	23	-1319.701	21	-106723.194	5
324	WP163	22.67	max	5330.732	2	8679.487	22	92.607	19	1011.125	19	71178.799	20
325		22.67	min	-2636.003	22	-9369.362	2	-120.263	7	-1067.694	7	-101200.302	8
326	WP164	22.67	max	17623.802	2	12581.868	7	737.115	6	2612.415	6	202735.242	3
327		22.67	min	1848.717	22	-12536.222	19	-679.064	18	-2548.862	18	-185290.384	23
328	WP165	22.67	max	5591.271	8	10002.66	6	142.228	17	994.34	17	106767.638	2
329		22.67	min	-2843.611	20	-9284.349	18	-159.974	5	-1021.239	5	-75952.309	22
330	WP166	22.67	max	5835.465	6	10201.009	6	298.851	3	1397.245	3	104757.476	2
331		22.67	min	-2907.983	18	-9301.595	18	-256.208	23	-1324.49	23	-73928.116	22
332	WP167	22.67	max	3876.868	18	10312.44	6	68.189	23	916.239	19	103594.168	20
333		22.67	min	-3921.391	6	-10208.717	18	-70.12	3	-922.061	7	-104668.407	8
334	WP168	22.67	max	5455.018	2	8917.713	22	84.875	19	1024.005	19	75760.12	18

Envelope Wall Panel Forces (Continued)

	Wall Label	Elevation [ft]		Axial [lb]	LC	x Shear [lb]	LC	z Shear [lb]	LC	x-x Moment [lb-ft]	LC	z-z Moment [lb-ft]	LC
335		22.67	min	-2765.657	22	-9589.751	2	-108.622	7	-1072.791	7	-106088.277	6
336	WP169	22.67	max	5415.075	8	9530.719	6	158.069	17	996.291	17	104416.489	2
337		22.67	min	-2649.567	20	-8873.756	18	-175.868	5	-1024.021	5	-72277.267	22
338	WP170	22.67	max	8521.419	3	10559.916	6	281.4	19	1348.448	19	63677.158	4
339		22.67	min	-4158.635	23	-10426.102	18	-399.97	7	-1577.383	7	-59266.176	24
340	WP171	22.67	max	0.001	8	7034.99	6	116.973	23	566.52	19	108289.35	18
341		22.67	min	-0.001	20	-6921.014	18	-117.554	3	-575.823	7	-110112.901	6
342	WP172	22.67	max	3617.185	6	1001.278	8	46.855	5	285.364	3	14407.71	20
343		22.67	min	1459.565	18	-964.885	20	-46.854	17	-285.338	23	-14989.981	8
344	WP173	22.67	max	6241.064	2	9972.954	22	208.869	17	979.315	19	77990.97	18
345		22.67	min	-3272.649	22	-10534.521	2	-215.281	5	-998.403	7	-115337.549	6
346	WP174	22.67	max	5002.059	4	9139.745	22	204.517	3	1138.182	3	96171.973	18
347		22.67	min	-3119.051	24	-9387.014	2	-135.98	23	-1040.939	23	-120973.507	6
348	WP175	22.67	max	5901.433	2	9549.815	22	700.666	3	1421.528	3	73742.938	18
349		22.67	min	-2929.752	22	-10077.204	2	-617.352	23	-1342.524	23	-111162.568	6
350	WP176	22.67	max	5644.421	2	9352.183	22	276.396	3	1224.919	3	74447.43	18
351		22.67	min	-2881.507	22	-9909.661	2	-233.192	23	-1150.602	23	-108106.977	6
352	WP177	22.67	max	5127.779	2	9175.949	22	71.87	17	1063.592	19	74178.864	18
353		22.67	min	-2876.258	22	-9494.858	2	-77.971	5	-1089.905	7	-104058.789	6
354	WP178	22.67	max	3879.115	5	14146.132	7	411.254	6	1714.001	6	66445.468	19
355		22.67	min	1368.979	17	-14099.853	19	-386.489	18	-1666.715	18	-69641.134	7
356	WP179	22.67	max	18605.56	7	8034.062	8	577.924	1	2106.651	1	123719.32	20
357		22.67	min	1080.127	19	-7919.551	20	-535.103	21	-2030.499	21	-135747.323	8
358	WP180	22.67	max	5112.757	7	9514.586	7	110.811	6	1227.258	6	116600.118	1
359		22.67	min	-2767.91	19	-9027.837	19	-52.439	18	-1174.435	18	-88347.1	21
360	WP181	22.67	max	4585.094	3	8359.521	23	115.448	22	1112.303	22	95684.11	17
361		22.67	min	-2569.947	23	-8999.891	3	-177.528	2	-1218.952	2	-115831.499	5
362	WP182	22.67	max	5731.706	1	2195.226	23	69.025	18	175.783	24	33875.826	3
363		22.67	min	2311.839	21	-2197.426	3	-69.29	6	-180.029	4	-33839.023	23
364	WP183	22.67	max	5833.505	5	8324.419	5	253.995	22	1291.668	22	76617.636	3
365		22.67	min	-3088.359	17	-7809.957	17	-320.817	2	-1377.208	2	-51736.409	23
366	WP184	22.67	max	7068.824	5	1965.824	23	409.485	22	1102.136	22	13232.493	19
367		22.67	min	-2284.192	17	-2295.919	3	-430.087	2	-1143.527	2	-17130.837	7
368	WP185	22.67	max	3160.734	5	952.992	7	42.003	18	353.346	22	14131.212	19
369		22.67	min	1275.383	17	-947.533	19	-42.344	6	-358.792	2	-14218.564	7
370	WP186	22.67	max	13530.077	1	7552.669	24	1306.65	17	2662.224	17	113574.837	20
371		22.67	min	-416.824	21	-7572.229	4	-1370.613	5	-2721.049	5	-115199.964	8
372	WP187	22.67	max	12412.211	3	6329.172	8	131.056	17	1411.466	17	96233.415	4
373		22.67	min	-1612.85	23	-6322.627	20	-189.7	5	-1466.317	5	-93190.781	24
374	WP188	22.67	max	6344.81	7	2020.891	8	185.871	1	709.155	1	14178.01	2
375		22.67	min	-1859.884	19	-1656.348	20	-167.516	21	-674.576	21	-10663.873	22
376	WP189	22.67	max	12734.878	1	9333.869	23	77.023	18	926.745	22	147318.367	3
377		22.67	min	5138.289	21	-9343.578	3	-78.628	6	-952.423	2	-147161.622	23

Envelope Wall Panel Forces (Continued)

	Wall Label	Elevation [ft]		Axial [lb]	LC	x Shear [lb]	LC	z Shear [lb]	LC	x-x Moment [lb-ft]	LC	z-z Moment [lb-ft]	LC
378	WP190	22.67	max	11543.964	7	4160.889	8	1949.861	1	2586.287	1	66560.93	2
379		22.67	min	-1411.488	19	-4094.045	20	-1854.595	21	-2527.64	21	-56973.675	22
380	WP191	22.67	max	11704.585	5	4545.269	22	246.121	3	1260.202	3	49132.976	20
381		22.67	min	25.916	17	-4771.998	2	-198.893	23	-1178.515	23	-64514.073	8
382	WP192	22.67	max	3824.573	20	1546.786	7	460.238	8	549.297	8	11552.871	17
383		22.67	min	-3854.746	8	-1543.718	19	-447.554	20	-536.696	20	-11630.14	5
384	WP193	22.67	max	8761.671	1	2728.184	6	1182.941	17	1909.288	1	37781.834	4
385		22.67	min	-1906.816	21	-2671.848	18	-1192.601	5	-1893.135	21	-32156.591	24
386	WP194	22.67	max	3160.734	5	944.727	7	54.988	18	373.453	22	13696.836	19
387		22.67	min	1275.383	17	-934.51	19	-55.149	6	-376.033	2	-13860.305	7
388	WP195	22.67	max	5487.941	3	1027.81	24	484.125	17	863.682	17	6217.408	18
389		22.67	min	-2616.52	23	-1270.352	4	-517.439	5	-882.784	5	-8825.339	6
390	WP196	22.67	max	6950.062	8	2394.176	7	206.623	24	641.57	22	17969.636	3
391		22.67	min	-2333.013	20	-2072.1	19	-223.636	4	-685.558	2	-14559.796	23
392	WP197	22.67	max	22625.128	8	12709.761	8	70.849	18	1179.894	17	126077.251	18
393		22.67	min	2968.558	20	-12366.149	20	-178.606	6	-1396.007	5	-127900.37	6
394	WP198	22.67	max	3921.984	6	1635.265	5	409.266	22	607.558	22	12530.061	3
395		22.67	min	-3877.265	18	-1627.097	17	-415.99	2	-619.895	2	-12491.451	23
396	WP199	22.67	max	3497.583	8	1277.381	7	78.197	18	268.357	24	18894.195	19
397		22.67	min	1411.304	20	-1275.81	19	-78.414	6	-271.838	4	-18919.339	7
398	WP200	22.67	max	7562.899	2	3226.404	7	25.832	18	579.162	22	50291.369	19
399		22.67	min	3050.149	22	-3205.731	19	-26.499	6	-589.842	2	-50622.117	7
400	WP201	22.67	max	3415.307	5	1253.545	7	67.692	2	166.376	6	18694.577	19
401		22.67	min	1378.106	17	-1246.421	19	-67.603	22	-164.96	18	-18808.557	7
402	WP202	22.67	max	9652.83	6	5000.587	23	466.47	22	1643.104	22	67548.027	19
403		22.67	min	-1051.91	18	-5036.148	3	-526.089	2	-1702.551	2	-77691.6	7
404	WP203	22.67	max	9599.191	4	4028.437	23	790.567	8	1526.683	8	58368.074	17
405		22.67	min	-1226.378	24	-4044.154	3	-747.252	20	-1511.72	20	-61894.45	5
406	WP204	22.67	max	9397.562	4	4023.274	23	811.984	8	1826.584	8	57785.422	17
407		22.67	min	-1042.597	24	-4031.901	3	-762.344	20	-1782.358	20	-61451.425	5
408	WP205	22.67	max	13673.704	2	8951	7	580.499	8	1841.998	8	145566.455	3
409		22.67	min	509.917	22	-8909.725	19	-550.155	20	-1794.425	20	-137999.187	23
410	WP206	22.67	max	8761.764	3	4503.807	7	45.495	2	275.138	6	70751.213	19
411		22.67	min	3531.544	23	-4486.171	19	-45.313	22	-272.215	18	-71033.146	7
412	WP207	22.67	max	11255.405	2	6356.335	7	827.254	6	1904.288	6	92959.833	19
413		22.67	min	-781.759	22	-6306.118	19	-755.068	18	-1862.618	18	-95111.06	7
414	WP208	22.67	max	8925.975	3	4485.563	7	146.838	22	482.3	22	41958.245	1
415		22.67	min	-2293.522	23	-4062.078	19	-168.652	2	-528.269	2	-36021.331	21
416	WP209	22.67	max	17525.676	6	12929.81	7	308.732	24	1518.547	24	202299.615	19
417		22.67	min	2104.963	18	-12910.138	19	-332.445	4	-1564.127	4	-212760.568	7
418	WP210	22.67	max	12599.444	5	7548.859	21	285.958	24	998.858	24	79102.83	19
419		22.67	min	-965.894	17	-7905.983	1	-310.598	4	-1048.584	4	-93061.002	7
420	WP211	22.67	max	11036.275	6	6171.572	7	447.339	24	787.843	24	90983.723	19

Envelope Wall Panel Forces (Continued)

	Wall Label	Elevation [ft]		Axial [lb]	LC	x Shear [lb]	LC	z Shear [lb]	LC	x-x Moment [lb-ft]	LC	z-z Moment [lb-ft]	LC
421		22.67	min	-1337.738	18	-6171.488	19	-534.949	4	-832.738	4	-92571.956	7
422	WP212	22.67	max	15864.832	6	11496.933	7	746.192	24	1854.007	22	179697.004	3
423		22.67	min	1090.569	18	-11484.995	19	-800.653	4	-1891.802	2	-156332.567	23
424	WP213	22.67	max	17667.266	6	12481.738	7	680.831	24	2408.163	22	202205.845	3
425		22.67	min	1969.819	18	-12426.842	19	-729.843	4	-2474.419	2	-185972.359	23
426	WP214	22.67	max	9842.769	6	4123.817	7	685.006	22	1778.919	22	56854.666	19
427		22.67	min	-968.801	18	-4112.898	19	-760.536	2	-1872.809	2	-62169.28	7
428	WP215	22.67	max	3155.701	1	1152.433	5	90.014	18	129.072	24	16821.628	17
429		22.67	min	1273.352	21	-1149.487	17	-90.206	6	-132.141	4	-16868.762	5
430	WP216	22.67	max	3155.701	1	1119.197	5	51.775	18	264.54	24	16760.563	17
431		22.67	min	1273.352	21	-1115.931	17	-51.944	6	-267.242	4	-16812.825	5
432	WP217	22.67	max	3155.701	2	1135.088	7	48.903	4	314.606	6	17027.519	19
433		22.67	min	1273.353	22	-1132.618	19	-48.749	24	-312.149	18	-17067.039	7
434	WP218	22.67	max	3375.151	1	1300.238	23	86.992	18	151.318	22	19291.091	3
435		22.67	min	1361.903	21	-1302.208	3	-87.007	6	-151.563	2	-19259.562	23
436	WP219	22.67	max	3154.364	4	1095.49	7	72.29	18	365.312	22	15972.785	19
437		22.67	min	1272.813	24	-1093.505	19	-72.355	6	-366.339	2	-16004.547	7
438	WP220	22.67	max	3154.365	4	1068.3	23	72.52	18	358.532	22	15573.588	3
439		22.67	min	1272.813	24	-1068.554	3	-72.922	6	-364.969	2	-15569.523	23
440	WP221	22.67	max	3403.969	1	1243.447	7	76.504	18	357.417	22	18269.547	19
441		22.67	min	1373.53	21	-1240.918	19	-76.808	6	-362.29	2	-18310.003	7
442	WP222	22.67	max	4716.767	1	6852.315	23	262.853	3	1231.991	8	75527.58	19
443		22.67	min	-2793.731	21	-7178.814	3	-156.973	23	-1041.904	20	-92711.939	7

AWC NDS-18 / SDPWS-15 ASD Wall Panel Wood Code Checks (Axial)

	Wall Panel	Region	Stud Size	Stud Spacing[in]	Axial Check	Gov LC	Chord Size	Chord Axial Check	Gov LC
0	WP1	R1	2X6	16	0	N/A	2-2X6	1.477	6
1	WP2	R1	2X6	16	0	N/A	2-2X6	1.082	20
2	WP3	R1	2X6	16	0	N/A	2-2X6	0.985	6
3	WP4	R1	2X6	16	0	N/A	2-2X6	1.041	2
4	WP5	R1	2X6	16	0	N/A	2-2X6	0.935	6
5	WP6	R1	2X6	16	0	N/A	2-2X6	0.949	2
6	WP7	R1	2X6	16	0	N/A	2-2X6	0.916	8
7	WP8	R1	2X6	16	0	N/A	2-2X6	0.938	4
8	WP9	R1	2X6	16	0	N/A	2-2X6	0.675	4
9	WP10	R1	2X6	16	0	N/A	2-2X6	1.214	6
10	WP11	R1	2X6	16	0	N/A	2-2X6	1.072	6
11	WP12	R1	2X6	16	0	N/A	2-2X6	1.066	6
12	WP13	R1	2X6	16	0	N/A	2-2X6	1.202	6
13	WP14	R1	2X6	16	0	N/A	2-2X6	0.982	6
14	WP15	R1	2X6	16	0	N/A	2-2X6	0.972	2
15	WP16	R1	2X6	16	0	N/A	2-2X6	0.986	6
16	WP17	R1	2X6	16	0	N/A	2-2X6	0.98	2

AWC NDS-18 / SDPWS-15 ASD Wall Panel Wood Code Checks (Axial) (Continued)

	Wall Panel	Region	Stud Size	Stud Spacing[in]	Axial Check	Gov LC	Chord Size	Chord Axial Check	Gov LC
17	WP18	R1	2X6	16	0	N/A	2-2X6	0.996	6
18	WP19	R1	2X6	16	0	N/A	2-2X6	0.965	6
19	WP20	R1	2X6	16	0	N/A	2-2X6	0.966	8
20	WP21	R1	2X6	16	0	N/A	2-2X6	0.659	7
21	WP22	R1	2X6	16	0	N/A	2-2X6	0.546	5
22	WP23	R1	2X6	16	0	N/A	2-2X6	1.02	1
23	WP24	R1	2X6	16	0	N/A	2-2X6	1.096	5
24	WP25	R1	2X6	16	0	N/A	2-2X6	0.96	1
25	WP26	R1	2X6	16	0	N/A	2-2X6	1.344	8
26	WP27	R1	2X6	16	0	N/A	2-2X6	1.233	8
27	WP28	R1	2X6	16	0	N/A	2-2X6	0.797	2
28	WP29	R1	2X6	16	0	N/A	2-2X6	1.15	2
29	WP30	R1	2X6	16	0	N/A	2-2X6	1.3	8
30	WP31	R1	2X6	16	0	N/A	2-2X6	0.93	6
31	WP32	R1	2X6	16	0	N/A	2-2X6	0.979	4
32	WP33	R1	2X6	16	0	N/A	2-2X6	0.685	6
33	WP34	R1	2X6	16	0	N/A	2-2X6	1.09	6
34	WP35	R1	2X6	16	0	N/A	2-2X6	0.729	8
35	WP36	R1	2X6	16	0	N/A	2-2X6	0.652	5
36	WP37	R1	2X6	16	0	N/A	2-2X6	0.888	7
37	WP38	R1	2X6	16	0	N/A	2-2X6	0.887	7
38	WP39	R1	2X6	16	0	N/A	2-2X6	0.853	7
39	WP40	R1	2X6	16	0	N/A	2-2X6	0.836	7
40	WP41	R1	2X6	16	0	N/A	2-2X6	0.753	3
41	WP42	R1	2X6	16	0	N/A	2-2X6	0.747	3
42	WP43	R1	2X6	16	0	N/A	2-2X6	1.413	7
43	WP44	R1	2X6	16	0	N/A	2-2X6	1.087	7
44	WP45	R1	2X6	16	0	N/A	2-2X6	1.404	7
45	WP46	R1	2X6	16	0	N/A	2-2X6	1.396	7
46	WP47	R1	2X6	16	0	N/A	2-2X6	1.668	3
47	WP48	R1	2X6	16	0	N/A	2-2X6	1.49	7
48	WP49	R1	2X6	16	0	N/A	2-2X6	1.679	7
49	WP50	R1	2X6	16	0	N/A	2-2X6	1.756	3
50	WP51	R1	2X6	16	0	N/A	2-2X6	1.499	7
51	WP52	R1	2X6	16	0	N/A	2-2X6	1.296	3
52	WP53	R1	2X6	16	0	N/A	2-2X6	1.162	7
53	WP54	R1	2X6	16	0	N/A	2-2X6	1.207	1
54	WP55	R1	2X6	16	0	N/A	2-2X6	1.939	7
55	WP56	R1	2X6	16	0	N/A	2-2X6	1.934	7
56	WP57	R1	2X6	16	0	N/A	2-2X6	1.378	5
57	WP58	R1	2X6	16	0	N/A	2-2X6	1.558	7
58	WP59	R1	2X6	16	0	N/A	2-2X6	0.986	3
59	WP60	R1	2X6	16	0	N/A	2-2X6	1.907	3

AWC NDS-18 / SDPWS-15 ASD Wall Panel Wood Code Checks (Axial) (Continued)

	Wall Panel	Region	Stud Size	Stud Spacing[in]	Axial Check	Gov LC	Chord Size	Chord Axial Check	Gov LC
60	WP61	R1	2X6	16	0	N/A	2-2X6	1.907	3
61	WP62	R1	2X6	16	0	N/A	2-2X6	1.39	7
62	WP63	R1	2X6	16	0	N/A	2-2X6	0.956	7
63	WP64	R1	2X6	16	0	N/A	2-2X6	0.807	5
64	WP65	R1	2X6	16	0	N/A	2-2X6	0.818	7
65	WP66	R1	2X6	16	0	N/A	2-2X6	0.813	7
66	WP67	R1	2X6	16	0	N/A	2-2X6	0.808	7
67	WP68	R1	2X6	16	0	N/A	2-2X6	1.564	5
68	WP69	R1	2X6	16	0	N/A	2-2X6	0.903	7
69	WP70	R1	2X6	16	0	N/A	2-2X6	0.853	7
70	WP71	R1	2X6	16	0	N/A	2-2X6	0.79	7
71	WP72	R1	2X6	16	0	N/A	2-2X6	0.779	7
72	WP73	R1	2X6	16	0	N/A	2-2X6	0.82	7
73	WP74	R1	2X6	16	0	N/A	2-2X6	1.125	7
74	WP75	R1	2X6	16	0	N/A	2-2X6	0.601	6
75	WP76	R1	2X6	16	0	N/A	2-2X6	0.693	6
76	WP77	R1	2X6	16	0	N/A	2-2X6	0.464	7
77	WP78	R1	2X6	16	0	N/A	2-2X6	0.586	2
78	WP79	R1	2X6	16	0	N/A	2-2X6	0.336	5
79	WP80	R1	2X6	16	0	N/A	2-2X6	0.914	5
80	WP81	R1	2X6	16	0	N/A	2-2X6	0.467	7
81	WP82	R1	2X6	16	0	N/A	2-2X6	1.215	7
82	WP83	R1	2X6	16	0	N/A	2-2X6	0.668	7
83	WP84	R1	2X6	16	0	N/A	2-2X6	0.852	6
84	WP85	R1	2X6	16	0	N/A	2-2X6	0.567	4
85	WP86	R1	2X6	16	0	N/A	2-2X6	0.5	7
86	WP87	R1	2X6	16	0	N/A	2-2X6	0.599	8
87	WP88	R1	2X6	16	0	N/A	2-2X6	0.641	6
88	WP89	R1	2X6	16	0	N/A	2-2X6	0.556	8
89	WP90	R1	2X6	16	0	N/A	2-2X6	1.068	3
90	WP91	R1	2X6	16	0	N/A	2-2X6	0.647	2
91	WP92	R1	2X6	16	0	N/A	2-2X6	0.589	2
92	WP93	R1	2X6	16	0	N/A	2-2X6	0.649	20
93	WP94	R1	2X6	16	0	N/A	2-2X6	0.556	6
94	WP95	R1	2X6	16	0	N/A	2-2X6	0.571	2
95	WP96	R1	2X6	16	0	N/A	2-2X6	0.409	4
96	WP97	R1	2X6	16	0	N/A	2-2X6	0.673	6
97	WP98	R1	2X6	16	0	N/A	2-2X6	0.389	8
98	WP99	R1	2X6	16	0	N/A	2-2X6	0.682	6
99	WP100	R1	2X6	16	0	N/A	2-2X6	0.65	6
100	WP101	R1	2X6	16	0	N/A	2-2X6	0.597	6
101	WP102	R1	2X6	16	0	N/A	2-2X6	0.597	6
102	WP103	R1	2X6	16	0	N/A	2-2X6	0.574	6

AWC NDS-18 / SDPWS-15 ASD Wall Panel Wood Code Checks (Axial) (Continued)

	Wall Panel	Region	Stud Size	Stud Spacing[in]	Axial Check	Gov LC	Chord Size	Chord Axial Check	Gov LC
103	WP104	R1	2X6	16	0	N/A	2-2X6	0.438	7
104	WP105	R1	2X6	16	0	N/A	2-2X6	0.78	8
105	WP106	R1	2X6	16	0	N/A	2-2X6	0.626	1
106	WP107	R1	2X6	16	0	N/A	2-2X6	0.635	5
107	WP108	R1	2X6	16	0	N/A	2-2X6	0.613	7
108	WP109	R1	2X6	16	0	N/A	2-2X6	0.591	3
109	WP110	R1	2X6	16	0	N/A	2-2X6	0.487	7
110	WP111	R1	2X6	16	0	N/A	2-2X6	0.403	7
111	WP112	R1	2X6	16	0	N/A	2-2X6	0.811	8
112	WP113	R1	2X6	16	0	N/A	2-2X6	0.715	8
113	WP114	R1	2X6	16	0	N/A	2-2X6	0.424	2
114	WP115	R1	2X6	16	0	N/A	2-2X6	1.006	3
115	WP116	R1	2X6	16	0	N/A	2-2X6	0.667	2
116	WP117	R1	2X6	16	0	N/A	2-2X6	0.552	6
117	WP118	R1	2X6	16	0	N/A	2-2X6	0.341	19
118	WP119	R1	2X6	16	0	N/A	2-2X6	0.579	4
119	WP120	R1	2X6	16	0	N/A	2-2X6	0.395	7
120	WP121	R1	2X6	16	0	N/A	2-2X6	0.336	8
121	WP122	R1	2X6	16	0	N/A	2-2X6	0.501	3
122	WP123	R1	2X6	16	0	N/A	2-2X6	0.692	6
123	WP124	R1	2X6	16	0	N/A	2-2X6	0.339	17
124	WP125	R1	2X6	16	0	N/A	2-2X6	0.5	7
125	WP126	R1	2X6	16	0	N/A	2-2X6	0.686	7
126	WP127	R1	2X6	16	0	N/A	2-2X6	0.442	7
127	WP128	R1	2X6	16	0	N/A	2-2X6	0.791	7
128	WP129	R1	2X6	16	0	N/A	2-2X6	0.773	7
129	WP130	R1	2X6	16	0	N/A	2-2X6	0.771	7
130	WP131	R1	2X6	16	0	N/A	2-2X6	1	3
131	WP132	R1	2X6	16	0	N/A	2-2X6	0.835	7
132	WP133	R1	2X6	16	0	N/A	2-2X6	0.876	7
133	WP134	R1	2X6	16	0	N/A	2-2X6	0.667	1
134	WP135	R1	2X6	16	0	N/A	2-2X6	1.218	7
135	WP136	R1	2X6	16	0	N/A	2-2X6	0.86	5
136	WP137	R1	2X6	16	0	N/A	2-2X6	0.902	7
137	WP138	R1	2X6	16	0	N/A	2-2X6	1.214	3
138	WP139	R1	2X6	16	0	N/A	2-2X6	1.212	3
139	WP140	R1	2X6	16	0	N/A	2-2X6	0.71	3
140	WP141	R1	2X6	16	0	N/A	2-2X6	0.446	5
141	WP142	R1	2X6	16	0	N/A	2-2X6	0.439	7
142	WP143	R1	2X6	16	0	N/A	2-2X6	0.434	7
143	WP144	R1	2X6	16	0	N/A	2-2X6	0.511	7
144	WP145	R1	2X6	16	0	N/A	2-2X6	0.425	7
145	WP146	R1	2X6	16	0	N/A	2-2X6	0.42	3

AWC NDS-18 / SDPWS-15 ASD Wall Panel Wood Code Checks (Axial) (Continued)

	Wall Panel	Region	Stud Size	Stud Spacing[in]	Axial Check	Gov LC	Chord Size	Chord Axial Check	Gov LC
146	WP147	R1	2X6	16	0	N/A	2-2X6	0.448	7
147	WP148	R1	2X6	16	0	N/A	2-2X6	0.683	7
148	WP149	R1	2X6	16	0	N/A	2-2X6	0.535	6
149	WP150	R1	2X6	16	0	N/A	2-2X6	0.538	6
150	WP151	R1	2X6	16	0	N/A	2-2X6	0.378	7
151	WP152	R1	2X6	16	0	N/A	2-2X6	0.516	2
152	WP153	R1	2X6	16	0	N/A	2-2X6	0.274	5
153	WP154	R1	2X6	16	0	N/A	2-2X6	0.691	5
154	WP155	R1	2X6	16	0	N/A	2-2X6	0.384	3
155	WP156	R1	2X6	16	0	N/A	2-2X6	1.006	7
156	WP157	R1	2X6	16	0	N/A	2-2X6	0.576	7
157	WP158	R1	2X6	16	0	N/A	2-2X6	0.691	6
158	WP159	R1	2X6	16	0	N/A	2-2X6	0.514	4
159	WP160	R1	2X6	16	0	N/A	2-2X6	0.365	7
160	WP161	R1	2X6	16	0	N/A	2-2X6	0.536	8
161	WP162	R1	2X6	16	0	N/A	2-2X6	0.553	5
162	WP163	R1	2X6	16	0	N/A	2-2X6	0.5	8
163	WP164	R1	2X6	16	0	N/A	2-2X6	0.964	3
164	WP165	R1	2X6	16	0	N/A	2-2X6	0.528	2
165	WP166	R1	2X6	16	0	N/A	2-2X6	0.517	2
166	WP167	R1	2X6	16	0	N/A	2-2X6	0.534	4
167	WP168	R1	2X6	16	0	N/A	2-2X6	0.524	6
168	WP169	R1	2X6	16	0	N/A	2-2X6	0.517	2
169	WP170	R1	2X6	16	0	N/A	2-2X6	0.324	4
170	WP171	R1	2X6	16	0	N/A	2-2X6	0.554	6
171	WP172	R1	2X6	16	0	N/A	2-2X6	0.288	8
172	WP173	R1	2X6	16	0	N/A	2-2X6	0.568	6
173	WP174	R1	2X6	16	0	N/A	2-2X6	0.601	6
174	WP175	R1	2X6	16	0	N/A	2-2X6	0.549	6
175	WP176	R1	2X6	16	0	N/A	2-2X6	0.533	6
176	WP177	R1	2X6	16	0	N/A	2-2X6	0.511	6
177	WP178	R1	2X6	16	0	N/A	2-2X6	0.375	7
178	WP179	R1	2X6	16	0	N/A	2-2X6	0.662	8
179	WP180	R1	2X6	16	0	N/A	2-2X6	0.582	1
180	WP181	R1	2X6	16	0	N/A	2-2X6	0.587	5
181	WP182	R1	2X6	16	0	N/A	2-2X6	0.498	3
182	WP183	R1	2X6	16	0	N/A	2-2X6	0.476	3
183	WP184	R1	2X6	16	0	N/A	2-2X6	0.307	5
184	WP185	R1	2X6	16	0	N/A	2-2X6	0.307	7
185	WP186	R1	2X6	16	0	N/A	2-2X6	0.636	8
186	WP187	R1	2X6	16	0	N/A	2-2X6	0.6	4
187	WP188	R1	2X6	16	0	N/A	2-2X6	0.291	4
188	WP189	R1	2X6	16	0	N/A	2-2X6	0.893	3

AWC NDS-18 / SDPWS-15 ASD Wall Panel Wood Code Checks (Axial) (Continued)

	Wall Panel	Region	Stud Size	Stud Spacing[in]	Axial Check	Gov LC	Chord Size	Chord Axial Check	Gov LC
189	WP190	R1	2X6	16	0	N/A	2-2X6	0.545	2
190	WP191	R1	2X6	16	0	N/A	2-2X6	0.46	6
191	WP192	R1	2X6	16	0	N/A	2-2X6	0.248	7
192	WP193	R1	2X6	16	0	N/A	2-2X6	0.445	4
193	WP194	R1	2X6	16	0	N/A	2-2X6	0.3	7
194	WP195	R1	2X6	16	0	N/A	2-2X6	0.249	8
195	WP196	R1	2X6	16	0	N/A	2-2X6	0.373	3
196	WP197	R1	2X6	16	0	N/A	2-2X6	0.591	6
197	WP198	R1	2X6	16	0	N/A	2-2X6	0.24	5
198	WP199	R1	2X6	16	0	N/A	2-2X6	0.363	7
199	WP200	R1	2X6	16	0	N/A	2-2X6	0.554	7
200	WP201	R1	2X6	16	0	N/A	2-2X6	0.367	7
201	WP202	R1	2X6	16	0	N/A	2-2X6	0.612	7
202	WP203	R1	2X6	16	0	N/A	2-2X6	0.608	7
203	WP204	R1	2X6	16	0	N/A	2-2X6	0.606	7
204	WP205	R1	2X6	16	0	N/A	2-2X6	0.906	3
205	WP206	R1	2X6	16	0	N/A	2-2X6	0.653	7
206	WP207	R1	2X6	16	0	N/A	2-2X6	0.749	7
207	WP208	R1	2X6	16	0	N/A	2-2X6	0.571	1
208	WP209	R1	2X6	16	0	N/A	2-2X6	1.005	7
209	WP210	R1	2X6	16	0	N/A	2-2X6	0.695	5
210	WP211	R1	2X6	16	0	N/A	2-2X6	0.783	7
211	WP212	R1	2X6	16	0	N/A	2-2X6	0.961	3
212	WP213	R1	2X6	16	0	N/A	2-2X6	0.961	3
213	WP214	R1	2X6	16	0	N/A	2-2X6	0.519	3
214	WP215	R1	2X6	16	0	N/A	2-2X6	0.353	5
215	WP216	R1	2X6	16	0	N/A	2-2X6	0.352	5
216	WP217	R1	2X6	16	0	N/A	2-2X6	0.356	7
217	WP218	R1	2X6	16	0	N/A	2-2X6	0.377	3
218	WP219	R1	2X6	16	0	N/A	2-2X6	0.338	7
219	WP220	R1	2X6	16	0	N/A	2-2X6	0.33	3
220	WP221	R1	2X6	16	0	N/A	2-2X6	0.359	7
221	WP222	R1	2X6	16	0	N/A	2-2X6	0.532	19

AWC NDS-18 / SDPWS-15 ASD Wall Panel Wood Code Checks (In-Plane)

	Wall Panel	Shear Panel Label	Region	Shear Check	Shear Force[lb/ft]	Gov LC	Hold-Down Label	Chord Strap Label	Tension Check	Tie-Down Force[lb]	Gov LC
0	WP1	S1_15/32_8d@2	R1	0.862	629.564	6	HDU8-SDS2.5_3_DF-SP	NC	0.898	6071.798	22
1	WP2	S1_15/32_8d@2	R1	0.917	669.739	6	HDU14-SDS2.5_5.5_DF-SP	NC	1.318	19035.585	6
2	WP3	S1_15/32_8d@2	R1	0.952	694.794	4	HDU11-SDS2.5_7.25_DF-SP	NC	0.998	11151.477	17
3	WP4	S1_15/32_8d@2	R1	0.882	643.502	6	HDU14-SDS2.5_5.5_DF-SP	NC	1.238	17884.851	18
4	WP5	S1_15/32_8d@2	R1	0.869	634.534	2	HDU14-SDS2.5_5.5_DF-SP	NC	1.137	16425.406	22
5	WP6	S1_15/32_8d@2	R1	0.838	611.822	6	HDU14-SDS2.5_5.5_DF-SP	NC	1.117	16137.147	18
6	WP7	S1_15/32_8d@2	R1	0.829	605.085	2	HDU14-SDS2.5_5.5_DF-SP	NC	1.111	16047.88	22

AWC NDS-18 / SDPWS-15 ASD Wall Panel Wood Code Checks (In-Plane) (Continued)

	Wall Panel	Shear Panel Label	Region	Shear Check	Shear Force[lb/ft]	Gov LC	Hold-Down Label	Chord Strap Label	Tension Check	Tie-Down Force[lb]	Gov LC
7	WP8	S1_15/32_8d@2	R1	0.843	615.072	6	HDU14-SDS2.5_5.5_DF-SP	NC	1.12	16179.052	18
8	WP9	S1_15/32_8d@2	R1	0.888	648	2	HDU14-SDS2.5_7.25_DF-SP	NC	0.889	12789.946	23
9	WP10	S1_15/32_8d@2	R1	0.836	609.989	6	HDU14-SDS2.5_5.5_DF-SP	NC	1.064	15371.552	6
10	WP11	S1_15/32_8d@2	R1	0.889	648.793	2	HDU14-SDS2.5_5.5_DF-SP	NC	1.302	18802.557	22
11	WP12	S1_15/32_8d@2	R1	0.841	613.966	2	HDU14-SDS2.5_5.5_DF-SP	NC	1.162	16785.396	22
12	WP13	S1_15/32_8d@2	R1	0.789	575.901	2	HDU14-SDS2.5_5.5_DF-SP	NC	1.054	15222.505	6
13	WP14	S1_15/32_8d@2	R1	0.864	630.533	2	HDU14-SDS2.5_5.5_DF-SP	NC	1.19	17183.542	22
14	WP15	S1_15/32_8d@2	R1	0.874	638.376	6	HDU14-SDS2.5_5.5_DF-SP	NC	1.182	17079.054	18
15	WP16	S1_15/32_8d@2	R1	0.877	640.289	2	HDU14-SDS2.5_5.5_DF-SP	NC	1.199	17325.416	22
16	WP17	S1_15/32_8d@2	R1	0.892	651.469	6	HDU14-SDS2.5_5.5_DF-SP	NC	1.187	17139.688	18
17	WP18	S1_15/32_8d@2	R1	0.886	646.783	2	HDU14-SDS2.5_5.5_DF-SP	NC	1.19	17187.232	22
18	WP19	S1_15/32_8d@2	R1	0.889	648.755	2	HDU14-SDS2.5_5.5_DF-SP	NC	1.192	17219.203	22
19	WP20	S1_15/32_8d@3	R1	0.917	504.522	2	HDU14-SDS2.5_5.5_DF-SP	NC	1.027	14836.475	22
20	WP21	S1_15/32_8d@2	R1	0.963	702.825	1	HDU8-SDS2.5_3_DF-SP	NC	0.912	6172.069	23
21	WP22	S1_15/32_8d@2	R1	0.91	664.352	1	HDU5-SDS2.5_DF-SP	NC	0.878	4957.065	21
22	WP23	S1_15/32_8d@2	R1	0.845	616.93	5	HDU14-SDS2.5_5.5_DF-SP	NC	1.127	16279.948	19
23	WP24	S1_15/32_8d@2	R1	0.848	618.91	1	HDU14-SDS2.5_5.5_DF-SP	NC	1.111	16045.412	21
24	WP25	S1_15/32_8d@2	R1	0.857	625.8	5	HDU14-SDS2.5_5.5_DF-SP	NC	1.193	17234.022	17
25	WP26	S1_15/32_8d@3	R1	0.961	528.495	8	HDU8-SDS2.5_4.5_DF-SP	NC	0.911	7166.108	22
26	WP27	S1_15/32_8d@3	R1	0.924	508.17	4	HDU11-SDS2.5_5.5_DF-SP	NC	0.848	7918.223	20
27	WP28	S1_15/32_8d@3	R1	0.822	452.068	8	HDU8-SDS2.5_3.5_DF-SP	NC	0.984	6856.11	24
28	WP29	S1_15/32_8d@3	R1	0.851	467.881	8	HDU8-SDS2.5_3_DF-SP	NC	0.955	6463.91	18
29	WP30	S1_15/32_8d@3	R1	0.876	481.866	8	HDU2-SDS2.5_DF-SP	NC	0.893	2744.745	24
30	WP31	S1_15/32_8d@3	R1	0.858	472.042	2	HDU4-SDS2.5_DF-SP	NC	0.861	3931.736	18
31	WP32	S1_15/32_8d@4	R1	0.854	367.366	8	HDU8-SDS2.5_3_DF-SP	NC	0.885	5984.351	23
32	WP33	S1_15/32_8d@4	R1	0.815	350.608	8	HDU8-SDS2.5_3_DF-SP	NC	0.889	6015.164	21
33	WP34	S1_15/32_8d@3	R1	0.924	508.059	8	Not Req'd	NC	NC	NC	NC
34	WP35	S1_15/32_8d@4	R1	0.754	324.086	6	HDU4-SDS2.5_DF-SP	NC	0.87	3970.697	24
35	WP36	S1_15/32_8d@3	R1	0.832	457.531	5	HDU14-SDS2.5_7.25_DF-SP	NC	0.83	11950.758	17
36	WP37	S1_15/32_8d@4	R1	0.857	368.298	7	HDU8-SDS2.5_3_DF-SP	NC	0.879	5947.201	23
37	WP38	S1_15/32_8d@4	R1	0.854	367.206	7	HDU8-SDS2.5_3_DF-SP	NC	0.878	5937.857	23
38	WP39	S1_15/32_8d@4	R1	0.86	369.67	7	HDU5-SDS2.5_DF-SP	NC	0.976	5510.998	23
39	WP40	S1_15/32_8d@4	R1	0.877	377.086	7	HDU5-SDS2.5_DF-SP	NC	0.959	5413.264	23
40	WP41	S1_15/32_8d@4	R1	0.782	336.118	3	HDU5-SDS2.5_DF-SP	NC	0.845	4770.022	19
41	WP42	S1_15/32_8d@4	R1	0.788	338.819	3	HDU5-SDS2.5_DF-SP	NC	0.83	4686.773	19
42	WP43	S1_15/32_8d@2	R1	0.878	640.828	3	HDU14-SDS2.5_3.5_DF-SP	NC	0.878	9454.052	19
43	WP44	S1_15/32_8d@3	R1	0.815	448.047	7	HDU8-SDS2.5_3_DF-SP	NC	0.893	6043.474	23
44	WP45	S1_15/32_8d@2	R1	0.865	631.482	7	HDU11-SDS2.5_7.25_DF-SP	NC	0.982	10973.421	21
45	WP46	S1_15/32_8d@2	R1	0.857	625.611	7	HDU14-SDS2.5_3.5_DF-SP	NC	0.982	10574.842	21
46	WP47	S1_15/32_8d@2	R1	0.904	659.916	7	HDU14-SDS2.5_3.5_DF-SP	NC	0.954	10273.583	19
47	WP48	S1_15/32_8d@2	R1	0.89	649.424	7	HDU11-SDS2.5_5.5_DF-SP	NC	0.898	8386.967	23
48	WP49	S1_15/32_8d@2	R1	0.921	672.627	7	HDU8-SDS2.5_4.5_DF-SP	NC	0.918	7228.01	23
49	WP50	S1_15/32_8d@2	R1	0.929	678.372	3	HDU8-SDS2.5_3_DF-SP	NC	0.842	5698.433	23

AWC NDS-18 / SDPWS-15 ASD Wall Panel Wood Code Checks (In-Plane) (Continued)

	Wall Panel	Shear Panel Label	Region	Shear Check	Shear Force[lb/ft]	Gov LC	Hold-Down Label	Chord Strap Label	Tension Check	Tie-Down Force[lb]	Gov LC
50	WP51	S1_15/32_8d@2	R1	0.866	632.185	3	HDU14-SDS2.5_3.5_DF-SP	NC	0.931	10029.543	21
51	WP52	S1_15/32_8d@2	R1	0.826	602.64	3	HDU8-SDS2.5_4.5_DF-SP	NC	0.893	7025.278	19
52	WP53	S1_15/32_8d@2	R1	0.923	673.787	3	HDU14-SDS2.5_3.5_DF-SP	NC	0.92	9909.943	19
53	WP54	S1_15/32_8d@2	R1	0.921	672.522	7	HDU14-SDS2.5_7.25_DF-SP	NC	0.815	11727.448	23
54	WP55	S1_15/32_8d@2	R1	0.972	709.523	7	HDU14-SDS2.5_3.5_DF-SP	NC	0.942	10141.17	23
55	WP56	S1_15/32_8d@2	R1	0.967	706.005	7	HDU14-SDS2.5_3.5_DF-SP	NC	0.942	10143.033	23
56	WP57	S1_15/32_8d@2	R1	0.952	695.133	1	HDU14-SDS2.5_7.25_DF-SP	NC	0.839	12067.99	17
57	WP58	S1_15/32_8d@2	R1	0.904	659.796	7	HDU14-SDS2.5_7.25_DF-SP	NC	0.791	11377.063	17
58	WP59	S1_15/32_8d@2	R1	0.858	626.704	7	HDU14-SDS2.5_3.5_DF-SP	NC	0.916	9866.862	23
59	WP60	S1_15/32_8d@2	R1	0.941	686.924	7	HDU14-SDS2.5_3.5_DF-SP	NC	0.999	10758.3	17
60	WP61	S1_15/32_8d@2	R1	0.935	682.196	3	HDU11-SDS2.5_5.5_DF-SP	NC	0.996	9294.87	17
61	WP62	S1_15/32_8d@2	R1	0.848	619.307	3	HDU11-SDS2.5_5.5_DF-SP	NC	0.971	9068.895	17
62	WP63	S1_15/32_8d@2	R1	0.821	599.422	3	HDU11-SDS2.5_5.5_DF-SP	NC	0.985	9194.696	19
63	WP64	S1_15/32_8d@2	R1	0.813	593.131	7	HDU14-SDS2.5_7.25_DF-SP	NC	0.94	13520.181	19
64	WP65	S1_15/32_8d@4	R1	0.833	358.381	7	HDU5-SDS2.5_DF-SP	NC	0.989	5582.717	23
65	WP66	S1_15/32_8d@4	R1	0.837	360.108	7	HDU5-SDS2.5_DF-SP	NC	0.977	5513.66	23
66	WP67	S1_15/32_8d@4	R1	0.837	360.032	7	HDU5-SDS2.5_DF-SP	NC	0.965	5448.479	23
67	WP68	S1_15/32_8d@2	R1	0.888	648.337	3	HDU14-SDS2.5_5.5_DF-SP	NC	1.032	14907.198	19
68	WP69	S1_15/32_8d@4	R1	0.874	375.761	7	HDU8-SDS2.5_3_DF-SP	NC	0.935	6328.405	23
69	WP70	S1_15/32_8d@4	R1	0.859	369.518	7	HDU8-SDS2.5_3_DF-SP	NC	0.841	5689.157	23
70	WP71	S1_15/32_8d@4	R1	0.814	350.044	7	HDU5-SDS2.5_DF-SP	NC	0.929	5241.692	23
71	WP72	S1_15/32_8d@4	R1	0.798	343.251	7	HDU5-SDS2.5_DF-SP	NC	0.903	5095.077	23
72	WP73	S1_15/32_8d@4	R1	0.821	353.011	7	HDU5-SDS2.5_DF-SP	NC	0.928	5239.396	23
73	WP74	S1_15/32_8d@2	R1	0.837	611.131	3	HDU14-SDS2.5_5.5_DF-SP	NC	1.149	16596.928	21
74	WP75	S1_15/32_8d@3	R1	0.935	514.289	2	NC	CMST12_162_DF/SP_Nail	1.086	10004.066	22
75	WP76	S1_15/32_8d@3	R1	0.852	468.494	6	NC	CMST12_162_DF/SP_Nail	0.951	8761.918	6
76	WP77	S1_15/32_8d@6	R1	0.849	237.593	7	NC	CMSTC16_148_DF/SP_Nail	0.565	2651.642	23
77	WP78	S1_15/32_8d@3	R1	0.973	535.254	6	NC	CMST12_162_DF/SP_Nail	1.085	9998.741	18
78	WP79	S1_15/32_8d@2	R1	0.886	646.948	1	NC	CMSTC16_148_DF/SP_Nail	0.51	2393.335	21
79	WP80	S1_15/32_8d@2	R1	0.799	583.017	3	NC	CMST12_162_DF/SP_Nail	1	9214.091	19
80	WP81	S1_15/32_8d@6	R1	0.856	239.661	7	NC	CMSTC16_148_DF/SP_Nail	0.594	2787.257	23
81	WP82	S1_15/32_8d@2	R1	0.924	674.738	7	NC	CMST12_162_DF/SP_Nail	0.725	6683.242	23
82	WP83	S1_15/32_8d@3	R1	0.942	518.318	7	NC	CMST14_162_DF/SP_Nail	0.861	5574.948	19
83	WP84	S1_15/32_8d@3	R1	0.878	482.905	6	NC	CMSTC16_148_DF/SP_Nail	0.658	3084.582	22
84	WP85	S1_15/32_8d@3	R1	0.881	484.509	6	NC	CMST12_162_DF/SP_Nail	1.022	9414.991	18
85	WP86	S1_15/32_8d@4	R1	0.666	286.525	7	NC	CMSTC16_148_DF/SP_Nail	0.663	3107.766	23
86	WP87	S1_15/32_8d@3	R1	0.861	473.512	2	NC	CMST12_162_DF/SP_Nail	1.005	9263.106	22
87	WP88	S1_15/32_8d@2	R1	0.858	626.309	4	NC	CMST12_162_DF/SP_Nail	0.709	6533.519	17
88	WP89	S1_15/32_8d@3	R1	0.886	487.055	2	NC	CMST12_162_DF/SP_Nail	1.018	9385.138	22
89	WP90	S1_15/32_8d@3	R1	0.974	535.535	3	NC	CMSTC16_148_DF/SP_Nail	0.738	3459.64	23
90	WP91	S1_15/32_8d@2	R1	0.82	598.401	6	NC	CMST12_162_DF/SP_Nail	1.173	10805.987	18
91	WP92	S1_15/32_8d@3	R1	0.962	529.215	6	NC	CMST12_162_DF/SP_Nail	1.09	10048.087	18
92	WP93	S1_15/32_8d@2	R1	0.801	584.546	6	NC	CMST12_162_DF/SP_Nail	1.246	11483.993	6

AWC NDS-18 / SDPWS-15 ASD Wall Panel Wood Code Checks (In-Plane) (Continued)

	Wall Panel	Shear Panel Label	Region	Shear Check	Shear Force[lb/ft]	Gov LC	Hold-Down Label	Chord Strap Label	Tension Check	Tie-Down Force[lb]	Gov LC
93	WP94	S1_15/32_8d@3	R1	0.86	473.249	2	NC	CMST12_162_DF/SP_Nail	1.024	9432.035	22
94	WP95	S1_15/32_8d@3	R1	0.895	492.234	6	NC	CMST12_162_DF/SP_Nail	1.021	9407.213	18
95	WP96	S1_15/32_8d@2	R1	0.829	604.853	6	NC	CMST12_162_DF/SP_Nail	0.87	8016.489	23
96	WP97	S1_15/32_8d@3	R1	0.791	435.114	6	NC	CMST12_162_DF/SP_Nail	0.923	8509.374	6
97	WP98	S1_15/32_8d@6	R1	0.76	212.908	8	NC	CMSTC16_148_DF/SP_Nail	0.364	1705	24
98	WP99	S1_15/32_8d@2	R1	0.845	616.69	2	NC	CMST12_162_DF/SP_Nail	1.263	11639.138	22
99	WP100	S1_15/32_8d@3	R1	0.885	486.615	2	NC	CMST12_162_DF/SP_Nail	1.085	9998.601	22
100	WP101	S1_15/32_8d@3	R1	0.948	521.204	2	NC	CMST12_162_DF/SP_Nail	1.107	10203.045	22
101	WP102	S1_15/32_8d@3	R1	0.955	525.295	2	NC	CMST12_162_DF/SP_Nail	1.106	10188.782	22
102	WP103	S1_15/32_8d@3	R1	0.93	511.675	2	NC	CMST12_162_DF/SP_Nail	1.084	9990.214	22
103	WP104	S1_15/32_8d@2	R1	0.972	709.495	3	NC	CMSTC16_148_DF/SP_Nail	0.784	3676.658	23
104	WP105	S1_15/32_8d@4	R1	0.894	384.569	8	NC	CMSTC16_148_DF/SP_Nail	0.365	1710.665	24
105	WP106	S1_15/32_8d@3	R1	0.86	472.908	7	NC	CMST12_162_DF/SP_Nail	1.022	9416.27	19
106	WP107	S1_15/32_8d@3	R1	0.84	462.001	1	NC	CMST12_162_DF/SP_Nail	0.999	9204.703	21
107	WP108	S1_15/32_8d@4	R1	0.728	313.162	7	NC	CMSTC16_148_DF/SP_Nail	0.647	3033.87	23
108	WP109	S1_15/32_8d@2	R1	0.811	591.821	5	NC	CMST12_162_DF/SP_Nail	1.127	10383.889	17
109	WP110	S1_15/32_8d@4	R1	0.856	367.999	3	NC	CMSTC16_148_DF/SP_Nail	0.908	4256.946	19
110	WP111	S1_15/32_8d@6	R1	0.785	219.673	7	NC	CMSTC16_148_DF/SP_Nail	0.465	2181.624	23
111	WP112	S1_15/32_8d@3	R1	0.873	480.171	8	NC	CMSTC16_148_DF/SP_Nail	0.967	4532.894	22
112	WP113	S1_15/32_8d@4	R1	0.929	399.463	8	NC	CMST14_162_DF/SP_Nail	0.737	4769.206	20
113	WP114	S1_15/32_8d@4	R1	0.784	336.967	8	NC	CMSTC16_148_DF/SP_Nail	0.751	3524.285	24
114	WP115	S1_15/32_8d@3	R1	0.949	521.971	3	NC	CMSTC16_148_DF/SP_Nail	0.881	4133.495	19
115	WP116	S1_15/32_8d@4	R1	0.814	350.062	8	NC	CMSTC16_148_DF/SP_Nail	0.768	3602.217	18
116	WP117	S1_15/32_8d@4	R1	0.855	367.76	2	NC	CMSTC16_148_DF/SP_Nail	0.438	2056.435	18
117	WP118	S1_15/32_8d@4	R1	0.78	335.612	7	NC	CMST12_162_DF/SP_Nail	0.73	6728.201	19
118	WP119	S1_15/32_8d@4	R1	0.731	314.412	4	NC	CMSTC16_148_DF/SP_Nail	0.858	4024.513	23
119	WP120	S1_15/32_8d@6	R1	0.758	212.105	7	NC	CMSTC16_148_DF/SP_Nail	0.444	2082.203	23
120	WP121	S1_15/32_8d@6	R1	0.815	228.187	4	NC	CMSTC16_148_DF/SP_Nail	0.6	2812.002	20
121	WP122	S1_15/32_8d@4	R1	0.877	377.305	7	NC	CMSTC16_148_DF/SP_Nail	0.979	4590.268	23
122	WP123	S1_15/32_8d@3	R1	0.899	494.658	8	NC	CMSTC16_148_DF/SP_Nail	0.043	199.544	20
123	WP124	S1_15/32_8d@4	R1	0.771	331.449	5	NC	CMST12_162_DF/SP_Nail	0.725	6680.024	17
124	WP125	S1_15/32_8d@4	R1	0.666	286.469	7	NC	CMSTC16_148_DF/SP_Nail	0.663	3108.725	23
125	WP126	S1_15/32_8d@4	R1	0.838	360.54	7	NC	CMSTC16_148_DF/SP_Nail	0.623	2921.111	23
126	WP127	S1_15/32_8d@6	R1	0.787	220.403	7	NC	CMSTC16_148_DF/SP_Nail	0.521	2442.568	23
127	WP128	S1_15/32_8d@3	R1	0.843	463.923	3	NC	CMST14_162_DF/SP_Nail	0.783	5066.983	20
128	WP129	S1_15/32_8d@3	R1	0.804	442.327	7	NC	CMST14_162_DF/SP_Nail	0.895	5794.092	21
129	WP130	S1_15/32_8d@3	R1	0.803	441.689	7	NC	CMST14_162_DF/SP_Nail	0.862	5581.213	19
130	WP131	S1_15/32_8d@3	R1	0.909	499.747	7	NC	CMST14_162_DF/SP_Nail	0.939	6081.581	19
131	WP132	S1_15/32_8d@3	R1	0.851	467.972	7	NC	CMSTC16_148_DF/SP_Nail	0.881	4132.458	23
132	WP133	S1_15/32_8d@3	R1	0.873	480.258	7	NC	CMST14_162_DF/SP_Nail	0.922	5971.499	21
133	WP134	S1_15/32_8d@3	R1	0.856	470.821	7	NC	CMST14_162_DF/SP_Nail	1	6472.463	23
134	WP135	S1_15/32_8d@2	R1	0.929	678.463	7	NC	CMST12_162_DF/SP_Nail	0.723	6658.473	23
135	WP136	S1_15/32_8d@2	R1	0.915	668.171	1	NC	CMST12_162_DF/SP_Nail	0.834	7681.539	17

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	Wall Panel	Shear Panel Label	Region	Shear Check	Shear Force[lb/ft]	Gov LC	Hold-Down Label	Chord Strap Label	Tension Check	Tie-Down Force[lb]	Gov LC
136	WP137	S1_15/32_8d@3	R1	0.891	489.872	7	NC	CMST12_162_DF/SP_Nail	0.739	6811.126	17
137	WP138	S1_15/32_8d@2	R1	0.956	697.712	3	NC	CMST12_162_DF/SP_Nail	0.779	7180.622	17
138	WP139	S1_15/32_8d@2	R1	0.947	691.461	3	NC	CMST14_162_DF/SP_Nail	0.97	6283.631	17
139	WP140	S1_15/32_8d@3	R1	0.817	449.369	7	NC	CMST14_162_DF/SP_Nail	0.752	4867.813	17
140	WP141	S1_15/32_8d@6	R1	0.861	241.188	7	NC	CMSTC16_148_DF/SP_Nail	0.583	2734.074	21
141	WP142	S1_15/32_8d@6	R1	0.835	233.851	7	NC	CMSTC16_148_DF/SP_Nail	0.564	2644.894	23
142	WP143	S1_15/32_8d@6	R1	0.802	224.452	7	NC	CMSTC16_148_DF/SP_Nail	0.55	2581.38	23
143	WP144	S1_15/32_8d@4	R1	0.682	293.246	7	NC	CMSTC16_148_DF/SP_Nail	0.716	3357.107	23
144	WP145	S1_15/32_8d@6	R1	0.805	225.287	7	NC	CMSTC16_148_DF/SP_Nail	0.528	2477.749	23
145	WP146	S1_15/32_8d@6	R1	0.799	223.696	3	NC	CMSTC16_148_DF/SP_Nail	0.515	2414.318	19
146	WP147	S1_15/32_8d@6	R1	0.834	233.432	3	NC	CMSTC16_148_DF/SP_Nail	0.54	2534.727	23
147	WP148	S1_15/32_8d@3	R1	0.892	490.459	1	NC	CMST12_162_DF/SP_Nail	1.076	9915.561	21
148	WP149	S1_15/32_8d@4	R1	0.745	320.226	2	NC	CMSTC16_148_DF/SP_Nail	0.949	4451.816	22
149	WP150	S1_15/32_8d@6	R1	0.81	226.865	6	NC	CMSTC16_148_DF/SP_Nail	0.753	3529.427	6
150	WP151	S1_15/32_8d@6	R1	0.49	137.303	7	NC	CMSTC16_148_DF/SP_Nail	0.284	1332.678	23
151	WP152	S1_15/32_8d@4	R1	0.786	337.927	6	NC	CMSTC16_148_DF/SP_Nail	0.943	4422.03	18
152	WP153	S1_15/32_8d@3	R1	0.861	473.343	1	NC	CMSTC16_148_DF/SP_Nail	0.155	726.182	23
153	WP154	S1_15/32_8d@4	R1	0.674	289.64	3	NC	CMSTC16_148_DF/SP_Nail	0.859	4026.854	19
154	WP155	S1_15/32_8d@6	R1	0.504	141.051	3	NC	CMSTC16_148_DF/SP_Nail	0.301	1410.111	19
155	WP156	S1_15/32_8d@4	R1	0.864	371.664	7	NC	CMSTC16_148_DF/SP_Nail	0.763	3578.533	23
156	WP157	S1_15/32_8d@4	R1	0.749	322.256	7	NC	CMSTC16_148_DF/SP_Nail	0.664	3116.355	19
157	WP158	S1_15/32_8d@6	R1	0.927	259.536	6	NC	CMSTC16_148_DF/SP_Nail	0.381	1788.76	22
158	WP159	S1_15/32_8d@4	R1	0.729	313.336	6	NC	CMSTC16_148_DF/SP_Nail	0.919	4308.987	18
159	WP160	S1_15/32_8d@6	R1	0.472	132.048	7	NC	CMSTC16_148_DF/SP_Nail	0.267	1250.755	23
160	WP161	S1_15/32_8d@4	R1	0.685	294.49	2	NC	CMSTC16_148_DF/SP_Nail	0.886	4156.82	22
161	WP162	S1_15/32_8d@4	R1	0.871	374.388	4	NC	CMSTC16_148_DF/SP_Nail	0.623	2922.703	17
162	WP163	S1_15/32_8d@4	R1	0.719	309.199	2	NC	CMSTC16_148_DF/SP_Nail	0.9	4222.943	22
163	WP164	S1_15/32_8d@4	R1	0.836	359.482	7	NC	CMSTC16_148_DF/SP_Nail	0.577	2708.004	23
164	WP165	S1_15/32_8d@4	R1	0.768	330.098	6	NC	CMSTC16_148_DF/SP_Nail	0.947	4442.459	18
165	WP166	S1_15/32_8d@4	R1	0.783	336.645	6	NC	CMSTC16_148_DF/SP_Nail	0.955	4478.707	18
166	WP167	S1_15/32_8d@4	R1	0.791	340.321	6	NC	CMST14_162_DF/SP_Nail	0.775	5020.479	6
167	WP168	S1_15/32_8d@4	R1	0.736	316.472	2	NC	CMSTC16_148_DF/SP_Nail	0.951	4458.485	22
168	WP169	S1_15/32_8d@4	R1	0.731	314.524	6	NC	CMSTC16_148_DF/SP_Nail	0.902	4230.022	18
169	WP170	S1_15/32_8d@4	R1	0.81	348.488	6	NC	CMSTC16_148_DF/SP_Nail	0.715	3352.738	23
170	WP171	S1_15/32_8d@6	R1	0.829	232.162	6	NC	CMSTC16_148_DF/SP_Nail	0.775	3633.832	6
171	WP172	S1_15/32_8d@6	R1	0.355	99.403	8	NC	CMSTC16_148_DF/SP_Nail	0.156	733.797	24
172	WP173	S1_15/32_8d@4	R1	0.808	347.65	2	NC	CMST14_162_DF/SP_Nail	0.76	4918.781	22
173	WP174	S1_15/32_8d@4	R1	0.72	309.781	2	NC	CMSTC16_148_DF/SP_Nail	0.991	4646.535	22
174	WP175	S1_15/32_8d@4	R1	0.773	332.558	2	NC	CMSTC16_148_DF/SP_Nail	0.983	4608.529	22
175	WP176	S1_15/32_8d@4	R1	0.761	327.029	2	NC	CMSTC16_148_DF/SP_Nail	0.967	4536.305	22
176	WP177	S1_15/32_8d@4	R1	0.729	313.341	2	NC	CMSTC16_148_DF/SP_Nail	0.949	4453.106	22
177	WP178	S1_15/32_8d@3	R1	0.849	466.837	7	NC	CMSTC16_148_DF/SP_Nail	0.321	1507.434	19
178	WP179	S1_15/32_8d@6	R1	0.82	229.547	8	NC	CMSTC16_148_DF/SP_Nail	0.348	1633.361	24

AWC NDS-18 / SDPWS-15 ASD Wall Panel Wood Code Checks (In-Plane) (Continued)

	Wall Panel	Shear Panel Label	Region	Shear Check	Shear Force[lb/ft]	Gov LC	Hold-Down Label	Chord Strap Label	Tension Check	Tie-Down Force[lb]	Gov LC
179	WP180	S1_15/32_8d@4	R1	0.73	313.991	7	NC	CMSTC16_148_DF/SP_Nail	0.941	4415.464	19
180	WP181	S1_15/32_8d@4	R1	0.7	300.925	3	NC	CMSTC16_148_DF/SP_Nail	0.916	4296.123	23
181	WP182	S1_15/32_8d@6	R1	0.624	174.838	3	NC	CMSTC16_148_DF/SP_Nail	0.328	1537.566	19
182	WP183	S1_15/32_8d@4	R1	0.807	346.851	5	NC	CMSTC16_148_DF/SP_Nail	0.904	4238.744	17
183	WP184	S1_15/32_8d@6	R1	0.784	219.522	3	NC	CMSTC16_148_DF/SP_Nail	0.426	1997.28	17
184	WP185	S1_15/32_8d@6	R1	0.387	108.272	7	NC	CMSTC16_148_DF/SP_Nail	0.208	973.502	23
185	WP186	S1_15/32_8d@6	R1	0.876	245.29	4	NC	CMSTC16_148_DF/SP_Nail	0.511	2398.462	22
186	WP187	S1_15/32_8d@6	R1	0.854	239.243	8	NC	CMSTC16_148_DF/SP_Nail	0.594	2786.486	20
187	WP188	S1_15/32_8d@6	R1	0.711	198.978	8	NC	CMSTC16_148_DF/SP_Nail	0.344	1614.097	24
188	WP189	S1_15/32_8d@4	R1	0.778	334.57	3	NC	CMSTC16_148_DF/SP_Nail	0.576	2703.379	19
189	WP190	S1_15/32_8d@6	R1	0.715	200.318	8	NC	CMSTC16_148_DF/SP_Nail	0.432	2026.844	18
190	WP191	S1_15/32_8d@6	R1	0.799	223.684	2	NC	CMSTC16_148_DF/SP_Nail	0.29	1359.696	18
191	WP192	S1_15/32_8d@6	R1	0.651	182.228	7	NC	CMSTC16_148_DF/SP_Nail	0.595	2792.167	3
192	WP193	S1_15/32_8d@6	R1	0.65	181.879	6	NC	CMSTC16_148_DF/SP_Nail	0.429	2013.176	23
193	WP194	S1_15/32_8d@6	R1	0.383	107.333	7	NC	CMSTC16_148_DF/SP_Nail	0.198	929.124	23
194	WP195	S1_15/32_8d@6	R1	0.557	155.863	4	NC	CMSTC16_148_DF/SP_Nail	0.319	1497.669	20
195	WP196	S1_15/32_8d@6	R1	0.842	235.732	7	NC	CMSTC16_148_DF/SP_Nail	0.461	2164.3	23
196	WP197	S1_15/32_8d@4	R1	0.74	318.337	8	NC	CMSTC16_148_DF/SP_Nail	0.24	1124.884	20
197	WP198	S1_15/32_8d@6	R1	0.66	184.798	5	NC	CMSTC16_148_DF/SP_Nail	0.605	2838.679	17
198	WP199	S1_15/32_8d@6	R1	0.468	131.15	7	NC	CMSTC16_148_DF/SP_Nail	0.263	1235.717	23
199	WP200	S1_15/32_8d@6	R1	0.695	194.547	7	NC	CMSTC16_148_DF/SP_Nail	0.324	1518.43	23
200	WP201	S1_15/32_8d@6	R1	0.471	131.803	7	NC	CMSTC16_148_DF/SP_Nail	0.274	1283.466	23
201	WP202	S1_15/32_8d@6	R1	0.835	233.902	3	NC	CMSTC16_148_DF/SP_Nail	0.536	2512.418	20
202	WP203	S1_15/32_8d@6	R1	0.831	232.747	3	NC	CMSTC16_148_DF/SP_Nail	0.579	2714.672	19
203	WP204	S1_15/32_8d@6	R1	0.829	232.042	3	NC	CMSTC16_148_DF/SP_Nail	0.575	2694.652	19
204	WP205	S1_15/32_8d@4	R1	0.786	337.94	7	NC	CMSTC16_148_DF/SP_Nail	0.795	3730.567	19
205	WP206	S1_15/32_8d@6	R1	0.837	234.472	7	NC	CMSTC16_148_DF/SP_Nail	0.411	1926.028	23
206	WP207	S1_15/32_8d@4	R1	0.696	299.123	7	NC	CMSTC16_148_DF/SP_Nail	0.708	3321.96	21
207	WP208	S1_15/32_8d@4	R1	0.77	331.242	7	NC	CMSTC16_148_DF/SP_Nail	0.749	3512.784	23
208	WP209	S1_15/32_8d@4	R1	0.862	370.747	7	NC	CMSTC16_148_DF/SP_Nail	0.761	3570.943	23
209	WP210	S1_15/32_8d@4	R1	0.864	371.318	1	NC	CMSTC16_148_DF/SP_Nail	0.777	3644.377	17
210	WP211	S1_15/32_8d@4	R1	0.725	311.82	7	NC	CMSTC16_148_DF/SP_Nail	0.792	3715.793	17
211	WP212	S1_15/32_8d@4	R1	0.859	369.248	7	NC	CMSTC16_148_DF/SP_Nail	0.738	3459.617	17
212	WP213	S1_15/32_8d@4	R1	0.829	356.621	7	NC	CMSTC16_148_DF/SP_Nail	0.68	3190.485	17
213	WP214	S1_15/32_8d@6	R1	0.813	227.517	7	NC	CMSTC16_148_DF/SP_Nail	0.497	2331.25	17
214	WP215	S1_15/32_8d@6	R1	0.468	131.14	5	NC	CMSTC16_148_DF/SP_Nail	0.273	1280.609	21
215	WP216	S1_15/32_8d@6	R1	0.455	127.358	5	NC	CMSTC16_148_DF/SP_Nail	0.272	1273.996	21
216	WP217	S1_15/32_8d@6	R1	0.461	129.166	7	NC	CMSTC16_148_DF/SP_Nail	0.278	1303.54	23
217	WP218	S1_15/32_8d@6	R1	0.495	138.549	3	NC	CMSTC16_148_DF/SP_Nail	0.292	1370.103	19
218	WP219	S1_15/32_8d@6	R1	0.445	124.713	7	NC	CMSTC16_148_DF/SP_Nail	0.252	1184.05	23
219	WP220	S1_15/32_8d@6	R1	0.434	121.647	3	NC	CMSTC16_148_DF/SP_Nail	0.242	1136.329	19
220	WP221	S1_15/32_8d@6	R1	0.468	131.177	7	NC	CMSTC16_148_DF/SP_Nail	0.265	1243.025	23
221	WP222	S1_15/32_8d@4	R1	0.739	317.588	3	NC	CMSTC16_148_DF/SP_Nail	0.981	4602.16	21

AWC NDS-18 / SDPWS-15 ASD Wall Panel Wood Code Checks (In-Plane) (Continued)

Wall Panel	Shear Panel Label	Region	Shear Check	Shear Force[lb/ft]	Gov LC	Hold-Down Label	Chord Strap Label	Tension Check	Tie-Down Force[lb]	Gov LC