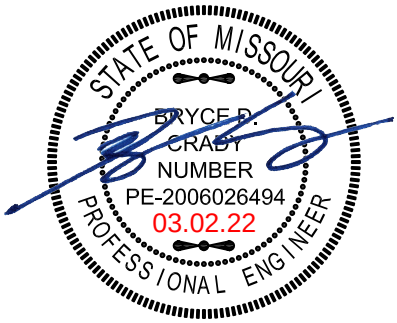
APEX
ENGINEERS, INC.

Structural Design Calculations

For

MEGA STORAGE
520 NE TOWN CENTRE DRIVE
LEE'S SUMMIT, MO



03/02/2022

DAVIDSON AE

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Design Loads

APEX ENGINEERS INC	Project:	Mega Storage
	Client:	Davidson AE
	Engineer:	JB
	Date:	3/2/2022
	Description:	Dead Load Development

Roof Dead Load Calculations

Description	**Typical Roof**		
Roofing Materials	Standing Seam Metal	1.50 psf	
Sheathing	None	0.00 psf	
Framing	CFM Framing	2.30 psf	<-- Equivalent to 1200S162-54 @ 16" o.c.
Insulation	None	0.00 psf	
Ceiling Finish	None	0.00 psf	
Sprinklers	No	0.00 psf	
Mechanical	No	0.00 psf	
Collateral	No	0.00 psf	
Miscellaneous		0.00 psf	
Total DL:		3.80 psf	
Roof Pitch:	0.50 : 12		
Adjusted for Roof Slope:		4 psf	

Wall Dead Load Calculations

Description	**Typ Exterior**		
Exterior Finish	Metal Panel	2.00 psf	
Wall Sheathing	None	0.00 psf	
Wall Framing	CFM Framing	1.20 psf	<-- Equivalent to 600S162-54 @ 16" o.c.
Insulation	None	0.00 psf	
Interior Finish	None	0.00 psf	
Miscellaneous		0.00 psf	
Total DL:		4 psf	

APEX ENGINEERS,INC	Project:	Mega Storage
	Client:	Davidson AE
	Engineer:	JB
	Date:	3/2/2022
	Description:	Live Load Tables

Occupancy or Use	Uniform, L_o (psf)	Live Load Reduction Permitted?	Multiple-Story Live Load Reduction Permitted?	Concentrated (lb)
Roofs				
Roof: Ordinary flat, pitched, and curved	20	Yes	—	

Reference Pella Building Systems calculation packages for specific loading conditions and reactions used in for the foundation design.

Foundation Design

Project Title: Mega Storage
Engineer: JB
Project ID: 520 NE Town Centre Drive Lee's Summit, MO 64064
Project Descr: Foundation Design

Wall Footing

Project File: Mega Storage_Shawnee.ec6

DESCRIPTION: Building (1, 2, 3) - Exterior Footing

Code References

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

General Information

Material Properties

f'c : Concrete 28 day strength	=	3.50 ksi
fy : Rebar Yield	=	60.0 ksi
Ec : Concrete Elastic Modulus	=	3,122.0 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
AutoCalc Footing Weight as DL :		Yes

Soil Design Values

Allowable Soil Bearing	=	1.50 ksf
Increase Bearing By Footing Weight	=	No
Soil Passive Resistance (for Sliding)	=	250.0 pcf
Soil/Concrete Friction Coeff.	=	0.30

Increases based on footing Depth

Reference Depth below Surface	=	ft
Allow. Pressure Increase per foot of depth	=	ksf
when base footing is below	=	ft

Increases based on footing Width

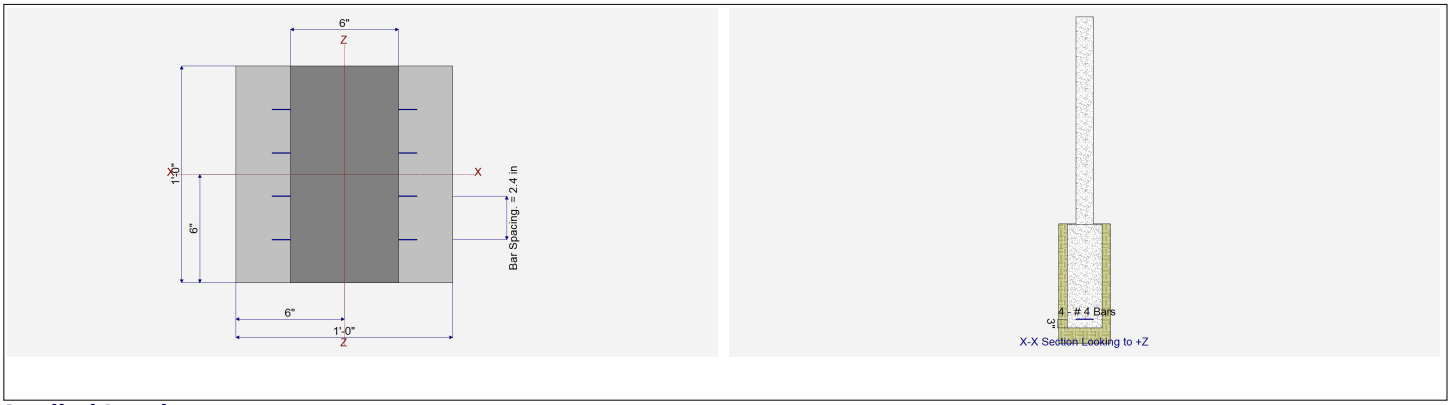
Allow. Pressure Increase per foot of width	=	ksf
when footing is wider than	=	ft

Adjusted Allowable Bearing Pressure = 0.0 ksf

Dimensions

Footing Width	=	1.0 ft	Footing Thickness	=	36.0 in	Bars along X-X Axis	
Wall Thickness	=	6.0 in	Rebar Centerline to Edge of Concrete...			# of Bars in 12" Width	= 4
Wall center offset from center of footing	=	0 in	at Bottom of footing	=	3.0 in	Reinforcing Bar Size	= # 4

Reinforcing



Applied Loads

		D	Lr	L	S	W	E	H	
P : Column Load	=	0.0720	0.0810		0.0810				k
OB : Overburden	=								ksf
V-x	=								k
M-zz	=								k-ft
Vx applied	=		in above top of footing						

Project Title: Mega Storage
Engineer: JB
Project ID: 520 NE Town Centre Drive Lee's Summit, MO 64064
Project Descr: Foundation Design

Wall Footing

Project File: Mega Storage_Shawnee.ec6

DESCRIPTION: Building (1, 2, 3) - Exterior Footing

DESIGN SUMMARY

Design OK

	Factor of Safety	Item	Applied	Capacity	Governing Load Combination
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	Uplift	0.0 k	0.0 k	No Uplift

	Utilization Ratio	Item	Applied	Capacity	Governing Load Combination
PASS	0.0	Soil Bearing	0.0 ksf	0.0 ksf	0.0
PASS	0.0	Z Flexure (+X)	0.0 k-ft	0.0 k-ft	No Moment
PASS	0.0	Z Flexure (-X)	0.0 k-ft	0.0 k-ft	No Moment
PASS	n/a	1-way Shear (+X)	0.0 psi	0.0 psi	n/a
PASS	0.0	1-way Shear (-X)	0.0 psi	0.0 psi	n/a

Detailed Results

Soil Bearing

Rotation Axis & Load Combination...	Gross Allowable	Xecc	Actual Soil Bearing Stress -X	Actual Soil Bearing Stress +X	Actual / Allowable Ratio

Overturning Stability

Units : k-ft

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

Sliding Stability

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

Footing Flexure

Flexure Axis & Load Combination	Mu k-ft	Which Side ?	Tension @ Bot. or Top ?	As Req'd in^2	Gvrn. As in^2	Actual As in^2	Phi*Mn k-ft	Status

One Way Shear

Units : k

Load Combination...	Vu @ -X	Vu @ +X	Vu:Max	Phi Vn	Vu / Phi*Vn	Status

Project Title: Mega Storage
Engineer: JB
Project ID: 520 NE Town Centre Drive Lee's Summit, MO 64064
Project Descr: Foundation Design

Wall Footing

Project File: Mega Storage_Shawnee.ec6

DESCRIPTION: Building (1, 2, 3) - Interior Footing

Code References

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

General Information

Material Properties

f'c : Concrete 28 day strength	=	3.50 ksi
fy : Rebar Yield	=	60.0 ksi
Ec : Concrete Elastic Modulus	=	3,122.0 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
AutoCalc Footing Weight as DL :		Yes

Soil Design Values

Allowable Soil Bearing	=	1.50 ksf
Increase Bearing By Footing Weight	=	No
Soil Passive Resistance (for Sliding)	=	250.0 pcf
Soil/Concrete Friction Coeff.	=	0.30

Increases based on footing Depth

Reference Depth below Surface	=	ft
Allow. Pressure Increase per foot of depth	=	ksf
when base footing is below	=	ft

Increases based on footing Width

Allow. Pressure Increase per foot of width	=	ksf
when footing is wider than	=	ft

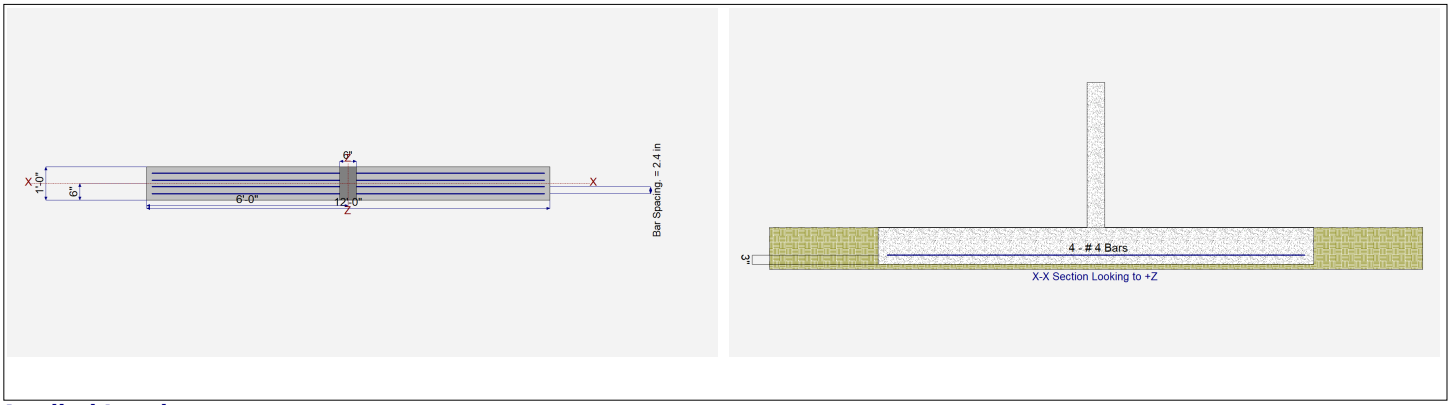
Adjusted Allowable Bearing Pressure = 0.0 ksf

Dimensions

Footing Width	=	12.0 ft	Footing Thickness	=	12.0 in		
Wall Thickness	=	6.0 in	Rebar Centerline to Edge of Concrete...				
Wall center offset from center of footing	=	0 in	at Bottom of footing	=	3.0 in		

Reinforcing

Bars along X-X Axis					
# of Bars in 12" Width	=	4			
Reinforcing Bar Size	=	#	4		



Applied Loads

		D	Lr	L	S	W	E	H	
P : Column Load	=	0.0770	0.130		0.130				k
OB : Overburden	=								ksf
V-x	=								k
M-zz	=								k-ft
Vx applied	=	in above top of footing							

Project Title: Mega Storage
Engineer: JB
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Project Descr: Foundation Design

Wall Footing

Project File: Mega Storage_Shawnee.ec6

DESCRIPTION: Building (1, 2, 3) - Interior Footing

DESIGN SUMMARY

Design OK

	Factor of Safety	Item	Applied	Capacity	Governing Load Combination
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	Uplift	0.0 k	0.0 k	No Uplift

	Utilization Ratio	Item	Applied	Capacity	Governing Load Combination
PASS	0.0	Soil Bearing	0.0 ksf	0.0 ksf	0.0
PASS	0.0	Z Flexure (+X)	0.0 k-ft	0.0 k-ft	No Moment
PASS	0.0	Z Flexure (-X)	0.0 k-ft	0.0 k-ft	No Moment
PASS	n/a	1-way Shear (+X)	0.0 psi	0.0 psi	n/a
PASS	0.0	1-way Shear (-X)	0.0 psi	0.0 psi	n/a

Detailed Results

Soil Bearing

Rotation Axis & Load Combination...	Gross Allowable	Xecc	Actual Soil Bearing Stress -X	Actual Soil Bearing Stress +X	Actual / Allowable Ratio

Overturning Stability

Units : k-ft

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

Sliding Stability

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

Footing Flexure

Flexure Axis & Load Combination	Mu k-ft	Which Side ?	Tension @ Bot. or Top ?	As Req'd in^2	Gvrn. As in^2	Actual As in^2	Phi*Mn k-ft	Status

One Way Shear

Units : k

Load Combination...	Vu @ -X	Vu @ +X	Vu:Max	Phi Vn	Vu / Phi*Vn	Status

Project Title: Mega Storage
Engineer: JB
Project ID: 520 NE Town Centre Drive Lee's Summit, MO 64064
Project Descr: Foundation Design

Wall Footing

Project File: Mega Storage_Shawnee.ec6

DESCRIPTION: Building (4, 5) - Exterior Footing

Code References

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

General Information

Material Properties

f'c : Concrete 28 day strength	=	3.50 ksi
fy : Rebar Yield	=	60.0 ksi
Ec : Concrete Elastic Modulus	=	3,122.0 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
AutoCalc Footing Weight as DL :		Yes

Soil Design Values

Allowable Soil Bearing	=	1.50 ksf
Increase Bearing By Footing Weight	=	No
Soil Passive Resistance (for Sliding)	=	250.0 pcf
Soil/Concrete Friction Coeff.	=	0.30

Increases based on footing Depth

Reference Depth below Surface	=	ft
Allow. Pressure Increase per foot of depth	=	ksf
when base footing is below	=	ft

Increases based on footing Width

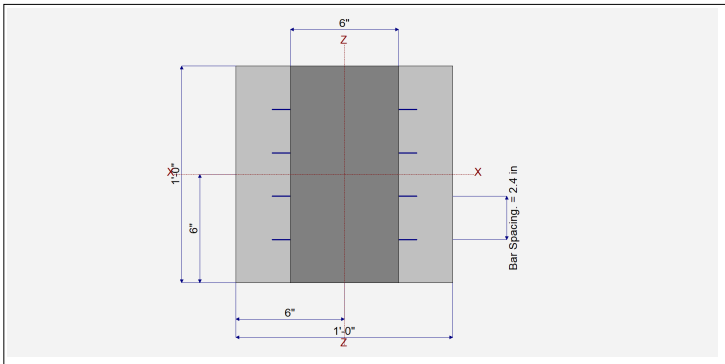
Allow. Pressure Increase per foot of width	=	ksf
when footing is wider than	=	ft

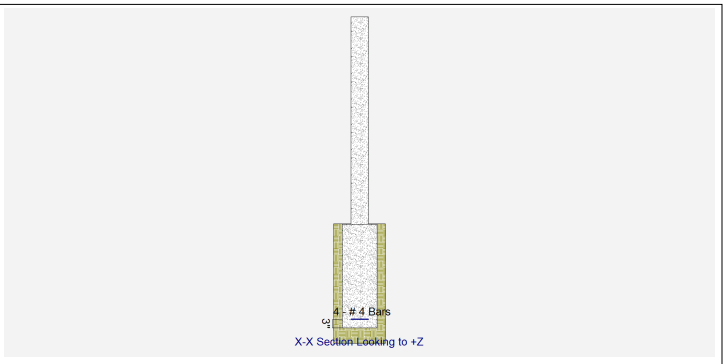
Adjusted Allowable Bearing Pressure = 0.0 ksf

Dimensions

Footing Width	=	1.0 ft	Footing Thickness	=	36.0 in	Bars along X-X Axis	
Wall Thickness	=	6.0 in	Rebar Centerline to Edge of Concrete...			# of Bars in 12" Width	= 4
Wall center offset from center of footing	=	0 in	at Bottom of footing	=	3.0 in	Reinforcing Bar Size	= # 4

Reinforcing





Applied Loads

		D	Lr	L	S	W	E	H	
P : Column Load	=	0.0690	0.0650		0.0650				k
OB : Overburden	=								ksf
V-x	=								k
M-zz	=								k-ft
Vx applied	=	in above top of footing							

Project Title: Mega Storage
Engineer: JB
Project ID: 520 NE Town Centre Drive Lee's Summit, MO 64064
Project Descr: Foundation Design

Wall Footing

Project File: Mega Storage_Shawnee.ec6

DESCRIPTION: Building (4, 5) - Exterior Footing

DESIGN SUMMARY

Design OK

	Factor of Safety	Item	Applied	Capacity	Governing Load Combination
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	Uplift	0.0 k	0.0 k	No Uplift

	Utilization Ratio	Item	Applied	Capacity	Governing Load Combination
PASS	0.0	Soil Bearing	0.0 ksf	0.0 ksf	0.0
PASS	0.0	Z Flexure (+X)	0.0 k-ft	0.0 k-ft	No Moment
PASS	0.0	Z Flexure (-X)	0.0 k-ft	0.0 k-ft	No Moment
PASS	n/a	1-way Shear (+X)	0.0 psi	0.0 psi	n/a
PASS	0.0	1-way Shear (-X)	0.0 psi	0.0 psi	n/a

Detailed Results

Soil Bearing

Rotation Axis & Load Combination...	Gross Allowable	Xecc	Actual Soil Bearing Stress -X	Actual Soil Bearing Stress +X	Actual / Allowable Ratio

Overturning Stability

Units : k-ft

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

Sliding Stability

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

Footing Flexure

Flexure Axis & Load Combination	Mu k-ft	Which Side ?	Tension @ Bot. or Top ?	As Req'd in^2	Gvrn. As in^2	Actual As in^2	Phi*Mn k-ft	Status

One Way Shear

Units : k

Load Combination...	Vu @ -X	Vu @ +X	Vu:Max	Phi Vn	Vu / Phi*Vn	Status

Project Title: Mega Storage
Engineer: JB
Project ID: 520 NE Town Centre Drive Lee's Summit, MO 64064
Project Descr: Foundation Design

Wall Footing

Project File: Mega Storage_Shawnee.ec6

LIC# : KW-06014638, Build:20.22.2.9 APEX ENGINEERS INC (c) ENERCALC INC 1983-2022

DESCRIPTION: Building (4, 5) - Interior Footing

Code References

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

General Information

Material Properties

f'c : Concrete 28 day strength	=	3.50 ksi
fy : Rebar Yield	=	60.0 ksi
Ec : Concrete Elastic Modulus	=	3,122.0 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
AutoCalc Footing Weight as DL :		Yes

Soil Design Values

Allowable Soil Bearing	=	1.50 ksf
Increase Bearing By Footing Weight	=	No
Soil Passive Resistance (for Sliding)	=	250.0 pcf
Soil/Concrete Friction Coeff.	=	0.30

Increases based on footing Depth

Reference Depth below Surface	=	ft
Allow. Pressure Increase per foot of depth	=	ksf
when base footing is below	=	ft

Increases based on footing Width

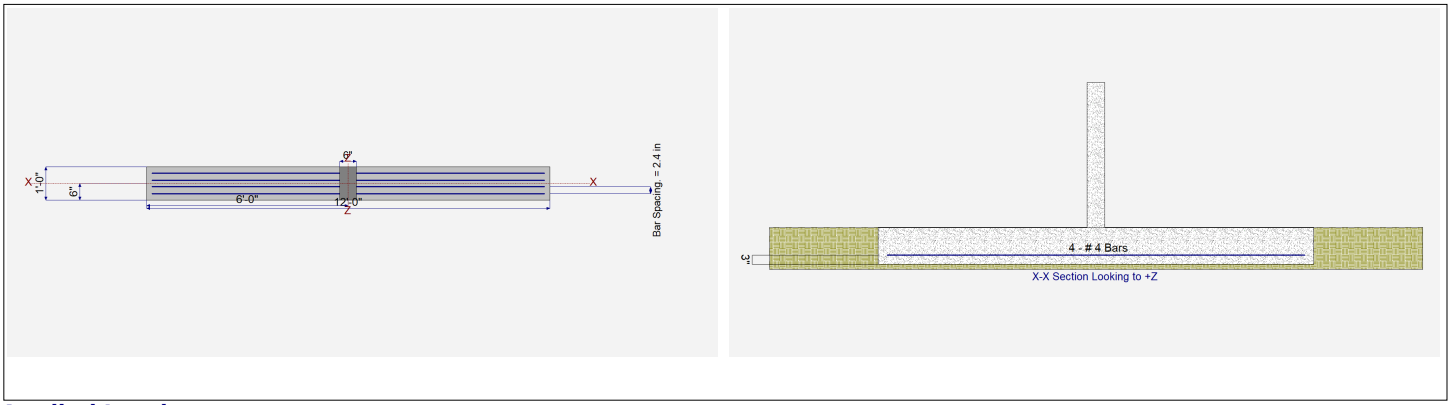
Allow. Pressure Increase per foot of width	=	ksf
when footing is wider than	=	ft

Adjusted Allowable Bearing Pressure = 0.0 ksf

Dimensions

Footing Width	=	12.0 ft	Footing Thickness	=	12.0 in	Bars along X-X Axis	
Wall Thickness	=	6.0 in	Rebar Centerline to Edge of Concrete...			# of Bars in 12" Width	= 4
Wall center offset from center of footing	=	0 in	at Bottom of footing	=	3.0 in	Reinforcing Bar Size	= # 4

Reinforcing



Applied Loads

		D	Lr	L	S	W	E	H	
P : Column Load	=	0.0730	0.130		0.130				k
OB : Overburden	=								ksf
V-x	=								k
M-zz	=								k-ft
Vx applied	=	in above top of footing							

Project Title: Mega Storage
Engineer: JB
Project ID: 520 NE Town Centre Drive Lee's Summit, MO 64064
Project Descr: Foundation Design

Wall Footing

Project File: Mega Storage_Shawnee.ec6

DESCRIPTION: Building (4, 5) - Interior Footing

DESIGN SUMMARY

Design OK

	Factor of Safety	Item	Applied	Capacity	Governing Load Combination
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	Uplift	0.0 k	0.0 k	No Uplift

	Utilization Ratio	Item	Applied	Capacity	Governing Load Combination
PASS	0.0	Soil Bearing	0.0 ksf	0.0 ksf	0.0
PASS	0.0	Z Flexure (+X)	0.0 k-ft	0.0 k-ft	No Moment
PASS	0.0	Z Flexure (-X)	0.0 k-ft	0.0 k-ft	No Moment
PASS	n/a	1-way Shear (+X)	0.0 psi	0.0 psi	n/a
PASS	0.0	1-way Shear (-X)	0.0 psi	0.0 psi	n/a

Detailed Results

Soil Bearing

Rotation Axis & Load Combination...	Gross Allowable	Xecc	Actual Soil Bearing Stress -X	Actual Soil Bearing Stress +X	Actual / Allowable Ratio

Overturning Stability

Units : k-ft

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

Sliding Stability

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

Footing Flexure

Flexure Axis & Load Combination	Mu k-ft	Which Side ?	Tension @ Bot. or Top ?	As Req'd in^2	Gvrn. As in^2	Actual As in^2	Phi*Mn k-ft	Status

One Way Shear

Units : k

Load Combination...	Vu @ -X	Vu @ +X	Vu:Max	Phi Vn	Vu / Phi*Vn	Status

Project Title: Mega Storage
Engineer: JB
Project ID: 520 NE Town Centre Drive Lee's Summit, MO 64064
Project Descr: Foundation Design

Wall Footing

Project File: Mega Storage_Shawnee.ec6

DESCRIPTION: Building (8, 13, 14, 15) - Exterior Footing

Code References

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

General Information

Material Properties

f'c : Concrete 28 day strength	=	3.50 ksi
fy : Rebar Yield	=	60.0 ksi
Ec : Concrete Elastic Modulus	=	3,122.0 ksi
Concrete Density	=	145.0 pcf
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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
AutoCalc Footing Weight as DL :		Yes

Soil Design Values

Allowable Soil Bearing	=	1.50 ksf
Increase Bearing By Footing Weight	=	No
Soil Passive Resistance (for Sliding)	=	250.0 pcf
Soil/Concrete Friction Coeff.	=	0.30

Increases based on footing Depth

Reference Depth below Surface	=	ft
Allow. Pressure Increase per foot of depth	=	ksf
when base footing is below	=	ft

Increases based on footing Width

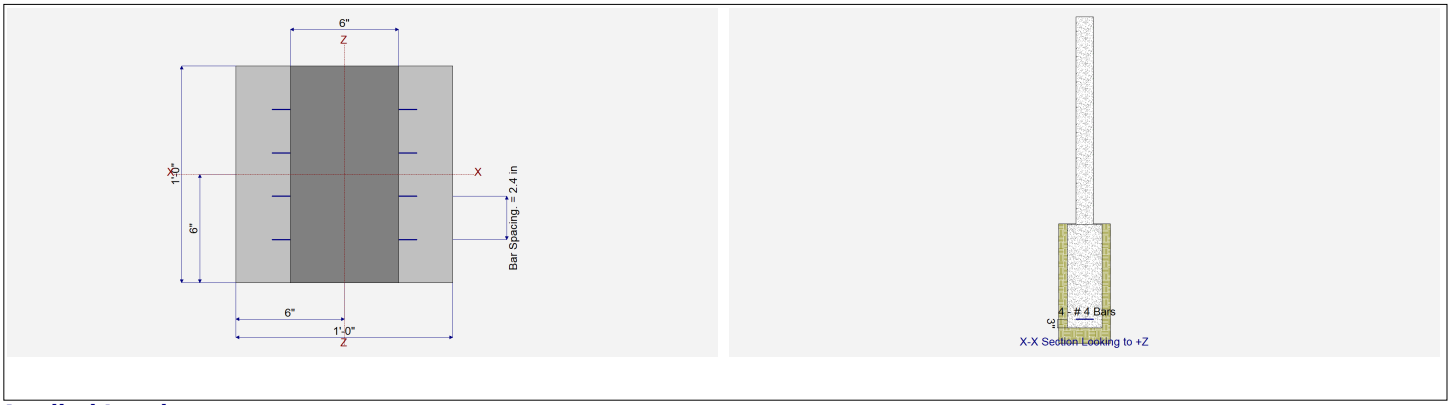
Allow. Pressure Increase per foot of width	=	ksf
when footing is wider than	=	ft

Adjusted Allowable Bearing Pressure = 0.0 ksf

Dimensions

Footing Width	=	1.0 ft	Footing Thickness	=	36.0 in	Bars along X-X Axis	
Wall Thickness	=	6.0 in	Rebar Centerline to Edge of Concrete...			# of Bars in 12" Width	= 4
Wall center offset from center of footing	=	0 in	at Bottom of footing	=	3.0 in	Reinforcing Bar Size	= # 4

Reinforcing



Applied Loads

		D	Lr	L	S	W	E	H	
P : Column Load	=	0.0750	0.0610		0.0610				k
OB : Overburden	=								ksf
V-x	=								k
M-zz	=								k-ft
Vx applied	=		in above top of footing						

Project Title: Mega Storage
Engineer: JB
Project ID: 520 NE Town Centre Drive Lee's Summit, MO 64064
Project Descr: Foundation Design

Wall Footing

Project File: Mega Storage_Shawnee.ec6

DESCRIPTION: Building (8, 13, 14, 15) - Exterior Footing

DESIGN SUMMARY

Design OK

	Factor of Safety	Item	Applied	Capacity	Governing Load Combination
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	Uplift	0.0 k	0.0 k	No Uplift

	Utilization Ratio	Item	Applied	Capacity	Governing Load Combination
PASS	0.0	Soil Bearing	0.0 ksf	0.0 ksf	0.0
PASS	0.0	Z Flexure (+X)	0.0 k-ft	0.0 k-ft	No Moment
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PASS	n/a	1-way Shear (+X)	0.0 psi	0.0 psi	n/a
PASS	0.0	1-way Shear (-X)	0.0 psi	0.0 psi	n/a

Detailed Results

Soil Bearing

Rotation Axis & Load Combination...	Gross Allowable	Xecc	Actual Soil Bearing Stress -X	Actual Soil Bearing Stress +X	Actual / Allowable Ratio

Overturning Stability

Units : k-ft

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

Sliding Stability

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

Footing Flexure

Flexure Axis & Load Combination	Mu k-ft	Which Side ?	Tension @ Bot. or Top ?	As Req'd in^2	Gvrn. As in^2	Actual As in^2	Phi*Mn k-ft	Status

One Way Shear

Units : k

Load Combination...	Vu @ -X	Vu @ +X	Vu:Max	Phi Vn	Vu / Phi*Vn	Status

Project Title: Mega Storage
Engineer: JB
Project ID: 520 NE Town Centre Drive Lee's Summit, MO 64064
Project Descr: Foundation Design

Wall Footing

Project File: Mega Storage_Shawnee.ec6

DESCRIPTION: Building (8, 13, 14, 15) - Interior Footing

Code References

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

General Information

Material Properties

f'c : Concrete 28 day strength	=	3.50 ksi
fy : Rebar Yield	=	60.0 ksi
Ec : Concrete Elastic Modulus	=	3,122.0 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
AutoCalc Footing Weight as DL :		Yes

Soil Design Values

Allowable Soil Bearing	=	1.50 ksf
Increase Bearing By Footing Weight	=	No
Soil Passive Resistance (for Sliding)	=	250.0 pcf
Soil/Concrete Friction Coeff.	=	0.30

Increases based on footing Depth

Reference Depth below Surface	=	ft
Allow. Pressure Increase per foot of depth	=	ksf
when base footing is below	=	ft

Increases based on footing Width

Allow. Pressure Increase per foot of width	=	ksf
when footing is wider than	=	ft

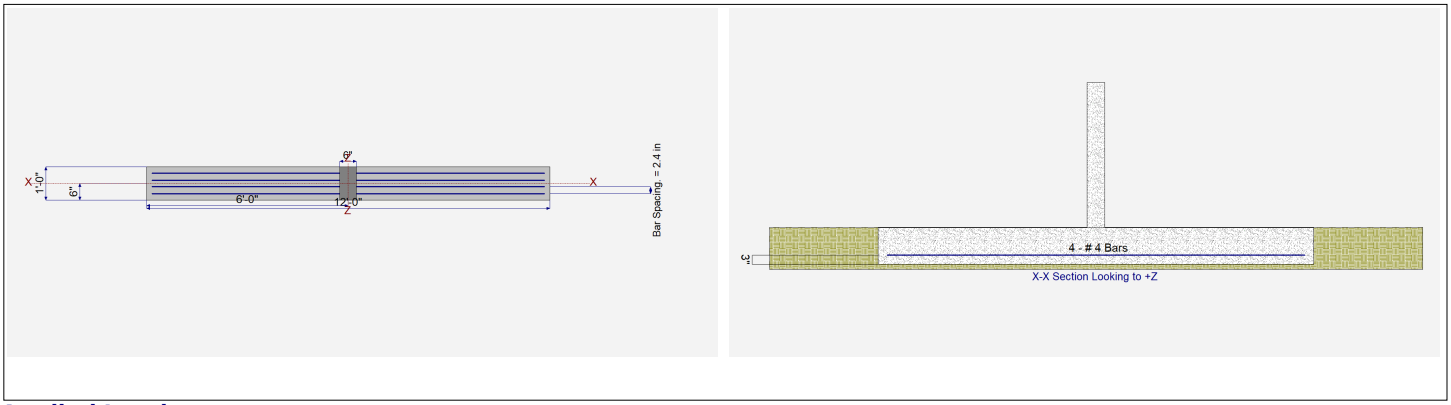
Adjusted Allowable Bearing Pressure = 0.0 ksf

Dimensions

Footing Width	=	12.0 ft	Footing Thickness	=	12.0 in		
Wall Thickness	=	6.0 in	Rebar Centerline to Edge of Concrete...				
Wall center offset from center of footing	=	0 in	at Bottom of footing	=	3.0 in		

Reinforcing

Bars along X-X Axis					
# of Bars in 12" Width	=	4			
Reinforcing Bar Size	=	#	4		



Applied Loads

		D	Lr	L	S	W	E	H	
P : Column Load	=	0.0840	0.1210		0.1210				k
OB : Overburden	=								ksf
V-x	=								k
M-zz	=								k-ft
Vx applied	=		in above top of footing						

Project Title: Mega Storage
Engineer: JB
Project ID: 520 NE Town Centre Drive Lee's Summit, MO 64064
Project Descr: Foundation Design

Wall Footing

Project File: Mega Storage_Shawnee.ec6

DESCRIPTION: Building (8, 13, 14, 15) - Interior Footing

DESIGN SUMMARY

Design OK

	Factor of Safety	Item	Applied	Capacity	Governing Load Combination
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	Uplift	0.0 k	0.0 k	No Uplift

	Utilization Ratio	Item	Applied	Capacity	Governing Load Combination
PASS	0.0	Soil Bearing	0.0 ksf	0.0 ksf	0.0
PASS	0.0	Z Flexure (+X)	0.0 k-ft	0.0 k-ft	No Moment
PASS	0.0	Z Flexure (-X)	0.0 k-ft	0.0 k-ft	No Moment
PASS	n/a	1-way Shear (+X)	0.0 psi	0.0 psi	n/a
PASS	0.0	1-way Shear (-X)	0.0 psi	0.0 psi	n/a

Detailed Results

Soil Bearing

Rotation Axis & Load Combination...	Gross Allowable	Xecc	Actual Soil Bearing Stress -X	Actual Soil Bearing Stress +X	Actual / Allowable Ratio

Overturning Stability

Units : k-ft

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

Sliding Stability

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

Footing Flexure

Flexure Axis & Load Combination	Mu k-ft	Which Side ?	Tension @ Bot. or Top ?	As Req'd in^2	Gvrn. As in^2	Actual As in^2	Phi*Mn k-ft	Status

One Way Shear

Units : k

Load Combination...	Vu @ -X	Vu @ +X	Vu:Max	Phi Vn	Vu / Phi*Vn	Status

Project Title: Mega Storage
Engineer: JB
Project ID: 520 NE Town Centre Drive Lee's Summit, MO 64064
Project Descr: Foundation Design

Wall Footing

Project File: Mega Storage_Shawnee.ec6

DESCRIPTION: Building (9, 10) - Exterior Footing

Code References

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

General Information

Material Properties

f'c : Concrete 28 day strength	=	3.50 ksi
fy : Rebar Yield	=	60.0 ksi
Ec : Concrete Elastic Modulus	=	3,122.0 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
AutoCalc Footing Weight as DL :		Yes

Soil Design Values

Allowable Soil Bearing	=	1.50 ksf
Increase Bearing By Footing Weight	=	No
Soil Passive Resistance (for Sliding)	=	250.0 pcf
Soil/Concrete Friction Coeff.	=	0.30

Increases based on footing Depth

Reference Depth below Surface	=	ft
Allow. Pressure Increase per foot of depth	=	ksf
when base footing is below	=	ft

Increases based on footing Width

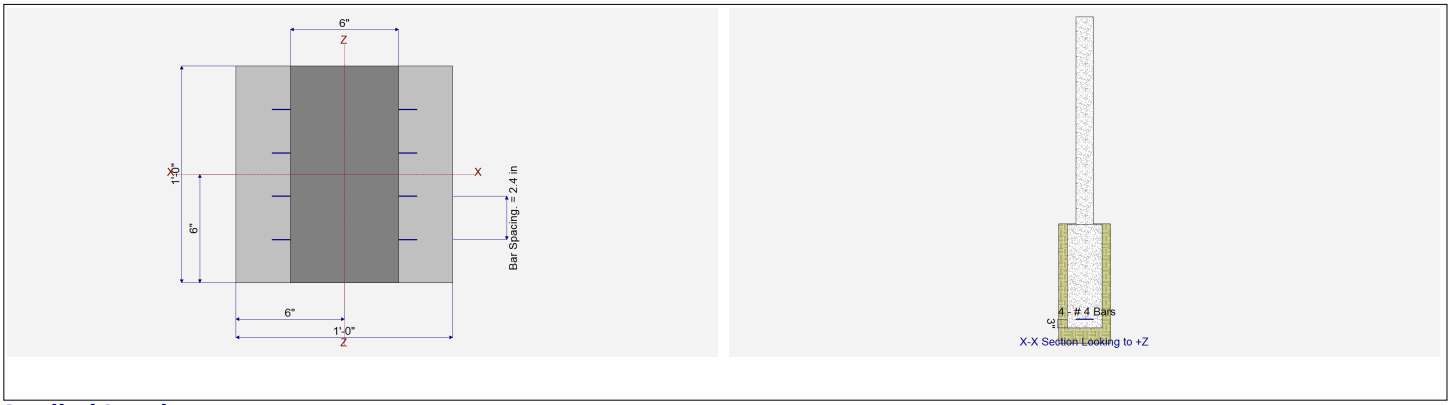
Allow. Pressure Increase per foot of width	=	ksf
when footing is wider than	=	ft

Adjusted Allowable Bearing Pressure = 0.0 ksf

Dimensions

Footing Width	=	1.0 ft	Footing Thickness	=	36.0 in	Bars along X-X Axis	
Wall Thickness	=	6.0 in	Rebar Centerline to Edge of Concrete...			# of Bars in 12" Width	= 4
Wall center offset from center of footing	=	0 in	at Bottom of footing	=	3.0 in	Reinforcing Bar Size	= # 4

Reinforcing



Applied Loads

		D	Lr	L	S	W	E	H	
P : Column Load	=	0.0770	0.0620		0.0620				k
OB : Overburden	=								ksf
V-x	=								k
M-zz	=								k-ft
Vx applied	=		in above top of footing						

Project Title: Mega Storage
Engineer: JB
Project ID: 520 NE Town Centre Drive Lee's Summit, MO 64064
Project Descr: Foundation Design

Wall Footing

Project File: Mega Storage_Shawnee.ec6

DESCRIPTION: Building (9, 10) - Exterior Footing

DESIGN SUMMARY

Design OK

	Factor of Safety	Item	Applied	Capacity	Governing Load Combination
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	Uplift	0.0 k	0.0 k	No Uplift

	Utilization Ratio	Item	Applied	Capacity	Governing Load Combination
PASS	0.0	Soil Bearing	0.0 ksf	0.0 ksf	0.0
PASS	0.0	Z Flexure (+X)	0.0 k-ft	0.0 k-ft	No Moment
PASS	0.0	Z Flexure (-X)	0.0 k-ft	0.0 k-ft	No Moment
PASS	n/a	1-way Shear (+X)	0.0 psi	0.0 psi	n/a
PASS	0.0	1-way Shear (-X)	0.0 psi	0.0 psi	n/a

Detailed Results

Soil Bearing

Rotation Axis & Load Combination...	Gross Allowable	Xecc	Actual Soil Bearing Stress -X	Actual Soil Bearing Stress +X	Actual / Allowable Ratio

Overturning Stability

Units : k-ft

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

Sliding Stability

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

Footing Flexure

Flexure Axis & Load Combination	Mu k-ft	Which Side ?	Tension @ Bot. or Top ?	As Req'd in^2	Gvrn. As in^2	Actual As in^2	Phi*Mn k-ft	Status

One Way Shear

Units : k

Load Combination...	Vu @ -X	Vu @ +X	Vu:Max	Phi Vn	Vu / Phi*Vn	Status

Project Title: Mega Storage
Engineer: JB
Project ID: 520 NE Town Centre Drive Lee's Summit, MO 64064
Project Descr: Foundation Design

Wall Footing

Project File: Mega Storage_Shawnee.ec6

DESCRIPTION: Building (9, 10) - Interior Footing

Code References

Calculations per ACI 318-14, IBC 2018, CBC 2019, ASCE 7-16
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AutoCalc Footing Weight as DL :		Yes

Soil Design Values

Allowable Soil Bearing	=	1.50 ksf
Increase Bearing By Footing Weight	=	No
Soil Passive Resistance (for Sliding)	=	250.0 pcf
Soil/Concrete Friction Coeff.	=	0.30

Increases based on footing Depth

Reference Depth below Surface	=	ft
Allow. Pressure Increase per foot of depth	=	ksf
when base footing is below	=	ft

Increases based on footing Width

Allow. Pressure Increase per foot of width	=	ksf
when footing is wider than	=	ft

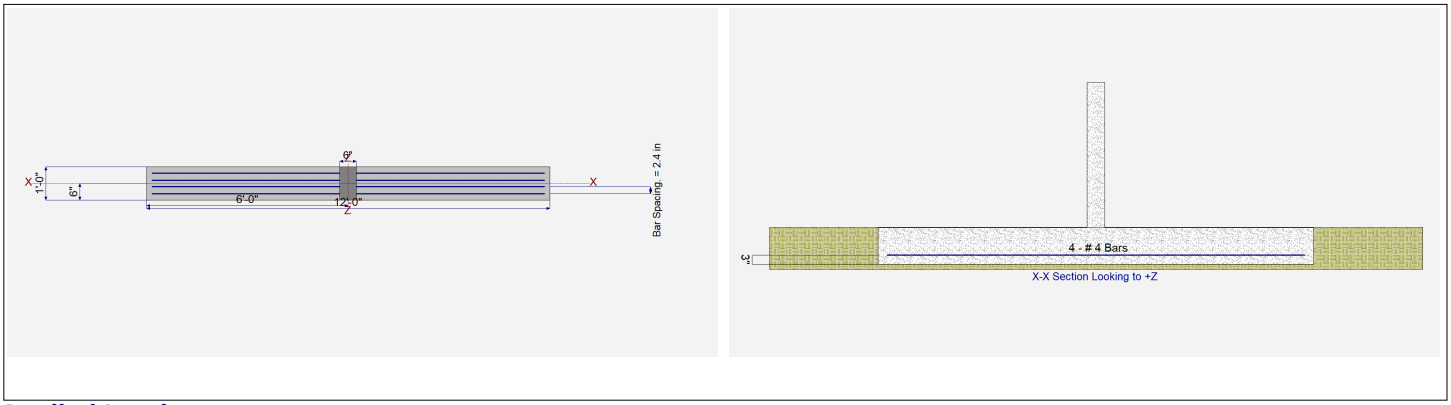
Adjusted Allowable Bearing Pressure = 0.0 ksf

Dimensions

Footing Width	=	12.0 ft	Footing Thickness	=	12.0 in		
Wall Thickness	=	6.0 in	Rebar Centerline to Edge of Concrete...				
Wall center offset from center of footing	=	0 in	at Bottom of footing	=	3.0 in		

Reinforcing

Bars along X-X Axis					
# of Bars in 12" Width	=	4			
Reinforcing Bar Size	=	#	4		



Applied Loads

		D	Lr	L	S	W	E	H	
P : Column Load	=	0.0890	0.1240		0.1240				k
OB : Overburden	=								ksf
V-x	=								k
M-zz	=								k-ft
Vx applied	=		in above top of footing						

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DESCRIPTION: Building (9, 10) - Interior Footing

DESIGN SUMMARY

Design OK

	Factor of Safety	Item	Applied	Capacity	Governing Load Combination
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	Uplift	0.0 k	0.0 k	No Uplift

	Utilization Ratio	Item	Applied	Capacity	Governing Load Combination
PASS	0.0	Soil Bearing	0.0 ksf	0.0 ksf	0.0
PASS	0.0	Z Flexure (+X)	0.0 k-ft	0.0 k-ft	No Moment
PASS	0.0	Z Flexure (-X)	0.0 k-ft	0.0 k-ft	No Moment
PASS	n/a	1-way Shear (+X)	0.0 psi	0.0 psi	n/a
PASS	0.0	1-way Shear (-X)	0.0 psi	0.0 psi	n/a

Detailed Results

Soil Bearing

Rotation Axis & Load Combination...	Gross Allowable	Xecc	Actual Soil Bearing Stress -X	Actual Soil Bearing Stress +X	Actual / Allowable Ratio

Overturning Stability

Units : k-ft

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

Sliding Stability

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

Footing Flexure

Flexure Axis & Load Combination	Mu k-ft	Which Side ?	Tension @ Bot. or Top ?	As Req'd in^2	Gvrn. As in^2	Actual As in^2	Phi*Mn k-ft	Status

One Way Shear

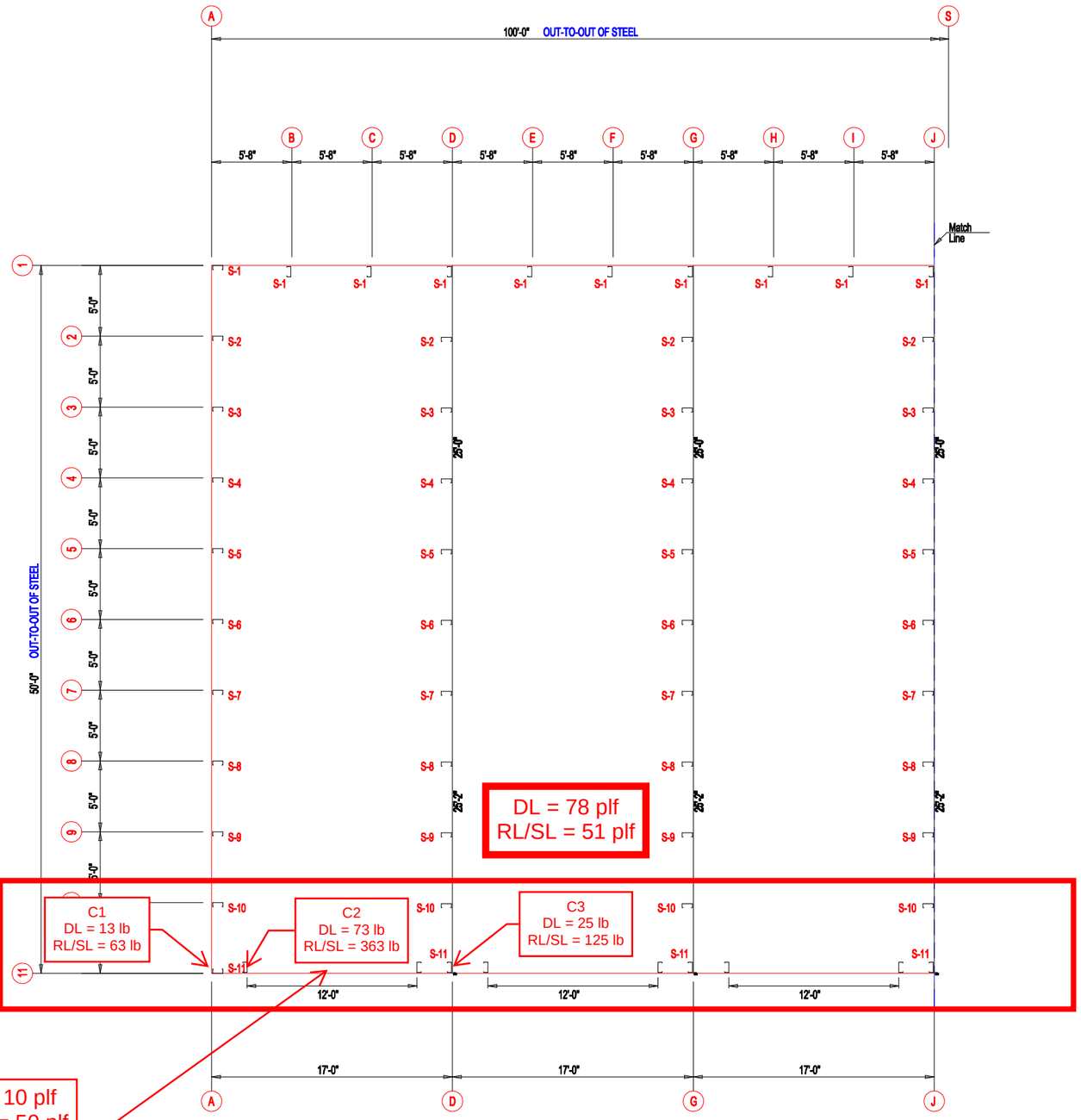
Units : k

Load Combination...	Vu @ -X	Vu @ +X	Vu:Max	Phi Vn	Vu / Phi*Vn	Status

Miscellaneous

BUILDINGS 1, 2 & 3

MEMBER TABLE		
MARK	PART	LENGTH
S-1	6X2C16	14'-9 1/2"
S-2	6X2C16	15'-0"
S-3	6X2C16	15'-2 1/2"
S-4	6X2C16	15'-5"
S-5	6X2C16	15'-7 1/2"
S-6	6X2C16	15'-10"
S-7	6X2C16	16'-0 1/2"
S-8	6X2C16	16'-3"
S-9	6X2C16	16'-5 1/2"
S-10	6X2C16	16'-8"
S-11	6X2C16	17'-0"



FLOOR PLAN

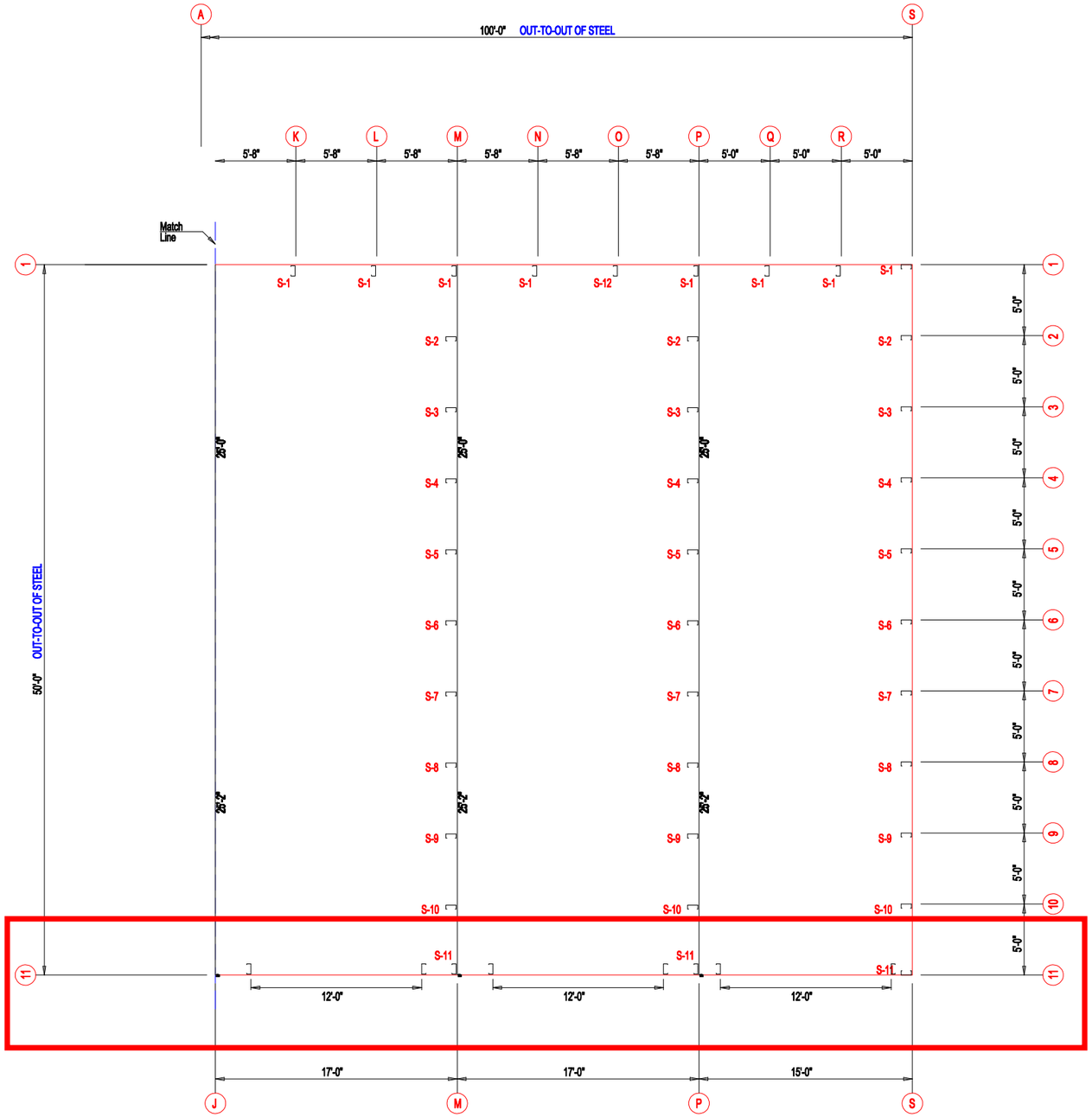
DL: 2.5 ft x 4 psf = 10 plf
RL: 2.5 ft x 20 psf = 50 plf
SL: 2.5 ft x 20 psf = 50 plf

DLW: 16.88 ft x 4 psf = 68 plf

SOUTH FOOTING

PELLA BUILDING SYSTEMS
906 West 9th Street Pella, IA 50219
(800) 225-0481 www.pellabuildings.com

DESCRIPTION: FLOOR PLAN						
CUSTOMER: DLR					PROJECT: MEGA STORAGE LEES SUMMIT	
LOCATION: LEES SUMMIT MO						
DRN. BY	CK'D BY	DATE	SCALE	REV.	QUOTATION NO.	SHEET NO.
JB	DES	1/17/22	N.T.S.	00	MEGASTORAGELEESSUMMITBUILDING#1#3	2 OF 24



FLOOR PLAN

MEMBER TABLE

MARK	PART	LENGTH
S-1	6X2C16	14'-9 1/2"
S-2	6X2C16	15'-0"
S-3	6X2C16	15'-2 1/2"
S-4	6X2C16	15'-5"
S-5	6X2C16	15'-7 1/2"
S-6	6X2C16	15'-10"
S-7	6X2C16	16'-0 1/2"
S-8	6X2C16	16'-3"
S-9	6X2C16	16'-5 1/2"
S-10	6X2C16	16'-8"
S-11	6X2C16	17'-0"
S-12	6X25C14	14'-9 1/2"

SOUTH FOOTING

PELLA BUILDING SYSTEMS
906 West 9th Street Pella, IA 50219
(800) 225-0481 www.pellabuildings.com

DESCRIPTION: FLOOR PLAN

CUSTOMER: DLR

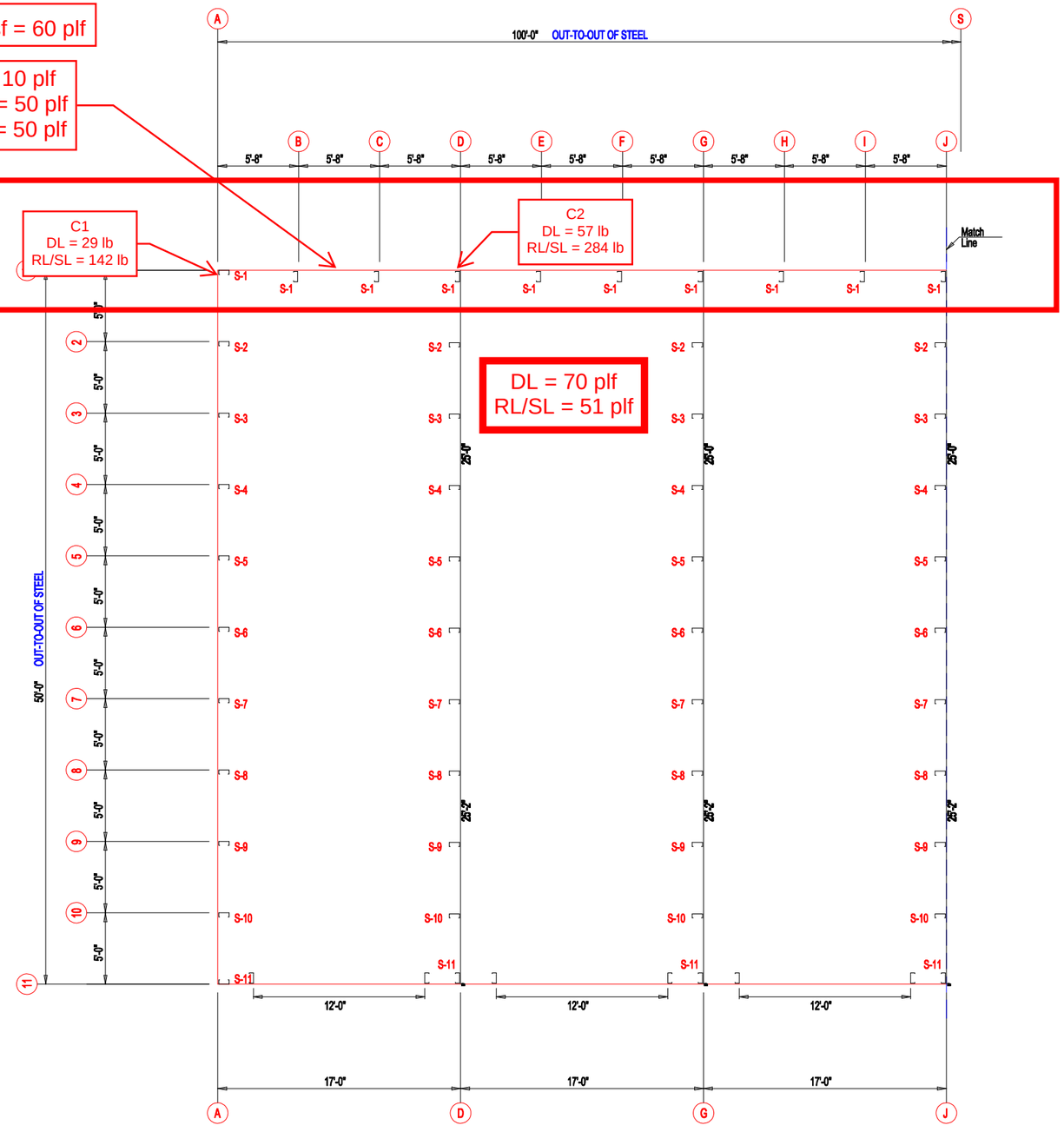
PROJECT: MEGA STORAGE LEES SUMMIT

LOCATION: LEES SUMMIT MO

DRN. BY	CK'D BY	DATE	SCALE	REV.	QUOTATION NO.	SHEET NO.
JB	DES	1/17/22	N.T.S.	00	MEGASTORAGELEESSUMMITBUILDING#1#3	24 OF 24

DLW: 14.79 ft x 4 psf = 60 plf

DL: 2.5 ft x 4 psf = 10 plf
RL: 2.5 ft x 20 psf = 50 plf
SL: 2.5 ft x 20 psf = 50 plf



FLOOR PLAN

MEMBER TABLE

MARK	PART	LENGTH
S-1	6X2C16	14'-9 1/2"
S-2	6X2C16	15'-0"
S-3	6X2C16	15'-2 1/2"
S-4	6X2C16	15'-5"
S-5	6X2C16	15'-7 1/2"
S-6	6X2C16	15'-10"
S-7	6X2C16	16'-0 1/2"
S-8	6X2C16	16'-3"
S-9	6X2C16	16'-5 1/2"
S-10	6X2C16	16'-8"
S-11	6X2C16	17'-0"

NORTH FOOTING

PELLA BUILDING SYSTEMS
906 West 9th Street Pella, IA 50219
(800) 225-0481 www.pellabuildings.com

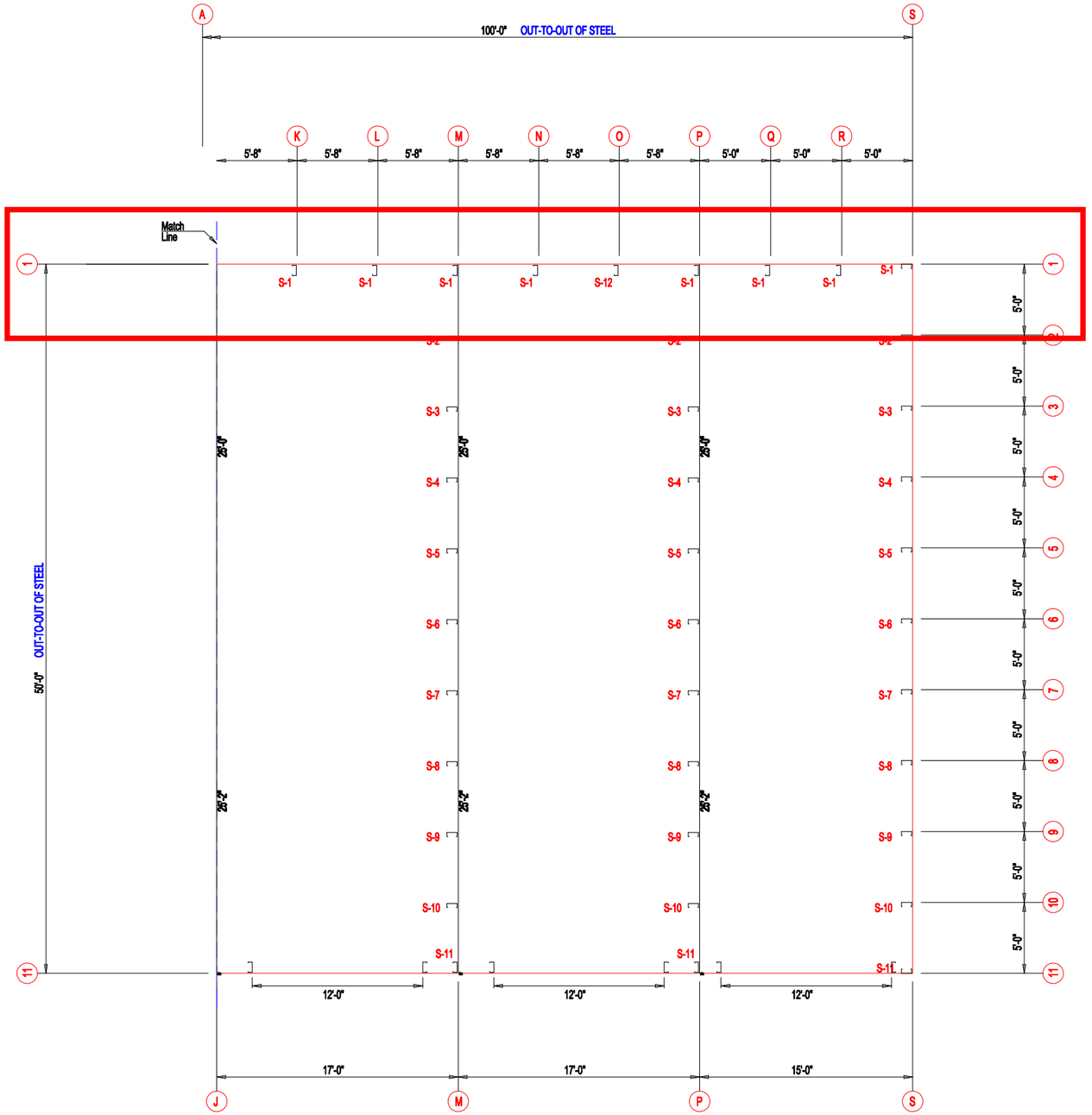
DESCRIPTION: FLOOR PLAN

CUSTOMER: DLR

PROJECT: MEGA STORAGE LEES SUMMIT

LOCATION: LEES SUMMIT MO

DRN. BY	CK'D BY	DATE	SCALE	REV.	QUOTATION NO.	SHEET NO.
JB	DES	1/17/22	N.T.S.	00	MEGASTORAGELEESSUMMITBUILDING#1#3	2 OF 24



FLOOR PLAN

MEMBER TABLE

MARK	PART	LENGTH
S-1	6X2C16	14'-9 1/2"
S-2	6X2C16	15'-0"
S-3	6X2C16	15'-2 1/2"
S-4	6X2C16	15'-5"
S-5	6X2C16	15'-7 1/2"
S-6	6X2C16	15'-10"
S-7	6X2C16	16'-0 1/2"
S-8	6X2C16	16'-3"
S-9	6X2C16	16'-5 1/2"
S-10	6X2C16	16'-8"
S-11	6X2C16	17'-0"
S-12	6X25C14	14'-9 1/2"

NORTH

FOOTING

PELLA BUILDING SYSTEMS
906 West 9th Street Pella, IA 50219
(800) 225-0481 www.pellabuildings.com

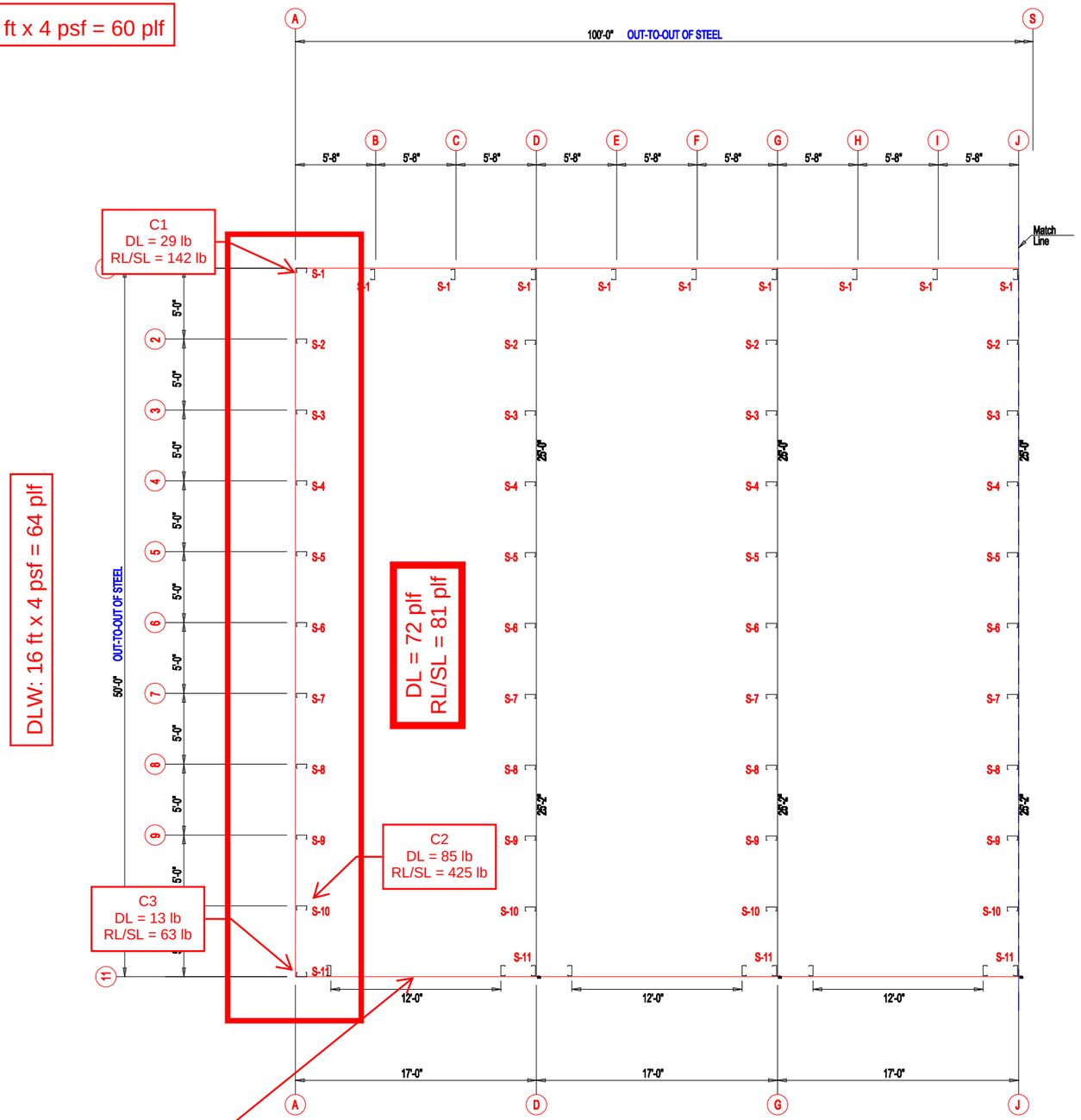
DESCRIPTION: FLOOR PLAN

CUSTOMER: DLR | PROJECT: MEGA STORAGE LEES SUMMIT

LOCATION: LEES SUMMIT MO

DRN. BY	CK'D BY	DATE	SCALE	REV.	QUOTATION NO.	SHEET NO.
JB	DES	1/17/22	N.T.S.	00	MEGASTORAGELEESSUMMITBUILDING#1#3	24 OF 24

DLW: 14.79 ft x 4 psf = 60 plf



FLOOR PLAN

DL: 2.5 ft x 4 psf = 10 plf
RL: 2.5 ft x 20 psf = 50 plf
SL: 2.5 ft x 20 psf = 50 plf

MEMBER TABLE

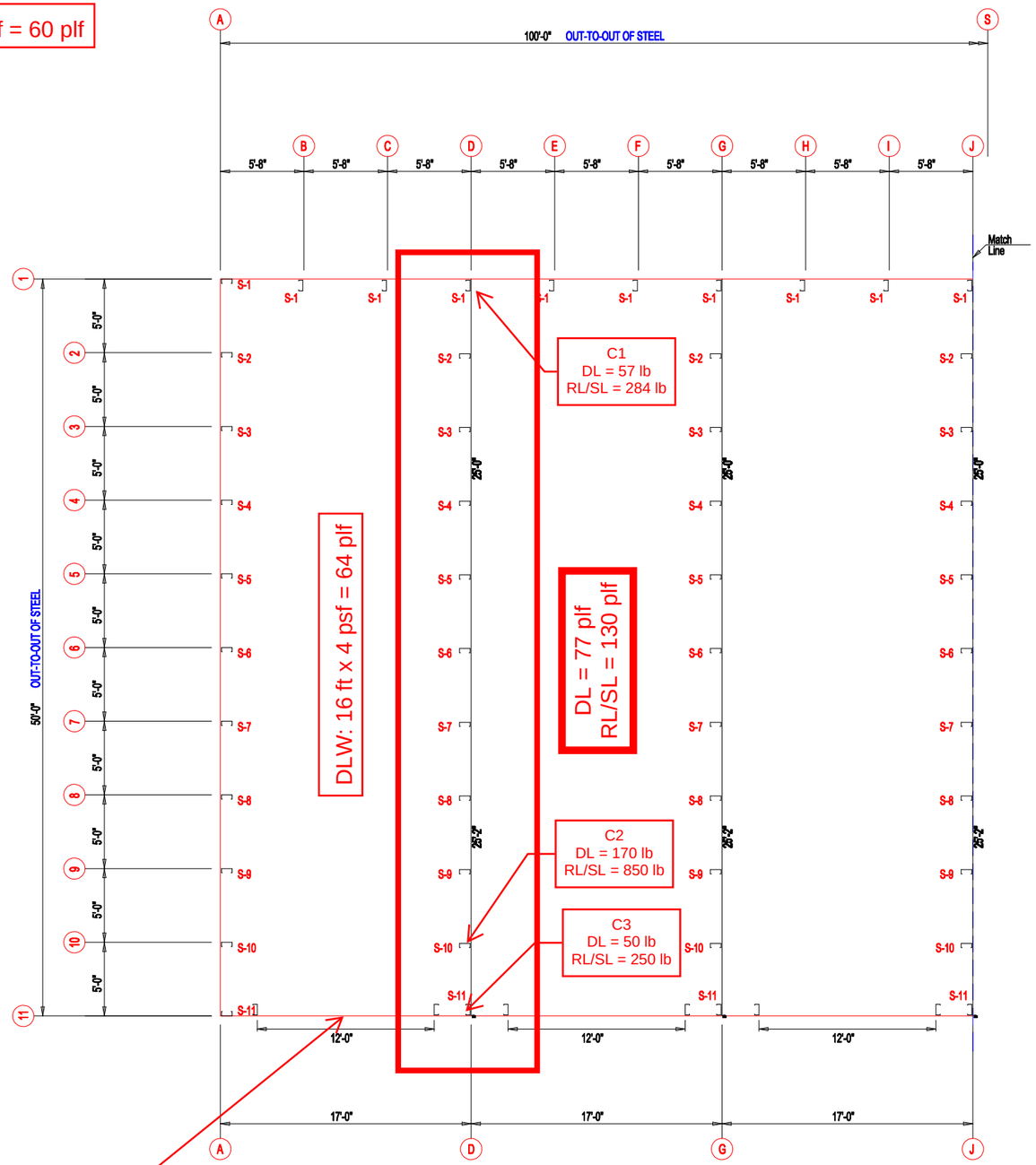
MARK	PART	LENGTH
S-1	6X2C16	14'-9 1/2"
S-2	6X2C16	15'-0"
S-3	6X2C16	15'-2 1/2"
S-4	6X2C16	15'-5"
S-5	6X2C16	15'-7 1/2"
S-6	6X2C16	15'-10"
S-7	6X2C16	16'-0 1/2"
S-8	6X2C16	16'-3"
S-9	6X2C16	16'-5 1/2"
S-10	6X2C16	16'-8"
S-11	6X2C16	17'-0"

WEST FOOTING

PELLA BUILDING SYSTEMS
906 West 9th Street Pella, IA 50219
(800) 225-0481 www.pellabuildings.com

DESCRIPTION: FLOOR PLAN						
CUSTOMER: DLR					PROJECT: MEGA STORAGE LEES SUMMIT	
LOCATION: LEES SUMMIT MO						
DRN. BY	CK'D BY	DATE	SCALE	REV.	QUOTATION NO.	SHEET NO.
JB	DES	1/17/22	N.T.S.	00	MEGASTORAGELEESSUMMITBUILDING#1#3	24 OF 24

DLW: 14.79 ft x 4 psf = 60 plf



FLOOR PLAN

DL: 2.5 ft x 4 psf = 10 plf
RL: 2.5 ft x 20 psf = 50 plf
SL: 2.5 ft x 20 psf = 50 plf

MEMBER TABLE

MARK	PART	LENGTH
S-1	6X2C16	14'-9 1/2"
S-2	6X2C16	15'-0"
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S-7	6X2C16	16'-0 1/2"
S-8	6X2C16	16'-3"
S-9	6X2C16	16'-5 1/2"
S-10	6X2C16	16'-8"
S-11	6X2C16	17'-0"

INTERIOR FOOTING

PELLA BUILDING SYSTEMS
906 West 9th Street Pella, IA 50219
(800) 225-0481 www.pellabuildings.com

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CUSTOMER: DLR					PROJECT: MEGA STORAGE LEES SUMMIT	
LOCATION: LEES SUMMIT MO						
DRN. BY	CK'D BY	DATE	SCALE	REV.	QUOTATION NO.	SHEET NO.
JB	DES	1/17/22	N.T.S.	00	MEGASTORAGELEESSUMMITBUILDING#1#3	24 OF 24

Buildings 1, 2 & 3

SOUTH FOOTING LOAD (EXT)			
LENGTH (FT)	100		
COLUMN	C1	C2	C3
# OF COLUMNS	2	12	5
DL (LB)	13	73	25
RL (LB)	63	363	125
SL (LB)	63	363	125
DL SUM (LB)	26	876	125
RL SUM (LB)	126	4356	625
SL SUM (LB)	126	4356	625
DL WALL (PLF)	68		
DL (PLF)	78		
RL (PLF)	51		
SL (PLF)	51		

NORTH FOOTING LOAD (EXT)			
LENGTH (FT)	100		
COLUMN	C1	C2	
# OF COLUMNS	2	17	
DL (LB)	29	57	
RL (LB)	142	284	
SL (LB)	142	284	
DL SUM (LB)	58	969	
RL SUM (LB)	284	4828	
SL SUM (LB)	284	4828	
DL WALL (PLF)	60		
DL (PLF)	70		
RL (PLF)	51		
SL (PLF)	51		

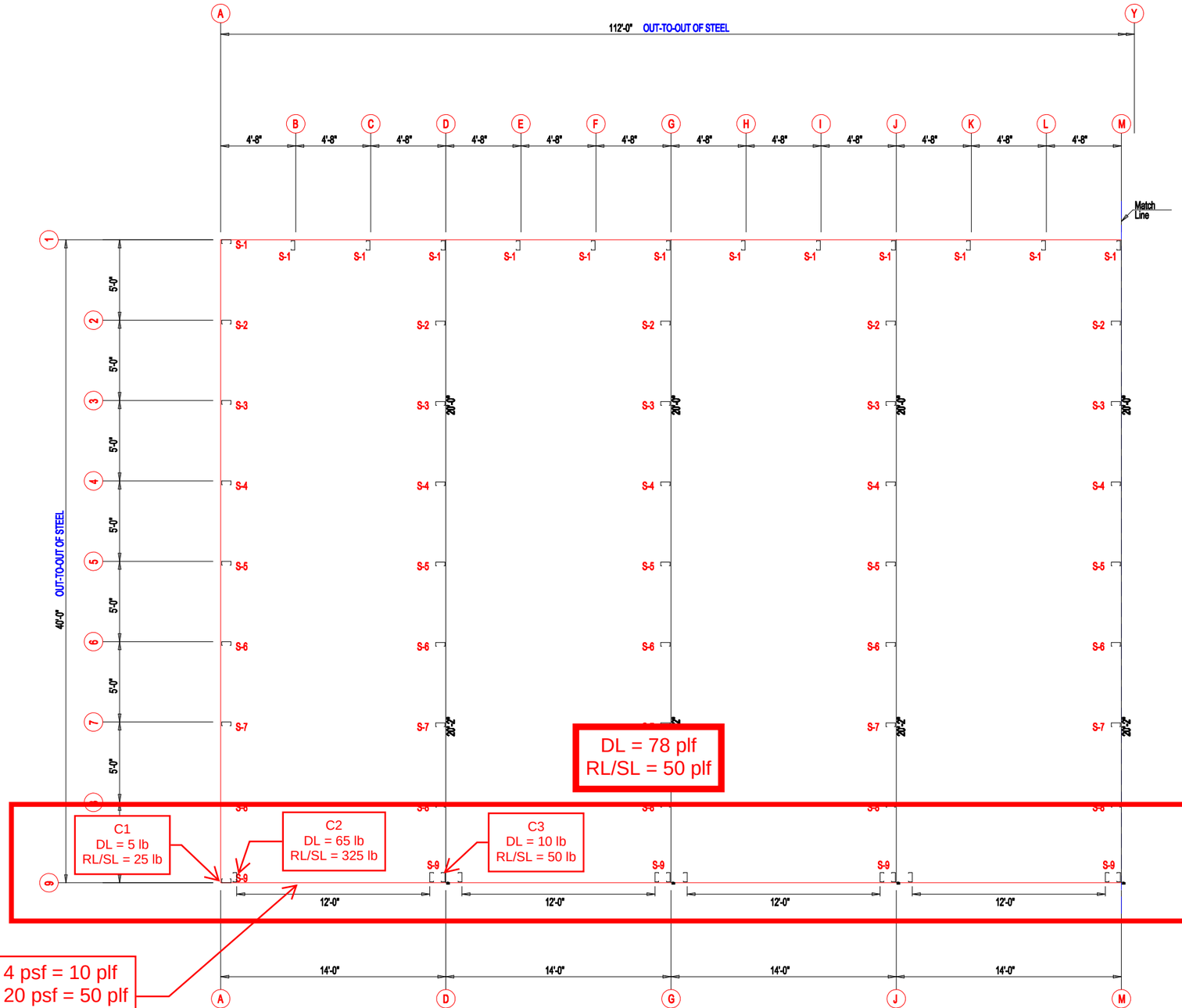
Buildings 1, 2 & 3

WEST FOOTING LOAD (EXT)			
LENGTH (FT)	50		
COLUMN	C1	C2	C3
# OF COLUMNS	1	9	1
DL (LB)	29	85	13
RL (LB)	142	425	63
SL (LB)	142	425	63
DL SUM (LB)	29	765	13
RL SUM (LB)	142	3825	63
SL SUM (LB)	142	3825	63
DL WALL (PLF)	64		
DL (PLF)	72		
RL (PLF)	81		
SL (PLF)	81		

INTERIOR FOOTING LOAD (INT)			
LENGTH (FT)	50		
COLUMN	C1	C2	C3
# OF COLUMNS	1	7	1
DL (LB)	57	170	50
RL (LB)	284	850	250
SL (LB)	284	850	250
DL SUM (LB)	57	1190	50
RL SUM (LB)	284	5950	250
SL SUM (LB)	284	5950	250
DL WALL (PLF)	64		
DL (PLF)	77		
RL (PLF)	130		
SL (PLF)	130		

BUILDINGS 4 & 5

MEMBER TABLE		
MARK	PART	LENGTH
S-1	6X2C16	14'-9 1/2"
S-2	6X2C16	15'-0"
S-3	6X2C16	15'-2 1/2"
S-4	6X2C16	15'-5"
S-5	6X2C16	15'-7 1/2"
S-6	6X2C16	15'-10"
S-7	6X2C16	16'-0 1/2"
S-8	6X2C16	16'-3"
S-9	6X2C16	16'-7"



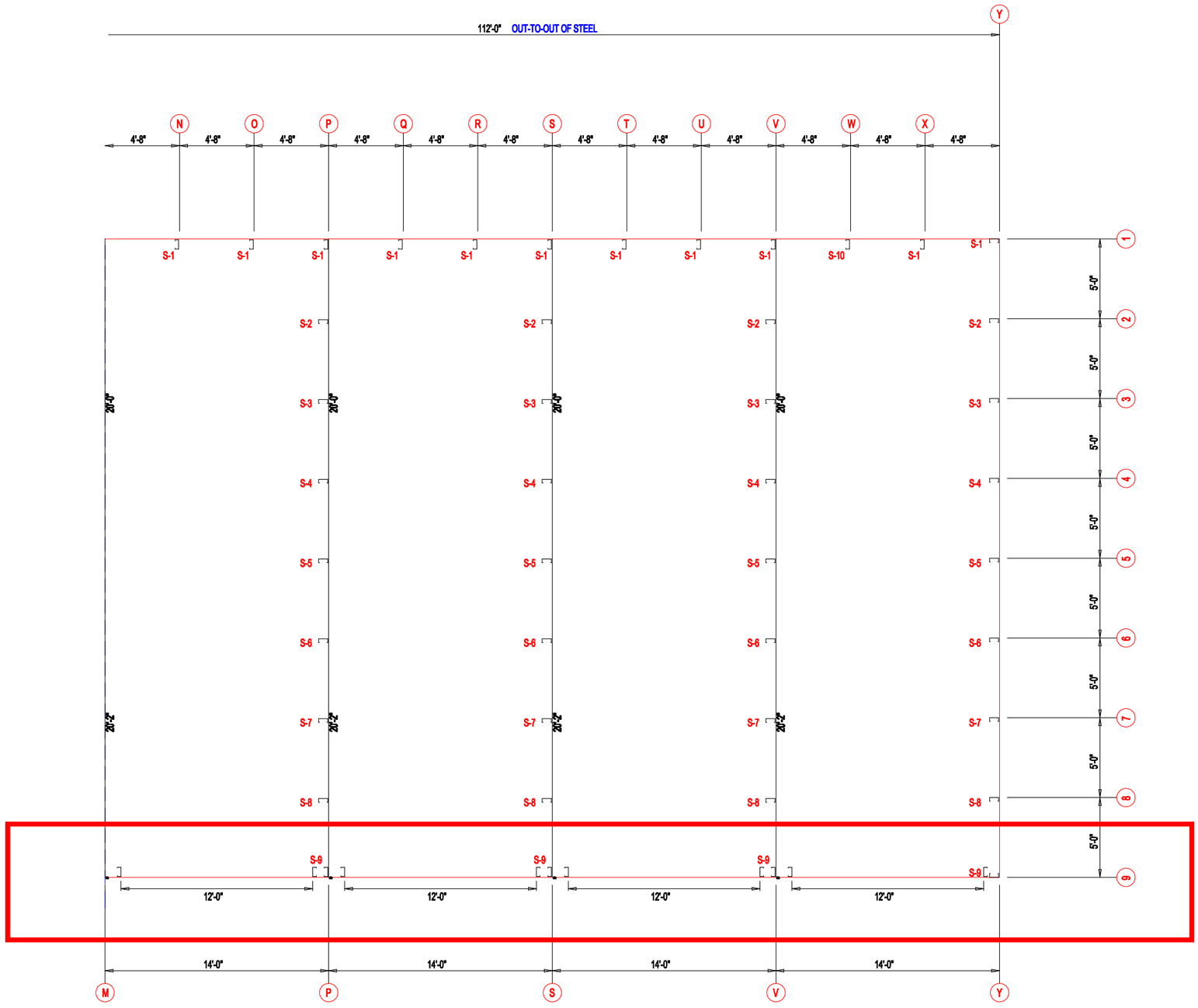
FLOOR PLAN

SOUTH FOOTING

PELLA BUILDING SYSTEMS
906 West 9th Street Pella, IA 50219
(800) 225-0481 www.pellabuildings.com

DESCRIPTION: FLOOR PLAN						
CUSTOMER: DLR					PROJECT: MEGA STORAGE LEE SUMMIT 4,5	
LOCATION: LEES SUMMIT MO						
DRN. BY	CK'D BY	DATE	SCALE	REV.	QUOTATION NO.	SHEET NO.
JB	DES	1/17/22	N.T.S.	00	MEGASTORAGELEESUMMITBUILDING#4#5	2 OF 24

MEMBER TABLE		
MARK	PART	LENGTH
S-1	6X2C16	14'-9 1/2"
S-2	6X2C16	15'-0"
S-3	6X2C16	15'-2 1/2"
S-4	6X2C16	15'-5"
S-5	6X2C16	15'-7 1/2"
S-6	6X2C16	15'-10"
S-7	6X2C16	16'-0 1/2"
S-8	6X2C16	16'-3"
S-9	6X2C16	16'-7"
S-10	6X25C14	14'-9 1/2"



FLOOR PLAN

SOUTH FOOTING

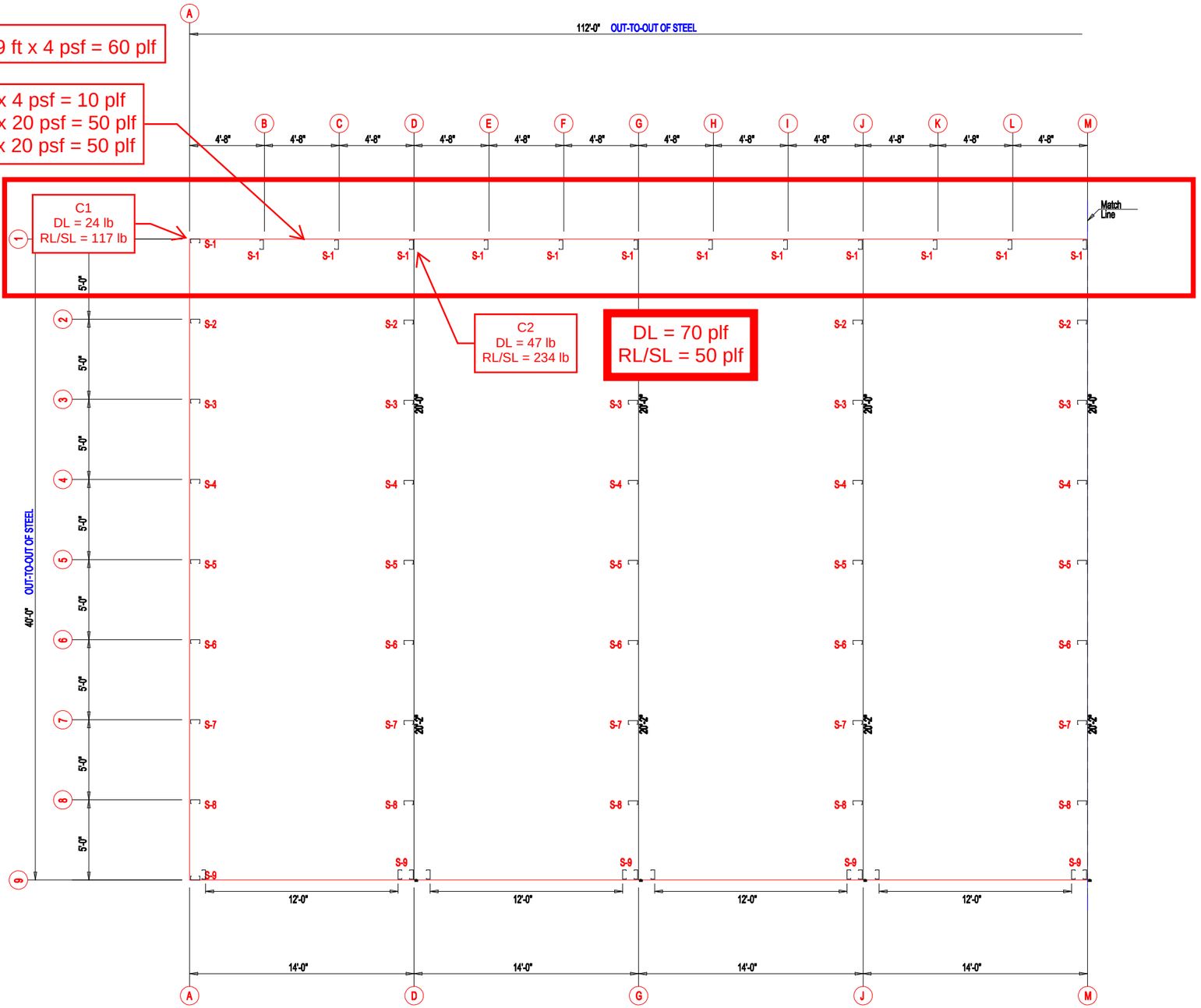
PELLA BUILDING SYSTEMS

906 West 9th Street Pella, IA 50219
(800) 225-0481 www.pellabuildings.com

DESCRIPTION: FLOOR PLAN						
CUSTOMER: DLR					PROJECT: MEGA STORAGE LEE SUMMIT 4,5	
LOCATION: LEES SUMMIT MO						
DRN. BY	CK'D BY	DATE	SCALE	REV.	QUOTATION NO.	SHEET NO.
JB	DES	1/17/22	N.T.S.	00	MEGASTORAGELEESUMMITBUILDING#4#5	2 OF 24

DLW: 14.79 ft x 4 psf = 60 plf

DL: 2.5 ft x 4 psf = 10 plf
RL: 2.5 ft x 20 psf = 50 plf
SL: 2.5 ft x 20 psf = 50 plf



FLOOR PLAN

MEMBER TABLE

MARK	PART	LENGTH
S-1	6X2C16	14'-9 1/2"
S-2	6X2C16	15'-0"
S-3	6X2C16	15'-2 1/2"
S-4	6X2C16	15'-5"
S-5	6X2C16	15'-7 1/2"
S-6	6X2C16	15'-10"
S-7	6X2C16	16'-0 1/2"
S-8	6X2C16	16'-3"
S-9	6X2C16	16'-7"

NORTH
FOOTING

PELLA
BUILDING SYSTEMS
906 West 9th Street Pella, IA 50219
(800) 225-0481 www.pellabuildings.com

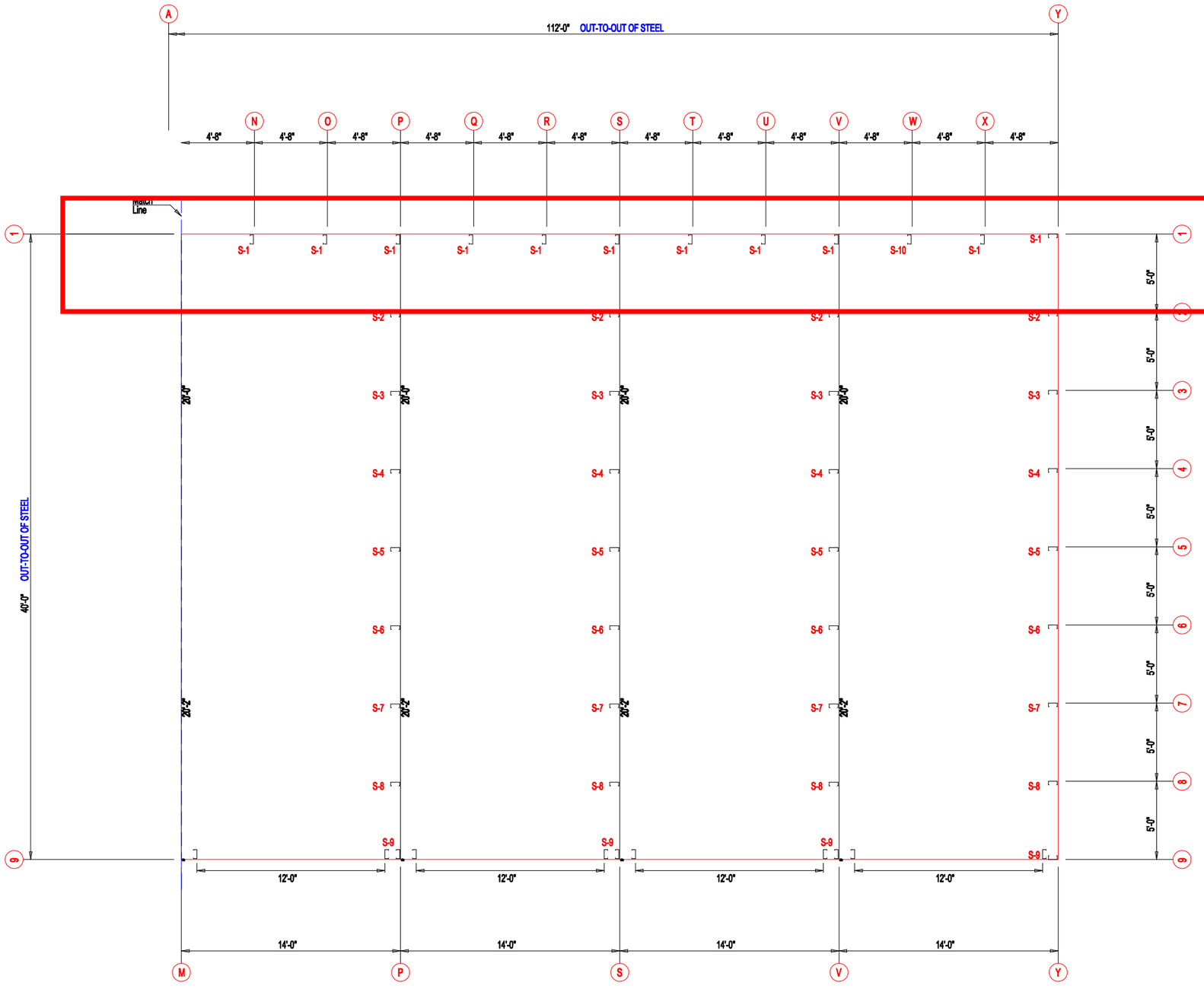
DESCRIPTION: FLOOR PLAN

CUSTOMER: DLR | PROJECT: MEGA STORAGE LEE SUMMIT 4,5

LOCATION: LEES SUMMIT MO

DRN. BY	CK'D BY	DATE	SCALE	REV.	QUOTATION NO.	SHEET NO.
JB	DES	1/17/22	N.T.S.	00	MEGASTORAGELEESSUMMITBUILDING#4#5	2 OF 24

MEMBER TABLE		
MARK	PART	LENGTH
S-1	6X2C16	14'-9 1/2"
S-2	6X2C16	15'-0"
S-3	6X2C16	15'-2 1/2"
S-4	6X2C16	15'-5"
S-5	6X2C16	15'-7 1/2"
S-6	6X2C16	15'-10"
S-7	6X2C16	16'-0 1/2"
S-8	6X2C16	16'-3"
S-9	6X2C16	16'-7"
S-10	6X25C14	14'-9 1/2"



FLOOR PLAN

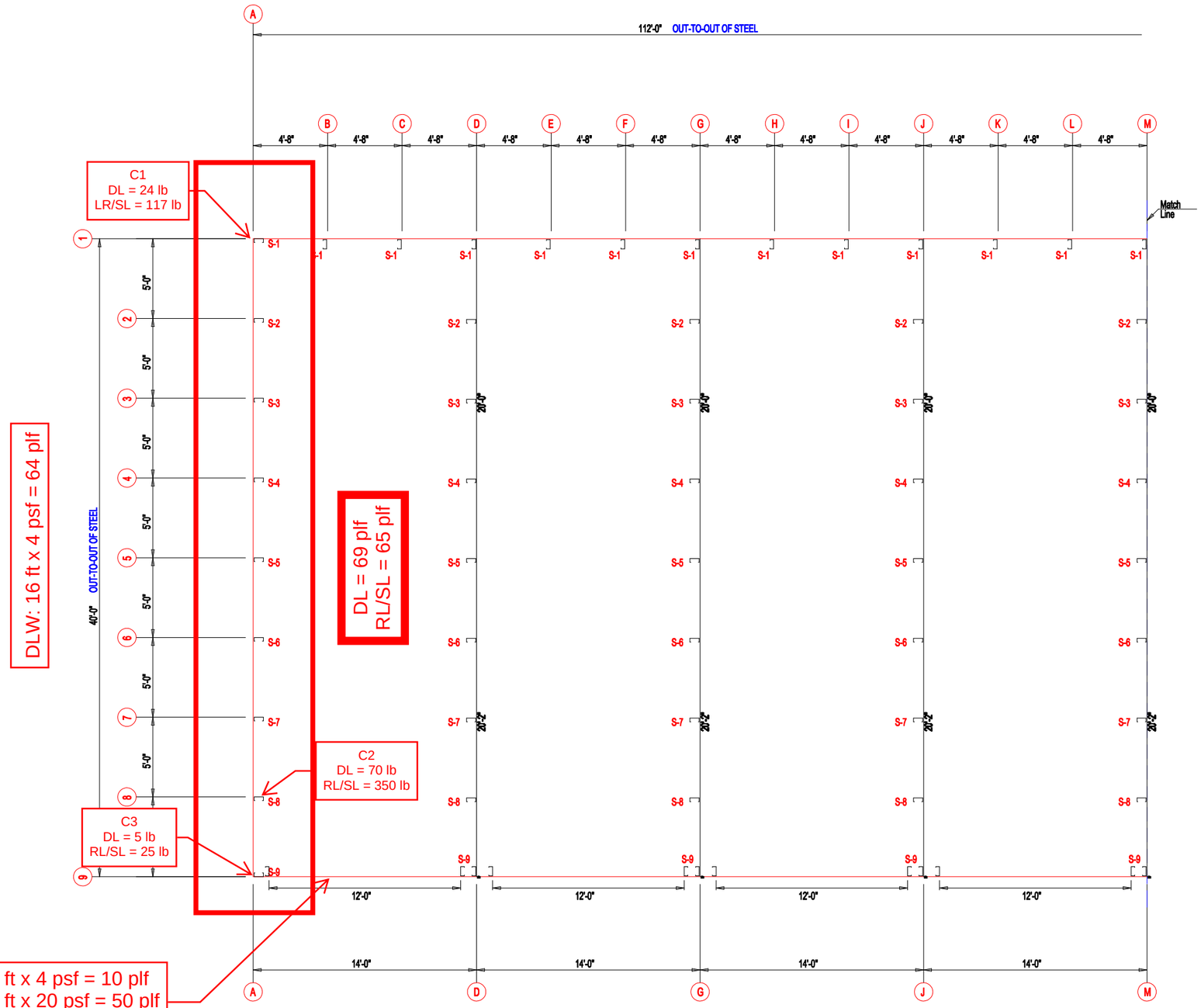
NORTH FOOTING

PELLA BUILDING SYSTEMS

906 West 9th Street Pella, IA 50219
(800) 225-0481 www.pellabuildings.com

DESCRIPTION: FLOOR PLAN						
CUSTOMER: DLR					PROJECT: MEGA STORAGE LEE SUMMIT 4,5	
LOCATION: LEES SUMMIT MO						
DRN. BY	CK'D BY	DATE	SCALE	REV.	QUOTATION NO.	SHEET NO.
JB	DES	1/17/22	N.T.S.	00	MEGASTORAGELEESSUMMITBUILDING#4#5	24

MEMBER TABLE		
MARK	PART	LENGTH
S-1	6X2C16	14'-9 1/2"
S-2	6X2C16	15'-0"
S-3	6X2C16	15'-2 1/2"
S-4	6X2C16	15'-5"
S-5	6X2C16	15'-7 1/2"
S-6	6X2C16	15'-10"
S-7	6X2C16	16'-0 1/2"
S-8	6X2C16	16'-3"
S-9	6X2C16	16'-7"



FLOOR PLAN

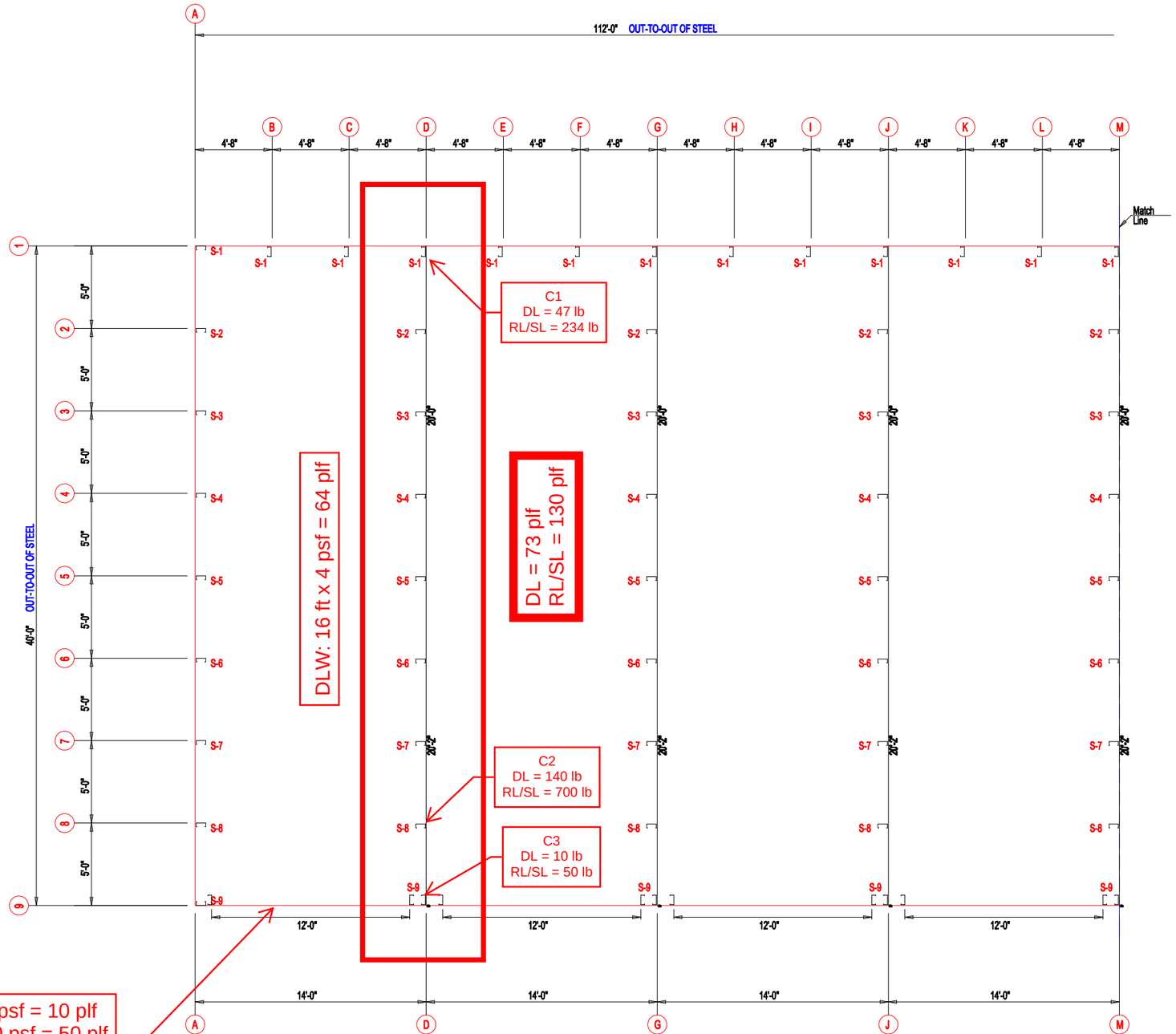
WEST FOOTING

PELLA BUILDING SYSTEMS

906 West 9th Street Pella, IA 50219
(800) 225-0481 www.pellabuildings.com

DESCRIPTION: FLOOR PLAN						
CUSTOMER: DLR					PROJECT: MEGA STORAGE LEE SUMMIT 4,5	
LOCATION: LEES SUMMIT MO						
DRN. BY	CK'D BY	DATE	SCALE	REV.	QUOTATION NO.	SHEET NO.
JB	DES	1/17/22	N.T.S.	00	MEGASTORAGELEESSUMMITBUILDING#4#5	2 OF 24

MEMBER TABLE		
MARK	PART	LENGTH
S-1	6X2C16	14'-9 1/2"
S-2	6X2C16	15'-0"
S-3	6X2C16	15'-2 1/2"
S-4	6X2C16	15'-5"
S-5	6X2C16	15'-7 1/2"
S-6	6X2C16	15'-10"
S-7	6X2C16	16'-0 1/2"
S-8	6X2C16	16'-3"
S-9	6X2C16	16'-7"



FLOOR PLAN

INTERIOR FOOTING

PELLA BUILDING SYSTEMS
906 West 9th Street Pella, IA 50219
(800) 225-0481 www.pellabuildings.com

DESCRIPTION: FLOOR PLAN						
CUSTOMER: DLR					PROJECT: MEGA STORAGE LEE SUMMIT 4,5	
LOCATION: LEES SUMMIT MO						
DRN. BY	CK'D BY	DATE	SCALE	REV.	QUOTATION NO.	SHEET NO.
JB	DES	1/17/22	N.T.S.	00	MEGASTORAGELEESSUMMITBUILDING#4#5	2 OF 24

Buildings 4 & 5

SOUTH FOOTING LOAD (EXT)			
LENGTH (FT)	112		
COLUMN	C1	C2	C3
# OF COLUMNS	2	16	7
DL (LB)	5	65	10
RL (LB)	25	325	50
SL (LB)	25	325	50
DL SUM (LB)	10	1040	70
RL SUM (LB)	50	5200	350
SL SUM (LB)	50	5200	350
DL WALL (PLF)	68		
DL (PLF)	78		
RL (PLF)	50		
SL (PLF)	50		

NORTH FOOTING LOAD (EXT)			
LENGTH (FT)	112		
COLUMN	C1	C2	
# OF COLUMNS	2	23	
DL (LB)	24	47	
RL (LB)	117	234	
SL (LB)	117	234	
DL SUM (LB)	48	1081	
RL SUM (LB)	234	5382	
SL SUM (LB)	234	5382	
DL WALL (PLF)	60		
DL (PLF)	70		
RL (PLF)	50		
SL (PLF)	50		

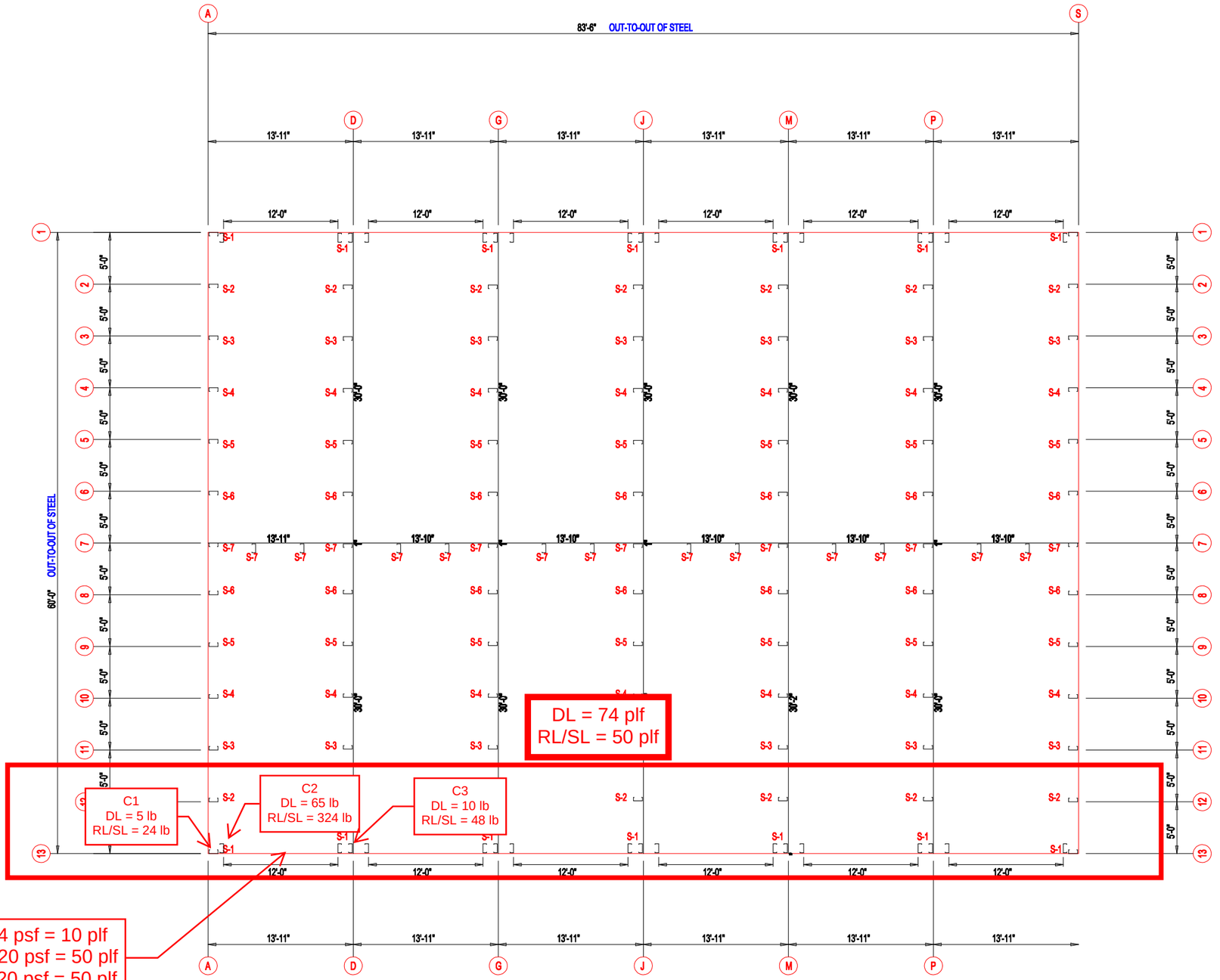
Buildings 4 & 5

WEST FOOTING LOAD (EXT)			
LENGTH (FT)	40		
COLUMN	C1	C2	C3
# OF COLUMNS	1	7	1
DL (LB)	24	70	5
RL (LB)	117	350	25
SL (LB)	117	350	25
DL SUM (LB)	24	490	5
RL SUM (LB)	117	2450	25
SL SUM (LB)	117	2450	25
DL WALL (PLF)	64		
DL (PLF)	69		
RL (PLF)	65		
SL (PLF)	65		

INTERIOR FOOTING LOAD (INT)			
LENGTH (FT)	40		
COLUMN	C1	C2	C3
# OF COLUMNS	1	7	1
DL (LB)	47	140	10
RL (LB)	234	700	50
SL (LB)	234	700	50
DL SUM (LB)	47	980	10
RL SUM (LB)	234	4900	50
SL SUM (LB)	234	4900	50
DL WALL (PLF)	64		
DL (PLF)	73		
RL (PLF)	130		
SL (PLF)	130		

BUILDINGS 8, 13, 14 & 15

MEMBER TABLE		
MARK	PART	LENGTH
S-1	6X2C16	16'-0"
S-2	6X2C16	16'-1"
S-3	6X2C16	16'-3 1/2"
S-4	6X2C16	16'-6"
S-5	6X2C16	16'-8 1/2"
S-6	6X2C16	16'-11"
S-7	6X2C16	17'-1 1/2"



FLOOR PLAN

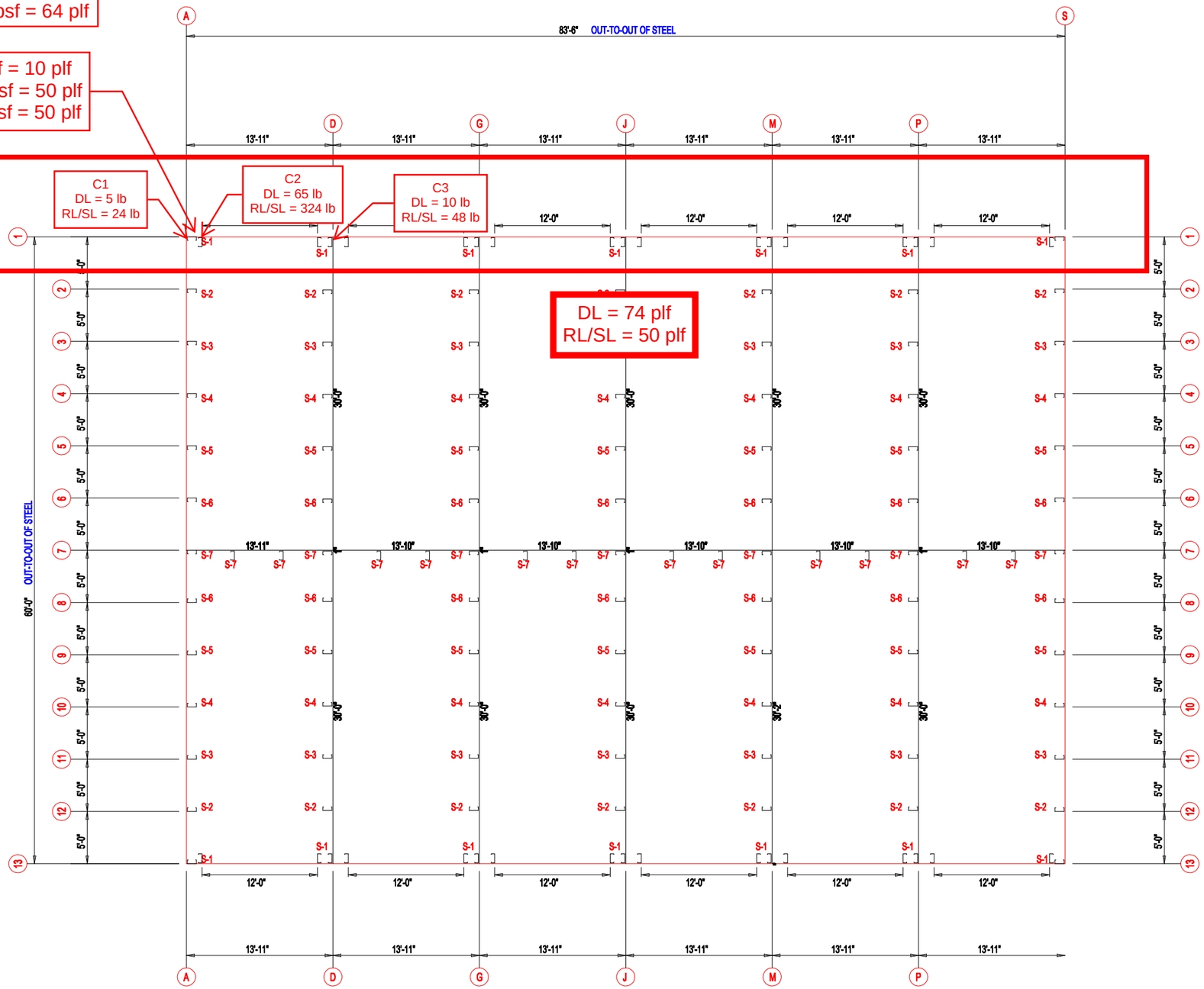
SOUTH FOOTING

PELLA BUILDING SYSTEMS
906 West 9th Street Pella, IA 50219
(800) 225-0481 www.pellabuildings.com

DESCRIPTION: FLOOR PLAN						
CUSTOMER: DLR					PROJECT: MEGA STORAGE LEES SUMMIT	
LOCATION: LEE'S SUMMIT						
DRN. BY	CK'D BY	DATE	SCALE	REV.	QUOTATION NO.	SHEET NO.
JB	DES	1/17/22	N.T.S.	00	MEGASTORAGELEESSUMMIT#8#14#15	OF #8#14#15

DLW: 15.9 ft x 4 psf = 64 plf

DL: 2.5 ft x 4 psf = 10 plf
RL: 2.5 ft x 20 psf = 50 plf
SL: 2.5 ft x 20 psf = 50 plf



FLOOR PLAN

NORTH
FOOTING

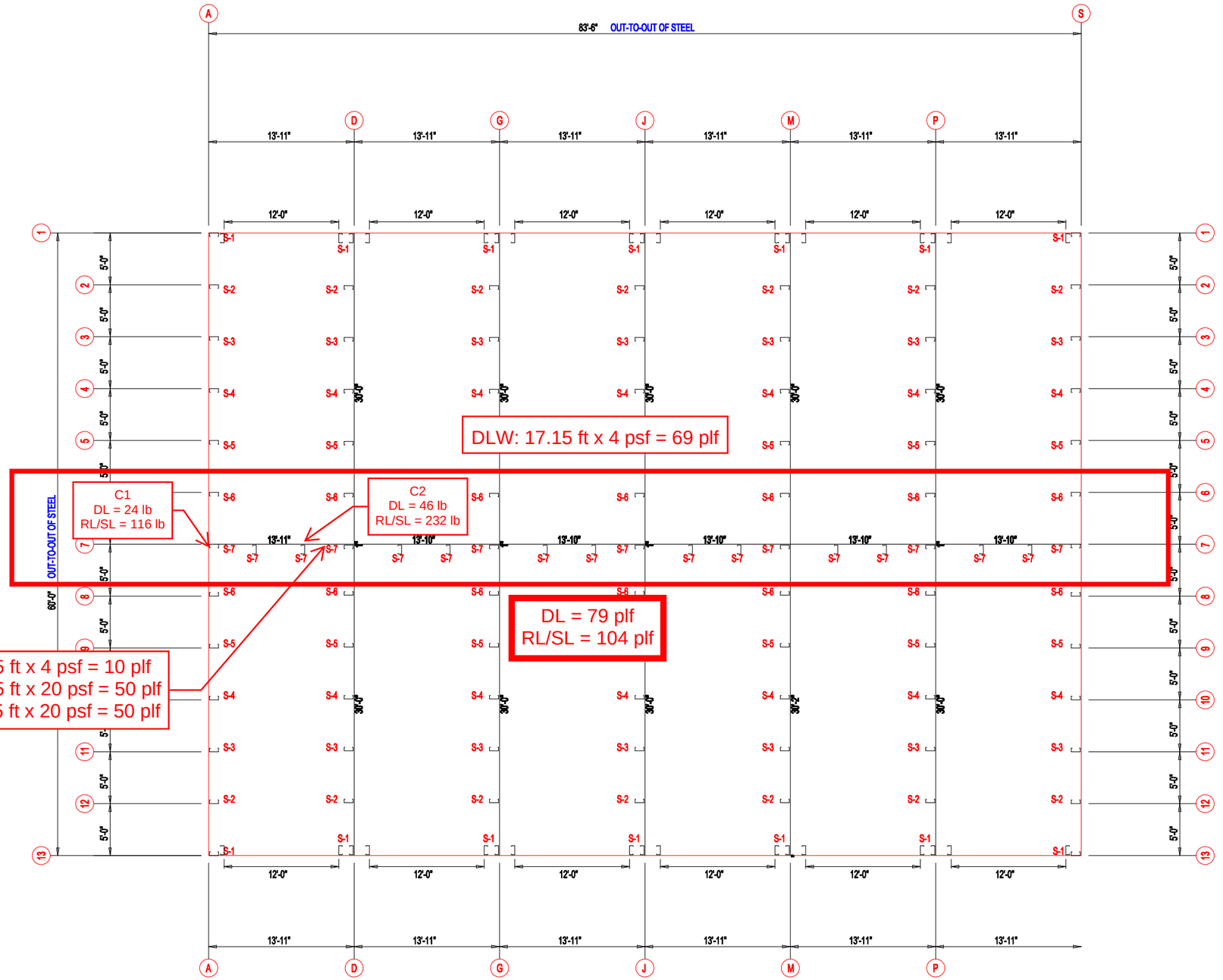
MEMBER TABLE

MARK	PART	LENGTH
S-1	6X2C16	16'-0"
S-2	6X2C16	16'-1"
S-3	6X2C16	16'-3 1/2"
S-4	6X2C16	16'-6"
S-5	6X2C16	16'-8 1/2"
S-6	6X2C16	16'-11"
S-7	6X2C16	17'-1 1/2"

PELLA
BUILDING SYSTEMS
906 West 9th Street Pella, IA 50219
(800) 225-0481 www.pellabuildings.com

DESCRIPTION: FLOOR PLAN						
CUSTOMER: DLR					PROJECT: MEGA STORAGE LEES SUMMIT	
LOCATION: LEE'S SUMMIT						
DRN. BY	CK'D BY	DATE	SCALE	REV.	QUOTATION NO.	SHEET NO.
JB	DES	1/17/22	N.T.S.	00	MEGASTORAGELEESSUMMIT#8#24#14#15	

MEMBER TABLE		
MARK	PART	LENGTH
S-1	6X2C16	16'-0"
S-2	6X2C16	16'-1"
S-3	6X2C16	16'-3 1/2"
S-4	6X2C16	16'-6"
S-5	6X2C16	16'-8 1/2"
S-6	6X2C16	16'-11"
S-7	6X2C16	17'-1 1/2"



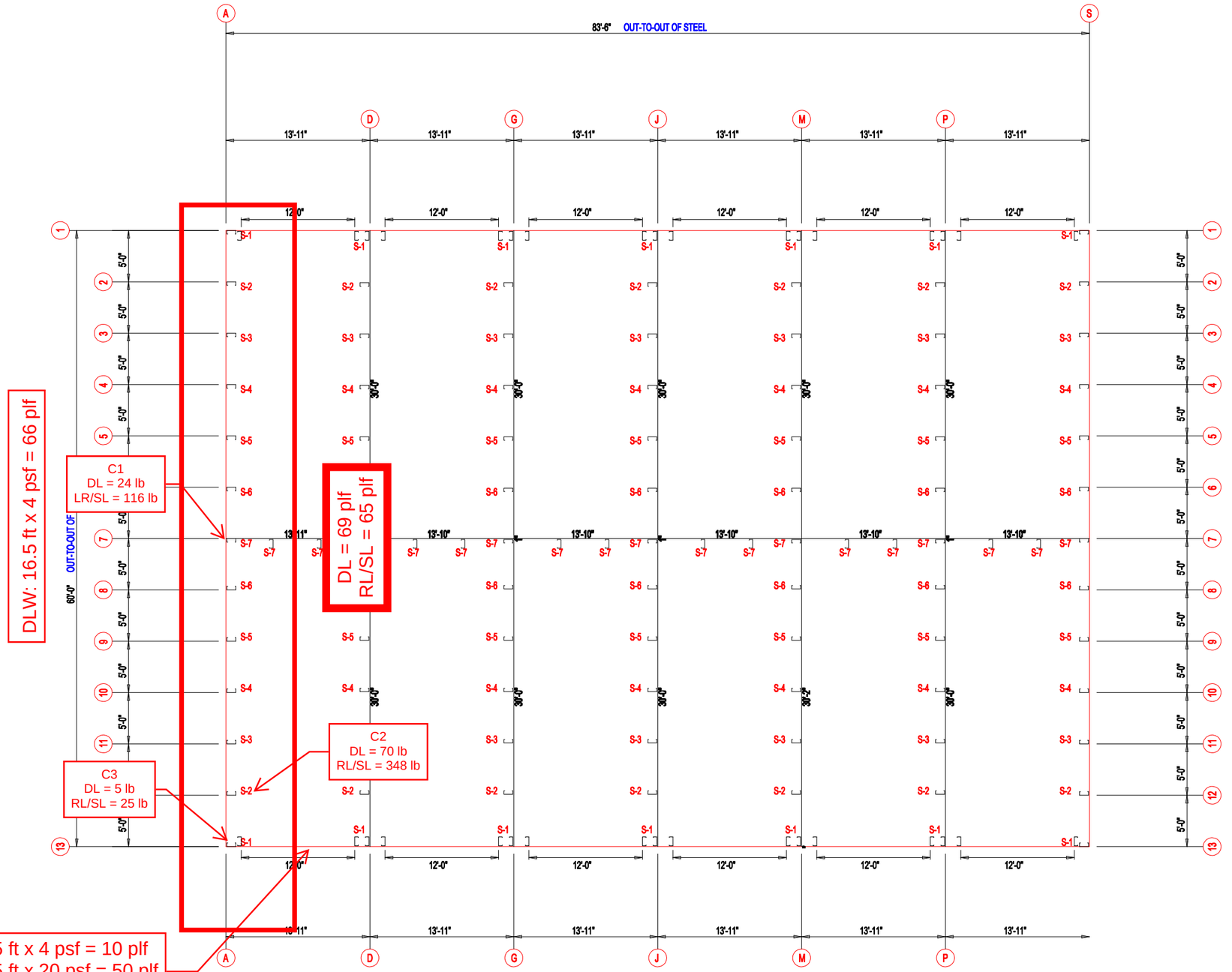
FLOOR PLAN

CENTER INTERIOR FOOTING

PELLA BUILDING SYSTEMS
906 West 9th Street Pella, IA 50219
(800) 225-0481 www.pellabuildings.com

DESCRIPTION: FLOOR PLAN						
CUSTOMER: DLR					PROJECT: MEGA STORAGE LEES SUMMIT	
LOCATION: LEE'S SUMMIT						
DRN. BY	CK'D BY	DATE	SCALE	REV.	QUOTATION NO.	SHEET NO.
JB	DES	1/17/22	N.T.S.	00	MEGASTORAGELEESSUMMIT#8#24#14#15	2 OF 2

MEMBER TABLE		
MARK	PART	LENGTH
S-1	6X2C16	16'-0"
S-2	6X2C16	16'-1"
S-3	6X2C16	16'-3 1/2"
S-4	6X2C16	16'-6"
S-5	6X2C16	16'-8 1/2"
S-6	6X2C16	16'-11"
S-7	6X2C16	17'-1 1/2"



FLOOR PLAN

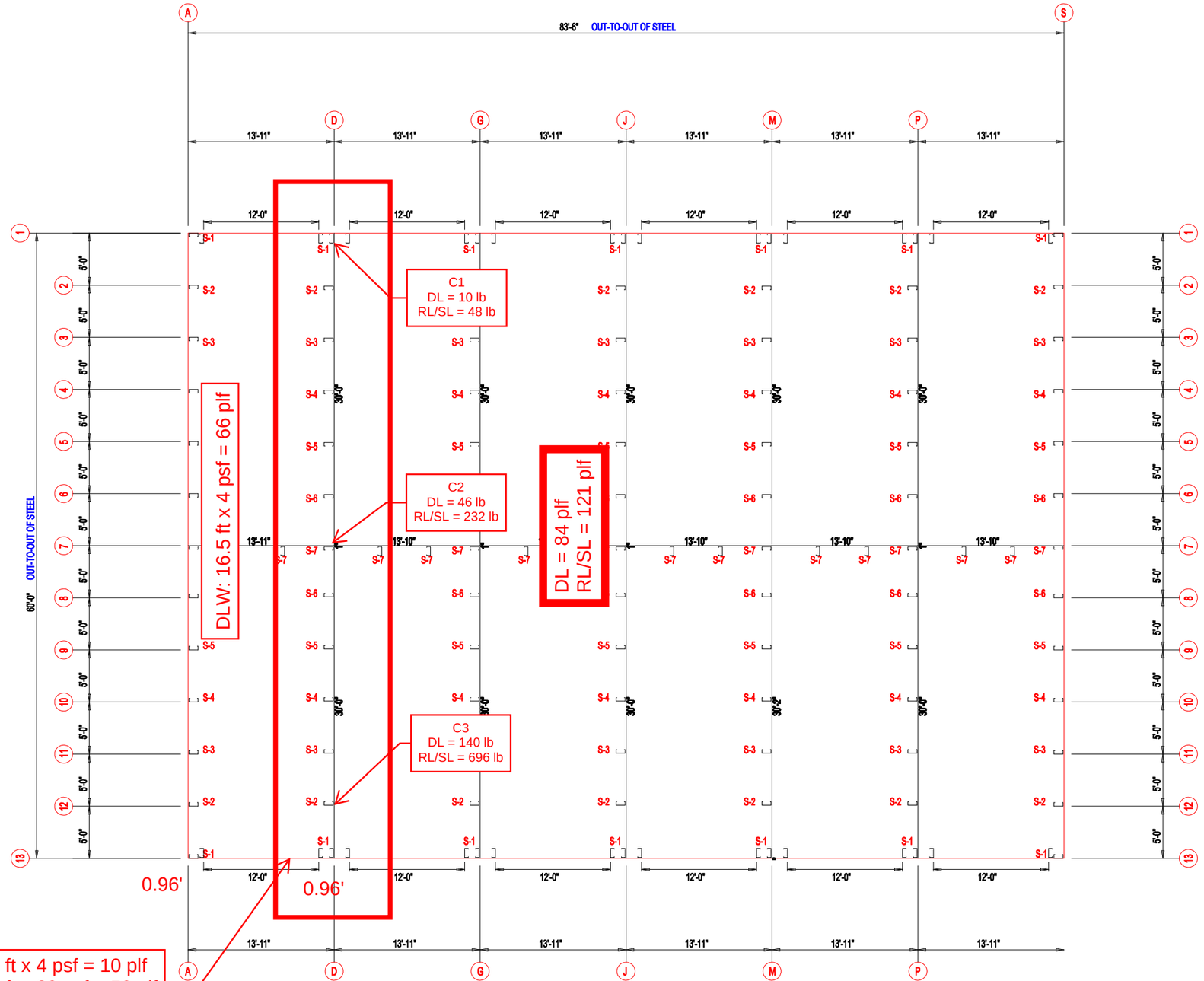
WEST FOOTING

PELLA BUILDING SYSTEMS

906 West 9th Street Pella, IA 50219
(800) 225-0481 www.pellabuildings.com

DESCRIPTION: FLOOR PLAN						
CUSTOMER: DLR					PROJECT: MEGA STORAGE LEES SUMMIT	
LOCATION: LEE'S SUMMIT						
DRN. BY	CK'D BY	DATE	SCALE	REV.	QUOTATION NO.	SHEET NO.
JB	DES	1/17/22	N.T.S.	00	MEGASTORAGELEESSUMMIT#8#14#15	OF #8#14#15

MEMBER TABLE		
MARK	PART	LENGTH
S-1	6X2C16	16'-0"
S-2	6X2C16	16'-1"
S-3	6X2C16	16'-3 1/2"
S-4	6X2C16	16'-6"
S-5	6X2C16	16'-8 1/2"
S-6	6X2C16	16'-11"
S-7	6X2C16	17'-1 1/2"



FLOOR PLAN

INTERIOR FOOTING

PELLA BUILDING SYSTEMS
906 West 9th Street Pella, IA 50219
(800) 225-0481 www.pellabuildings.com

DESCRIPTION: FLOOR PLAN						
CUSTOMER: DLR					PROJECT: MEGA STORAGE LEES SUMMIT	
LOCATION: LEE'S SUMMIT						
DRN. BY	CK'D BY	DATE	SCALE	REV.	QUOTATION NO.	SHEET NO.
JB	DES	1/17/22	N.T.S.	00	MEGASTORAGELEESSUMMIT#8#14#15	OF

Buildings 8, 13, 14 & 15

SOUTH FOOTING LOAD (EXT)			
LENGTH (FT)	83.5		
COLUMN	C1	C2	C3
# OF COLUMNS	2	12	5
DL (LB)	5	65	10
RL (LB)	24	324	48
SL (LB)	24	324	48
DL SUM (LB)	10	780	50
RL SUM (LB)	48	3888	240
SL SUM (LB)	48	3888	240
DL WALL (PLF)	64		
DL (PLF)	74		
RL (PLF)	50		
SL (PLF)	50		

NORTH FOOTING LOAD (EXT)			
LENGTH (FT)	83.5		
COLUMN	C1	C2	
# OF COLUMNS	2	12	5
DL (LB)	5	65	10
RL (LB)	24	324	48
SL (LB)	24	324	48
DL SUM (LB)	10	780	50
RL SUM (LB)	48	3888	240
SL SUM (LB)	48	3888	240
DL WALL (PLF)	64		
DL (PLF)	74		
RL (PLF)	50		
SL (PLF)	50		

Buildings 8, 13, 14 & 15

WEST FOOTING LOAD (EXT)			
LENGTH (FT)	60		
COLUMN	C1	C2	C3
# OF COLUMNS	1	10	2
DL (LB)	24	70	5
RL (LB)	116	348	25
SL (LB)	116	348	25
DL SUM (LB)	24	700	10
RL SUM (LB)	116	3480	50
SL SUM (LB)	116	3480	50
DL WALL (PLF)	66		
DL (PLF)	75		
RL (PLF)	61		
SL (PLF)	61		

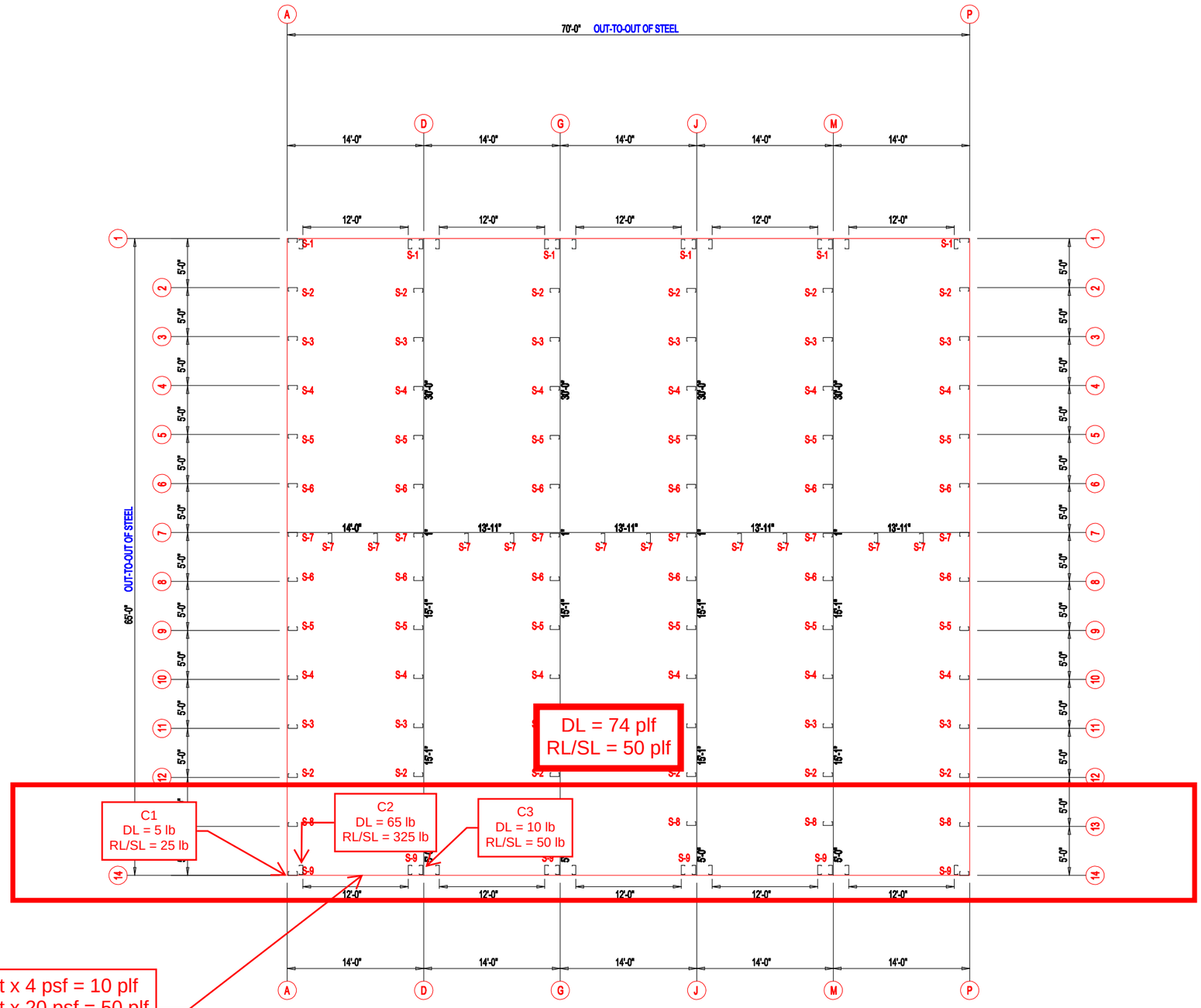
INTERIOR FOOTING LOAD (INT)			
LENGTH (FT)	60		
COLUMN	C1	C2	C3
# OF COLUMNS	2	1	10
DL (LB)	10	46	140
RL (LB)	48	232	696
SL (LB)	48	232	696
DL SUM (LB)	20	46	1400
RL SUM (LB)	96	232	6960
SL SUM (LB)	96	232	6960
DL WALL (PLF)	66		
DL (PLF)	84		
RL (PLF)	121		
SL (PLF)	121		

Buildings 8, 13, 14 & 15

CENTER INTERIOR FOOTING LOAD (INT)			
LENGTH (FT)	83.5		
COLUMN	C1	C2	
# OF COLUMNS	2	17	
DL (LB)	24	46	
RL (LB)	116	232	
SL (LB)	116	232	
DL SUM (LB)	48	782	0
RL SUM (LB)	232	3944	0
SL SUM (LB)	232	3944	0
DL WALL (PLF)	69		
DL (PLF)	79		
RL (PLF)	70		
SL (PLF)	70		

BUILDINGS 9 & 10

MEMBER TABLE		
MARK	PART	LENGTH
S-1	6X2C16	16'-2 1/2"
S-2	6X2C16	16'-3 1/2"
S-3	6X2C16	16'-6"
S-4	6X2C16	16'-8 1/2"
S-5	6X2C16	16'-11"
S-6	6X2C16	17'-1 1/2"
S-7	6X2C16	17'-4"
S-8	6X2C16	16'-1"
S-9	6X2C16	16'-0"



FLOOR PLAN

DL: 2.5 ft x 4 psf = 10 plf
RL: 2.5 ft x 20 psf = 50 plf
SL: 2.5 ft x 20 psf = 50 plf

DLW: 15.9 ft x 4 psf = 64 plf

SOUTH FOOTING

PELLA BUILDING SYSTEMS
906 West 9th Street Pella, IA 50219
(800) 225-0481 www.pellabuildings.com

DESCRIPTION: FLOOR PLAN						
CUSTOMER: DLR					PROJECT: MEGA STORAGE LEES SUMMIT 9,10	
LOCATION: LEE'S SUMMIT MO						
DRN. BY	CK'D BY	DATE	SCALE	REV.	QUOTATION NO.	SHEET NO.
JB	DES	1/17/22	N.T.S.	00	MEGASTORAGELEESSUMMIT#9#10	1 OF 1

DLW: 16.1 ft x 4 psf = 65 plf

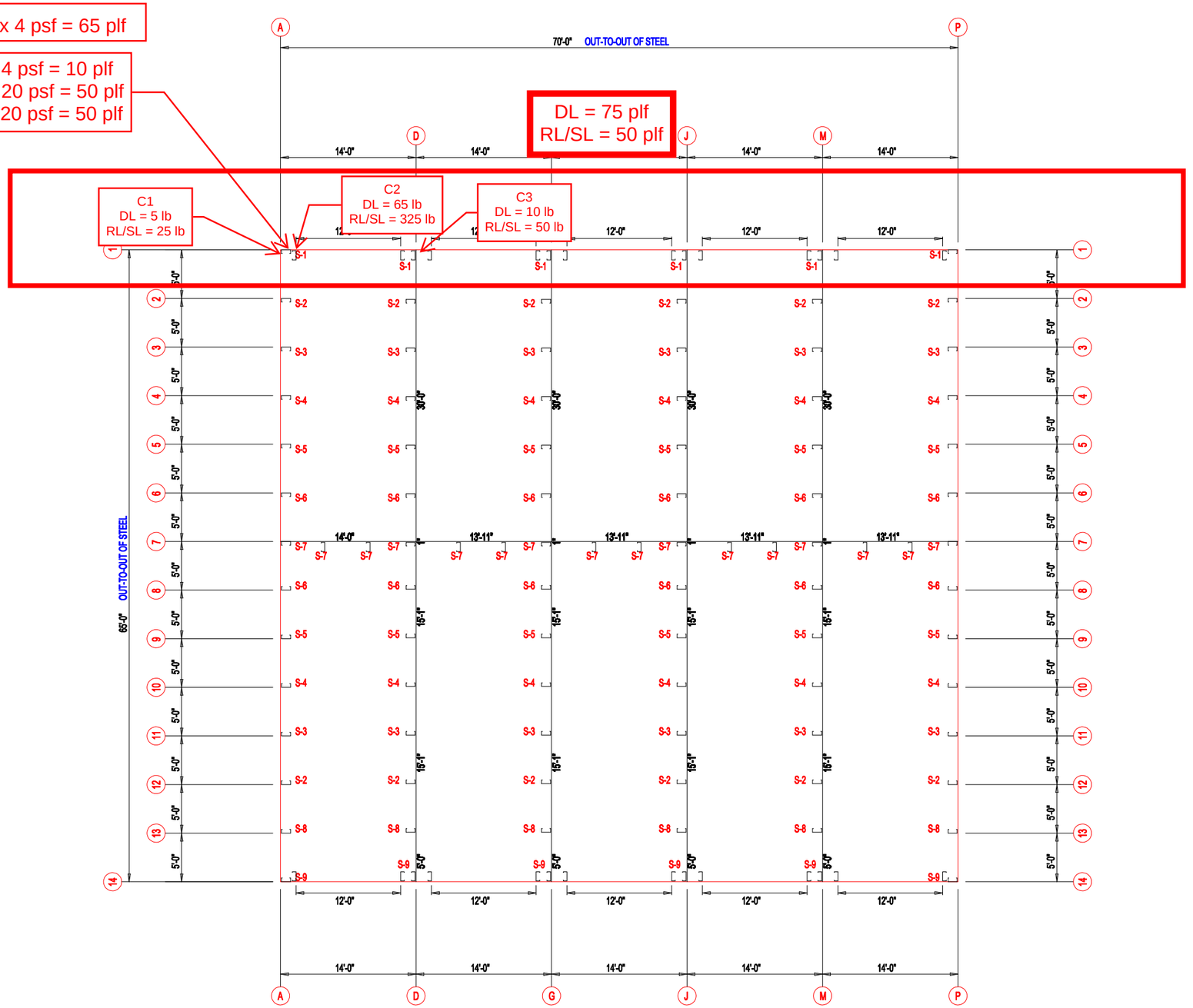
DL: 2.5 ft x 4 psf = 10 plf
RL: 2.5 ft x 20 psf = 50 plf
SL: 2.5 ft x 20 psf = 50 plf

DL = 75 plf
RL/SL = 50 plf

C1
DL = 5 lb
RL/SL = 25 lb

C2
DL = 65 lb
RL/SL = 325 lb

C3
DL = 10 lb
RL/SL = 50 lb



FLOOR PLAN

MEMBER TABLE

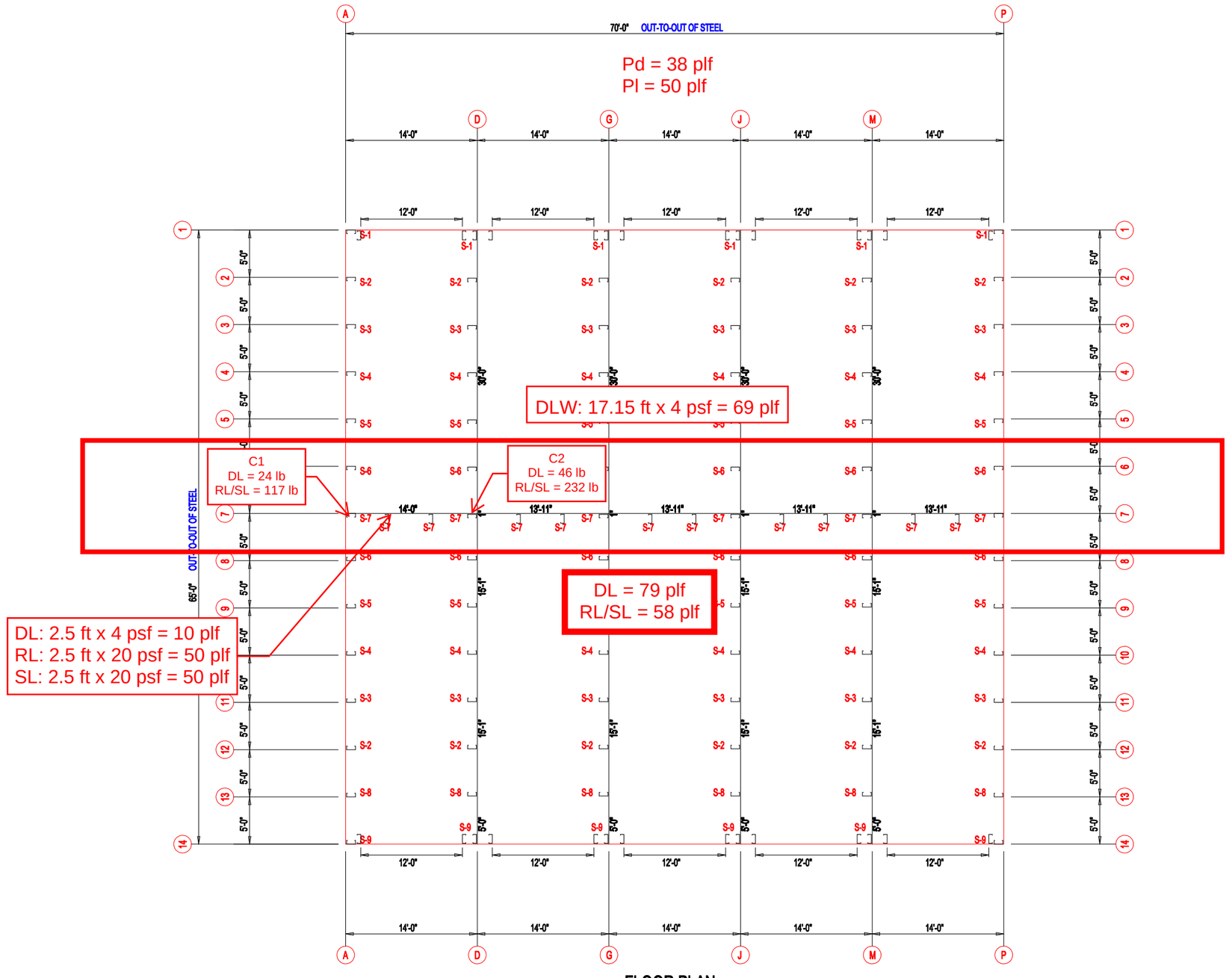
MARK	PART	LENGTH
S-1	6X2C16	16'-2 1/2"
S-2	6X2C16	16'-3 1/2"
S-3	6X2C16	16'-6"
S-4	6X2C16	16'-8 1/2"
S-5	6X2C16	16'-11"
S-6	6X2C16	17'-1 1/2"
S-7	6X2C16	17'-4"
S-8	6X2C16	16'-1"
S-9	6X2C16	16'-0"

NORTH
FOOTING

PELLA
BUILDING SYSTEMS
906 West 9th Street Pella, IA 50219
(800) 225-0481 www.pellabuildings.com

DESCRIPTION: FLOOR PLAN						
CUSTOMER: DLR					PROJECT: MEGA STORAGE LEES SUMMIT 9,10	
LOCATION: LEE'S SUMMIT MO						
DRN. BY	CK'D BY	DATE	SCALE	REV.	QUOTATION NO.	SHEET NO.
JB	DES	1/17/22	N.T.S.	00	MEGASTORAGELEESSUMMIT#9#10	OF

MEMBER TABLE		
MARK	PART	LENGTH
S-1	6X2C16	16'-2 1/2"
S-2	6X2C16	16'-3 1/2"
S-3	6X2C16	16'-6"
S-4	6X2C16	16'-8 1/2"
S-5	6X2C16	16'-11"
S-6	6X2C16	17'-1 1/2"
S-7	6X2C16	17'-4"
S-8	6X2C16	16'-1"
S-9	6X2C16	16'-0"



FLOOR PLAN

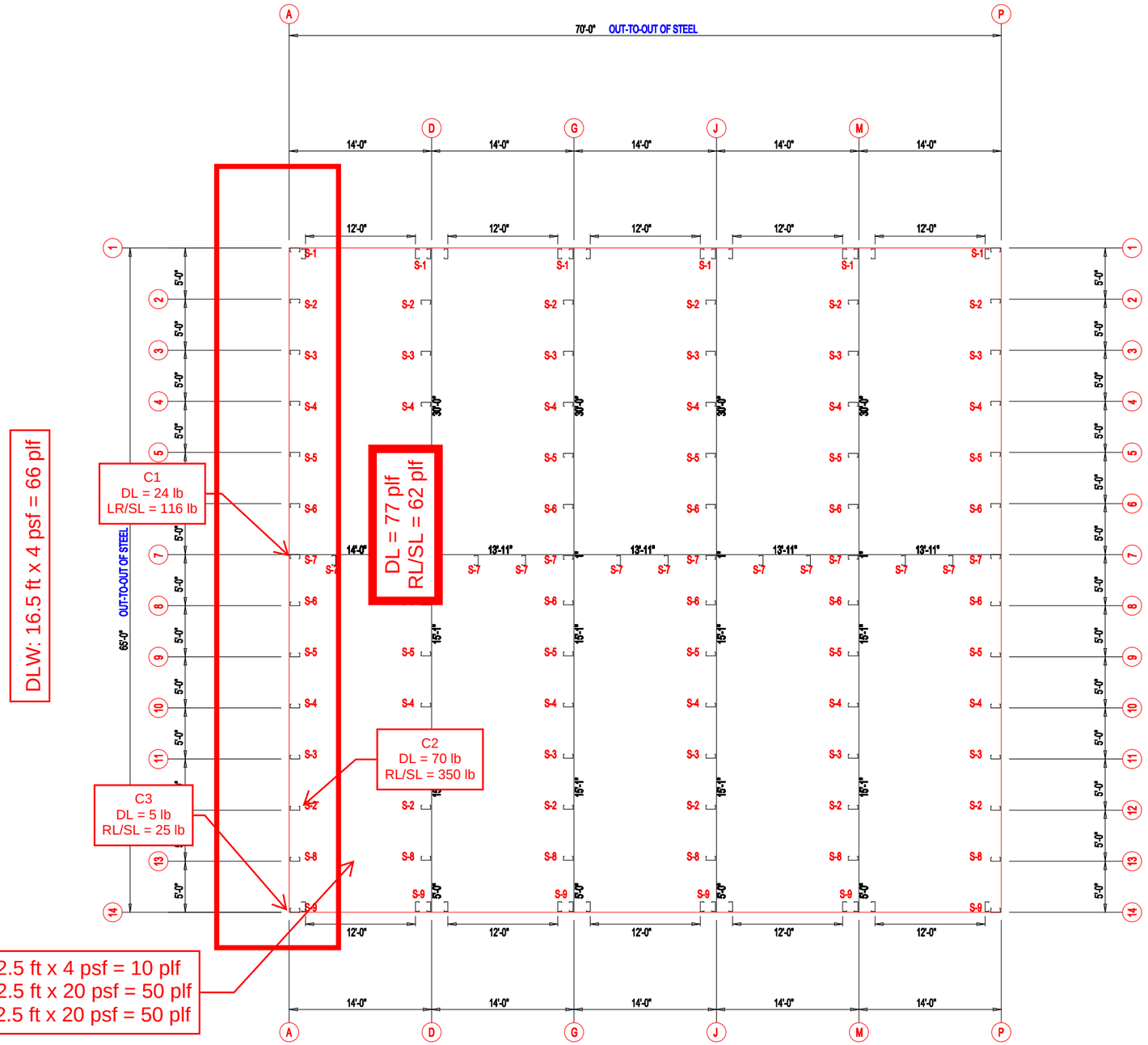
CENTER INTERIOR FOOTING

PELLA BUILDING SYSTEMS

906 West 9th Street Pella, IA 50219
(800) 225-0481 www.pellabuildings.com

DESCRIPTION: FLOOR PLAN						
CUSTOMER: DLR					PROJECT: MEGA STORAGE LEES SUMMIT 9,10	
LOCATION: LEE'S SUMMIT MO						
DRN. BY	CK'D BY	DATE	SCALE	REV.	QUOTATION NO.	SHEET NO.
JB	DES	1/17/22	N.T.S.	00	MEGASTORAGELEESSUMMIT#9#10	1 OF 1 SHEETS

MEMBER TABLE		
MARK	PART	LENGTH
S-1	6X2C16	16'-2 1/2"
S-2	6X2C16	16'-3 1/2"
S-3	6X2C16	16'-6"
S-4	6X2C16	16'-8 1/2"
S-5	6X2C16	16'-11"
S-6	6X2C16	17'-1 1/2"
S-7	6X2C16	17'-4"
S-8	6X2C16	16'-1"
S-9	6X2C16	16'-0"



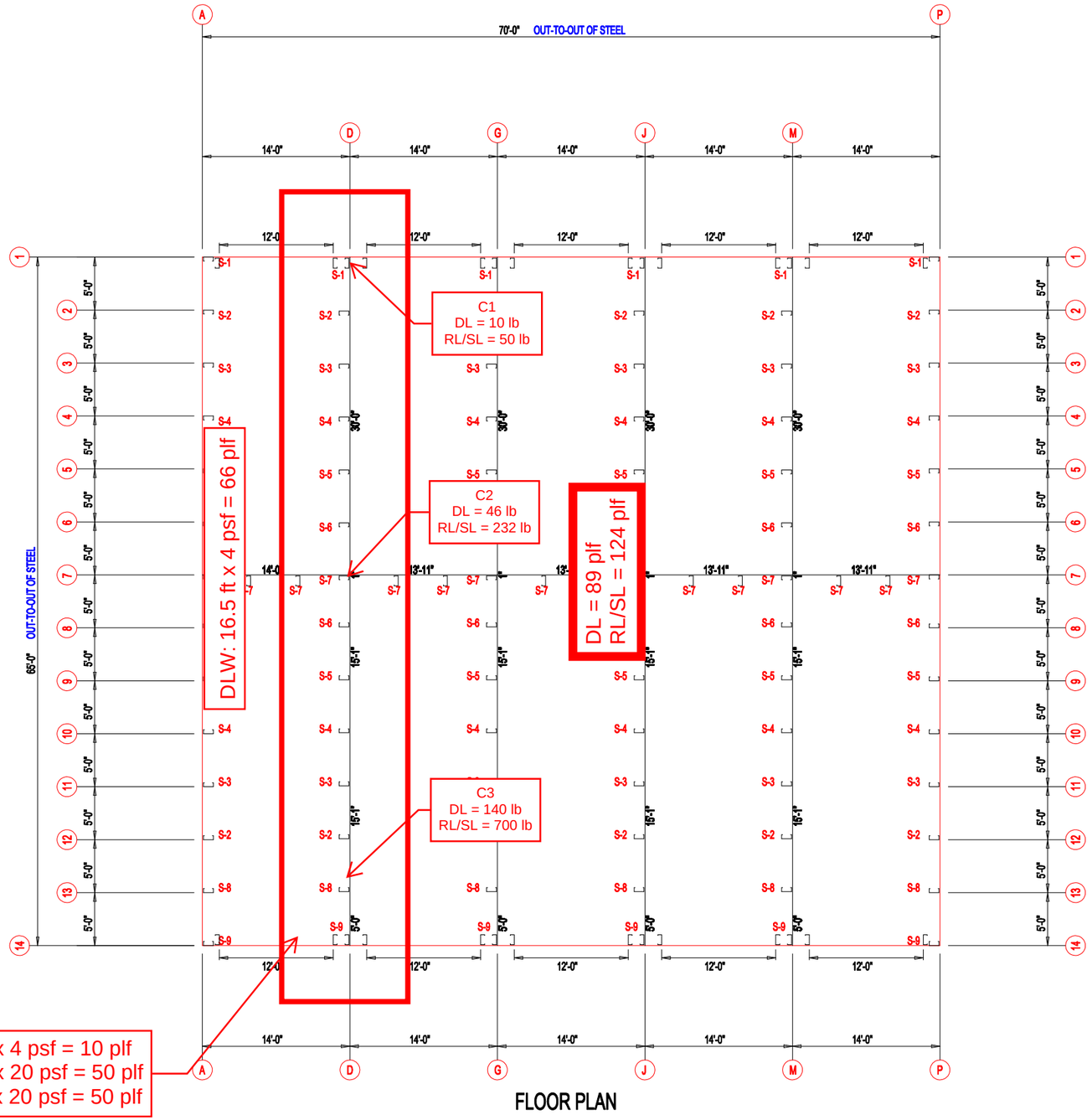
FLOOR PLAN

WEST FOOTING

PELLA BUILDING SYSTEMS
906 West 9th Street Pella, IA 50219
(800) 225-0481 www.pellabuildings.com

DESCRIPTION: FLOOR PLAN						
CUSTOMER: DLR					PROJECT: MEGA STORAGE LEES SUMMIT 9,10	
LOCATION: LEE'S SUMMIT MO						
DRN. BY	CK'D BY	DATE	SCALE	REV.	QUOTATION NO.	SHEET NO.
JB	DES	1/17/22	N.T.S.	00	MEGASTORAGELEESSUMMIT#9#10	2 OF 2

MEMBER TABLE		
MARK	PART	LENGTH
S-1	6X2C16	16'-2 1/2"
S-2	6X2C16	16'-3 1/2"
S-3	6X2C16	16'-6"
S-4	6X2C16	16'-8 1/2"
S-5	6X2C16	16'-11"
S-6	6X2C16	17'-1 1/2"
S-7	6X2C16	17'-4"
S-8	6X2C16	16'-1"
S-9	6X2C16	16'-0"



FLOOR PLAN

INTERIOR FOOTING

PELLA BUILDING SYSTEMS
906 West 9th Street Pella, IA 50219
(800) 225-0481 www.pellabuildings.com

DESCRIPTION: FLOOR PLAN						
CUSTOMER: DLR					PROJECT: MEGA STORAGE LEES SUMMIT 9,10	
LOCATION: LEE'S SUMMIT MO						
DRN. BY	CK'D BY	DATE	SCALE	REV.	QUOTATION NO.	SHEET NO.
JB	DES	1/17/22	N.T.S.	00	MEGASTORAGELEESSUMMIT#9#10	OF

Buildings 9 & 10

SOUTH FOOTING LOAD (EXT)			
LENGTH (FT)	70		
COLUMN	C1	C2	C3
# OF COLUMNS	2	10	4
DL (LB)	5	65	10
RL (LB)	25	325	50
SL (LB)	25	325	50
DL SUM (LB)	10	650	40
RL SUM (LB)	50	3250	200
SL SUM (LB)	50	3250	200
DL WALL (PLF)	64		
DL (PLF)	74		
RL (PLF)	50		
SL (PLF)	50		

NORTH FOOTING LOAD (EXT)			
LENGTH (FT)	70		
COLUMN	C1	C2	
# OF COLUMNS	2	10	4
DL (LB)	5	65	10
RL (LB)	25	325	50
SL (LB)	25	325	50
DL SUM (LB)	10	650	40
RL SUM (LB)	50	3250	200
SL SUM (LB)	50	3250	200
DL WALL (PLF)	65		
DL (PLF)	75		
RL (PLF)	50		
SL (PLF)	50		

Buildings 9 & 10

WEST FOOTING LOAD (EXT)			
LENGTH (FT)	65		
COLUMN	C1	C2	C3
# OF COLUMNS	1	11	2
DL (LB)	24	70	5
RL (LB)	116	350	25
SL (LB)	116	350	25
DL SUM (LB)	24	770	10
RL SUM (LB)	116	3850	50
SL SUM (LB)	116	3850	50
DL WALL (PLF)	66		
DL (PLF)	77		
RL (PLF)	62		
SL (PLF)	62		

INTERIOR FOOTING LOAD (INT)			
LENGTH (FT)	65		
COLUMN	C1	C2	C3
# OF COLUMNS	2	1	11
DL (LB)	10	46	140
RL (LB)	50	232	700
SL (LB)	50	232	700
DL SUM (LB)	20	46	1540
RL SUM (LB)	100	232	7700
SL SUM (LB)	100	232	7700
DL WALL (PLF)	66		
DL (PLF)	89		
RL (PLF)	124		
SL (PLF)	124		

Buildings 9 & 10

CENTER INTERIOR FOOTING LOAD (INT)			
LENGTH (FT)	70		
COLUMN	C1	C2	
# OF COLUMNS	2	14	
DL (LB)	24	46	
RL (LB)	117	232	
SL (LB)	117	232	
DL SUM (LB)	48	644	0
RL SUM (LB)	234	3248	0
SL SUM (LB)	234	3248	0
DL WALL (PLF)	69		
DL (PLF)	79		
RL (PLF)	54		
SL (PLF)	54		