Date: 2/24/2022
Project Name: GEORGES CELLAR HILL SOUTH
Project No.: CT2174
Designed By: KSBM Checked By: MSC

HUDSON Design Group LLC

WIND LOADS

Angle =	90	(deg)	Ice Thickness =	1.16	in.	Equivalent Angle =	270	(deg)

WIND LOADS WITH NO ICE:

Appurtenances	Height	Width	Depth	Flat Area (normal)	Flat Area (side)	Ratio (normal)	Ratio (side)	Ca (normal)	Ca (side)	Force (lbs)	Force (lbs)	Force (lbs)
TPA65R-BU6DA-K Antenna	71.2	20.7	7.7	10.24	3.81	3.44	9.25	1.24	1.47	661	292	292
AIR6419 Antenna	31.0	16.1	7.3	3.47	1.57	1.93	4.25	1.20	1.28	216	104	104
AIR6449 Antenna	30.6	15.9	10.6	3.38	2.25	1.92	2.89	1.20	1.22	211	143	143
DMP65R-BU6DA Antenna	71.2	20.7	7.7	10.24	3.81	3.44	9.25	1.24	1.47	661	292	292
4478 B14 RRH (Side)	18.1	8.3	13.4	1.04	1.68	2.18	1.35	1.20	1.20	65	105	105
8843 B2/B66A RRH (Side)	14.9	10.9	13.2	1.13	1.37	1.37	1.13	1.20	1.20	70	85	85
4449 B5/B12 RRH	17.9	13.2	9.4	1.64	1.17	1.36	1.90	1.20	1.20	102	73	73
WIND LOADS WITH ICE:												
TPA65R-BU6DA-K Antenna	73.5	23.0	10.0	11.76	5.12	3.19	7.33	1.23	1.41	120	60	60
AIR6419 Antenna	33.3	18.4	9.6	4.26	2.23	1.81	3.46	1.20	1.24	43	23	23
AIR6449 Antenna	32.9	18.2	12.9	4.17	2.96	1.81	2.55	1.20	1.20	42	30	30
DMP65R-BU6DA Antenna	73.5	23.0	10.0	11.76	5.12	3.19	7.33	1.23	1.41	120	60	60
4478 B14 RRH (Side)	20.4	10.6	15.7	1.51	2.23	1.92	1.30	1.20	1.20	15	22	22
8843 B2/B66A RRH (Side)	17.2	13.2	15.5	1.58	1.86	1.30	1.11	1.20	1.20	16	19	19
4449 B5/B12 RRH	20.2	15.5	11.7	2.18	1.65	1.30	1.72	1.20	1.20	22	16	16
WIND LOADS AT 30 MPH:												
TPA65R-BU6DA-K Antenna	71.2	20.7	7.7	10.24	3.81	3.44	9.25	1.24	1.47	38	17	17
AIR6419 Antenna	31.0	16.1	7.3	3.47	1.57	1.93	4.25	1.20	1.28	12	6	6
AIR6449 Antenna	30.6	15.9	10.6	3.38	2.25	1.92	2.89	1.20	1.22	12	8	8
DMP65R-BU6DA Antenna	71.2	20.7	7.7	10.24	3.81	3.44	9.25	1.24	1.47	38	17	17
4478 B14 RRH (Side)	18.1	8.3	13.4	1.04	1.68	2.18	1.35	1.20	1.20	4	6	6
8843 B2/B66A RRH (Side)	14.9	10.9	13.2	1.13	1.37	1.37	1.13	1.20	1.20	4	5	5
4449 B5/B12 RRH	17.9	13.2	9.4	1.64	1.17	1.36	1.90	1.20	1.20	6	4	4

Date: 2/24/2022
Project Name: GEORGES CELLAR HILL SOUTH
Project No.: CT2174
Designed By: KSBM Checked By: MSC

HUDSON Design Group LLC

WIND LOADS

Angle =	120	(deg)	Ice Thickness =	1.16	in.	Equivalent Angle =	300	(deg)

WIND LOADS WITH NO ICE:

Appurtenances	Height	Width	Depth	Flat Area (normal)	Flat Area (side)	Ratio (normal)	Ratio (side)	Ca (normal)	Ca (side)	Force (lbs)	Force (lbs)	Force (lbs)
TPA65R-BU6DA-K Antenna	71.2	20.7	7.7	10.24	3.81	3.44	9.25	1.24	1.47	661	292	384
AIR6419 Antenna	31.0	16.1	7.3	3.47	1.57	1.93	4.25	1.20	1.28	216	104	132
AIR6449 Antenna	30.6	15.9	10.6	3.38	2.25	1.92	2.89	1.20	1.22	211	143	160
DMP65R-BU6DA Antenna	71.2	20.7	7.7	10.24	3.81	3.44	9.25	1.24	1.47	661	292	384
4478 B14 RRH (Side)	18.1	8.3	13.4	1.04	1.68	2.18	1.35	1.20	1.20	65	105	95
8843 B2/B66A RRH (Side)	14.9	10.9	13.2	1.13	1.37	1.37	1.13	1.20	1.20	70	85	82
4449 B5/B12 RRH	17.9	13.2	9.4	1.64	1.17	1.36	1.90	1.20	1.20	102	73	80

WIND LOADS WITH ICE:

TPA65R-BU6DA-K Antenna	73.5	23.0	10.0	11.76	5.12	3.19	7.33	1.23	1.41	120	60	75
AIR6419 Antenna	33.3	18.4	9.6	4.26	2.23	1.81	3.46	1.20	1.24	43	23	28
AIR6449 Antenna	32.9	18.2	12.9	4.17	2.96	1.81	2.55	1.20	1.20	42	30	33
DMP65R-BU6DA Antenna	73.5	23.0	10.0	11.76	5.12	3.19	7.33	1.23	1.41	120	60	75
4478 B14 RRH (Side)	20.4	10.6	15.7	1.51	2.23	1.92	1.30	1.20	1.20	15	22	20
8843 B2/B66A RRH (Side)	17.2	13.2	15.5	1.58	1.86	1.30	1.11	1.20	1.20	16	19	18
4449 B5/B12 RRH	20.2	15.5	11.7	2.18	1.65	1.30	1.72	1.20	1.20	22	16	18

WIND LOADS AT 30 MPH:

TPA65R-BU6DA-K Antenna	71.2	20.7	7.7	10.24	3.81	3.44	9.25	1.24	1.47	38	17	22
AIR6419 Antenna	31.0	16.1	7.3	3.47	1.57	1.93	4.25	1.20	1.28	12	6	8
AIR6449 Antenna	30.6	15.9	10.6	3.38	2.25	1.92	2.89	1.20	1.22	12	8	9
DMP65R-BU6DA Antenna	71.2	20.7	7.7	10.24	3.81	3.44	9.25	1.24	1.47	38	17	22
4478 B14 RRH (Side)	18.1	8.3	13.4	1.04	1.68	2.18	1.35	1.20	1.20	4	6	5
8843 B2/B66A RRH (Side)	14.9	10.9	13.2	1.13	1.37	1.37	1.13	1.20	1.20	4	5	5
4449 B5/B12 RRH	17.9	13.2	9.4	1.64	1.17	1.36	1.90	1.20	1.20	6	4	5

Date: 2/24/2022
Project Name: GEORGES CELLAR HILL SOUTH
Project No.: CT2174
Designed By: KSBM Checked By: MSC

HUDSON Design Group LLC

WIND LOADS

Angle =	150	(deg)	Ice Thickness =	1.16	in.	Equivalent Angle =	330	(deg)

WIND LOADS WITH NO ICE:

Appurtenances	Height	Width	Depth	Flat Area (normal)	Flat Area (side)	Ratio (normal)	Ratio (side)	Ca (normal)	Ca (side)	Force (lbs)	Force (lbs)	Force (lbs)
TPA65R-BU6DA-K Antenna	71.2	20.7	7.7	10.24	3.81	3.44	9.25	1.24	1.47	661	292	569
AIR6419 Antenna	31.0	16.1	7.3	3.47	1.57	1.93	4.25	1.20	1.28	216	104	188
AIR6449 Antenna	30.6	15.9	10.6	3.38	2.25	1.92	2.89	1.20	1.22	211	143	194
DMP65R-BU6DA Antenna	71.2	20.7	7.7	10.24	3.81	3.44	9.25	1.24	1.47	661	292	569
4478 B14 RRH (Side)	18.1	8.3	13.4	1.04	1.68	2.18	1.35	1.20	1.20	65	105	75
8843 B2/B66A RRH (Side)	14.9	10.9	13.2	1.13	1.37	1.37	1.13	1.20	1.20	70	85	74
4449 B5/B12 RRH	17.9	13.2	9.4	1.64	1.17	1.36	1.90	1.20	1.20	102	73	95

WIND LOADS WITH ICE:

TPA65R-BU6DA-K Antenna	73.5	23.0	10.0	11.76	5.12	3.19	7.33	1.23	1.41	120	60	105
AIR6419 Antenna	33.3	18.4	9.6	4.26	2.23	1.81	3.46	1.20	1.24	43	23	38
AIR6449 Antenna	32.9	18.2	12.9	4.17	2.96	1.81	2.55	1.20	1.20	42	30	39
DMP65R-BU6DA Antenna	73.5	23.0	10.0	11.76	5.12	3.19	7.33	1.23	1.41	120	60	105
4478 B14 RRH (Side)	20.4	10.6	15.7	1.51	2.23	1.92	1.30	1.20	1.20	15	22	17
8843 B2/B66A RRH (Side)	17.2	13.2	15.5	1.58	1.86	1.30	1.11	1.20	1.20	16	19	16
4449 B5/B12 RRH	20.2	15.5	11.7	2.18	1.65	1.30	1.72	1.20	1.20	22	16	20

WIND LOADS AT 30 MPH:

TPA65R-BU6DA-K Antenna	71.2	20.7	7.7	10.24	3.81	3.44	9.25	1.24	1.47	38	17	33
AIR6419 Antenna	31.0	16.1	7.3	3.47	1.57	1.93	4.25	1.20	1.28	12	6	11
AIR6449 Antenna	30.6	15.9	10.6	3.38	2.25	1.92	2.89	1.20	1.22	12	8	11
DMP65R-BU6DA Antenna	71.2	20.7	7.7	10.24	3.81	3.44	9.25	1.24	1.47	38	17	33
4478 B14 RRH (Side)	18.1	8.3	13.4	1.04	1.68	2.18	1.35	1.20	1.20	4	6	4
8843 B2/B66A RRH (Side)	14.9	10.9	13.2	1.13	1.37	1.37	1.13	1.20	1.20	4	5	4
4449 B5/B12 RRH	17.9	13.2	9.4	1.64	1.17	1.36	1.90	1.20	1.20	6	4	5

Date: 2/25/2022
Project Name: GEORGES CELLAR HILL SOUTH
Project No.: CT2174
Designed By: KSBM **Checked By:** MSC

HUDSON Design Group LLC

ICE WEIGHT CALCULATIONS

Thickness of ice: 1.16 in.
Density of ice: 56 pcf

TPA65R-BU6DA-K Antenna

Weight of ice based on total radial SF area:

Height (in):	71.2	
Width (in):	20.7	
Depth (in):	7.7	
Total weight of ice on object:		195 lbs
Weight of object:	69.0 lbs	
Combined weight of ice and object:		264 lbs

AIR6419 Antenna

Weight of ice based on total radial SF area:

Height (in):	31.0	
Width (in):	16.1	
Depth (in):	7.3	
Total weight of ice on object:		69 lbs
Weight of object:	66.0 lbs	
Combined weight of ice and object:		135 lbs

AIR6449 Antenna

Weight of ice based on total radial SF area:

Height (in):	30.6	
Width (in):	15.9	
Depth (in):	10.6	
Total weight of ice on object:		73 lbs
Weight of object:	82.0 lbs	
Combined weight of ice and object:		155 lbs

DMP65R-BU6DA Antenna

Weight of ice based on total radial SF area:

Height (in):	71.2	
Width (in):	20.7	
Depth (in):	7.7	
Total weight of ice on object:		195 lbs
Weight of object:	80.0 lbs	
Combined weight of ice and object:		275 lbs

4478 B14 RRH

Weight of ice based on total radial SF area:

Height (in):	18.1	
Width (in):	13.4	
Depth (in):	8.3	
Total weight of ice on object:		36 lbs
Weight of object:	60.0 lbs	
Combined weight of ice and object:		96 lbs

8843 B2/B66A RRH

Weight of ice based on total radial SF area:

Height (in):	14.9	
Width (in):	13.2	
Depth (in):	10.9	
Total weight of ice on object:		32 lbs
Weight of object:	72.0 lbs	
Combined weight of ice and object:		104 lbs

4449 B5/B12 RRH

Weight of ice based on total radial SF area:

Height (in):	17.9	
Width (in):	13.2	
Depth (in):	9.4	
Total weight of ice on object:		37 lbs
Weight of object:	73.0 lbs	
Combined weight of ice and object:		110 lbs

DC6-48-60-18 Surge Arrestor

Weight of ice based on total radial SF area:

Depth (in):	31.4	
Diameter(in):	10.2	
Total weight of ice on object:		42 lbs
Weight of object:	33 lbs	
Combined weight of ice and object:		75 lbs

PL 11-1/4x5/8

Weight of ice based on total radial SF area:

Height (in):	11.25	
Width (in):	0.63	
Per foot weight of ice on object:		18 plf

PL 3-1/2x5/8

Weight of ice based on total radial SF area:

Height (in):	3.5	
Width (in):	0.63	
Per foot weight of ice on object:		7 plf

3/4" Round Bar

Per foot weight of ice:

diameter (in):	0.75	
Per foot weight of ice on object:		3 plf

5/8" Round Bar

Per foot weight of ice:

diameter (in):	0.63	
Per foot weight of ice on object:		3 plf

2" pipe

Per foot weight of ice:

diameter (in):	2.38	
Per foot weight of ice on object:		5 plf

2-1/2" pipe

Per foot weight of ice:

diameter (in):	2.88	
Per foot weight of ice on object:		6 plf

HSS 4x4

Weight of ice based on total radial SF area:

Height (in):	4	
Width (in):	4	
Per foot weight of ice on object:		10 plf

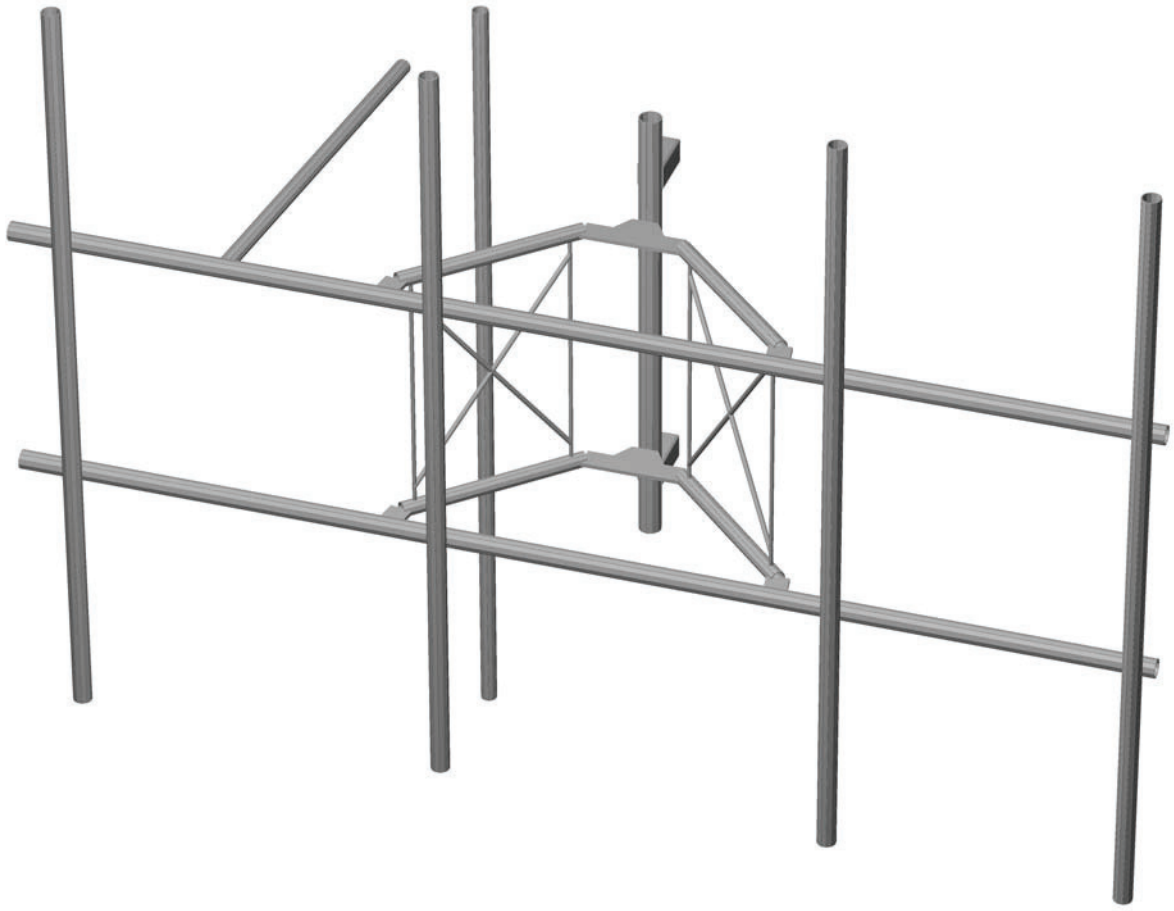
3" Pipe

Per foot weight of ice:

diameter (in):	3.5	
Per foot weight of ice on object:		7 plf

HUDSON
Design Group LLC

Mount Calculations
(Proposed Conditions)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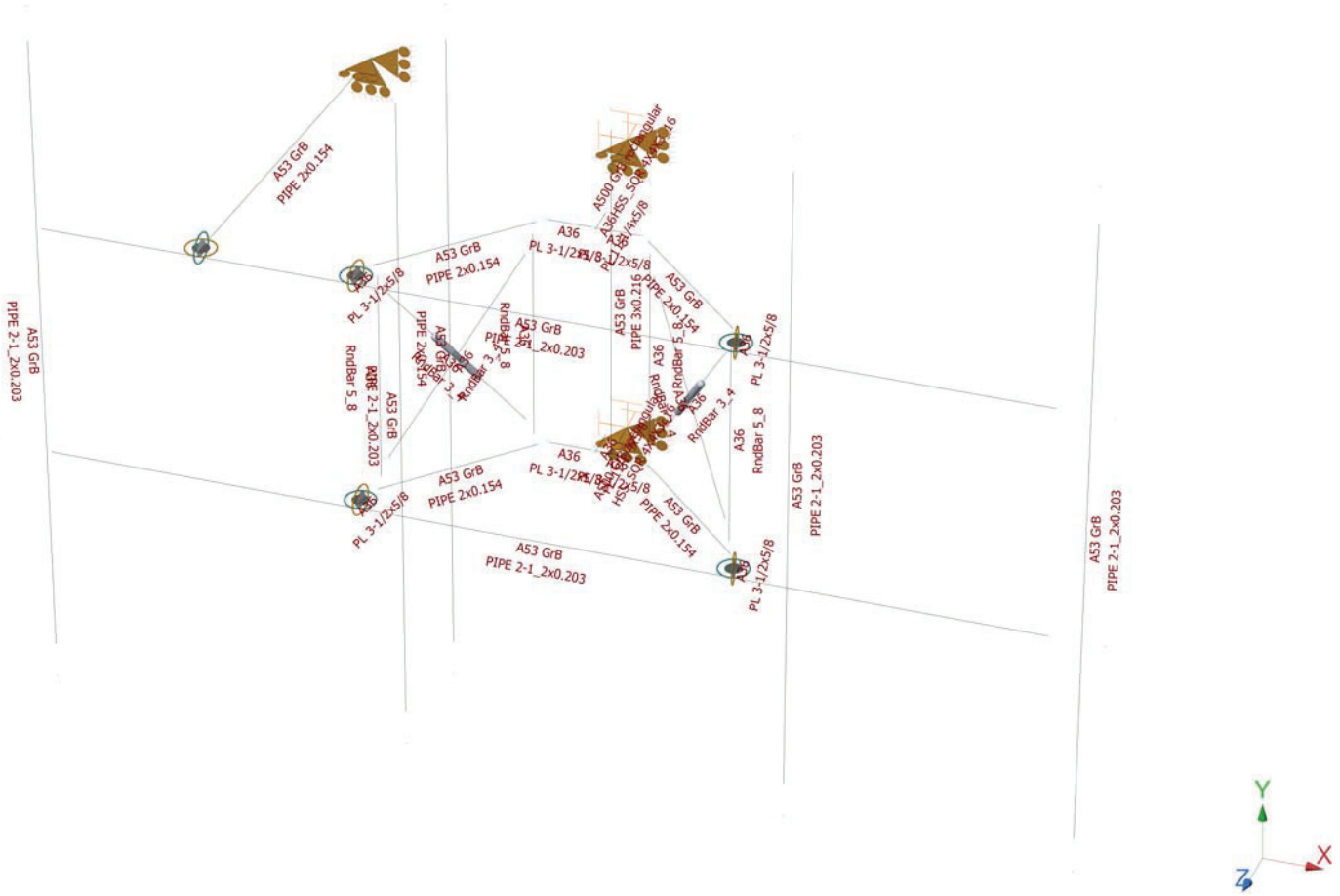
X
Z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PIPE 2x0.154
A36
PL 3-1/2x5/8
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PIPE 2x0.154
A53 GrB
PIPE 3x0.216
A53 GrB
PIPE 2x0.154
A36
RndBar 5_8
A36
RndBar 3_4
A36
PL 3-1/2x5/8
A53 GrB
PIPE 2-1_2x0.203
A53 GrB
PIPE 2-1_2x0.203
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PIPE 2-1_2x0.203
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PIPE 2-1_2x0.203
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PL 3-1/2x5/8
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PIPE 2-1_2x0.203
Y
X
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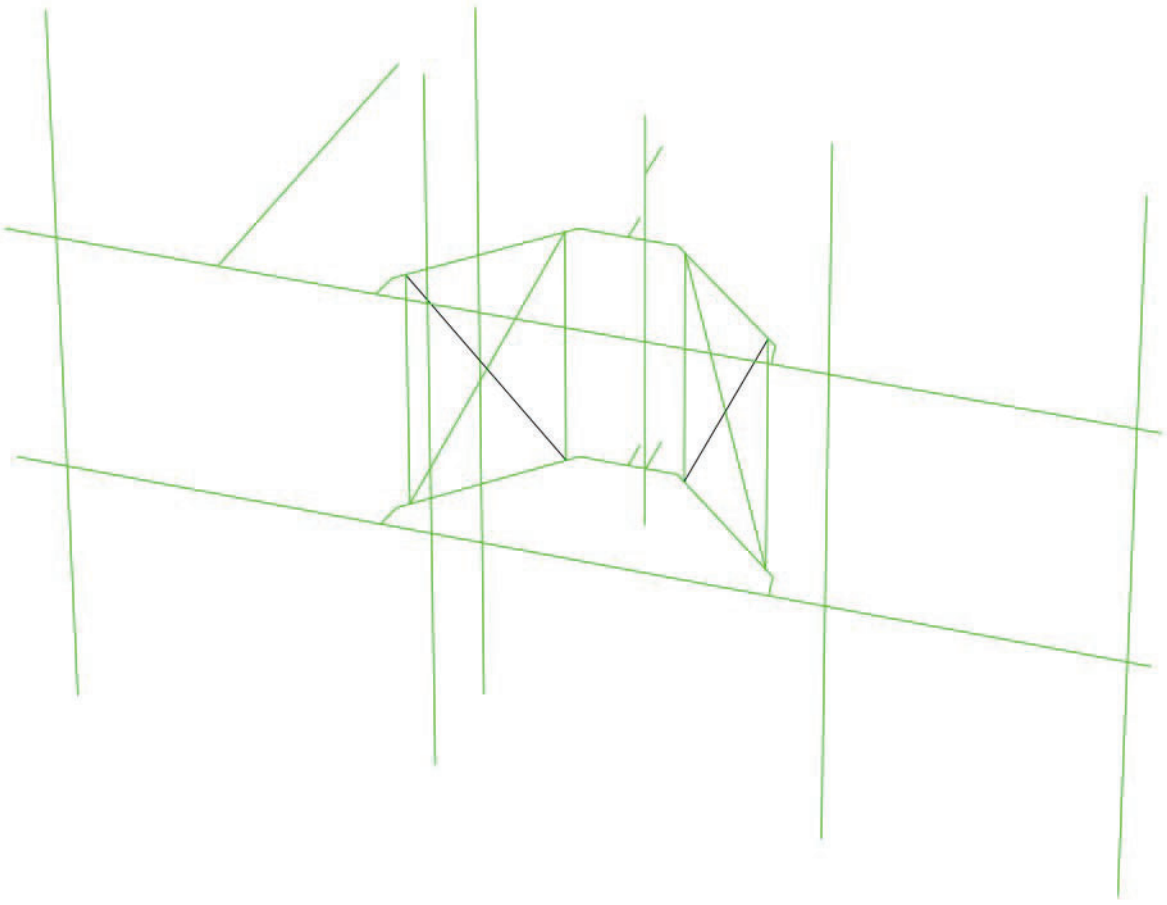
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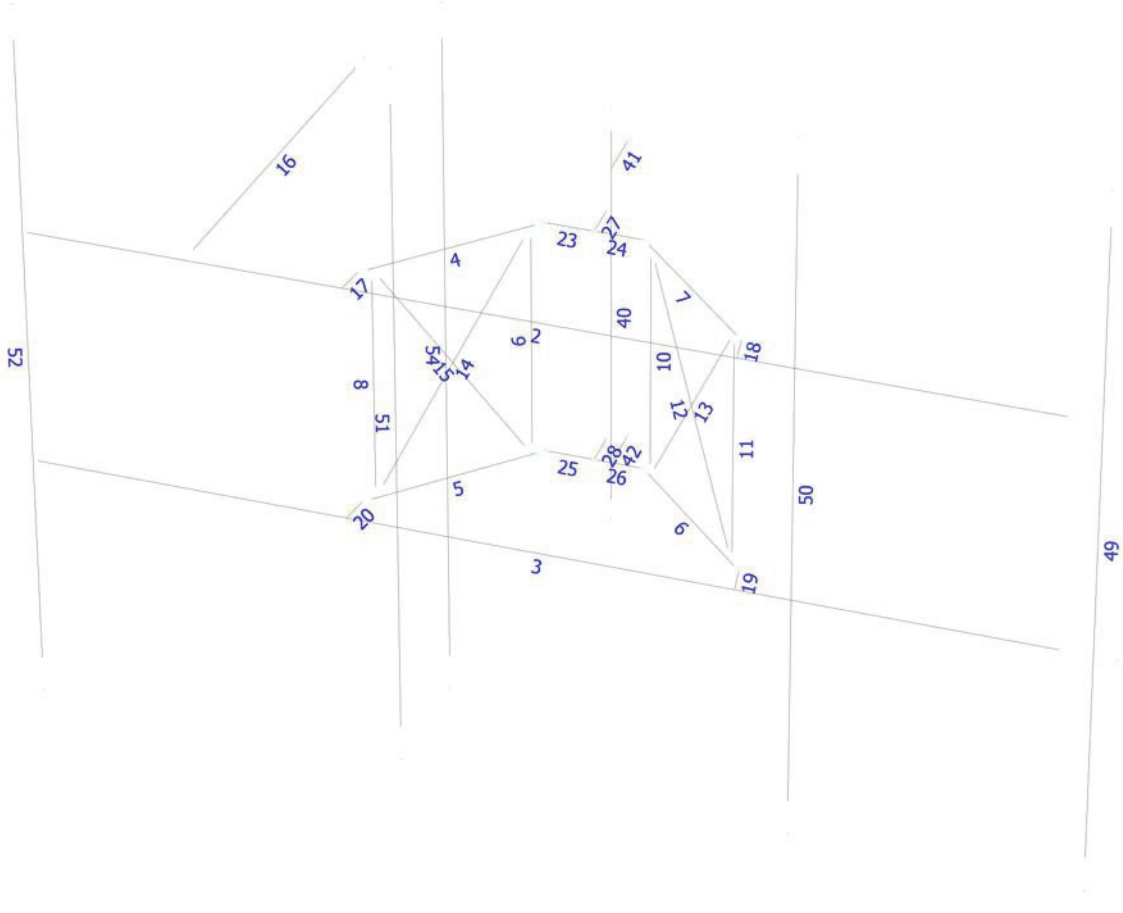
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Z

RAM® Elements
CONNECT Edition

Current Date: 2/25/2022 9:41 AM
Units system: English

Load data

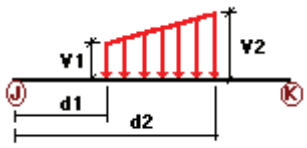
GLOSSARY

Comb : Indicates if load condition is a load combination

Load Conditions

Condition	Description	Comb.	Category
D	Dead Load	No	DL
Wo	Wind Load (NO ICE)	No	WIND
W30	WL 30deg	No	WIND
W60	WL 60deg	No	WIND
W90	WL 90deg	No	WIND
W120	WL 120deg	No	WIND
W150	WL 150deg	No	WIND
Di	Ice Load	No	LL
WI0	WL ICE 0deg	No	WIND
WI30	WL ICE 30deg	No	WIND
WI60	WL ICE 60deg	No	WIND
WI90	WL ICE 90deg	No	WIND
WI120	WL ICE 120deg	No	WIND
WI150	WL ICE 150deg	No	WIND
WL0	WL 30 mph 0deg	No	WIND
WL30	WL 30 mph 30deg	No	WIND
WL60	WL 30 mph 60deg	No	WIND
WL90	WL 30 mph 90deg	No	WIND
WL120	WL 30 mph 120deg	No	WIND
WL150	WL 30 mph 150deg	No	WIND
LL1	250 lb Live Load Center of Mount	No	LL
LL2	250 lb Live Load Right End of Mount	No	LL
LL3	250 lb Live Load Left End of Mount	No	LL
LLa1	500 lb Live Load Antenna 1	No	LL
LLa2	500 lb Live Load Antenna 2	No	LL
LLa3	500 lb Live Load Antenna 3	No	LL
LLa4	500 lb Live Load Antenna 4	No	LL

Distributed force on members



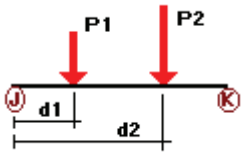
Condition	Member	Dir1	Val1 [Kip/ft]	Val2 [Kip/ft]	Dist1 [ft]	%	Dist2 [ft]	%
Wo	2	z	-0.015	0.00	0.00	No	0.00	No
	3	z	-0.015	0.00	0.00	No	0.00	No
	4	z	-0.012	0.00	0.00	No	0.00	No
	5	z	-0.012	0.00	0.00	No	0.00	No
	6	z	-0.012	0.00	0.00	No	0.00	No
	7	z	-0.012	0.00	0.00	No	0.00	No
	8	z	-0.003	0.00	0.00	No	0.00	No
	9	z	-0.003	0.00	0.00	No	0.00	No
	10	z	-0.003	0.00	0.00	No	0.00	No
	11	z	-0.003	0.00	0.00	No	0.00	No
	12	z	-0.004	0.00	0.00	No	0.00	No
	13	z	-0.004	0.00	0.00	No	0.00	No
	14	z	-0.004	0.00	0.00	No	0.00	No
	15	z	-0.004	0.00	0.00	No	0.00	No
	16	z	-0.012	0.00	0.00	No	0.00	No
	17	z	-0.005	0.00	0.00	No	0.00	No
	18	z	-0.005	0.00	0.00	No	0.00	No
	19	z	-0.005	0.00	0.00	No	0.00	No
	20	z	-0.005	0.00	0.00	No	0.00	No
	23	z	-0.005	0.00	0.00	No	0.00	No
	24	z	-0.005	0.00	0.00	No	0.00	No
	25	z	-0.005	0.00	0.00	No	0.00	No
	26	z	-0.005	0.00	0.00	No	0.00	No
	27	z	-0.005	0.00	0.00	No	0.00	No
	28	z	-0.005	0.00	0.00	No	0.00	No
	40	z	-0.018	0.00	0.00	No	0.00	No
	41	z	-0.022	0.00	0.00	No	0.00	No
	42	z	-0.022	0.00	0.00	No	0.00	No
	49	z	-0.015	0.00	0.00	No	0.00	No
	50	z	-0.015	-0.015	0.00	No	2.00	No
		z	-0.015	-0.015	8.00	No	10.00	No
	51	z	-0.015	-0.015	0.00	No	1.75	No
		z	-0.015	-0.015	8.25	No	10.00	No
	52	z	-0.015	-0.015	0.00	No	2.00	No
		z	-0.015	-0.015	8.00	No	10.00	No
	54	z	-0.012	0.00	0.00	No	0.00	No
W30	2	z	-0.015	0.00	0.00	No	0.00	No
	3	z	-0.015	0.00	0.00	No	0.00	No
	4	z	-0.012	0.00	0.00	No	0.00	No
	5	z	-0.012	0.00	0.00	No	0.00	No
	6	z	-0.012	0.00	0.00	No	0.00	No
	7	z	-0.012	0.00	0.00	No	0.00	No
	8	z	-0.003	0.00	0.00	No	0.00	No
	9	z	-0.003	0.00	0.00	No	0.00	No
	10	z	-0.003	0.00	0.00	No	0.00	No
	11	z	-0.003	0.00	0.00	No	0.00	No
	12	z	-0.004	0.00	0.00	No	0.00	No
	13	z	-0.004	0.00	0.00	No	0.00	No
	14	z	-0.004	0.00	0.00	No	0.00	No
	15	z	-0.004	0.00	0.00	No	0.00	No
	16	z	-0.012	0.00	0.00	No	0.00	No
	17	z	-0.005	0.00	0.00	No	0.00	No
	18	z	-0.005	0.00	0.00	No	0.00	No
	19	z	-0.005	0.00	0.00	No	0.00	No
	20	z	-0.005	0.00	0.00	No	0.00	No
	23	z	-0.005	0.00	0.00	No	0.00	No
	24	z	-0.005	0.00	0.00	No	0.00	No
	25	z	-0.005	0.00	0.00	No	0.00	No
	26	z	-0.005	0.00	0.00	No	0.00	No
	27	z	-0.005	0.00	0.00	No	0.00	No

	28	z	-0.005	0.00	0.00	No	0.00	No
	40	z	-0.018	0.00	0.00	No	0.00	No
	41	z	-0.022	0.00	0.00	No	0.00	No
	42	z	-0.022	0.00	0.00	No	0.00	No
	49	z	-0.015	0.00	0.00	No	0.00	No
	50	z	-0.015	-0.015	0.00	No	2.00	No
		z	-0.015	-0.015	8.00	No	10.00	No
	51	z	-0.015	-0.015	0.00	No	1.75	No
		z	-0.015	-0.015	8.25	No	10.00	No
	52	z	-0.015	-0.015	0.00	No	2.00	No
		z	-0.015	-0.015	8.00	No	10.00	No
	54	z	-0.012	0.00	0.00	No	0.00	No
W60	2	x	-0.015	0.00	0.00	No	0.00	No
	3	x	-0.015	0.00	0.00	No	0.00	No
	4	x	-0.012	0.00	0.00	No	0.00	No
	5	x	-0.012	0.00	0.00	No	0.00	No
	6	x	-0.012	0.00	0.00	No	0.00	No
	7	x	-0.012	0.00	0.00	No	0.00	No
	8	x	-0.003	0.00	0.00	No	0.00	No
	9	x	-0.003	0.00	0.00	No	0.00	No
	10	x	-0.003	0.00	0.00	No	0.00	No
	11	x	-0.003	0.00	0.00	No	0.00	No
	12	x	-0.004	0.00	0.00	No	0.00	No
	13	x	-0.004	0.00	0.00	No	0.00	No
	14	x	-0.004	0.00	0.00	No	0.00	No
	15	x	-0.004	0.00	0.00	No	0.00	No
	16	x	-0.012	0.00	0.00	No	0.00	No
	17	x	-0.005	0.00	0.00	No	0.00	No
	18	x	-0.005	0.00	0.00	No	0.00	No
	19	x	-0.005	0.00	0.00	No	0.00	No
	20	x	-0.005	0.00	0.00	No	0.00	No
	23	x	-0.005	0.00	0.00	No	0.00	No
	24	x	-0.005	0.00	0.00	No	0.00	No
	25	x	-0.005	0.00	0.00	No	0.00	No
	26	x	-0.005	0.00	0.00	No	0.00	No
	27	x	-0.005	0.00	0.00	No	0.00	No
	28	x	-0.005	0.00	0.00	No	0.00	No
	40	x	-0.018	0.00	0.00	No	0.00	No
	41	x	-0.022	0.00	0.00	No	0.00	No
	42	x	-0.022	0.00	0.00	No	0.00	No
	49	x	-0.015	0.00	0.00	No	0.00	No
	50	x	-0.015	0.00	0.00	No	0.00	No
	51	x	-0.015	0.00	0.00	No	0.00	No
	52	x	-0.015	0.00	0.00	No	0.00	No
	54	x	-0.012	0.00	0.00	No	0.00	No
W90	4	x	-0.012	0.00	0.00	No	0.00	No
	5	x	-0.012	0.00	0.00	No	0.00	No
	6	x	-0.012	0.00	0.00	No	0.00	No
	7	x	-0.012	0.00	0.00	No	0.00	No
	8	x	-0.003	0.00	0.00	No	0.00	No
	9	x	-0.003	0.00	0.00	No	0.00	No
	10	x	-0.003	0.00	0.00	No	0.00	No
	11	x	-0.003	0.00	0.00	No	0.00	No
	12	x	-0.004	0.00	0.00	No	0.00	No
	13	x	-0.004	0.00	0.00	No	0.00	No
	14	x	-0.004	0.00	0.00	No	0.00	No
	15	x	-0.004	0.00	0.00	No	0.00	No
	16	x	-0.012	0.00	0.00	No	0.00	No
	17	x	-0.005	0.00	0.00	No	0.00	No
	18	x	-0.005	0.00	0.00	No	0.00	No

	19	x	-0.005	0.00	0.00	No	0.00	No
	20	x	-0.005	0.00	0.00	No	0.00	No
	23	x	-0.005	0.00	0.00	No	0.00	No
	24	x	-0.005	0.00	0.00	No	0.00	No
	25	x	-0.005	0.00	0.00	No	0.00	No
	26	x	-0.005	0.00	0.00	No	0.00	No
	27	x	-0.005	0.00	0.00	No	0.00	No
	28	x	-0.005	0.00	0.00	No	0.00	No
	40	x	-0.018	0.00	0.00	No	0.00	No
	41	x	-0.022	0.00	0.00	No	0.00	No
	42	x	-0.022	0.00	0.00	No	0.00	No
	49	x	-0.015	0.00	0.00	No	0.00	No
	50	x	-0.015	0.00	0.00	No	0.00	No
	51	x	-0.015	0.00	0.00	No	0.00	No
	52	x	-0.015	0.00	0.00	No	0.00	No
	54	x	-0.012	0.00	0.00	No	0.00	No
W120	2	x	-0.015	0.00	0.00	No	0.00	No
	3	x	-0.015	0.00	0.00	No	0.00	No
	4	x	-0.012	0.00	0.00	No	0.00	No
	5	x	-0.012	0.00	0.00	No	0.00	No
	6	x	-0.012	0.00	0.00	No	0.00	No
	7	x	-0.012	0.00	0.00	No	0.00	No
	8	x	-0.003	0.00	0.00	No	0.00	No
	9	x	-0.003	0.00	0.00	No	0.00	No
	10	x	-0.003	0.00	0.00	No	0.00	No
	11	x	-0.003	0.00	0.00	No	0.00	No
	12	x	-0.004	0.00	0.00	No	0.00	No
	13	x	-0.004	0.00	0.00	No	0.00	No
	14	x	-0.004	0.00	0.00	No	0.00	No
	15	x	-0.004	0.00	0.00	No	0.00	No
	16	x	-0.012	0.00	0.00	No	0.00	No
	17	x	-0.005	0.00	0.00	No	0.00	No
	18	x	-0.005	0.00	0.00	No	0.00	No
	19	x	-0.005	0.00	0.00	No	0.00	No
	20	x	-0.005	0.00	0.00	No	0.00	No
	23	x	-0.005	0.00	0.00	No	0.00	No
	24	x	-0.005	0.00	0.00	No	0.00	No
	25	x	-0.005	0.00	0.00	No	0.00	No
	26	x	-0.005	0.00	0.00	No	0.00	No
	27	x	-0.005	0.00	0.00	No	0.00	No
	28	x	-0.005	0.00	0.00	No	0.00	No
	40	x	-0.018	0.00	0.00	No	0.00	No
	41	x	-0.022	0.00	0.00	No	0.00	No
	42	x	-0.022	0.00	0.00	No	0.00	No
	49	x	-0.015	0.00	0.00	No	0.00	No
	50	x	-0.015	0.00	0.00	No	0.00	No
	51	x	-0.015	0.00	0.00	No	0.00	No
	52	x	-0.015	0.00	0.00	No	0.00	No
	54	x	-0.012	0.00	0.00	No	0.00	No
W150	2	z	0.015	0.00	0.00	No	0.00	No
	3	z	0.015	0.00	0.00	No	0.00	No
	4	z	0.012	0.00	0.00	No	0.00	No
	5	z	0.012	0.00	0.00	No	0.00	No
	6	z	0.012	0.00	0.00	No	0.00	No
	7	z	0.012	0.00	0.00	No	0.00	No
	8	z	0.003	0.00	0.00	No	0.00	No
	9	z	0.003	0.00	0.00	No	0.00	No
	10	z	0.003	0.00	0.00	No	0.00	No
	11	z	0.003	0.00	0.00	No	0.00	No
	12	z	0.004	0.00	0.00	No	0.00	No

	13	z	0.004	0.00	0.00	No	0.00	No
	14	z	0.004	0.00	0.00	No	0.00	No
	15	z	0.004	0.00	0.00	No	0.00	No
	16	z	0.012	0.00	0.00	No	0.00	No
	17	z	0.005	0.00	0.00	No	0.00	No
	18	z	0.005	0.00	0.00	No	0.00	No
	19	z	0.005	0.00	0.00	No	0.00	No
	20	z	0.005	0.00	0.00	No	0.00	No
	23	z	0.005	0.00	0.00	No	0.00	No
	24	z	0.005	0.00	0.00	No	0.00	No
	25	z	0.005	0.00	0.00	No	0.00	No
	26	z	0.005	0.00	0.00	No	0.00	No
	27	z	0.005	0.00	0.00	No	0.00	No
	28	z	0.005	0.00	0.00	No	0.00	No
	40	z	0.018	0.00	0.00	No	0.00	No
	41	z	0.022	0.00	0.00	No	0.00	No
	42	z	0.022	0.00	0.00	No	0.00	No
	49	z	0.015	0.00	0.00	No	0.00	No
	50	z	0.015	0.00	0.00	No	0.00	No
	51	z	0.015	0.00	0.00	No	0.00	No
	52	z	0.015	0.00	0.00	No	0.00	No
	54	z	0.012	0.00	0.00	No	0.00	No
Di	2	y	-0.006	0.00	0.00	No	0.00	No
	3	y	-0.006	0.00	0.00	No	0.00	No
	4	y	-0.005	0.00	0.00	No	0.00	No
	5	y	-0.005	0.00	0.00	No	0.00	No
	6	y	-0.005	0.00	0.00	No	0.00	No
	7	y	-0.005	0.00	0.00	No	0.00	No
	8	y	-0.003	0.00	0.00	No	0.00	No
	9	y	-0.003	0.00	0.00	No	0.00	No
	10	y	-0.003	0.00	0.00	No	0.00	No
	11	y	-0.003	0.00	0.00	No	0.00	No
	12	y	-0.003	0.00	0.00	No	0.00	No
	13	y	-0.003	0.00	0.00	No	0.00	No
	14	y	-0.003	0.00	0.00	No	0.00	No
	15	y	-0.003	0.00	0.00	No	0.00	No
	16	y	-0.005	0.00	0.00	No	0.00	No
	17	y	-0.007	0.00	0.00	No	0.00	No
	18	y	-0.007	0.00	0.00	No	0.00	No
	19	y	-0.007	0.00	0.00	No	0.00	No
	20	y	-0.007	0.00	0.00	No	0.00	No
	23	y	-0.007	0.00	0.00	No	0.00	No
	24	y	-0.007	0.00	0.00	No	0.00	No
	25	y	-0.007	0.00	0.00	No	0.00	No
	26	y	-0.007	0.00	0.00	No	0.00	No
	27	y	-0.018	0.00	0.00	No	0.00	No
	28	y	-0.018	0.00	0.00	No	0.00	No
	40	y	-0.007	0.00	0.00	No	0.00	No
	41	y	-0.01	0.00	0.00	No	0.00	No
	42	y	-0.01	0.00	0.00	No	0.00	No
	49	y	-0.006	0.00	0.00	No	0.00	No
	50	y	-0.006	0.00	0.00	No	0.00	No
	51	y	-0.006	0.00	0.00	No	0.00	No
	52	y	-0.006	0.00	0.00	No	0.00	No
	54	y	-0.005	0.00	0.00	No	0.00	No

Concentrated forces on members



Condition	Member	Dir1	Value1 [Kip]	Dist1 [ft]	%
D	50	y	-0.035	2.50	No
		y	-0.035	7.50	No
		y	-0.06	1.00	No
		y	-0.072	1.00	No
	51	y	-0.033	2.25	No
		y	-0.033	4.00	No
		y	-0.041	6.00	No
		y	-0.041	7.75	No
	52	y	-0.04	2.50	No
		y	-0.04	7.50	No
		y	-0.073	1.00	No
	54	y	-0.033	2.50	No
Wo	50	z	-0.331	2.50	No
		z	-0.331	7.50	No
		z	-0.065	1.00	No
		z	-0.07	1.00	No
	51	z	-0.109	2.25	No
		z	-0.109	4.00	No
		z	-0.106	6.00	No
		z	-0.106	7.75	No
	52	z	-0.331	2.50	No
		z	-0.331	7.50	No
		z	-0.102	1.00	No
	54	z	-0.081	2.50	No
W30	50	3	-0.285	2.50	No
		3	-0.285	7.50	No
		3	-0.075	1.00	No
	51	3	-0.095	2.25	No
		3	-0.095	4.00	No
		3	-0.097	6.00	No
		3	-0.097	7.75	No
	52	3	-0.285	2.50	No
		3	-0.285	7.50	No
		3	-0.095	1.00	No
	54	3	-0.081	2.50	No
W60	50	3	-0.193	2.50	No
		3	-0.193	7.50	No
		3	-0.095	1.00	No
	51	3	-0.067	2.25	No
		3	-0.067	4.00	No
		3	-0.08	6.00	No
		3	-0.08	7.75	No
	52	3	-0.193	2.50	No
		3	-0.193	7.50	No
		3	-0.08	1.00	No
	54	3	-0.081	2.50	No
W90	50	x	-0.147	2.50	No
		x	-0.147	7.50	No
		x	-0.105	1.00	No
	51	x	-0.053	2.25	No
		x	-0.053	4.00	No
		x	-0.072	6.00	No
		x	-0.072	7.75	No
	52	x	-0.147	2.50	No

		x	-0.147	7.50	No
		x	-0.073	1.00	No
	54	x	-0.081	2.50	No
W120	50	2	-0.193	2.50	No
		2	-0.193	7.50	No
		2	-0.095	1.00	No
	51	2	-0.067	2.25	No
		2	-0.067	4.00	No
		2	-0.08	6.00	No
		2	-0.08	7.75	No
	52	2	-0.193	2.50	No
		2	-0.193	7.50	No
		2	-0.08	1.00	No
	54	2	-0.081	2.50	No
W150	50	2	-0.285	2.50	No
		2	-0.285	7.50	No
		2	-0.075	1.00	No
	51	2	-0.095	2.25	No
		2	-0.095	4.00	No
		2	-0.097	6.00	No
		2	-0.097	7.75	No
	52	2	-0.285	2.50	No
		2	-0.285	7.50	No
		2	-0.095	1.00	No
	54	2	-0.081	2.50	No
Di	50	y	-0.098	2.50	No
		y	-0.098	7.50	No
		y	-0.036	1.00	No
		y	-0.032	1.00	No
	51	y	-0.035	2.25	No
		y	-0.035	4.00	No
		y	-0.037	6.00	No
		y	-0.037	7.75	No
	52	y	-0.098	2.50	No
		y	-0.098	7.50	No
		y	-0.037	1.00	No
	54	y	-0.042	2.50	No
WI0	50	z	-0.061	2.50	No
		z	-0.061	7.50	No
		z	-0.015	1.00	No
		z	-0.016	1.00	No
	51	z	-0.022	2.25	No
		z	-0.022	4.00	No
		z	-0.021	6.00	No
		z	-0.021	7.75	No
	52	z	-0.061	2.50	No
		z	-0.061	7.50	No
		z	-0.022	1.00	No
	54	z	-0.017	2.50	No
WI30	50	3	-0.053	2.50	No
		3	-0.053	7.50	No
		3	-0.017	1.00	No
	51	3	-0.019	2.25	No
		3	-0.019	4.00	No
		3	-0.02	6.00	No
		3	-0.02	7.75	No
	52	3	-0.053	2.50	No
		3	-0.053	7.50	No
		3	-0.02	1.00	No
	54	3	-0.017	2.50	No

WI60	50	3	-0.038	2.50	No
		3	-0.038	7.50	No
		3	-0.02	1.00	No
	51	3	-0.014	2.25	No
		3	-0.014	4.00	No
		3	-0.017	6.00	No
		3	-0.017	7.75	No
	52	3	-0.038	2.50	No
		3	-0.038	7.50	No
		3	-0.018	1.00	No
	54	3	-0.017	2.50	No
WI90	50	x	-0.031	2.50	No
		x	-0.031	7.50	No
		x	-0.022	1.00	No
	51	x	-0.012	2.25	No
		x	-0.012	4.00	No
		x	-0.015	6.00	No
		x	-0.015	7.75	No
	52	x	-0.031	2.50	No
		x	-0.031	7.50	No
		x	-0.016	1.00	No
	54	x	-0.017	2.50	No
WI120	50	2	-0.038	2.50	No
		2	-0.038	7.50	No
		2	-0.02	1.00	No
	51	2	-0.014	2.25	No
		2	-0.014	4.00	No
		2	-0.017	6.00	No
		2	-0.017	7.75	No
	52	2	-0.038	2.50	No
		2	-0.038	7.50	No
		2	-0.018	1.00	No
	54	2	-0.017	2.50	No
WI150	50	2	-0.053	2.50	No
		2	-0.053	7.50	No
		2	-0.017	1.00	No
	51	2	-0.019	2.25	No
		2	-0.019	4.00	No
		2	-0.02	6.00	No
		2	-0.02	7.75	No
	52	2	-0.053	2.50	No
		2	-0.053	7.50	No
		2	-0.02	1.00	No
	54	2	-0.017	2.50	No
WL0	50	z	-0.02	2.50	No
		z	-0.02	7.50	No
		z	-0.004	1.00	No
		z	-0.004	1.00	No
	51	z	-0.007	2.25	No
		z	-0.007	4.00	No
		z	-0.007	6.00	No
		z	-0.007	7.75	No
	52	z	-0.02	2.50	No
		z	-0.02	7.50	No
		z	-0.006	1.00	No
	54	z	-0.005	2.50	No
WL30	50	3	-0.017	2.50	No
		3	-0.017	7.50	No
		3	-0.004	1.00	No
	51	3	-0.006	2.25	No

		3	-0.006	4.00	No
		3	-0.006	6.00	No
		3	-0.006	7.75	No
	52	3	-0.017	2.50	No
		3	-0.017	7.50	No
		3	-0.005	1.00	No
	54	3	-0.005	2.50	No
WL60	50	3	-0.012	2.50	No
		3	-0.012	7.50	No
		3	-0.005	1.00	No
	51	3	-0.004	2.25	No
		3	-0.004	4.00	No
		3	-0.005	6.00	No
		3	-0.005	7.75	No
	52	3	-0.012	2.50	No
		3	-0.012	7.50	No
		3	-0.005	1.00	No
	54	3	-0.005	2.50	No
WL90	50	x	-0.009	2.50	No
		x	-0.009	7.50	No
		x	-0.006	1.00	No
	51	x	-0.004	2.25	No
		x	-0.004	4.00	No
		x	-0.005	6.00	No
		x	-0.005	7.75	No
	52	x	-0.009	2.50	No
		x	-0.009	7.50	No
		x	-0.004	1.00	No
	54	x	-0.005	2.50	No
WL120	50	2	-0.012	2.50	No
		2	-0.012	7.50	No
		2	-0.005	1.00	No
	51	2	-0.004	2.25	No
		2	-0.004	4.00	No
		2	-0.005	6.00	No
		2	-0.005	7.75	No
	52	2	-0.012	2.50	No
		2	-0.012	7.50	No
		2	-0.005	1.00	No
	54	2	-0.005	2.50	No
WL150	50	2	-0.017	2.50	No
		2	-0.017	7.50	No
		2	-0.004	1.00	No
	51	2	-0.006	2.25	No
		2	-0.006	4.00	No
		2	-0.006	6.00	No
		2	-0.006	7.75	No
	52	2	-0.017	2.50	No
		2	-0.017	7.50	No
		2	-0.005	1.00	No
	54	2	-0.005	2.50	No
LL1	2	y	-0.25	50.00	Yes
LL2	2	y	-0.25	100.00	Yes
LL3	2	y	-0.25	0.00	Yes
LLa1	49	y	-0.50	50.00	Yes
LLa2	50	y	-0.50	50.00	Yes
LLa3	51	y	-0.50	50.00	Yes
LLa4	52	y	-0.50	50.00	Yes

Self weight multipliers for load conditions

Condition	Description	Self weight multiplier Comb.	MultX	MultY	MultZ
D	Dead Load	No	0.00	-1.00	0.00
Wo	Wind Load (NO ICE)	No	0.00	0.00	0.00
W30	WL 30deg	No	0.00	0.00	0.00
W60	WL 60deg	No	0.00	0.00	0.00
W90	WL 90deg	No	0.00	0.00	0.00
W120	WL 120deg	No	0.00	0.00	0.00
W150	WL 150deg	No	0.00	0.00	0.00
Di	Ice Load	No	0.00	0.00	0.00
WI0	WL ICE 0deg	No	0.00	0.00	0.00
WI30	WL ICE 30deg	No	0.00	0.00	0.00
WI60	WL ICE 60deg	No	0.00	0.00	0.00
WI90	WL ICE 90deg	No	0.00	0.00	0.00
WI120	WL ICE 120deg	No	0.00	0.00	0.00
WI150	WL ICE 150deg	No	0.00	0.00	0.00
WL0	WL 30 mph 0deg	No	0.00	0.00	0.00
WL30	WL 30 mph 30deg	No	0.00	0.00	0.00
WL60	WL 30 mph 60deg	No	0.00	0.00	0.00
WL90	WL 30 mph 90deg	No	0.00	0.00	0.00
WL120	WL 30 mph 120deg	No	0.00	0.00	0.00
WL150	WL 30 mph 150deg	No	0.00	0.00	0.00
LL1	250 lb Live Load Center of Mount	No	0.00	0.00	0.00
LL2	250 lb Live Load Right End of Mount	No	0.00	0.00	0.00
LL3	250 lb Live Load Left End of Mount	No	0.00	0.00	0.00
LLa1	500 lb Live Load Antenna 1	No	0.00	0.00	0.00
LLa2	500 lb Live Load Antenna 2	No	0.00	0.00	0.00
LLa3	500 lb Live Load Antenna 3	No	0.00	0.00	0.00
LLa4	500 lb Live Load Antenna 4	No	0.00	0.00	0.00

Earthquake (Dynamic analysis only)

Condition	a/g	Ang. [Deg]	Damp. [%]
D	0.00	0.00	0.00
Wo	0.00	0.00	0.00
W30	0.00	0.00	0.00
W60	0.00	0.00	0.00
W90	0.00	0.00	0.00
W120	0.00	0.00	0.00
W150	0.00	0.00	0.00
Di	0.00	0.00	0.00
WI0	0.00	0.00	0.00
WI30	0.00	0.00	0.00
WI60	0.00	0.00	0.00
WI90	0.00	0.00	0.00
WI120	0.00	0.00	0.00
WI150	0.00	0.00	0.00
WL0	0.00	0.00	0.00
WL30	0.00	0.00	0.00
WL60	0.00	0.00	0.00
WL90	0.00	0.00	0.00
WL120	0.00	0.00	0.00
WL150	0.00	0.00	0.00
LL1	0.00	0.00	0.00
LL2	0.00	0.00	0.00

LL3	0.00	0.00	0.00
LLa1	0.00	0.00	0.00
LLa2	0.00	0.00	0.00
LLa3	0.00	0.00	0.00
LLa4	0.00	0.00	0.00

RAM® Elements
CONNECT Edition

Current Date: 2/25/2022 9:42 AM
Units system: English

Steel Code Check

Report: Summary - Group by member

Load conditions to be included in design :

LC1=1.2D+Wo
LC2=1.2D+W30
LC3=1.2D+W60
LC4=1.2D+W90
LC5=1.2D+W120
LC6=1.2D+W150
LC7=1.2D-Wo
LC8=1.2D-W30
LC9=1.2D-W60
LC10=1.2D-W90
LC11=1.2D-W120
LC12=1.2D-W150
LC13=0.9D+Wo
LC14=0.9D+W30
LC15=0.9D+W60
LC16=0.9D+W90
LC17=0.9D+W120
LC18=0.9D+W150
LC19=0.9D-Wo
LC20=0.9D-W30
LC21=0.9D-W60
LC22=0.9D-W90
LC23=0.9D-W120
LC24=0.9D-W150
LC25=1.2D+Di+WI0
LC26=1.2D+Di+WI30
LC27=1.2D+Di+WI60
LC28=1.2D+Di+WI90
LC29=1.2D+Di+WI120
LC30=1.2D+Di+WI150
LC31=1.2D+Di-WI0
LC32=1.2D+Di-WI30
LC33=1.2D+Di-WI60
LC34=1.2D+Di-WI90
LC35=1.2D+Di-WI120
LC36=1.2D+Di-WI150
LC37=1.2D+1.6LL1
LC38=1.2D+1.6LL2
LC39=1.2D+1.6LL3
LC40=1.2D+WL0+1.6LLa1
LC41=1.2D+WL30+1.6LLa1
LC42=1.2D+WL60+1.6LLa1
LC43=1.2D+WL90+1.6LLa1
LC44=1.2D+WL120+1.6LLa1
LC45=1.2D+WL150+1.6LLa1
LC46=1.2D-WL0+1.6LLa1
LC47=1.2D-WL30+1.6LLa1
LC48=1.2D-WL60+1.6LLa1
LC49=1.2D-WL90+1.6LLa1
LC50=1.2D-WL120+1.6LLa1
LC51=1.2D-WL150+1.6LLa1
LC52=1.2D+WL0+1.6LLa2
LC53=1.2D+WL30+1.6LLa2
LC54=1.2D+WL60+1.6LLa2

LC55=1.2D+WL90+1.6LLa2
LC56=1.2D+WL120+1.6LLa2
LC57=1.2D+WL150+1.6LLa2
LC58=1.2D-WL0+1.6LLa2
LC59=1.2D-WL30+1.6LLa2
LC60=1.2D-WL60+1.6LLa2
LC61=1.2D-WL90+1.6LLa2
LC62=1.2D-WL120+1.6LLa2
LC63=1.2D-WL150+1.6LLa2
LC64=1.2D+WL0+1.6LLa3
LC65=1.2D+WL30+1.6LLa3
LC66=1.2D+WL60+1.6LLa3
LC67=1.2D+WL90+1.6LLa3
LC68=1.2D+WL120+1.6LLa3
LC69=1.2D+WL150+1.6LLa3
LC70=1.2D-WL0+1.6LLa3
LC71=1.2D-WL30+1.6LLa3
LC72=1.2D-WL60+1.6LLa3
LC73=1.2D-WL90+1.6LLa3
LC74=1.2D-WL120+1.6LLa3
LC75=1.2D-WL150+1.6LLa3
LC76=1.2D+WL0+1.6LLa4
LC77=1.2D+WL30+1.6LLa4
LC78=1.2D+WL60+1.6LLa4
LC79=1.2D+WL90+1.6LLa4
LC80=1.2D+WL120+1.6LLa4
LC81=1.2D+WL150+1.6LLa4
LC82=1.2D-WL0+1.6LLa4
LC83=1.2D-WL30+1.6LLa4
LC84=1.2D-WL60+1.6LLa4
LC85=1.2D-WL90+1.6LLa4
LC86=1.2D-WL120+1.6LLa4
LC87=1.2D-WL150+1.6LLa4

Description	Section	Member	Ctrl Eq.	Ratio	Status	Reference
	HSS_SQR 4X4X3_16	**41**	LC4 at 100.00%	**0.15**	**OK**	
		42	LC10 at 100.00%	0.14	OK	
	PIPE 2-1_2x0.203	**2**	LC6 at 32.81%	**0.55**	**OK**	
		3	LC87 at 32.14%	0.47	OK	
		49	LC46 at 33.33%	0.31	OK	
		50	LC47 at 33.33%	0.27	OK	
		51	LC77 at 64.58%	0.15	OK	
		52	LC77 at 33.33%	0.38	OK	
	PIPE 2x0.154	**4**	LC6 at 93.75%	**0.41**	**OK**	
		5	LC12 at 93.75%	0.34	OK	
		6	LC41 at 93.75%	0.28	OK	
		7	LC40 at 93.75%	0.32	OK	
		16	LC3 at 0.00%	0.06	OK	
		54	LC79 at 35.42%	0.13	OK	
	PIPE 3x0.216	**40**	LC76 at 78.13%	**0.17**	**OK**	
	PL 11-1/4x5/8	**27**	LC30 at 100.00%	**0.41**	**OK**	
		28	LC36 at 100.00%	0.29	OK	
	PL 3-1/2x5/8	**17**	LC77 at 100.00%	0.38	OK	
		18	LC40 at 100.00%	0.35	OK	
		19	LC45 at 100.00%	0.42	OK	
		20	LC83 at 100.00%	0.45	OK	
		23	LC81 at 100.00%	0.52	OK	
		24	LC45 at 0.00%	0.50	OK	
		25	LC77 at 100.00%	**0.52**	**OK**	

	26	LC40 at 0.00%	0.49	OK
RndBar 3_4	**12**	LC40 at 100.00%	0.27	OK
	13	LC41 at 0.00%	**0.29**	**With warnings**
	14	LC82 at 100.00%	0.20	OK
	15	LC83 at 100.00%	0.22	With warnings
RndBar 5_8	**8**	LC87 at 87.50%	0.62	OK
	9	LC83 at 87.50%	**0.65**	**OK**
	10	LC40 at 87.50%	0.52	OK
	11	LC40 at 87.50%	0.53	OK

RAM® Elements
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Geometry data

GLOSSARY

Cb22, Cb33	: Moment gradient coefficients
Cm22, Cm33	: Coefficients applied to bending term in interaction formula
d0	: Tapered member section depth at J end of member
DJX	: Rigid end offset distance measured from J node in axis X
DJY	: Rigid end offset distance measured from J node in axis Y
DJZ	: Rigid end offset distance measured from J node in axis Z
DKX	: Rigid end offset distance measured from K node in axis X
DKY	: Rigid end offset distance measured from K node in axis Y
DKZ	: Rigid end offset distance measured from K node in axis Z
dL	: Tapered member section depth at K end of member
Ig factor	: Inertia reduction factor (Effective Inertia/Gross Inertia) for reinforced concrete members
K22	: Effective length factor about axis 2
K33	: Effective length factor about axis 3
L22	: Member length for calculation of axial capacity
L33	: Member length for calculation of axial capacity
LB pos	: Lateral unbraced length of the compression flange in the positive side of local axis 2
LB neg	: Lateral unbraced length of the compression flange in the negative side of local axis 2
RX	: Rotation about X
RY	: Rotation about Y
RZ	: Rotation about Z
TO	: 1 = Tension only member 0 = Normal member
TX	: Translation in X
TY	: Translation in Y
TZ	: Translation in Z

Nodes

Node	X [ft]	Y [ft]	Z [ft]	Rigid Floor
142	0.00	0.00	0.1833	0
143	-0.6362	0.00	0.6617	0
144	0.00	-3.3333	0.1833	0
145	-0.6362	-3.3333	0.6617	0
146	0.6362	-3.3333	0.6617	0
147	0.6362	0.00	0.6617	0
158	-7.25	0.00	2.8133	0
159	7.25	0.00	2.8133	0
160	-7.25	-3.3333	2.8133	0
161	7.25	-3.3333	2.8133	0
162	-2.4126	0.00	2.4208	0
163	-2.4126	-3.3333	2.4208	0
164	2.4126	-3.3333	2.4208	0
165	2.4126	0.00	2.4208	0
166	-2.2835	0.00	2.2929	0
167	-2.2835	-3.3333	2.2929	0
168	-0.7653	0.00	0.7895	0
169	-0.7653	-3.3333	0.7895	0
170	0.7653	0.00	0.7895	0
171	0.7653	-3.3333	0.7895	0
172	2.2835	0.00	2.2929	0
173	2.2835	-3.3333	2.2929	0
174	-4.50	0.00	2.8133	0

175	-4.00	0.00	-2.3167	0
184	-2.4792	0.00	2.8133	0
185	2.4792	0.00	2.8133	0
186	2.4792	-3.3333	2.8133	0
187	-2.4792	-3.3333	2.8133	0
208	0.00	0.00	0.6617	0
209	0.00	-3.3333	0.6617	0
234	0.00	1.3333	-0.0167	0
235	0.00	-4.6667	-0.0167	0
236	0.00	0.50	-0.0167	0
237	0.00	-3.8333	-0.0167	0
238	0.00	0.50	-0.6833	0
239	0.00	-3.8333	-0.6833	0
248	-1.6651	3.3333	1.3991	0
249	-1.6651	-6.6667	1.3991	0
254	7.00	3.3333	3.0133	0
255	7.00	-6.6667	3.0133	0
256	3.25	3.3333	3.0133	0
257	3.25	-6.6667	3.0133	0
258	-1.75	3.3333	3.0133	0
259	-1.75	-6.6667	3.0133	0
260	-6.50	3.3333	3.0133	0
261	-6.50	-6.6667	3.0133	0

Restraints

Node	TX	TY	TZ	RX	RY	RZ
175	1	1	1	0	0	0
238	1	1	1	1	1	1
239	1	1	1	1	1	1

Members

Member	NJ	NK	Description	Section	Material	d0 [in]	dL [in]	lg factor
2	158	159		PIPE 2-1_2x0.203	A53 GrB	0.00	0.00	0.00
3	160	161		PIPE 2-1_2x0.203	A53 GrB	0.00	0.00	0.00
4	162	143		PIPE 2x0.154	A53 GrB	0.00	0.00	0.00
5	163	145		PIPE 2x0.154	A53 GrB	0.00	0.00	0.00
6	164	146		PIPE 2x0.154	A53 GrB	0.00	0.00	0.00
7	165	147		PIPE 2x0.154	A53 GrB	0.00	0.00	0.00
8	166	167		RndBar 5_8	A36	0.00	0.00	0.00
9	168	169		RndBar 5_8	A36	0.00	0.00	0.00
10	170	171		RndBar 5_8	A36	0.00	0.00	0.00
11	172	173		RndBar 5_8	A36	0.00	0.00	0.00
12	170	173		RndBar 3_4	A36	0.00	0.00	0.00
13	171	172		RndBar 3_4	A36	0.00	0.00	0.00
14	167	168		RndBar 3_4	A36	0.00	0.00	0.00
15	166	169		RndBar 3_4	A36	0.00	0.00	0.00
16	174	175		PIPE 2x0.154	A53 GrB	0.00	0.00	0.00
17	162	184		PL 3-1/2x5/8	A36	0.00	0.00	0.00

18	165	185	PL 3-1/2x5/8	A36	0.00	0.00	0.00
19	164	186	PL 3-1/2x5/8	A36	0.00	0.00	0.00
20	163	187	PL 3-1/2x5/8	A36	0.00	0.00	0.00
23	143	208	PL 3-1/2x5/8	A36	0.00	0.00	0.00
24	208	147	PL 3-1/2x5/8	A36	0.00	0.00	0.00
25	145	209	PL 3-1/2x5/8	A36	0.00	0.00	0.00
26	209	146	PL 3-1/2x5/8	A36	0.00	0.00	0.00
27	208	142	PL 11-1/4x5/8	A36	11.25	4.00	0.00
28	209	144	PL 11-1/4x5/8	A36	11.25	4.00	0.00
40	234	235	PIPE 3x0.216	A53 GrB	0.00	0.00	0.00
41	236	238	HSS_SQR 4X4X3_16	A500 GrB rectangular	0.00	0.00	0.00
42	237	239	HSS_SQR 4X4X3_16	A500 GrB rectangular	0.00	0.00	0.00
49	254	255	PIPE 2-1_2x0.203	A53 GrB	0.00	0.00	0.00
50	256	257	PIPE 2-1_2x0.203	A53 GrB	0.00	0.00	0.00
51	258	259	PIPE 2-1_2x0.203	A53 GrB	0.00	0.00	0.00
52	260	261	PIPE 2-1_2x0.203	A53 GrB	0.00	0.00	0.00
54	248	249	PIPE 2x0.154	A53 GrB	0.00	0.00	0.00

Orientation of local axes

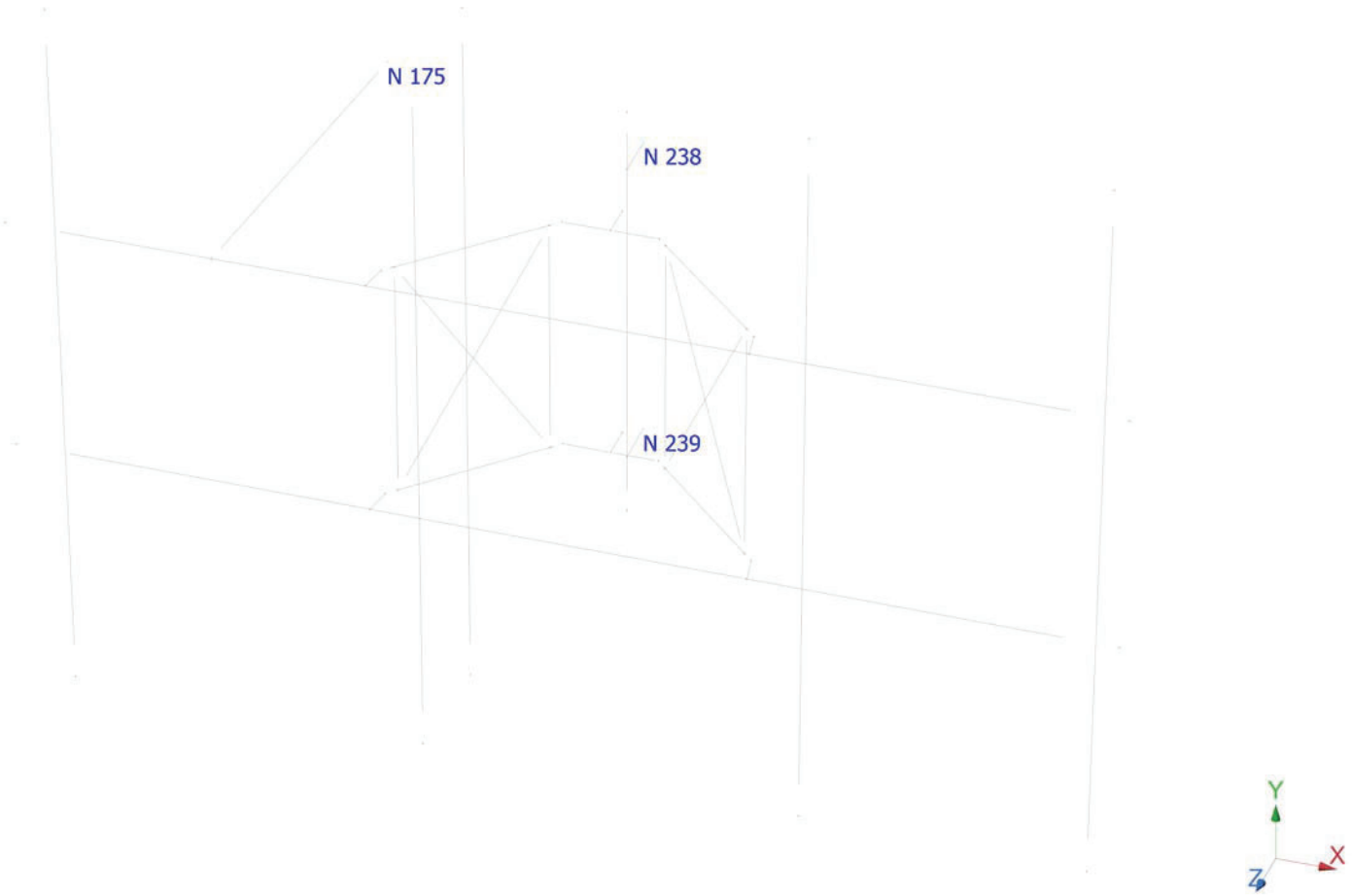
Member	Rotation [Deg]	Axes23	NX	NY	NZ
8	0.00	2	0.00	0.00	1.00
9	0.00	2	0.00	0.00	1.00
10	0.00	2	0.00	0.00	1.00
11	0.00	2	0.00	0.00	1.00
17	90.00	0	0.00	0.00	0.00
18	90.00	0	0.00	0.00	0.00
19	90.00	0	0.00	0.00	0.00
20	90.00	0	0.00	0.00	0.00
23	90.00	0	0.00	0.00	0.00
24	90.00	0	0.00	0.00	0.00
25	90.00	0	0.00	0.00	0.00
26	90.00	0	0.00	0.00	0.00
27	90.00	0	0.00	0.00	0.00
28	90.00	0	0.00	0.00	0.00
49	315.00	0	0.00	0.00	0.00
50	315.00	0	0.00	0.00	0.00
51	315.00	0	0.00	0.00	0.00
52	315.00	0	0.00	0.00	0.00
54	315.00	0	0.00	0.00	0.00

Rigid end offsets

Member	DJX [in]	DJY [in]	DJZ [in]	DKX [in]	DKY [in]	DKZ [in]
12	0.00	-3.50	0.00	0.00	3.50	0.00
13	0.00	3.50	0.00	0.00	-3.50	0.00
14	0.00	3.50	0.00	0.00	-3.50	0.00
15	0.00	-3.50	0.00	0.00	3.50	0.00
27	0.00	-0.625	0.00	0.00	-0.625	0.00
28	0.00	-0.625	0.00	0.00	-0.625	0.00

Hinges

Member	Node-J				Node-K				TOR	AXL	Axial rigidity
	M33	M22	V3	V2	M33	M22	V3	V2			
13	0	0	0	0	0	0	0	0	0	0	Tension only
15	0	0	0	0	0	0	0	0	0	0	Tension only
16	1	1	0	0	0	0	0	0	0	0	Full
17	1	1	0	0	0	0	0	0	0	0	Full
18	1	1	0	0	0	0	0	0	0	0	Full
19	1	1	0	0	0	0	0	0	0	0	Full
20	1	1	0	0	0	0	0	0	0	0	Full


N 175
N 238
N 239
Y
X
Z

RAM® Elements
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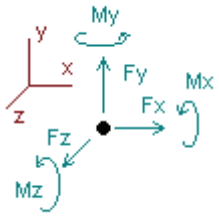
Current Date: 2/25/2022 9:44 AM
Units system: English

Analysis result

Reactions



Direction of positive forces and moments

	Forces [Kip]			Moments [Kip*ft]		
Node	**FX**	**FY**	**FZ**	**MX**	**MY**	**MZ**
Condition **LC1=1.2D+Wo**						
238	0.26667	0.14560	0.29981	-0.39765	-0.18606	0.06983
239	-0.19077	1.21507	2.15665	-0.15828	-0.41950	0.03055
175	-0.07591	0.00924	0.79662	0.00000	0.00000	0.00000
SUM	0.00000	1.36991	3.25308	-0.55592	-0.60556	0.10038
Condition **LC2=1.2D+W30**						
238	1.09090	0.41966	-0.61468	-0.25379	0.86403	0.33828
239	0.27929	0.94166	1.86902	-0.12924	0.37666	-0.16020
175	-0.11507	0.00858	1.18186	0.00000	0.00000	0.00000
SUM	1.25511	1.36991	2.43620	-0.38303	1.24068	0.17808
Condition **LC3=1.2D+W60**						
238	1.49466	0.78339	-1.48942	-0.15656	1.50086	0.47423
239	0.64482	0.57806	1.11918	-0.18221	1.02089	-0.27840
175	-0.09857	0.00846	1.30503	0.00000	0.00000	0.00000
SUM	2.04091	1.36991	0.93480	-0.33876	2.52175	0.19583
Condition **LC4=1.2D+W90**						
238	1.60652	0.92456	-1.83561	-0.11722	1.71929	0.49894
239	0.66622	0.43661	0.82934	-0.20187	1.10633	-0.29971
175	-0.06963	0.00874	1.00627	0.00000	0.00000	0.00000
SUM	2.20311	1.36991	0.00000	-0.31909	2.82562	0.19924
Condition **LC5=1.2D+W120**						
238	1.41766	1.02585	-2.02246	-0.10626	1.62573	0.43630
239	0.64631	0.33457	0.54951	-0.23336	1.08175	-0.28447
175	-0.02307	0.00949	0.53816	0.00000	0.00000	0.00000
SUM	2.04091	1.36991	-0.93480	-0.33962	2.70749	0.15182

Condition **LC6=1.2D+W150**

238	0.98275	1.30732	-2.47532	-0.09544	1.37586	0.28522
239	0.27917	0.05226	-0.30310	-0.33825	0.80902	-0.16571
175	-0.00681	0.01033	0.06473	0.00000	0.00000	0.00000
SUM	1.25511	1.36991	-2.71370	-0.43369	2.18488	0.11951

Condition **LC7=1.2D-Wo**

238	0.10835	1.22753	-2.07072	-0.17493	0.49279	-0.01141
239	-0.18818	0.13023	-0.37715	-0.38524	0.10459	0.01735
175	0.07983	0.01215	-0.80522	0.00000	0.00000	0.00000
SUM	0.00000	1.36991	-3.25308	-0.56017	0.59738	0.00594

Condition **LC8=1.2D-W30**

238	-0.71230	0.95517	-1.16282	-0.31734	-0.54989	-0.27875
239	-0.65810	0.40186	-0.08865	-0.41359	-0.68602	0.20768
175	0.11529	0.01288	-1.18473	0.00000	0.00000	0.00000
SUM	-1.25511	1.36991	-2.43620	-0.73093	-1.23591	-0.07107

Condition **LC9=1.2D-W60**

238	-1.11231	0.59272	-0.29337	-0.41353	-1.18522	-0.41371
239	-1.02296	0.76398	0.66141	-0.36017	-1.33005	0.32557
175	0.09437	0.01320	-1.30284	0.00000	0.00000	0.00000
SUM	-2.04091	1.36991	-0.93480	-0.77369	-2.51528	-0.08814

Condition **LC10=1.2D-W90**

238	-1.22339	0.45165	0.05307	-0.45322	-1.40575	-0.43836
239	-1.04471	0.90586	0.95110	-0.34075	-1.41842	0.34695
175	0.06499	0.01240	-1.00417	0.00000	0.00000	0.00000
SUM	-2.20311	1.36991	0.00000	-0.79397	-2.82417	-0.09141

Condition **LC11=1.2D-W120**

238	-1.03615	0.34992	0.24201	-0.46475	-1.31537	-0.37624
239	-1.02511	1.00854	1.23052	-0.30955	-1.39621	0.33196
175	0.02036	0.01144	-0.53774	0.00000	0.00000	0.00000
SUM	-2.04091	1.36991	0.93480	-0.77430	-2.71158	-0.04428

Condition **LC12=1.2D-W150**

238	-0.60406	0.06632	0.70217	-0.47699	-1.07285	-0.22610
239	-0.65809	1.29300	2.08297	-0.20521	-1.13023	0.21342
175	0.00704	0.01059	-0.07144	0.00000	0.00000	0.00000
SUM	-1.25511	1.36991	2.71370	-0.68220	-2.20308	-0.01268

Condition **LC13=0.9D+Wo**

238	0.21945	-0.02663	0.52302	-0.32621	-0.22528	0.06248
239	-0.14357	1.04707	1.93347	-0.09040	-0.38091	0.02467
175	-0.07588	0.00699	0.79659	0.00000	0.00000	0.00000
SUM	0.00000	1.02743	3.25308	-0.41661	-0.60618	0.08716

Condition	**LC14=0.9D+W30**					
238	1.04329	0.24732	-0.39156	-0.18227	0.82467	0.33080
239	0.32685	0.77361	1.64600	-0.06133	0.41540	-0.16619
175	-0.11503	0.00651	1.18176	0.00000	0.00000	0.00000
SUM	1.25511	1.02743	2.43620	-0.24361	1.24007	0.16462
Condition	**LC15=0.9D+W60**					
238	1.44665	0.61101	-1.26657	-0.08499	1.46129	0.46662
239	0.69278	0.40999	0.89648	-0.11423	1.05977	-0.28448
175	-0.09852	0.00644	1.30489	0.00000	0.00000	0.00000
SUM	2.04091	1.02743	0.93480	-0.19922	2.52106	0.18215
Condition	**LC16=0.9D+W90**					
238	1.55849	0.75225	-1.61299	-0.04567	1.67981	0.49132
239	0.71421	0.26860	0.60681	-0.13392	1.14535	-0.30580
175	-0.06959	0.00659	1.00618	0.00000	0.00000	0.00000
SUM	2.20311	1.02743	0.00000	-0.17959	2.82516	0.18552
Condition	**LC17=0.9D+W120**					
238	1.36976	0.85367	-1.80009	-0.03475	1.58643	0.42869
239	0.69419	0.16665	0.32715	-0.16545	1.12080	-0.29055
175	-0.02305	0.00712	0.53814	0.00000	0.00000	0.00000
SUM	2.04091	1.02743	-0.93480	-0.20021	2.70722	0.13814
Condition	**LC18=0.9D+W150**					
238	0.93487	1.13528	-2.25341	-0.02395	1.33664	0.27762
239	0.32706	-0.11559	-0.52507	-0.27034	0.84823	-0.17181
175	-0.00681	0.00774	0.06478	0.00000	0.00000	0.00000
SUM	1.25511	1.02743	-2.71370	-0.29429	2.18487	0.10580
Condition	**LC19=0.9D-Wo**					
238	0.06082	1.05571	-1.84904	-0.10358	0.45385	-0.01888
239	-0.14061	-0.03745	-0.59904	-0.31741	0.14394	0.01135
175	0.07979	0.00917	-0.80501	0.00000	0.00000	0.00000
SUM	0.00000	1.02743	-3.25308	-0.42099	0.59779	-0.00753
Condition	**LC20=0.9D-W30**					
238	-0.75946	0.78347	-0.94106	-0.24607	-0.58871	-0.28610
239	-0.61089	0.23424	-0.31069	-0.34578	-0.64681	0.20179
175	0.11523	0.00973	-1.18445	0.00000	0.00000	0.00000
SUM	-1.25511	1.02743	-2.43620	-0.59186	-1.23552	-0.08432
Condition	**LC21=0.9D-W60**					
238	-1.15906	0.42107	-0.07134	-0.34230	-1.22382	-0.42094
239	-0.97614	0.59637	0.43906	-0.29242	-1.29098	0.31977
175	0.09429	0.00999	-1.30251	0.00000	0.00000	0.00000
SUM	-2.04091	1.02743	-0.93480	-0.63472	-2.51480	-0.10117

Condition **LC22=0.9D-W90**

238	-1.27012	0.27992	0.27531	-0.38196	-1.44444	-0.44558
239	-0.99792	0.73818	0.72857	-0.27297	-1.37951	0.34116
175	0.06494	0.00932	-1.00388	0.00000	0.00000	0.00000
SUM	-2.20311	1.02743	0.00000	-0.65493	-2.82395	-0.10442

Condition **LC23=0.9D-W120**

238	-1.08301	0.17807	0.46450	-0.39345	-1.35422	-0.38348
239	-0.97821	0.84077	1.00782	-0.24174	-1.35733	0.32616
175	0.02032	0.00858	-0.53752	0.00000	0.00000	0.00000
SUM	-2.04091	1.02743	0.93480	-0.63518	-2.71155	-0.05732

Condition **LC24=0.9D-W150**

238	-0.65093	-0.10567	0.92513	-0.40567	-1.11178	-0.23335
239	-0.61121	1.12516	1.85988	-0.13741	-1.09152	0.20764
175	0.00703	0.00794	-0.07131	0.00000	0.00000	0.00000
SUM	-1.25511	1.02743	2.71370	-0.54308	-2.20331	-0.02570

Condition **LC25=1.2D+Di+WI0**

238	0.46296	1.14538	-1.45855	-0.50419	0.32780	0.07907
239	-0.44700	1.21967	1.69495	-0.45750	-0.39230	0.05965
175	-0.01595	0.02278	0.16360	0.00000	0.00000	0.00000
SUM	0.00000	2.38783	0.40000	-0.96169	-0.06450	0.13872

Condition **LC26=1.2D+Di+WI30**

238	0.62592	1.19882	-1.64231	-0.47466	0.53345	0.13169
239	-0.35914	1.16650	1.64513	-0.45033	-0.24152	0.02321
175	-0.02353	0.02251	0.24043	0.00000	0.00000	0.00000
SUM	0.24324	2.38783	0.24324	-0.92499	0.29193	0.15490

Condition **LC27=1.2D+Di+WI60**

238	0.59305	1.19757	-1.61688	-0.48114	0.50081	0.11949
239	-0.38479	1.16756	1.62264	-0.45624	-0.27745	0.03184
175	-0.01805	0.02270	0.18445	0.00000	0.00000	0.00000
SUM	0.19021	2.38783	0.19021	-0.93738	0.22336	0.15133

Condition **LC28=1.2D+Di+WI90**

238	0.62237	1.22735	-1.69337	-0.47185	0.55236	0.12677
239	-0.37679	1.13759	1.56502	-0.45942	-0.25421	0.02610
175	-0.01258	0.02289	0.12835	0.00000	0.00000	0.00000
SUM	0.23300	2.38783	0.00000	-0.93127	0.29815	0.15286

Condition **LC29=1.2D+Di+WI120**

238	0.57722	1.24651	-1.72739	-0.47008	0.52539	0.11184
239	-0.38436	1.11807	1.51013	-0.46575	-0.26508	0.03065
175	-0.00265	0.02325	0.02705	0.00000	0.00000	0.00000
SUM	0.19021	2.38783	-0.19021	-0.93583	0.26032	0.14249

Condition **LC30=1.2D+Di+WI150**

238	0.60483	1.25890	-1.75705	-0.46684	0.56503	0.12177
239	-0.35866	1.10570	1.48408	-0.46761	-0.22458	0.02185
175	-0.00292	0.02324	0.02973	0.00000	0.00000	0.00000
SUM	0.24324	2.38783	-0.24324	-0.93445	0.34044	0.14361

Condition **LC31=1.2D+Di-WI0**

238	0.43047	1.25071	-1.69292	-0.48115	0.39214	0.06271
239	-0.44588	1.11323	1.45023	-0.47870	-0.35988	0.05655
175	0.01541	0.02390	-0.15731	0.00000	0.00000	0.00000
SUM	0.00000	2.38783	-0.40000	-0.95985	0.03226	0.11926

Condition **LC32=1.2D+Di-WI30**

238	0.26766	1.19730	-1.50929	-0.51065	0.18666	0.01014
239	-0.53374	1.16636	1.50008	-0.48586	-0.51058	0.09298
175	0.02283	0.02417	-0.23403	0.00000	0.00000	0.00000
SUM	-0.24324	2.38783	-0.24324	-0.99651	-0.32392	0.10312

Condition **LC33=1.2D+Di-WI60**

238	0.30050	1.19855	-1.53471	-0.50417	0.21926	0.02233
239	-0.50809	1.16531	1.52256	-0.47996	-0.47468	0.08435
175	0.01738	0.02397	-0.17806	0.00000	0.00000	0.00000
SUM	-0.19021	2.38783	-0.19021	-0.98413	-0.25541	0.10668

Condition **LC34=1.2D+Di-WI90**

238	0.27121	1.16877	-1.45824	-0.51347	0.16766	0.01506
239	-0.51609	1.19529	1.58018	-0.47677	-0.49799	0.09009
175	0.01188	0.02377	-0.12194	0.00000	0.00000	0.00000
SUM	-0.23300	2.38783	0.00000	-0.99025	-0.33032	0.10515

Condition **LC35=1.2D+Di-WI120**

238	0.31630	1.14960	-1.42417	-0.51525	0.19454	0.02997
239	-0.50853	1.21482	1.63506	-0.47045	-0.48717	0.08555
175	0.00201	0.02342	-0.02068	0.00000	0.00000	0.00000
SUM	-0.19021	2.38783	0.19021	-0.98571	-0.29263	0.11552

Condition **LC36=1.2D+Di-WI150**

238	0.28870	1.13722	-1.39450	-0.51849	0.15483	0.02004
239	-0.53422	1.22719	1.66111	-0.46860	-0.52773	0.09435
175	0.00227	0.02342	-0.02336	0.00000	0.00000	0.00000
SUM	-0.24324	2.38783	0.24324	-0.98709	-0.37290	0.11439

Condition **LC37=1.2D+1.6LL1**

238	0.18900	0.88821	-1.17323	-0.36856	0.15851	0.02975
239	-0.18931	0.87124	1.17637	-0.34806	-0.14598	0.02259
175	0.00031	0.01046	-0.00314	0.00000	0.00000	0.00000
SUM	0.00000	1.76991	0.00000	-0.71662	0.01253	0.05234

Condition **LC38=1.2D+1.6LL2**

238	-0.53080	0.88266	-1.15487	-0.36820	-0.37416	-0.08091
239	0.52836	0.87675	1.17992	-0.34265	0.48343	-0.07411
175	0.00244	0.01049	-0.02506	0.00000	0.00000	0.00000
SUM	0.00000	1.76991	0.00000	-0.71085	0.10928	-0.15503

Condition **LC39=1.2D+1.6LL3**

238	0.91030	0.89665	-1.19712	-0.36130	0.69407	0.14271
239	-0.90818	0.86289	1.17541	-0.34657	-0.79083	0.12235
175	-0.00212	0.01037	0.02171	0.00000	0.00000	0.00000
SUM	0.00000	1.76991	0.00000	-0.70787	-0.09676	0.26506

Condition **LC40=1.2D+WL0+1.6LLa1**

238	-1.19635	1.06322	-1.43444	-0.44130	-0.87305	-0.18291
239	1.19710	1.09623	1.55375	-0.39847	1.05506	-0.16635
175	-0.00075	0.01045	0.00769	0.00000	0.00000	0.00000
SUM	0.00000	2.16991	0.12700	-0.83977	0.18201	-0.34926

Condition **LC41=1.2D+WL30+1.6LLa1**

238	-1.14802	1.07992	-1.48964	-0.43266	-0.81107	-0.16709
239	1.22580	1.07954	1.53560	-0.39683	1.10297	-0.17783
175	-0.00282	0.01044	0.02899	0.00000	0.00000	0.00000
SUM	0.07495	2.16991	0.07495	-0.82949	0.29190	-0.34492

Condition **LC42=1.2D+WL60+1.6LLa1**

238	-1.15864	1.07969	-1.48157	-0.43479	-0.82207	-0.17110
239	1.21699	1.07976	1.52780	-0.39884	1.09032	-0.17493
175	-0.00107	0.01045	0.01105	0.00000	0.00000	0.00000
SUM	0.05728	2.16991	0.05728	-0.83363	0.26824	-0.34602

Condition **LC43=1.2D+WL90+1.6LLa1**

238	-1.15095	1.08838	-1.50235	-0.43251	-0.80763	-0.16924
239	1.21926	1.07106	1.50941	-0.40019	1.09703	-0.17653
175	0.00069	0.01046	-0.00706	0.00000	0.00000	0.00000
SUM	0.06900	2.16991	0.00000	-0.83270	0.28940	-0.34577

Condition **LC44=1.2D+WL120+1.6LLa1**

238	-1.16340	1.09420	-1.51158	-0.43230	-0.81456	-0.17342
239	1.21704	1.06522	1.49173	-0.40240	1.09411	-0.17528
175	0.00364	0.01048	-0.03742	0.00000	0.00000	0.00000
SUM	0.05728	2.16991	-0.05728	-0.83471	0.27954	-0.34869

Condition **LC45=1.2D+WL150+1.6LLa1**

238	-1.15438	1.09848	-1.52188	-0.43117	-0.80182	-0.17014
239	1.22585	1.06095	1.48279	-0.40303	1.10751	-0.17826
175	0.00349	0.01048	-0.03586	0.00000	0.00000	0.00000
SUM	0.07495	2.16991	-0.07495	-0.83420	0.30570	-0.34840

Condition **LC46=1.2D-WL0+1.6LLa1**

238	-1.20662	1.09631	-1.50065	-0.43617	-0.85399	-0.18814
239	1.19732	1.06306	1.46935	-0.40714	1.06374	-0.16734
175	0.00930	0.01053	-0.09569	0.00000	0.00000	0.00000
SUM	0.00000	2.16991	-0.12700	-0.84332	0.20975	-0.35548

Condition **LC47=1.2D-WL30+1.6LLa1**

238	-1.25494	1.07961	-1.44546	-0.44481	-0.91596	-0.20396
239	1.16862	1.07975	1.48750	-0.40878	1.01584	-0.15586
175	0.01136	0.01054	-0.11699	0.00000	0.00000	0.00000
SUM	-0.07495	2.16991	-0.07495	-0.85359	0.09988	-0.35982

Condition **LC48=1.2D-WL60+1.6LLa1**

238	-1.24433	1.07985	-1.45353	-0.44268	-0.90496	-0.19995
239	1.17743	1.07953	1.49530	-0.40677	1.02849	-0.15877
175	0.00962	0.01053	-0.09904	0.00000	0.00000	0.00000
SUM	-0.05728	2.16991	-0.05728	-0.84945	0.12353	-0.35872

Condition **LC49=1.2D-WL90+1.6LLa1**

238	-1.25201	1.07115	-1.43276	-0.44496	-0.91941	-0.20181
239	1.17516	1.08824	1.51369	-0.40542	1.02177	-0.15716
175	0.00786	0.01052	-0.08093	0.00000	0.00000	0.00000
SUM	-0.06900	2.16991	0.00000	-0.85038	0.10236	-0.35897

Condition **LC50=1.2D-WL120+1.6LLa1**

238	-1.23957	1.06534	-1.42352	-0.44517	-0.91248	-0.19763
239	1.17738	1.09407	1.53137	-0.40321	1.02469	-0.15842
175	0.00491	0.01049	-0.05058	0.00000	0.00000	0.00000
SUM	-0.05728	2.16991	0.05728	-0.84838	0.11220	-0.35605

Condition **LC51=1.2D-WL150+1.6LLa1**

238	-1.24858	1.06106	-1.41322	-0.44630	-0.92523	-0.20091
239	1.16857	1.09835	1.54031	-0.40258	1.01127	-0.15543
175	0.00506	0.01050	-0.05213	0.00000	0.00000	0.00000
SUM	-0.07495	2.16991	0.07495	-0.84889	0.08604	-0.35634

Condition **LC52=1.2D+WL0+1.6LLa2**

238	-0.44828	1.07329	-1.46500	-0.43796	-0.31367	-0.06178
239	0.45239	1.08622	1.54980	-0.40265	0.34058	-0.06200
175	-0.00411	0.01040	0.04220	0.00000	0.00000	0.00000
SUM	0.00000	2.16991	0.12700	-0.84061	0.02691	-0.12378

Condition **LC53=1.2D+WL30+1.6LLa2**

238	-0.39993	1.09001	-1.52016	-0.42935	-0.25165	-0.04596
239	0.48108	1.06954	1.53158	-0.40104	0.38846	-0.07348
175	-0.00620	0.01036	0.06353	0.00000	0.00000	0.00000
SUM	0.07495	2.16991	0.07495	-0.83038	0.13680	-0.11944

Condition **LC54=1.2D+WL60+1.6LLa2**

238	-0.41056	1.08977	-1.51211	-0.43147	-0.26265	-0.04997
239	0.47228	1.06975	1.52378	-0.40303	0.37583	-0.07057
175	-0.00445	0.01039	0.04560	0.00000	0.00000	0.00000
SUM	0.05728	2.16991	0.05728	-0.83450	0.11318	-0.12054

Condition **LC55=1.2D+WL90+1.6LLa2**

238	-0.40287	1.09846	-1.53288	-0.42919	-0.24819	-0.04811
239	0.47456	1.06103	1.50536	-0.40438	0.38257	-0.07218
175	-0.00269	0.01042	0.02752	0.00000	0.00000	0.00000
SUM	0.06900	2.16991	0.00000	-0.83357	0.13438	-0.12028

Condition **LC56=1.2D+WL120+1.6LLa2**

238	-0.41535	1.10427	-1.54212	-0.42897	-0.25512	-0.05229
239	0.47235	1.05518	1.48766	-0.40659	0.37969	-0.07092
175	0.00027	0.01046	-0.00281	0.00000	0.00000	0.00000
SUM	0.05728	2.16991	-0.05728	-0.83556	0.12457	-0.12321

Condition **LC57=1.2D+WL150+1.6LLa2**

238	-0.40633	1.10855	-1.55241	-0.42784	-0.24237	-0.04901
239	0.48116	1.05090	1.47870	-0.40722	0.39309	-0.07391
175	0.00012	0.01046	-0.00125	0.00000	0.00000	0.00000
SUM	0.07495	2.16991	-0.07495	-0.83506	0.15072	-0.12292

Condition **LC58=1.2D-WL0+1.6LLa2**

238	-0.45861	1.10638	-1.53124	-0.43281	-0.29455	-0.06701
239	0.45266	1.05298	1.46528	-0.41130	0.34941	-0.06298
175	0.00596	0.01055	-0.06105	0.00000	0.00000	0.00000
SUM	0.00000	2.16991	-0.12700	-0.84411	0.05486	-0.13000

Condition **LC59=1.2D-WL30+1.6LLa2**

238	-0.50695	1.08967	-1.47609	-0.44142	-0.35655	-0.08283
239	0.42397	1.06966	1.48350	-0.41292	0.30154	-0.05151
175	0.00803	0.01058	-0.08237	0.00000	0.00000	0.00000
SUM	-0.07495	2.16991	-0.07495	-0.85434	-0.05501	-0.13434

Condition **LC60=1.2D-WL60+1.6LLa2**

238	-0.49633	1.08990	-1.48414	-0.43930	-0.34555	-0.07883
239	0.43277	1.06945	1.49130	-0.41092	0.31416	-0.05441
175	0.00628	0.01055	-0.06444	0.00000	0.00000	0.00000
SUM	-0.05728	2.16991	-0.05728	-0.85022	-0.03139	-0.13323

Condition **LC61=1.2D-WL90+1.6LLa2**

238	-0.50401	1.08122	-1.46336	-0.44158	-0.36002	-0.08068
239	0.43049	1.07816	1.50972	-0.40958	0.30742	-0.05281
175	0.00452	0.01053	-0.04636	0.00000	0.00000	0.00000
SUM	-0.06900	2.16991	0.00000	-0.85116	-0.05261	-0.13349

Condition **LC62=1.2D-WL120+1.6LLa2**

238	-0.49154	1.07541	-1.45411	-0.44180	-0.35310	-0.07651
239	0.43270	1.08402	1.52742	-0.40737	0.31029	-0.05406
175	0.00156	0.01048	-0.01603	0.00000	0.00000	0.00000
SUM	-0.05728	2.16991	0.05728	-0.84917	-0.04280	-0.13057

Condition **LC63=1.2D-WL150+1.6LLa2**

238	-0.50055	1.07113	-1.44383	-0.44293	-0.36585	-0.07978
239	0.42389	1.08830	1.53638	-0.40674	0.29689	-0.05108
175	0.00171	0.01048	-0.01760	0.00000	0.00000	0.00000
SUM	-0.07495	2.16991	0.07495	-0.84967	-0.06897	-0.13086

Condition **LC64=1.2D+WL0+1.6LLa3**

238	0.53954	1.07743	-1.46652	-0.44115	0.40137	0.08285
239	-0.53496	1.08214	1.54664	-0.41210	-0.39699	0.06881
175	-0.00458	0.01034	0.04688	0.00000	0.00000	0.00000
SUM	0.00000	2.16991	0.12700	-0.85326	0.00438	0.15166

Condition **LC65=1.2D+WL30+1.6LLa3**

238	0.58794	1.09414	-1.52154	-0.43260	0.46342	0.09868
239	-0.50632	1.06549	1.52827	-0.41053	-0.34916	0.05735
175	-0.00667	0.01028	0.06822	0.00000	0.00000	0.00000
SUM	0.07495	2.16991	0.07495	-0.84313	0.11426	0.15603

Condition **LC66=1.2D+WL60+1.6LLa3**

238	0.57730	1.09389	-1.51350	-0.43471	0.45241	0.09467
239	-0.51511	1.06568	1.52049	-0.41252	-0.36176	0.06025
175	-0.00491	0.01033	0.05029	0.00000	0.00000	0.00000
SUM	0.05728	2.16991	0.05728	-0.84722	0.09065	0.15492

Condition **LC67=1.2D+WL90+1.6LLa3**

238	0.58498	1.10257	-1.53422	-0.43244	0.46688	0.09653
239	-0.51283	1.05696	1.50201	-0.41387	-0.35501	0.05865
175	-0.00315	0.01037	0.03222	0.00000	0.00000	0.00000
SUM	0.06900	2.16991	0.00000	-0.84630	0.11187	0.15519

Condition **LC68=1.2D+WL120+1.6LLa3**

238	0.57248	1.10837	-1.54345	-0.43221	0.45993	0.09236
239	-0.51502	1.05109	1.48428	-0.41607	-0.35787	0.05991
175	-0.00018	0.01045	0.00189	0.00000	0.00000	0.00000
SUM	0.05728	2.16991	-0.05728	-0.84827	0.10206	0.15226

Condition **LC69=1.2D+WL150+1.6LLa3**

238	0.58151	1.11265	-1.55369	-0.43109	0.47269	0.09563
239	-0.50622	1.04681	1.47529	-0.41671	-0.34448	0.05693
175	-0.00034	0.01045	0.00345	0.00000	0.00000	0.00000
SUM	0.07495	2.16991	-0.07495	-0.84780	0.12821	0.15256

Condition **LC70=1.2D-WL0+1.6LLa3**

238	0.52917	1.11046	-1.53260	-0.43601	0.42047	0.07762
239	-0.53467	1.04885	1.46194	-0.42075	-0.38809	0.06785
175	0.00551	0.01060	-0.05634	0.00000	0.00000	0.00000
SUM	0.00000	2.16991	-0.12700	-0.85676	0.03238	0.14547

Condition **LC71=1.2D-WL30+1.6LLa3**

238	0.48078	1.09375	-1.47760	-0.44456	0.35844	0.06179
239	-0.56331	1.06550	1.48032	-0.42232	-0.43592	0.07931
175	0.00758	0.01066	-0.07767	0.00000	0.00000	0.00000
SUM	-0.07495	2.16991	-0.07495	-0.86688	-0.07748	0.14110

Condition **LC72=1.2D-WL60+1.6LLa3**

238	0.49142	1.09399	-1.48563	-0.44245	0.36945	0.06580
239	-0.55453	1.06530	1.48810	-0.42034	-0.42332	0.07641
175	0.00583	0.01061	-0.05975	0.00000	0.00000	0.00000
SUM	-0.05728	2.16991	-0.05728	-0.86279	-0.05387	0.14220

Condition **LC73=1.2D-WL90+1.6LLa3**

238	0.48374	1.08531	-1.46491	-0.44472	0.35498	0.06393
239	-0.55681	1.07403	1.50658	-0.41899	-0.43007	0.07801
175	0.00407	0.01056	-0.04167	0.00000	0.00000	0.00000
SUM	-0.06900	2.16991	0.00000	-0.86371	-0.07509	0.14194

Condition **LC74=1.2D-WL120+1.6LLa3**

238	0.49623	1.07952	-1.45568	-0.44495	0.36192	0.06811
239	-0.55462	1.07990	1.52430	-0.41679	-0.42722	0.07675
175	0.00111	0.01049	-0.01135	0.00000	0.00000	0.00000
SUM	-0.05728	2.16991	0.05728	-0.86174	-0.06530	0.14486

Condition **LC75=1.2D-WL150+1.6LLa3**

238	0.48721	1.07524	-1.44543	-0.44607	0.34916	0.06483
239	-0.56342	1.08418	1.53330	-0.41615	-0.44062	0.07973
175	0.00126	0.01049	-0.01291	0.00000	0.00000	0.00000
SUM	-0.07495	2.16991	0.07495	-0.86221	-0.09146	0.14456

Condition **LC76=1.2D+WL0+1.6LLa4**

238	1.48608	1.08586	-1.49627	-0.43206	1.12253	0.23517
239	-1.47856	1.07408	1.54652	-0.40792	-1.25191	0.20181
175	-0.00752	0.00997	0.07675	0.00000	0.00000	0.00000
SUM	0.00000	2.16991	0.12700	-0.83998	-0.12938	0.43698

Condition **LC77=1.2D+WL30+1.6LLa4**

238	1.53439	1.10261	-1.55129	-0.42355	1.18442	0.25101
239	-1.44981	1.05745	1.52807	-0.40639	-1.20397	0.19034
175	-0.00963	0.00984	0.09817	0.00000	0.00000	0.00000
SUM	0.07495	2.16991	0.07495	-0.82994	-0.01955	0.44135

Condition **LC78=1.2D+WL60+1.6LLa4**

238	1.52373	1.10233	-1.54320	-0.42564	1.17341	0.24700
239	-1.45858	1.05762	1.52027	-0.40836	-1.21657	0.19324
175	-0.00787	0.00995	0.08021	0.00000	0.00000	0.00000
SUM	0.05728	2.16991	0.05728	-0.83400	-0.04316	0.44024

Condition **LC79=1.2D+WL90+1.6LLa4**

238	1.53134	1.11097	-1.56384	-0.42337	1.18779	0.24885
239	-1.45624	1.04887	1.50170	-0.40970	-1.20979	0.19164
175	-0.00610	0.01007	0.06214	0.00000	0.00000	0.00000
SUM	0.06900	2.16991	0.00000	-0.83307	-0.02200	0.44050

Condition **LC80=1.2D+WL120+1.6LLa4**

238	1.51874	1.11671	-1.57296	-0.42312	1.18075	0.24466
239	-1.45835	1.04294	1.48390	-0.41188	-1.21259	0.19289
175	-0.00312	0.01026	0.03179	0.00000	0.00000	0.00000
SUM	0.05728	2.16991	-0.05728	-0.83500	-0.03184	0.43755

Condition **LC81=1.2D+WL150+1.6LLa4**

238	1.52773	1.12099	-1.58320	-0.42201	1.19346	0.24794
239	-1.44950	1.03867	1.47487	-0.41253	-1.19915	0.18991
175	-0.00328	0.01025	0.03337	0.00000	0.00000	0.00000
SUM	0.07495	2.16991	-0.07495	-0.83454	-0.00569	0.43784

Condition **LC82=1.2D-WL0+1.6LLa4**

238	1.47535	1.11867	-1.56191	-0.42687	1.14126	0.22990
239	-1.47795	1.04061	1.46146	-0.41652	-1.24282	0.20083
175	0.00261	0.01063	-0.02655	0.00000	0.00000	0.00000
SUM	0.00000	2.16991	-0.12700	-0.84339	-0.10156	0.43073

Condition **LC83=1.2D-WL30+1.6LLa4**

238	1.42705	1.10192	-1.50690	-0.43538	1.07939	0.21407
239	-1.50671	1.05723	1.47992	-0.41805	-1.29075	0.21230
175	0.00470	0.01076	-0.04797	0.00000	0.00000	0.00000
SUM	-0.07495	2.16991	-0.07495	-0.85343	-0.21136	0.42636

Condition **LC84=1.2D-WL60+1.6LLa4**

238	1.43771	1.10220	-1.51499	-0.43329	1.09039	0.21808
239	-1.49793	1.05706	1.48772	-0.41608	-1.27815	0.20939
175	0.00294	0.01065	-0.03000	0.00000	0.00000	0.00000
SUM	-0.05728	2.16991	-0.05728	-0.84936	-0.18775	0.42747

Condition **LC85=1.2D-WL90+1.6LLa4**

238	1.43010	1.09356	-1.49435	-0.43556	1.07601	0.21622
239	-1.50027	1.06582	1.50629	-0.41474	-1.28494	0.21099
175	0.00117	0.01053	-0.01193	0.00000	0.00000	0.00000
SUM	-0.06900	2.16991	0.00000	-0.85030	-0.20893	0.42722

Condition **LC86=1.2D-WL120+1.6LLa4**

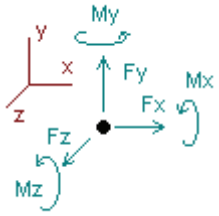
238	1.44269	1.08782	-1.48523	-0.43581	1.08304	0.22042
239	-1.49816	1.07174	1.52409	-0.41255	-1.28214	0.20974
175	-0.00180	0.01034	0.01842	0.00000	0.00000	0.00000
SUM	-0.05728	2.16991	0.05728	-0.84836	-0.19910	0.43016

Condition **LC87=1.2D-WL150+1.6LLa4**

238	1.43371	1.08354	-1.47500	-0.43692	1.07032	0.21714
239	-1.50701	1.07602	1.53311	-0.41190	-1.29559	0.21273
175	-0.00165	0.01035	0.01684	0.00000	0.00000	0.00000
SUM	-0.07495	2.16991	0.07495	-0.84882	-0.22526	0.42987

Envelope for nodal reactions

Note.- **Ic** is the controlling load condition



Direction of positive forces and moments

Envelope of nodal reactions for :

LC1=1.2D+Wo
LC2=1.2D+W30
LC3=1.2D+W60
LC4=1.2D+W90
LC5=1.2D+W120
LC6=1.2D+W150
LC7=1.2D-Wo
LC8=1.2D-W30
LC9=1.2D-W60
LC10=1.2D-W90
LC11=1.2D-W120
LC12=1.2D-W150
LC13=0.9D+Wo
LC14=0.9D+W30
LC15=0.9D+W60
LC16=0.9D+W90
LC17=0.9D+W120
LC18=0.9D+W150
LC19=0.9D-Wo
LC20=0.9D-W30
LC21=0.9D-W60
LC22=0.9D-W90
LC23=0.9D-W120
LC24=0.9D-W150
LC25=1.2D+Di+WI0
LC26=1.2D+Di+WI30
LC27=1.2D+Di+WI60
LC28=1.2D+Di+WI90
LC29=1.2D+Di+WI120

LC30=1.2D+Di+WI150
LC31=1.2D+Di-WI0
LC32=1.2D+Di-WI30
LC33=1.2D+Di-WI60
LC34=1.2D+Di-WI90
LC35=1.2D+Di-WI120
LC36=1.2D+Di-WI150
LC37=1.2D+1.6LL1
LC38=1.2D+1.6LL2
LC39=1.2D+1.6LL3
LC40=1.2D+WL0+1.6LLa1
LC41=1.2D+WL30+1.6LLa1
LC42=1.2D+WL60+1.6LLa1
LC43=1.2D+WL90+1.6LLa1
LC44=1.2D+WL120+1.6LLa1
LC45=1.2D+WL150+1.6LLa1
LC46=1.2D-WL0+1.6LLa1
LC47=1.2D-WL30+1.6LLa1
LC48=1.2D-WL60+1.6LLa1
LC49=1.2D-WL90+1.6LLa1
LC50=1.2D-WL120+1.6LLa1
LC51=1.2D-WL150+1.6LLa1
LC52=1.2D+WL0+1.6LLa2
LC53=1.2D+WL30+1.6LLa2
LC54=1.2D+WL60+1.6LLa2
LC55=1.2D+WL90+1.6LLa2
LC56=1.2D+WL120+1.6LLa2
LC57=1.2D+WL150+1.6LLa2
LC58=1.2D-WL0+1.6LLa2
LC59=1.2D-WL30+1.6LLa2
LC60=1.2D-WL60+1.6LLa2
LC61=1.2D-WL90+1.6LLa2
LC62=1.2D-WL120+1.6LLa2
LC63=1.2D-WL150+1.6LLa2
LC64=1.2D+WL0+1.6LLa3
LC65=1.2D+WL30+1.6LLa3
LC66=1.2D+WL60+1.6LLa3
LC67=1.2D+WL90+1.6LLa3
LC68=1.2D+WL120+1.6LLa3
LC69=1.2D+WL150+1.6LLa3
LC70=1.2D-WL0+1.6LLa3
LC71=1.2D-WL30+1.6LLa3
LC72=1.2D-WL60+1.6LLa3
LC73=1.2D-WL90+1.6LLa3
LC74=1.2D-WL120+1.6LLa3
LC75=1.2D-WL150+1.6LLa3
LC76=1.2D+WL0+1.6LLa4
LC77=1.2D+WL30+1.6LLa4
LC78=1.2D+WL60+1.6LLa4
LC79=1.2D+WL90+1.6LLa4
LC80=1.2D+WL120+1.6LLa4
LC81=1.2D+WL150+1.6LLa4
LC82=1.2D-WL0+1.6LLa4
LC83=1.2D-WL30+1.6LLa4
LC84=1.2D-WL60+1.6LLa4
LC85=1.2D-WL90+1.6LLa4
LC86=1.2D-WL120+1.6LLa4
LC87=1.2D-WL150+1.6LLa4

Node		Forces						Moments					
		Fx [Kip]	**lc**	**Fy** [Kip]	**lc**	**Fz** [Kip]	**lc**	**Mx** [Kip*ft]	**lc**	**My** [Kip*ft]	**lc**	**Mz** [Kip*ft]	**lc**
238	Max	1.607	LC4	1.307	LC6	0.925	LC24	-0.02395	LC18	1.71929	LC4	0.49894	LC4
	Min	-1.270	LC22	-0.106	LC24	-2.475	LC6	-0.51849	LC36	-1.44444	LC22	-0.44558	LC22
239	Max	1.226	LC45	1.293	LC12	2.157	LC1	-0.06133	LC14	1.14535	LC16	0.34695	LC10
	Min	-1.507	LC87	-0.116	LC18	-0.599	LC19	-0.48586	LC32	-1.41842	LC10	-0.30580	LC16
175	Max	0.115	LC8	0.024	LC32	1.305	LC3	0.00000	LC1	0.00000	LC1	0.00000	LC1
	Min	-0.115	LC2	0.006	LC15	-1.303	LC9	0.00000	LC1	0.00000	LC1	0.00000	LC1

HUDSON
Design Group LLC

Connection Check

Date: 2/25/2022
Project Name: GEORGES CELLAR HILL SOUTH
Project No.: CT2174
Designed By: KSBM **Checked By:** MSC

HUDSON Design Group LLC

CHECK CONNECTION CAPACITY (Worst Case)

Reference: AISC Steel Construction Manual 14th Edition (ASD)

Bolt Type = A325 5/8" (Threaded Rod)

Allowable Tensile Load =

F_{Tall} = 13806 lbs.

Allowable Shear Load =

F_{Vall}= 8283 lbs.

TENSILE FORCES

Reaction **F =** 2475 lbs. (See Bentley Output)

SHEAR FORCES

Reactions in X direction: 1607 lbs. (See Bentley Output)
Reactions in Y direction: 1307 lbs. (See Bentley Output)

Resultant: 2071 lbs.

No. of Supports = 1
No. of Bolts / Support = 3

Tension Design Load /Bolts =

f_t= 825.00 lbs. < 13806 lbs. **Therefore, OK !**

Shear Design Load / Bolts=

f_v= 690.47 lbs. < 8283 lbs. **Therefore, OK !**

CHECK COMBINED TENSION AND SHEAR

f_t / F_T	+	f_v / F_V	≤	1.0			
0.060	+	0.083	=	0.143	<	1.0	**Therefore, OK !**

EXHIBIT 5

Radio Frequency Exposure Analysis Report

April 7, 2022

Centerline on behalf of AT&T
Centerline Communications Project Number: 566605

AT&T Site Name: Georges Cellar Hill South
Site Number: CT2174
FA#: 10035120
USID: 4557

Site Address: 525 Orange Center Road, Orange, CT 06477

Site Compliance Summary

AT&T Compliance Status:	Compliant
Cumulative Calculated Power Density (Ground Level):	2.74902 µW/cm^2
Cumulative General Population % MPE (Ground Level):	0.27938%

April 7, 2022

Centerline
Attn: Jennifer Iliades, Project Manager
750 W Center St, Suite 301
West Bridgewater, MA 02379

RF Exposure Analysis for Site: **Georges Cellar Hill South**

Centerline Communications, LLC ("Centerline") was contracted to analyze the proposed AT&T facility at **525 Orange Center Road, Orange, CT 06477** for the purpose of determining whether the predictive exposure from the proposed facility is within specified federal limits.

All information used in this report was analyzed as a percentage of the Maximum Permissible Exposure (% MPE) limits as detailed in 47 CFR § 1.1310 as well as Federal Communications Commission (FCC) OET Bulletin 65 Edition 97-01. The FCC MPE limits are typically expressed in units of milliwatts per square centimeter (mW/cm^2) or microwatts per square centimeter ($\mu W/cm^2$). The exposure limits vary depending upon the frequencies being utilized. The General Population/Uncontrolled MPE limit (in mW/cm^2) for frequencies between 300 and 1500 is defined as frequency (in MHz) divided by 1500 ($f_{MHz}/1500$). Frequencies between 1500 and 100,000 MHz have a General Population/Uncontrolled MPE limit of 1 mW/cm^2 (1000 $\mu W/cm^2$). The calculated power density at each sample point divided by the limit at each calculated frequency provides a result in % MPE. Summing the calculated % MPE from all contributors provides a cumulative % MPE at a particular sample point. Wireless carriers use different frequency bands with varying MPE limits; therefore, it is useful to report results in terms of % MPE as opposed to power density.

All results were compared to the FCC radio frequency exposure rules as detailed in 47 CFR § 1.1307(b) to determine compliance with the MPE limits for General Population/Uncontrolled environments as defined below.

General population/uncontrolled exposure limits apply to situations in which the general population may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general population would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/ controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits, as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means. Additional details can be found in FCC OET 65.

Calculation Methodology

Centerline Communications, LLC has performed theoretical modeling of the site using a software tool, RoofMaster®, which incorporates calculation methodologies detailed in FCC OET 65. RoofMaster® uses a cylindrical model for conservative power density predictions within the near field of the antenna where the antenna pattern has not truly formed yet. Within this area power density values tend to decrease based upon an inverse distance function. At the point where it is appropriate for modeling to change from near-field calculations to far-field calculations, the power decreases inversely with the square of the distance. The modeling is based on worst-case assumptions in terms of transmitter power and duty cycle. No losses were included in the power calculations unless they were specifically provided for the project.

In OET 65, a far field model is presented to calculate the spatial peak power density. The RoofMaster® implementation of this model incorporates antenna manufacturer's horizontal and vertical pattern data to determine the power density in all directions. This model yields the power density at a single point in space. In order to determine the spatial power density for comparison to the FCC limits, the average of several points calculated within the human profile (0-6') must be conducted. RoofMaster® calculates seven power density values between 0-6' above the specified study plane and performs a linear spatial average.

Data & Results

The following table details the antennas and operating parameters for the AT&T antenna system as well as any other antenna systems at the site. This is based on antenna information provided by the client and data compiled from other sources where necessary. The data below was input into Roofmaster® to perform the theoretical exposure calculations at the ground.

The theoretical calculations performed in Roofmaster® determine the cumulative exposure at all sample points at ground level (0-6' spatial average). The results from highest cumulative sample point at ground level surrounding the site are displayed in the table below. The contribution from directional antennas to the maximum cumulative totals varies greatly depending on location; therefore, the contribution from one antenna sector at the highest calculated exposure point may be greater or less than other sectors since sectorized directional antennas are pointed in different directions and there is not much overlapping exposure.

The contribution to the cumulative power density and % MPE for each antenna/frequency band is listed in the table. The cumulative power density and cumulative % MPE are displayed at the bottom of the table.

CENTERLINE COMMUNICATIONS

Maximum Calculated Cumulative Power Density (Location: approximately of site)

Antenna ID	Make / Model	Frequency Band (MHz)	Antenna Gain (dBd)	Antenna Centerline (ft)	Channel Count	TX Power/ Channel (watts)	ERP (watts)	Calculated Power Density ($\mu W/cm^2$)	General Population MPE Limit ($\mu W/cm^2$)	General Population % MPE
AT&T A 1	CCI TPA65R-BU6D	700	11.75	148.25	4.00	40.00	2393.98	0.00004	466.67	0.00001
AT&T A 1	CCI TPA65R-BU6D	1900	15.05	148.25	2.00	40.00	2559.12	0.00005	1000.00	0.00001
AT&T A 1	CCI TPA65R-BU6D	1900	15.45	148.25	2.00	40.00	2806.01	0.00004	1000.00	0.00000
AT&T A 1	CCI TPA65R-BU6D	2100	15.95	148.25	2.00	40.00	3148.40	0.00002	1000.00	0.00000
AT&T A 1	CCI TPA65R-BU6D	2100	15.95	148.25	2.00	40.00	3148.40	0.00002	1000.00	0.00000
AT&T A 2	ERICSSON AIR6449	3700	23.55	150.00	1.00	108.40	24548.74	0.00178	1000.00	0.00018
AT&T A 3	ERICSSON AIR6419 LTE	3400	22.85	146.42	1.00	54.20	10447.19	0.00187	1000.00	0.00019
AT&T A 3	ERICSSON AIR6419 NR	3400	22.85	146.42	1.00	54.00	10408.63	0.00187	1000.00	0.00019
AT&T A 4	CCI DMP65R-BU6D	700	11.35	148.25	2.00	40.00	1091.67	0.00004	466.67	0.00001
AT&T A 4	CCI DMP65R-BU6D	850	11.45	148.25	2.00	40.00	1117.09	0.00001	566.67	0.00000
AT&T B 5	CCI TPA65R-BU6D	700	11.75	148.25	4.00	40.00	2393.98	0.00000	466.67	0.00000
AT&T B 5	CCI TPA65R-BU6D	1900	15.05	148.25	2.00	40.00	2559.12	0.00000	1000.00	0.00000
AT&T B 5	CCI TPA65R-BU6D	1900	15.45	148.25	2.00	40.00	2806.01	0.00000	1000.00	0.00000
AT&T B 5	CCI TPA65R-BU6D	2100	15.95	148.25	2.00	40.00	3148.40	0.00000	1000.00	0.00000
AT&T B 5	CCI TPA65R-BU6D	2100	15.95	148.25	2.00	40.00	3148.40	0.00000	1000.00	0.00000
AT&T B 6	ERICSSON AIR6449	3700	23.55	150.00	1.00	108.40	24548.74	0.00005	1000.00	0.00000
AT&T B 7	ERICSSON AIR6419 LTE	3400	22.85	146.42	1.00	54.20	10447.19	0.00002	1000.00	0.00000
AT&T B 7	ERICSSON AIR6419 NR	3400	22.85	146.42	1.00	54.00	10408.63	0.00002	1000.00	0.00000
AT&T B 8	CCI DMP65R-BU6D	700	11.35	148.25	2.00	40.00	1091.67	0.00000	466.67	0.00000
AT&T B 8	CCI DMP65R-BU6D	850	11.45	148.25	2.00	40.00	1117.09	0.00001	566.67	0.00000
AT&T C 9	CCI TPA65R-BU6D	700	11.75	148.25	4.00	40.00	2393.98	0.00076	466.67	0.00016
AT&T C 9	CCI TPA65R-BU6D	1900	15.05	148.25	2.00	40.00	2559.12	0.00010	1000.00	0.00001
AT&T C 9	CCI TPA65R-BU6D	1900	15.45	148.25	2.00	40.00	2806.01	0.00011	1000.00	0.00001
AT&T C 9	CCI TPA65R-BU6D	2100	15.95	148.25	2.00	40.00	3148.40	0.00014	1000.00	0.00001
AT&T C 9	CCI TPA65R-BU6D	2100	15.95	148.25	2.00	40.00	3148.40	0.00014	1000.00	0.00001
AT&T C 10	ERICSSON AIR6449	3700	23.55	150.00	1.00	108.40	24548.74	0.03610	1000.00	0.00361
AT&T C 11	ERICSSON AIR6419 LTE	3400	22.85	146.42	1.00	54.20	10447.19	0.01470	1000.00	0.00147
AT&T C 11	ERICSSON AIR6419 NR	3400	22.85	146.42	1.00	54.00	10408.63	0.01470	1000.00	0.00147
AT&T C 12	CCI DMP65R-BU6D	700	11.35	148.25	2.00	40.00	1091.67	0.00828	466.67	0.00177
AT&T C 12	CCI DMP65R-BU6D	850	11.45	148.25	2.00	40.00	1117.09	0.00528	566.67	0.00093
Unknown A 13	GENERIC PANEL 6FT	850	12.62	165.00	4.00	40.00	2924.96	0.00001	566.67	0.00000
Unknown A 14	GENERIC PANEL 6FT	1900	15.84	165.00	4.00	40.00	6139.32	0.00001	1000.00	0.00000
Unknown A 15	GENERIC PANEL 6FT	2100	16.39	165.00	4.00	40.00	6968.19	0.00001	1000.00	0.00000
Unknown A 15	GENERIC PANEL 6FT	700	12.33	165.00	4.00	40.00	2736.02	0.00008	466.67	0.00002

Antenna ID	Make / Model	Frequency Band (MHz)	Antenna Gain (dBd)	Antenna Centerline (ft)	Channel Count	TX Power/ Channel (watts)	ERP (watts)	Calculated Power Density (μW/cm²)	General Population MPE Limit (μW/cm²)	General Population % MPE
Unknown A 16	GENERIC PANEL	3700	23.34	165.00	4.00	50.00	43154.89	0.00141	1000.00	0.00014
Unknown B 17	GENERIC PANEL 6FT	850	12.62	165.00	4.00	40.00	2924.96	0.00000	566.67	0.00000
Unknown B 18	GENERIC PANEL 6FT	1900	15.84	165.00	4.00	40.00	6139.32	0.00001	1000.00	0.00000
Unknown B 19	GENERIC PANEL 6FT	2100	16.39	165.00	4.00	40.00	6968.19	0.00000	1000.00	0.00000
Unknown B 19	GENERIC PANEL 6FT	700	12.33	165.00	4.00	40.00	2736.02	0.00001	466.67	0.00000
Unknown B 20	GENERIC PANEL	3700	23.34	165.00	4.00	50.00	43154.89	0.00015	1000.00	0.00002
Unknown C 21	GENERIC PANEL 6FT	850	12.62	165.00	4.00	40.00	2924.96	0.00035	566.67	0.00006
Unknown C 22	GENERIC PANEL 6FT	1900	15.84	165.00	4.00	40.00	6139.32	0.00052	1000.00	0.00005
Unknown C 23	GENERIC PANEL 6FT	2100	16.39	165.00	4.00	40.00	6968.19	0.00395	1000.00	0.00040
Unknown C 23	GENERIC PANEL 6FT	700	12.33	165.00	4.00	40.00	2736.02	0.00896	466.67	0.00192
Unknown C 24	GENERIC PANEL	3700	23.34	165.00	4.00	50.00	43154.89	0.83336	1000.00	0.08334
Unknown A 25	GENERIC PANEL 6FT	1900	15.84	154.00	2.00	60.00	4604.49	0.00001	1000.00	0.00000
Unknown A 26	GENERIC PANEL 6FT	600	12.33	154.00	2.00	60.00	2052.02	0.00012	400.00	0.00003
Unknown A 27	GENERIC PANEL 6FT	700	12.33	154.00	2.00	60.00	2052.02	0.00007	466.67	0.00002
Unknown A 27	GENERIC PANEL 6FT	2100	15.84	154.00	2.00	60.00	4604.49	0.00002	1000.00	0.00000
Unknown A 28	GENERIC PANEL	3700	23.55	154.00	4.00	80.00	72468.62	0.00427	1000.00	0.00043
Unknown B 29	GENERIC PANEL 6FT	1900	15.84	154.00	2.00	60.00	4604.49	0.00001	1000.00	0.00000
Unknown B 30	GENERIC PANEL 6FT	600	12.33	154.00	2.00	60.00	2052.02	0.00001	400.00	0.00000
Unknown B 31	GENERIC PANEL 6FT	700	12.33	154.00	2.00	60.00	2052.02	0.00001	466.67	0.00000
Unknown B 31	GENERIC PANEL 6FT	2100	15.84	154.00	2.00	60.00	4604.49	0.00002	1000.00	0.00000
Unknown B 32	GENERIC PANEL	3700	23.55	154.00	4.00	80.00	72468.62	0.00013	1000.00	0.00001
Unknown C 33	GENERIC PANEL 6FT	1900	15.84	154.00	2.00	60.00	4604.49	0.00017	1000.00	0.00002
Unknown C 34	GENERIC PANEL 6FT	600	12.33	154.00	2.00	60.00	2052.02	0.00166	400.00	0.00041
Unknown C 35	GENERIC PANEL 6FT	700	12.33	154.00	2.00	60.00	2052.02	0.00697	466.67	0.00149
Unknown C 35	GENERIC PANEL 6FT	2100	15.84	154.00	2.00	60.00	4604.49	0.00347	1000.00	0.00035
Unknown C 36	GENERIC PANEL	3700	23.55	154.00	4.00	80.00	72468.62	1.78545	1000.00	0.17855
Unknown A 37	GENERIC PANEL 6FT	850	12.62	134.00	1.00	60.00	1096.86	0.00001	566.67	0.00000
Unknown A 38	GENERIC PANEL 6FT	850	12.62	134.00	1.00	60.00	1096.86	0.00001	566.67	0.00000

Antenna ID	Make / Model	Frequency Band (MHz)	Antenna Gain (dBd)	Antenna Centerline (ft)	Channel Count	TX Power/ Channel (watts)	ERP (watts)	Calculated Power Density (µW/cm²)	General Population MPE Limit (µW/cm²)	General Population % MPE
Unknown B 39	GENERIC PANEL 6FT	850	12.62	134.00	1.00	60.00	1096.86	0.00000	566.67	0.00000
Unknown B 40	GENERIC PANEL 6FT	850	12.62	134.00	1.00	60.00	1096.86	0.00000	566.67	0.00000
Unknown C 41	GENERIC PANEL 6FT	850	12.62	134.00	1.00	60.00	1096.86	0.00070	566.67	0.00012
Unknown C 42	GENERIC PANEL 6FT	850	12.62	134.00	1.00	60.00	1096.86	0.00469	566.67	0.00083
Unknown A 43	GENERIC PANEL 6FT	850	12.62	121.00	1.00	60.00	1096.86	0.00001	566.67	0.00000
Unknown A 44	GENERIC PANEL 6FT	850	12.62	121.00	1.00	60.00	1096.86	0.00001	566.67	0.00000
Unknown A 45	GENERIC PANEL 6FT	850	12.62	121.00	1.00	60.00	1096.86	0.00001	566.67	0.00000
Unknown B 46	GENERIC PANEL 6FT	850	12.62	121.00	1.00	60.00	1096.86	0.00000	566.67	0.00000
Unknown B 47	GENERIC PANEL 6FT	850	12.62	121.00	1.00	60.00	1096.86	0.00001	566.67	0.00000
Unknown B 48	GENERIC PANEL 6FT	850	12.62	121.00	1.00	60.00	1096.86	0.00000	566.67	0.00000
Unknown C 49	GENERIC PANEL 6FT	850	12.62	121.00	1.00	60.00	1096.86	0.00027	566.67	0.00005
Unknown C 50	GENERIC PANEL 6FT	850	12.62	121.00	1.00	60.00	1096.86	0.00087	566.67	0.00015
Unknown C 51	GENERIC PANEL 6FT	850	12.62	121.00	1.00	60.00	1096.86	0.00507	566.67	0.00090
							Cumulative Power Density:	**2.74902 µW/cm²**	**Cumulative % MPE:**	**0.27938%**

Summary

The theoretical calculations performed for this analysis yielded cumulative power density totals in all areas at ground that are within the allowable federal limits for public exposure to RF energy. Therefore, the site is **Compliant** with FCC rules and regulations.

Michelle Stone

Michelle Stone
RF EME Technical Writer II
Centerline Communications, LLC

EXHIBIT 6

ROBINSON & COLE

HARTFORD • STAMFORD • GREENWICH • NEW YORK • BOSTON

Attached to 1/28/97 BCS minutes

LAW OFFICES

One Commercial Plaza
280 Trumbull Street
Hartford, CT 06103-3597
860-275-8200
Fax 860-275-8299

Brian C. S. Freeman
860-275-8310
Internet: bfreeman@rc.com

January 13, 1997

Joel Rinebold, Executive Director
Connecticut Siting Council
136 Main Street, Suite 401
New Britain, CT 06051

Re: **Bell Atlantic NYNEX Mobile - Orange, Connecticut - Docket No. 177**

Dear Mr. Rinebold:

Enclosed please find a copy of the Stipulation and Agreement between the Town of Orange, the Applicant in this matter, Springwich Cellular Limited Partnership, and Smart SMR of New York, Inc. d/b/a Nextel Communications. An original and 20 copies of this document were hand-delivered to the Siting Council at its hearing this afternoon. An additional copy is being provided to you under cover of this letter for purposes of documenting service to all parties and intervenors.

Very truly yours,

Brian C. S. Freeman

BCSF:gs
Enclosure
cc: Parties and Intervenors of Record
Jennifer Young Gaudet
Kenneth C. Baldwin, Esq.

HART1-615707-1

STIPULATION AND AGREEMENT
BETWEEN
THE TOWN OF ORANGE, CONNECTICUT
AND
CELLCO PARTNERSHIP d/b/a BELL ATLANTIC NYNEX MOBILE, SPRINGWICH CELLULAR LIMITED PARTNERSHIP, AND SMART SMR OF NEW YORK, INC. d/b/a NEXTEL COMMUNICATIONS

On this 13 th day of January 1997, Cellco Partnership d/b/a Bell Atlantic NYNEX Mobile ("BANM"), the Town of Orange, Connecticut ("Town"), Springwich Cellular Limited Partnership ("Springwich"), and Smart SMR of New York, Inc. d/b/a Nextel Communications ("Nextel") (collectively, the "Parties") hereby stipulate and agree as follows:

WHEREAS, BANM has submitted an application to the Connecticut Siting Council ("Council") for a Certificate of Environmental Compatibility and Public Need for a proposed telecommunications facility at one of certain site in Orange, Connecticut, with one such site being property off Mapledale Road and adjacent to the Wilbur Cross Parkway and known as "Camp Cedarcrest";

WHEREAS, the facility proposed in BANM's application for the Camp Cedarcrest site and the Loman site are also intended to and designed to be used by Springwich and Nextel for placement and operation of telecommunications antennas of Springwich and Nextel;

WHEREAS, the Council has opened its Docket No. 177 for consideration of BANM's application;

WHEREAS, Springwich and Nextel have each been granted intervenor status in the Docket No. 177 application;

WHEREAS, the Town has been named as a party in Council Docket No. 177 and opposes BANM's application with respect to the Camp Cedarcrest site;

WHEREAS, the Town owns property off Orange Center Road, at which is located the High Plains Community Center;

WHEREAS, preliminary investigations by BANM, Springwich and Nextel of the High Plains Community Center property indicate that such property would be an acceptable location for a telecommunications facility, but that with respect to at least BANM's telecommunications coverage needs, such facility would not provide coverage comparable to the facility proposed for the Camp Cedarcrest site in BANM's application in Docket No. 177, and that such coverage deficiencies would be remedied if a facility at the High Plains Community Center were paired with a second telecommunications facility constructed at a location at or near the intersection of Routes 15 and 34;

WHEREAS, BANM is seeking to reach an agreement with either the South Central Regional Water Authority ("SCRWA") or the Connecticut Department of Transportation ("DOT") to allow the construction of a telecommunications facility at one of certain properties owned by SCRWA or DOT at or near the intersection of Routes 15 and 34 ("the Route 34 Sites");

NOW, THEREFORE, for mutual consideration, the sufficiency of which is hereby acknowledged by each of the Parties, the Parties agree as follows:

1. In exchange for actions by the Town pursuant to Paragraph 2 below:

   a. BANM will withdraw from consideration by the Council its request for a Certificate for a telecommunications facility at the Camp Cedarcrest site. BANM will effectuate this withdrawal by submitting to the Council a filing in Docket No. 177 to this effect, in no event later than 12:00 noon, Monday, January 13, 1997;

   b. Springwich and Nextel each will not oppose the withdrawal of the Camp Cedarcrest site from consideration by the Council;

   c. BANM, Springwich, and Nextel jointly and severally agree not to construct any new telecommunications tower in a residential area in Orange, which for purposes of this agreement shall mean all areas of Orange other than those ~~along~~ between the Post Road and Route 34, prior to January 1, 2000, provided, that this subparagraph 1.c shall not apply to the High Plains Community Center property and the Route 34 Sites. Should one or more of BANM, Springwich or Nextel breach its obligations under this Paragraph 1.c, the Town will have no further obligations to any of BANM, Springwich or Nextel under either this Stipulation and Agreement or the License Agreement referenced in Paragraph 2.a below; and

   d. Upon issuance of Certificates by the Council for a telecommunications facility at each of the High Plains Community Center site and one of the Route 34 Sites which includes Nextel's use thereof, BANM and Nextel shall release their respective leases with the Interservice Clubs Committee of New Haven, Inc. (the owner of the Camp Cedarcrest property) and BANM shall release its lease with Peter N. Loman and Robert C. Loman (the owners of the alternate site on Robert Treat Drive Extension for which BANM has requested a Certificate in its application in Docket No. 177).

2. In exchange for actions by BANM, Springwich and Nextel pursuant to Paragraphs 1 above, the Town will:

   a. Make available to BANM, Springwich, and Nextel, under reasonable terms and within the timeframe set forth below, a mutually acceptable location

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within the High Plains Community Center property for the construction and operation of a telecommunications facility (including but not limited to a monopole-style tower with a height of one hundred sixty (160) feet above ground level (not including the height of any antennas that may extend above the tower, with the diameter of such antennas not to exceed four (4 inches), antennas support structures on such tower, antennas, related telecommunications equipment, equipment building, emergency generator, and site fencing) (the "High Plains Facility"), to be subject to a license agreement between the Town and BANM ("License Agreement") and sublicense agreements between BANM and Springwich and Nextel at reasonable terms. Springwich antennas will be located on a platform beneath BANM antennas and shall provide for such minimum vertical separation distance as technically required; BANM and Nextel antennas will be located on the top antenna platform, or such other locations as BANM, Springwich and Nextel shall agree. Such License Agreement shall provide that (1) BANM shall be responsible for constructing the facility and subsequently turning over ownership of the facility to the Town upon completion of construction, and (2) BANM, Springwich, and Nextel shall be permitted to locate its antennas and related equipment at and on the facility. The timeframe for such availability and execution of the License Agreement shall be by the end of a special meeting of the Town Board of Selectmen to be scheduled in the week of January 27, 1997, but in no event later than January 31, 1997;

b. Make best efforts in support and assistance of efforts by BANM, Springwich, and/or Nextel to secure agreement by SCRWA and/or DOT, any appropriate governmental approvals and public acceptance of the construction and operation of a telecommunications facility at one of the Route 34 Sites; and

c. Waive the 60-day advance consultation period provided by Section 16-50*l*(e) of the Connecticut General Statutes with respect to any application or amendment to an application by BANM to the Council for a Certificate for a telecommunications facility at the High Plains Community Center or one of the Route 34 Sites.

d. Should the Town breach its obligation under this Stipulation and Agreement or if BANM, Springwich and/or Nextel unsuccessful in its attempt to reach an agreement with either SCRWA or DOT to allow for the construction of a telecommunications facility at one of the Route 34 Sites, BANM, Springwich, and Nextel shall have no obligations to the Town under either this Stipulation and Agreement or the License Agreement referenced above.

3. In the event BANM fails to use commercially reasonable due diligence in applying for and/or prosecuting all approvals necessary for construction and operation of the High Plains Facility and/or BANM is denied such approvals (beyond any available

or if the ~~to~~ CSC denies an application which includes the Route 34 sites or the High Plains Community Center

11/13/97

appeal(s)), the Parties agree as a specific covenant and condition of this Stipulation and Agreement that upon thirty (30) days written notice from Nextel or Springwich to the Parties, unless in the event of such failure BANM cures such failure within said 30 days, Nextel or Springwich automatically and without any further act of any Party, shall be entitled to all rights, title and interest under the License Agreement and shall become the Licensee under the License Agreement.

AGREED to by the Parties, as evidenced by the following signatures:

:

CELLCO PARTNERSHIP d/b/a
BELL ATLANTIC NYNEX MOBILE

By: _____

Its: Director of Engineering

TOWN OF ORANGE

By: _____

Its: TOWN COUNSEL

SPRINGWICH CELLULAR L.P.

By: Peter J Tyrrell

Its: General Counsel

SMART SMR OF NEW YORK, INC.
d/b/a NEXTEL COMMUNICATIONS

By: _____
ALAN STRAUSS

Its: Director of Site Development
General Manager of NY North

CERTIFICATE OF SERVICE

I hereby certify that on this day, a copy of the foregoing was delivered by regular mail, postage prepaid, to the following:

Peter J. Tyrrell, Esq.
Springwich Cellular
Limited Partnership
500 Enterprise Drive, 4th Fl.
Rocky Hill, CT 06067-3900

Town of Orange
c/o Francis A. Teodosio, Esq.
Orange Town Hall
617 Orange Center Road
Orange, CT 06477

Eugene Burshuliak
864 Mapledale Road
Orange, CT 06477

Residents of Robert Treat Extension
c/o Elvera Spinaci
829 Robert Treat Extension
Orange, CT 06477

John Rechi
805 Grassy Hill Road
Orange, CT 06477

Jeffrey Friedrichs
248 Ross Court
Orange, CT 06477

Erwin H. Levine
875 Robert Treat Extension
Orange, CT 06477

Orange Land Trust, Inc.
c/o Edmund B. Tucker, Pres.
433 Pudden Lane
Orange, CT 06477

Smart SMR of New York, Inc.
d/b/a Nextel Communications
c/o Christopher B. Fisher, Esq
Cuddy, Fede & Worby
90 Maple Avenue
White Plains, NY 10601-5196

January 13, 1997
Date

Brian C. S. Freeman
Kenneth C. Baldwinp

EXHIBIT 7

Proof of Delivery

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

Tracking Number
1Z9Y45030328899617

Service

UPS Ground

Delivered On

09/02/2022 10:12 A.M.

Delivered To
BASKING RIDGE, NJ, US

Received By

DEMONE

Left At
Receiver

Thank you for giving us this opportunity to serve you. Details are only available for shipments delivered within the last 120 days. Please print for your records if you require this information after 120 days.

Sincerely,

UPS

Tracking results provided by UPS: 09/06/2022 11:07 A.M. EST

Proof of Delivery

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

Tracking Number

1Z9Y45030335453398

Service

UPS Ground

Delivered On

09/02/2022 3:49 P.M.

Delivered To

ORANGE, CT, US

Received By

WAYLN

Left At

Inside Delivery

Thank you for giving us this opportunity to serve you. Details are only available for shipments delivered within the last 120 days. Please print for your records if you require this information after 120 days.

Sincerely,

UPS

Tracking results provided by UPS: 09/06/2022 11:08 A.M. EST

Proof of Delivery

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

Tracking Number

1Z9Y45030338412220

Service

UPS Ground

Delivered On

09/02/2022 3:49 P.M.

Delivered To

ORANGE, CT, US

Received By

WAYLN

Left At

Inside Delivery

Thank you for giving us this opportunity to serve you. Details are only available for shipments delivered within the last 120 days. Please print for your records if you require this information after 120 days.

Sincerely,

UPS

Tracking results provided by UPS: 09/06/2022 11:10 A.M. EST