



Chipmunk Solar

Exhibit C

Preliminary Geotechnical Engineering Report

Filing 2 of 2

Case No. 21-0960 EL BGN

PILE DRIVING AND LOAD TESTING RESULTS

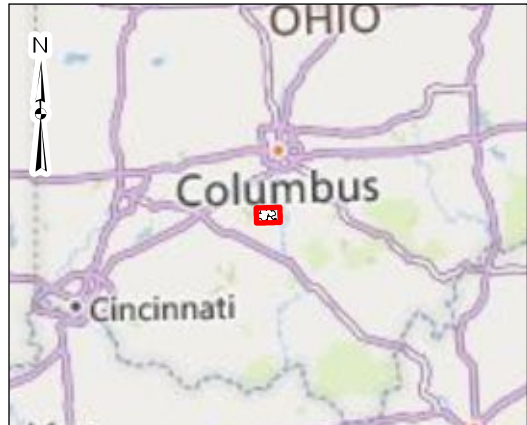
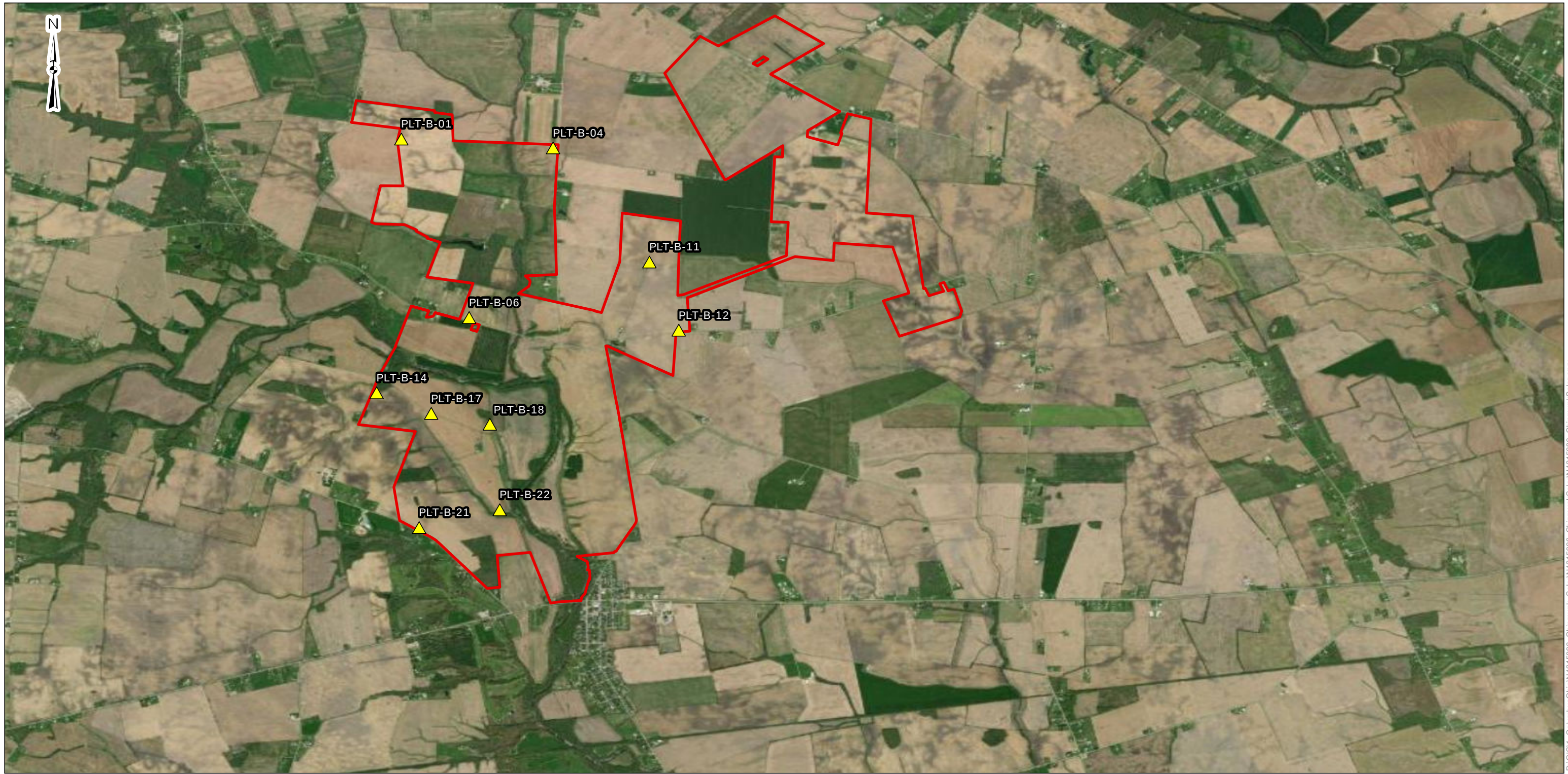
TEST PILE DRIVING DATA

Contents:

Pile Load Test Location Plan

Test Pile Driving Records (4 pages)

Note: All attachments are one page unless noted above.



Legend

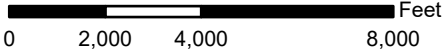
-  Chipmunk Solar LLC
-  Pile Test Location (within Boundary)

Project No.:	N4215086
Date:	Feb 2022
Drawn By:	KT
Reviewed By:	JNT



800 Morrison Road
Grahanna, Ohio 43230
PH. (614) 328-5150
terracon.com

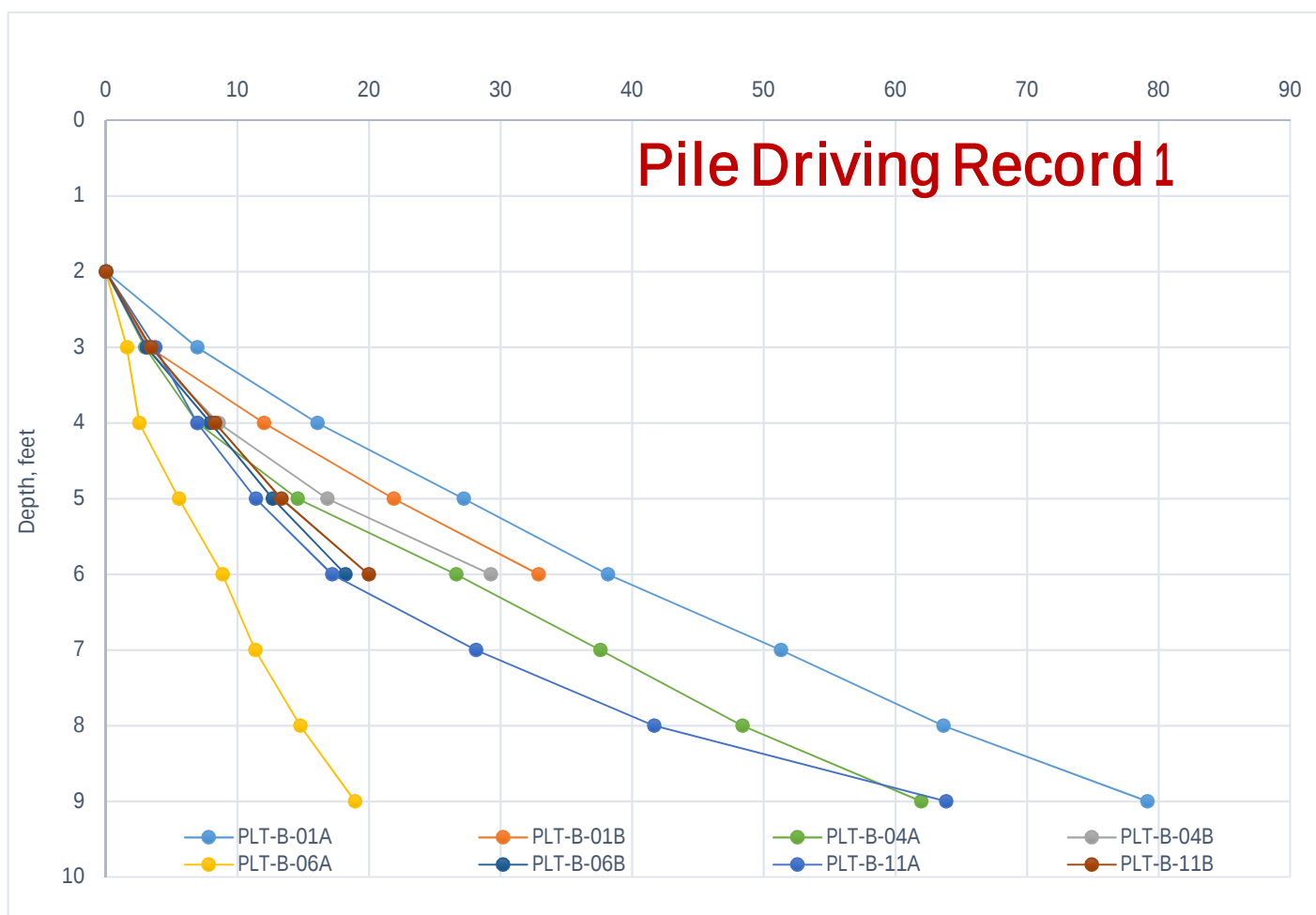
DATA SOURCES:
ESRI World Imagery provided by USDA/FSA, 2020.



PILE TEST LOCATION PLAN

Chipmunk Solar LLC
Pickaway County, Ohio

EDF Renewable Energy
10 Second Street NE, Suite 400
Minneapolis, Minnesota 55413

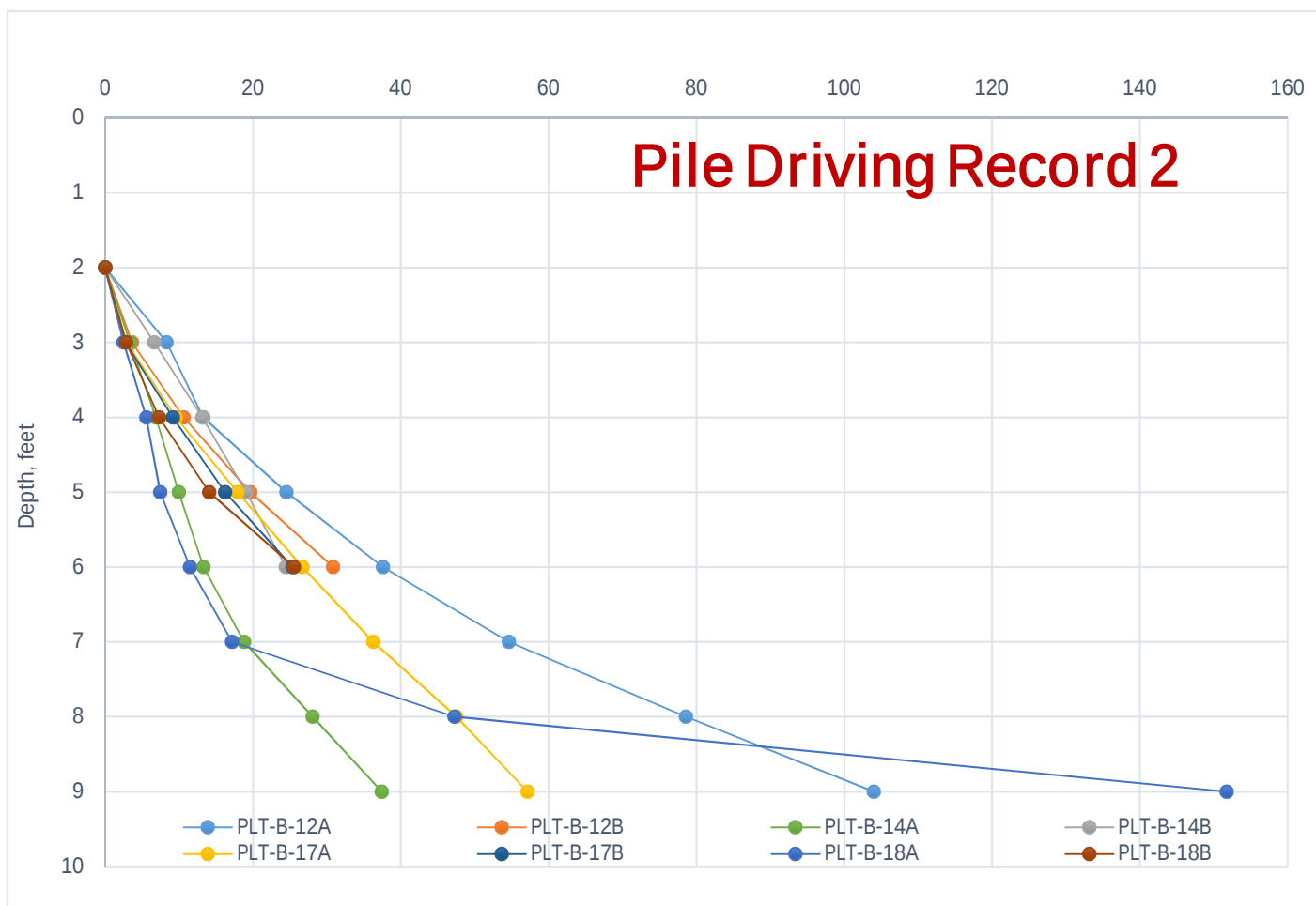


Depth (feet)	Cumulative Driving Time, seconds							
	PLT-B-01A	PLT-B-01B	PLT-B-04A	PLT-B-04B	PLT-B-06A	PLT-B-06B	PLT-B-11A	PLT-B-11B
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	7.0	3.3	3.0	3.0	1.6	3.1	3.7	3.4
4	16.1	12.0	7.0	8.6	2.5	8.0	6.9	8.3
5	27.2	21.9	14.6	16.8	5.6	12.7	11.4	13.3
6	38.2	32.9	26.6	29.2	8.9	18.2	17.2	20.0
7	51.3		37.6		11.4		28.1	
8	63.6		48.4		14.8		41.7	
9	79.1		62.0		18.9		63.9	
Embedment Depth, ft	9.0	6.0	9.0	6.0	9.0	6.0	9.0	6.0
Total Drive Time, sec	79.1	32.9	62.0	29.2	18.9	18.2	63.9	20.0
Average, sec/ft	11.3	8.2	8.9	7.3	2.7	4.6	9.1	5.0

NOTES:

Piles advanced with Vermeer PD-10 hydraulic ram. Installation depth started at 24 inches below ground surface

Terracon



Depth (feet)	Cumulative Driving Time, seconds							
	PLT-B-12A	PLT-B-12B	PLT-B-14A	PLT-B-14B	PLT-B-17A	PLT-B-17B	PLT-B-18A	PLT-B-18B
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	8.3	3.6	3.3	6.6	2.9	2.7	2.5	2.9
4	13.3	10.6	6.8	13.2	9.6	9.2	5.6	7.3
5	24.5	19.7	10.0	19.1	17.9	16.3	7.5	14.1
6	37.6	30.9	13.3	24.5	26.7	25.3	11.5	25.6
7	54.6		18.8		36.3		17.2	
8	78.6		28.1		47.5		47.3	
9	104.0		37.4		57.1		151.7	
Embedment Depth, ft	9.0	6.0	9.0	6.0	9.0	6.0	9.0	6.0
Total Drive Time, sec	104.0	30.9	37.4	24.5	57.1	25.3	151.7	25.6
Average, sec/ft	14.9	7.7	5.3	6.1	8.2	6.3	21.7	6.4

NOTES:

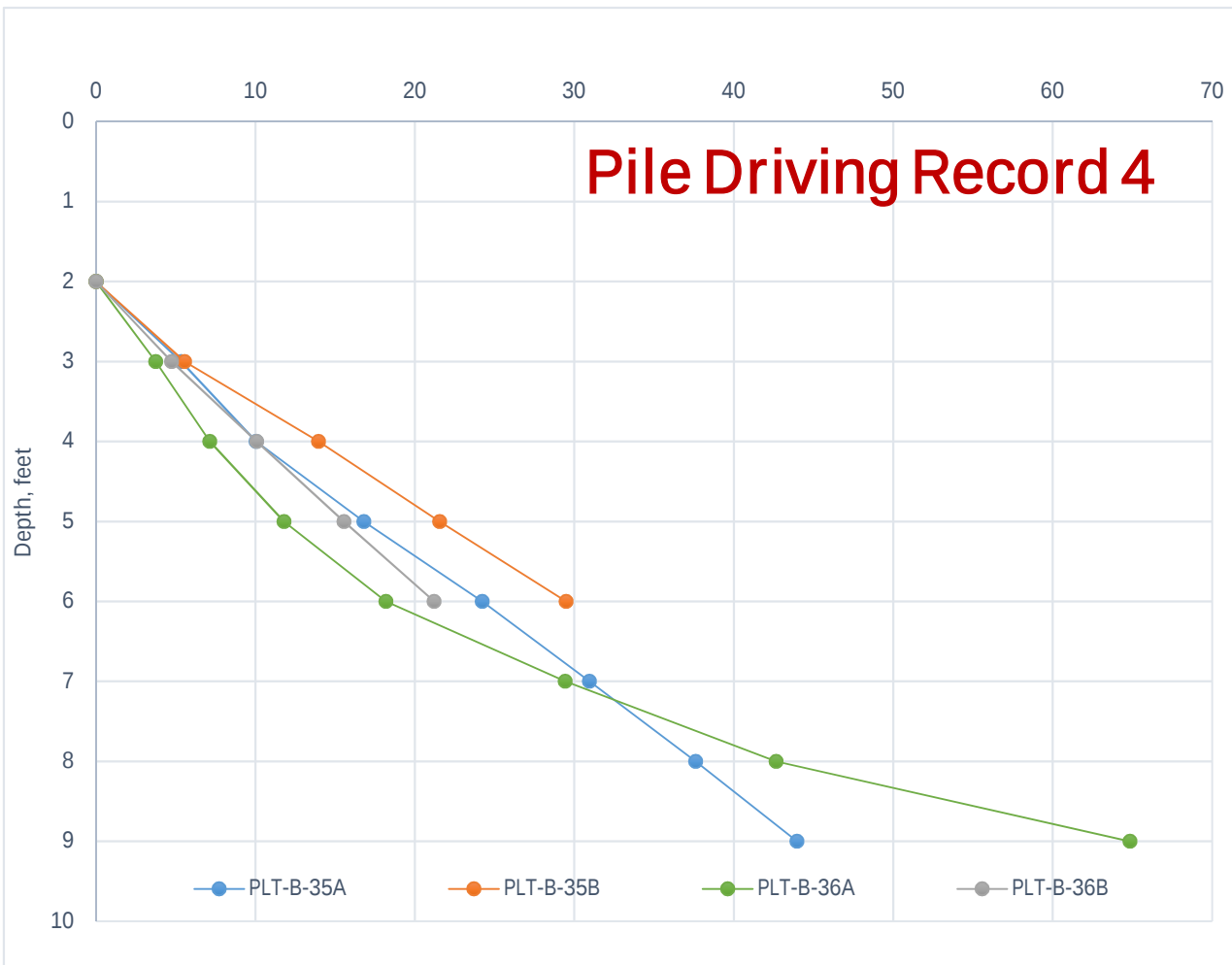
Piles advanced with Vermeer PD-10 hydraulic ram. Installation depth started at 24 inches below ground surface

Terracon



NOTES:

Terracon



Depth (feet)	Cumulative Driving Time, seconds			
	PLT-B-35A	PLT-B-35B	PLT-B-36A	PLT-B-36B
2	0.0	0.0	0.0	0.0
3	5.3	5.6	3.7	4.8
4	10.1	14.0	7.1	10.1
5	16.8	21.6	11.8	15.6
6	24.2	29.5	18.2	21.2
7	30.9		29.4	
8	37.6		42.7	
9	44.0		64.9	
Embedment Depth, ft	9	6	9	6
Total Drive Time, sec	44.0	29.5	64.9	21.2
Average, sec/ft	6.3	7.4	9.3	5.3

NOTES:

Piles advanced with Vermeer PD-10 hydraulic ram. Installation depth started at 24 inches below ground surface

Terracon

PILE LOAD TEST RESULTS – AXIAL TENSION LOAD

Contents:

Tension Load Test Results (28 pages)

Note: All attachments are one page unless noted above.

Tension Load Test Result for PLT-B-01A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

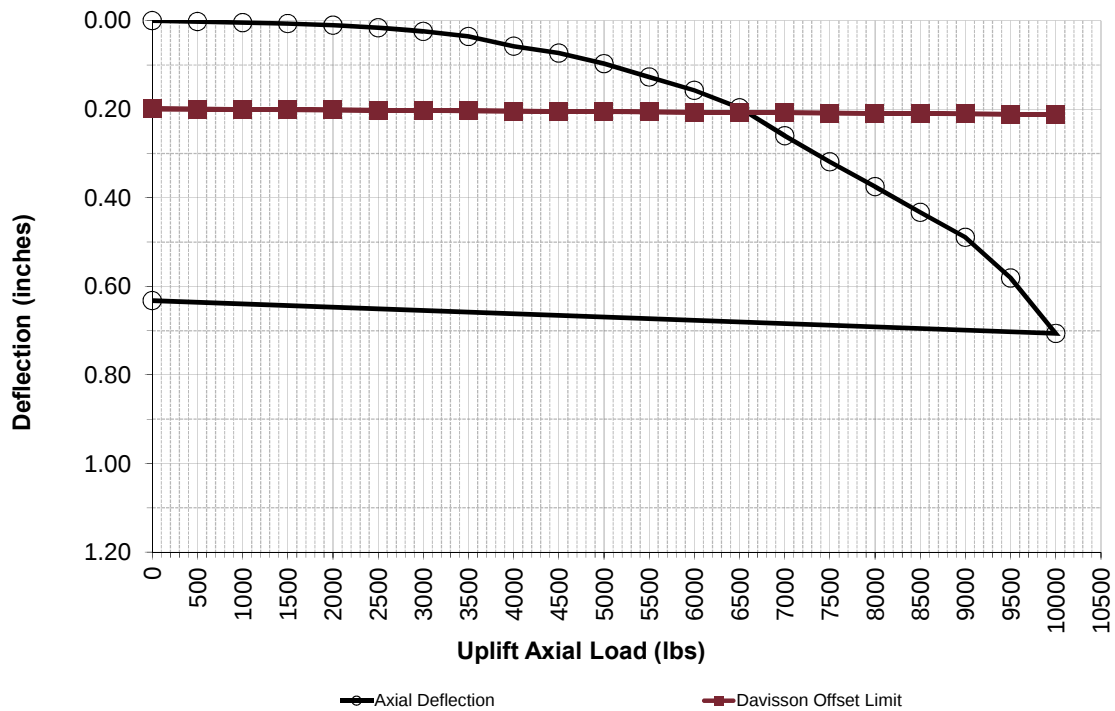
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/23/2021

Pile Information

Pile ID: PLT-B-01A
Latitude: 39.63757
Longitude: -83.14109
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 79.14

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) ($0.15+D/120+(PL/AE)$)	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.002	0.001	0.200	
10%	1000	0.005	0.001	0.200	
15%	1500	0.007	0.002	0.201	
20%	2000	0.011	0.003	0.202	
25%	2500	0.016	0.003	0.202	
30%	3000	0.024	0.004	0.203	
35%	3500	0.036	0.004	0.204	
40%	4000	0.058	0.005	0.204	
45%	4500	0.074	0.006	0.205	
50%	5000	0.097	0.006	0.205	
55%	5500	0.127	0.007	0.206	
60%	6000	0.158	0.008	0.207	
65%	6500	0.197	0.008	0.207	
70%	7000	0.260	0.009	0.208	
75%	7500	0.319	0.009	0.209	
80%	8000	0.375	0.010	0.209	
85%	8500	0.433	0.011	0.210	
90%	9000	0.489	0.011	0.210	
95%	9500	0.581	0.012	0.211	
100%	10000	0.707	0.013	0.212	
0%	0	0.632	0.000	0.199	



Tension Load Test Result for PLT-B-01B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

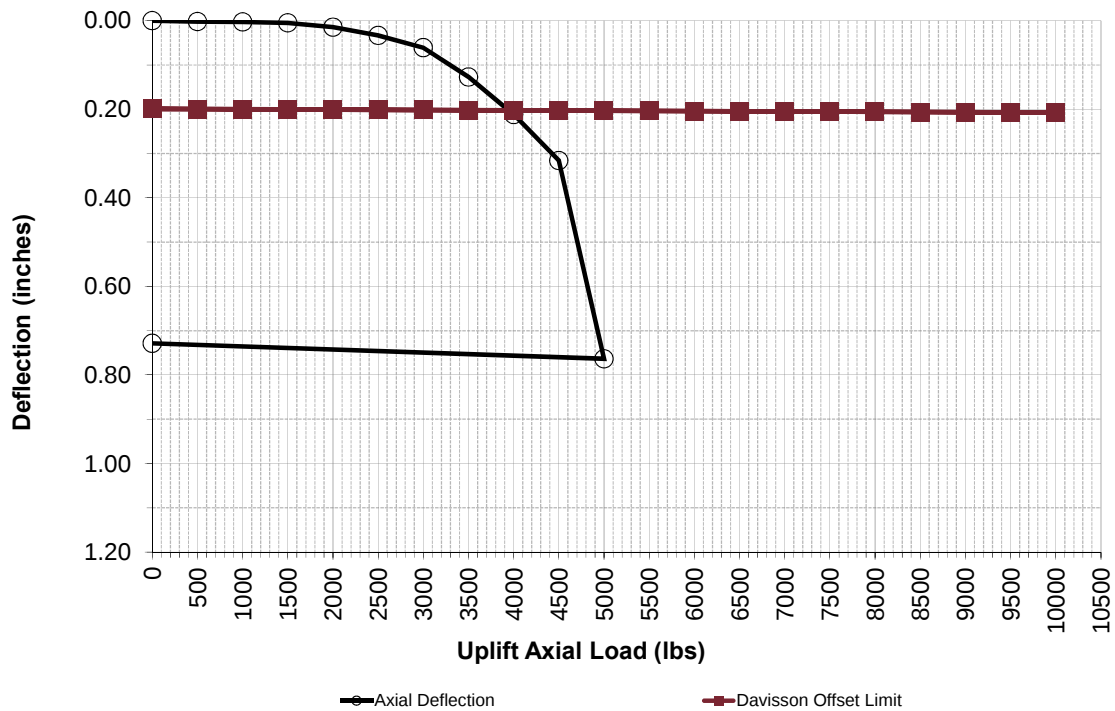
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/23/2021

Pile Information

Pile ID: PLT-B-01B
Latitude: 39.63757
Longitude: -83.14109
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 32.88

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.002	0.000	0.200	
10%	1000	0.003	0.001	0.200	
15%	1500	0.005	0.001	0.200	
20%	2000	0.015	0.002	0.201	
25%	2500	0.034	0.002	0.201	
30%	3000	0.061	0.003	0.202	
35%	3500	0.127	0.003	0.202	
40%	4000	0.212	0.003	0.203	
45%	4500	0.316	0.004	0.203	
50%	5000	0.764	0.004	0.203	
55%	5500		0.005	0.204	
60%	6000		0.005	0.204	
65%	6500		0.005	0.205	
70%	7000		0.006	0.205	
75%	7500		0.006	0.205	
80%	8000		0.007	0.206	
85%	8500		0.007	0.206	
90%	9000		0.008	0.207	
95%	9500		0.008	0.207	
100%	10000		0.008	0.208	
0%	0	0.729	0.000	0.199	



Tension Load Test Result for PLT-B-04A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

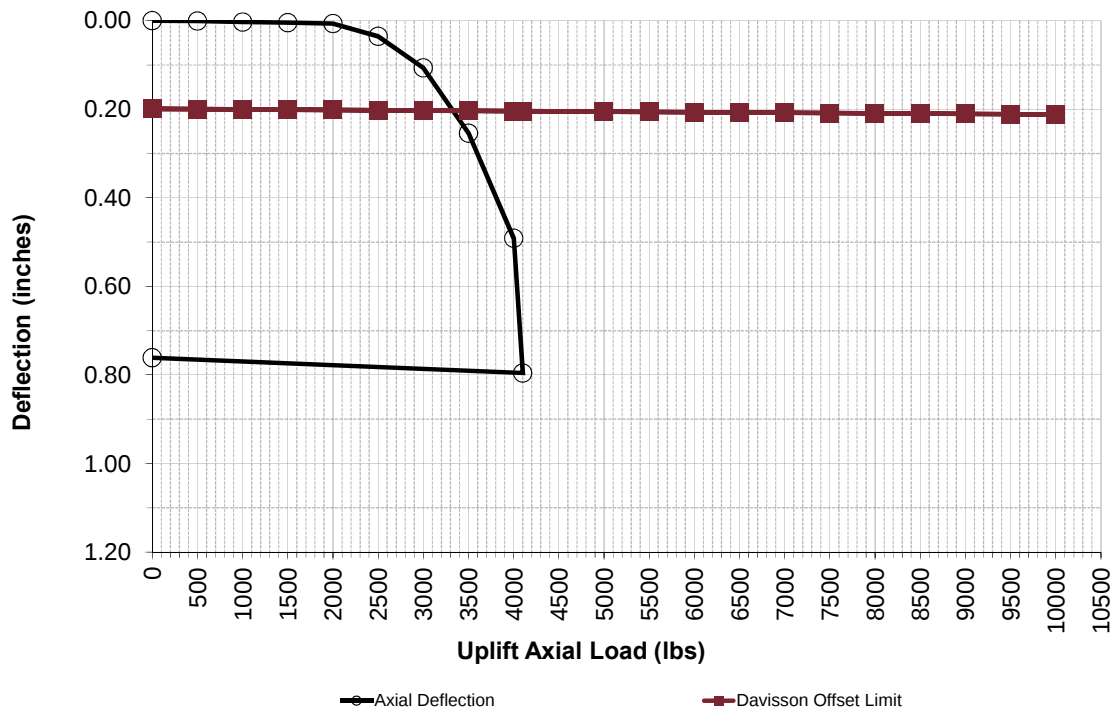
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/23/2021

Pile Information

Pile ID: PLT-B-04A
Latitude: 39.63657
Longitude: -83.12404
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 61.95

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.001	0.001	0.200	
10%	1000	0.003	0.001	0.200	
15%	1500	0.005	0.002	0.201	
20%	2000	0.007	0.003	0.202	
25%	2500	0.036	0.003	0.202	
30%	3000	0.107	0.004	0.203	
35%	3500	0.254	0.004	0.204	
40%	4000	0.491	0.005	0.204	
41%	4100	0.796	0.005	0.204	
50%	5000		0.006	0.205	
55%	5500		0.007	0.206	
60%	6000		0.008	0.207	
65%	6500		0.008	0.207	
70%	7000		0.009	0.208	
75%	7500		0.009	0.209	
80%	8000		0.010	0.209	
85%	8500		0.011	0.210	
90%	9000		0.011	0.210	
95%	9500		0.012	0.211	
100%	10000		0.013	0.212	
0%	0	0.761	0.000	0.199	



Tension Load Test Result for PLT-B-04B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

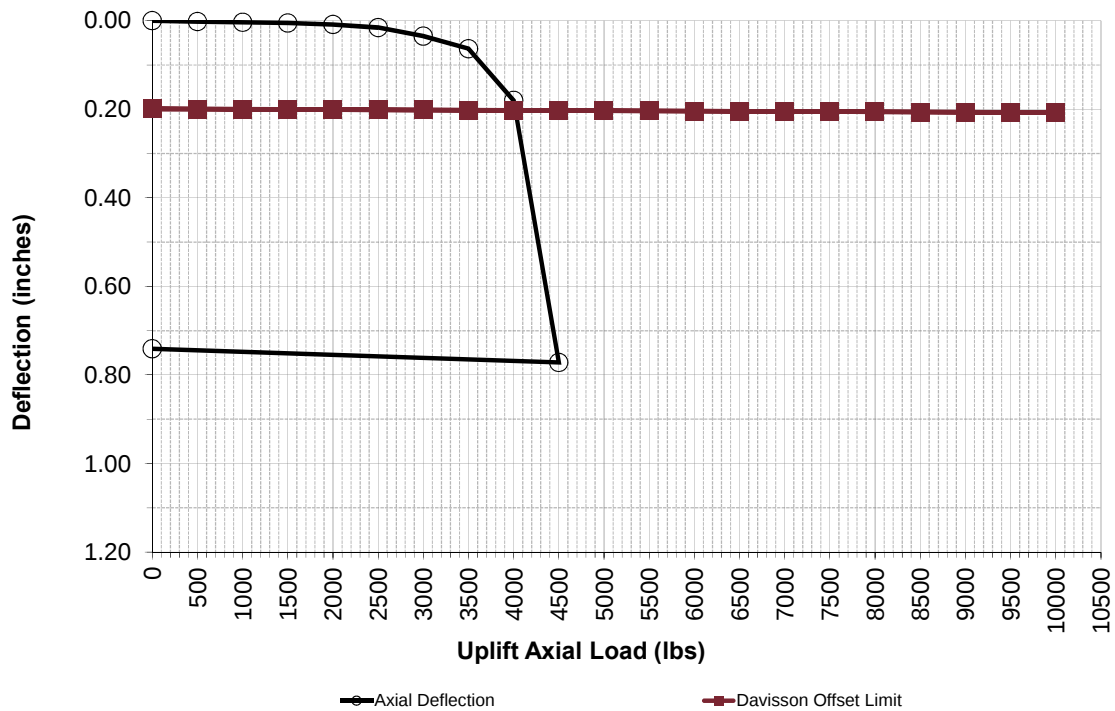
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/23/2021

Pile Information

Pile ID: PLT-B-04B
Latitude: 39.63657
Longitude: -83.12404
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 29.23

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.002	0.000	0.200	
10%	1000	0.004	0.001	0.200	
15%	1500	0.005	0.001	0.200	
20%	2000	0.009	0.002	0.201	
25%	2500	0.016	0.002	0.201	
30%	3000	0.035	0.003	0.202	
35%	3500	0.064	0.003	0.202	
40%	4000	0.180	0.003	0.203	
45%	4500	0.772	0.004	0.203	
50%	5000		0.004	0.203	
55%	5500		0.005	0.204	
60%	6000		0.005	0.204	
65%	6500		0.005	0.205	
70%	7000		0.006	0.205	
75%	7500		0.006	0.205	
80%	8000		0.007	0.206	
85%	8500		0.007	0.206	
90%	9000		0.008	0.207	
95%	9500		0.008	0.207	
100%	10000		0.008	0.208	
0%	0	0.741	0.000	0.199	



Tension Load Test Result for PLT-B-06A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

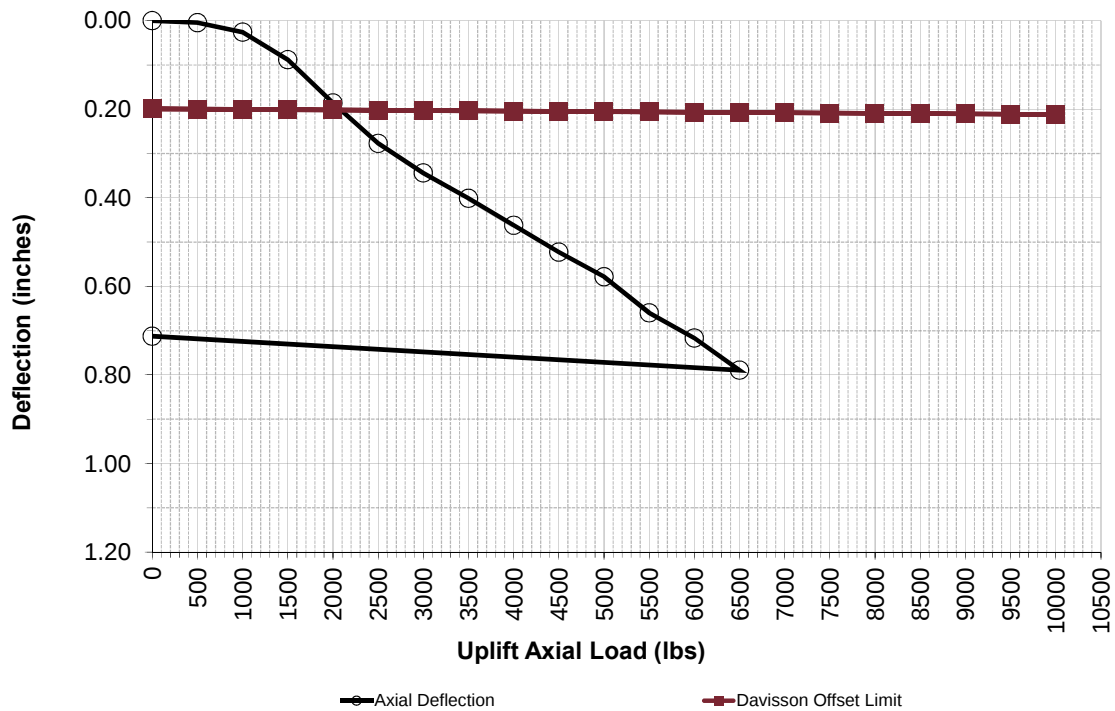
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/23/2021

Pile Information

Pile ID: PLT-B-06A
Latitude: 39.61752
Longitude: -83.13347
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 18.92

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) ($0.15+D/120+(PL/AE)$)	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.005	0.001	0.200	
10%	1000	0.026	0.001	0.200	
15%	1500	0.088	0.002	0.201	
20%	2000	0.186	0.003	0.202	
25%	2500	0.277	0.003	0.202	
30%	3000	0.344	0.004	0.203	
35%	3500	0.401	0.004	0.204	
40%	4000	0.462	0.005	0.204	
45%	4500	0.523	0.006	0.205	
50%	5000	0.578	0.006	0.205	
55%	5500	0.660	0.007	0.206	
60%	6000	0.717	0.008	0.207	
65%	6500	0.789	0.008	0.207	
70%	7000		0.009	0.208	
75%	7500		0.009	0.209	
80%	8000		0.010	0.209	
85%	8500		0.011	0.210	
90%	9000		0.011	0.210	
95%	9500		0.012	0.211	
100%	10000		0.013	0.212	
0%	0	0.713	0.000	0.199	



Tension Load Test Result for PLT-B-06B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

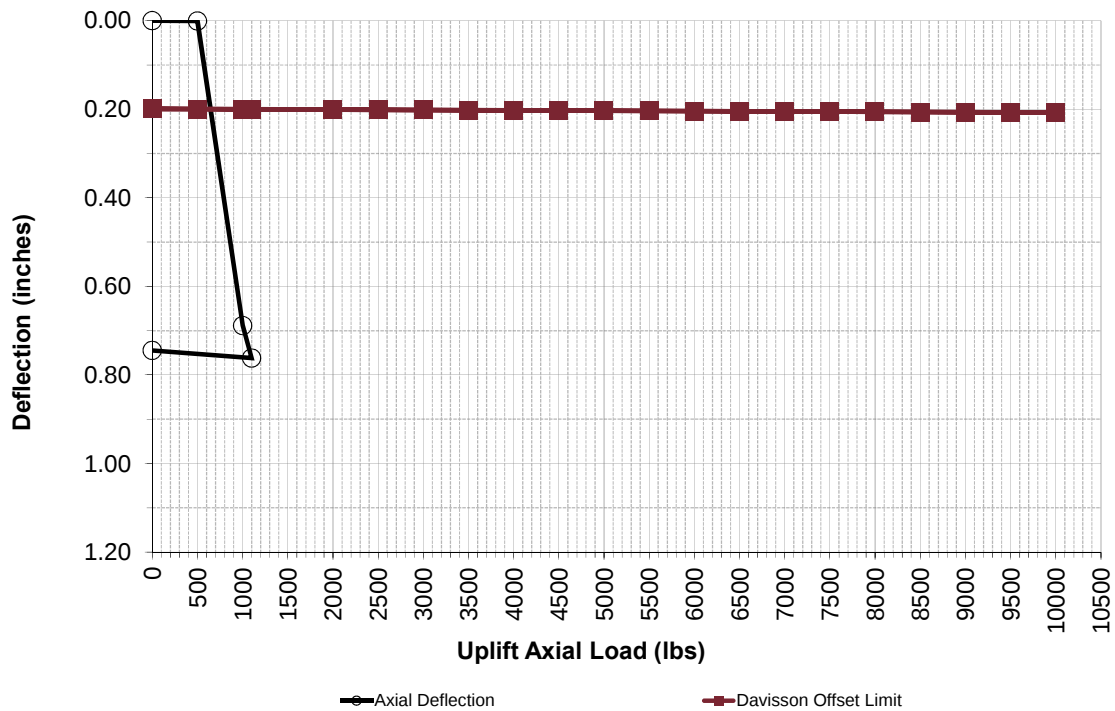
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/23/2021

Pile Information

Pile ID: PLT-B-06B
Latitude: 39.61752
Longitude: -83.13347
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 18.2

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.001	0.000	0.200	
10%	1000	0.689	0.001	0.200	
11%	1100	0.762	0.001	0.200	
20%	2000		0.002	0.201	
25%	2500		0.002	0.201	
30%	3000		0.003	0.202	
35%	3500		0.003	0.202	
40%	4000		0.003	0.203	
45%	4500		0.004	0.203	
50%	5000		0.004	0.203	
55%	5500		0.005	0.204	
60%	6000		0.005	0.204	
65%	6500		0.005	0.205	
70%	7000		0.006	0.205	
75%	7500		0.006	0.205	
80%	8000		0.007	0.206	
85%	8500		0.007	0.206	
90%	9000		0.008	0.207	
95%	9500		0.008	0.207	
100%	10000		0.008	0.208	
0%	0	0.745	0.000	0.199	



Tension Load Test Result for PLT-B-11A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

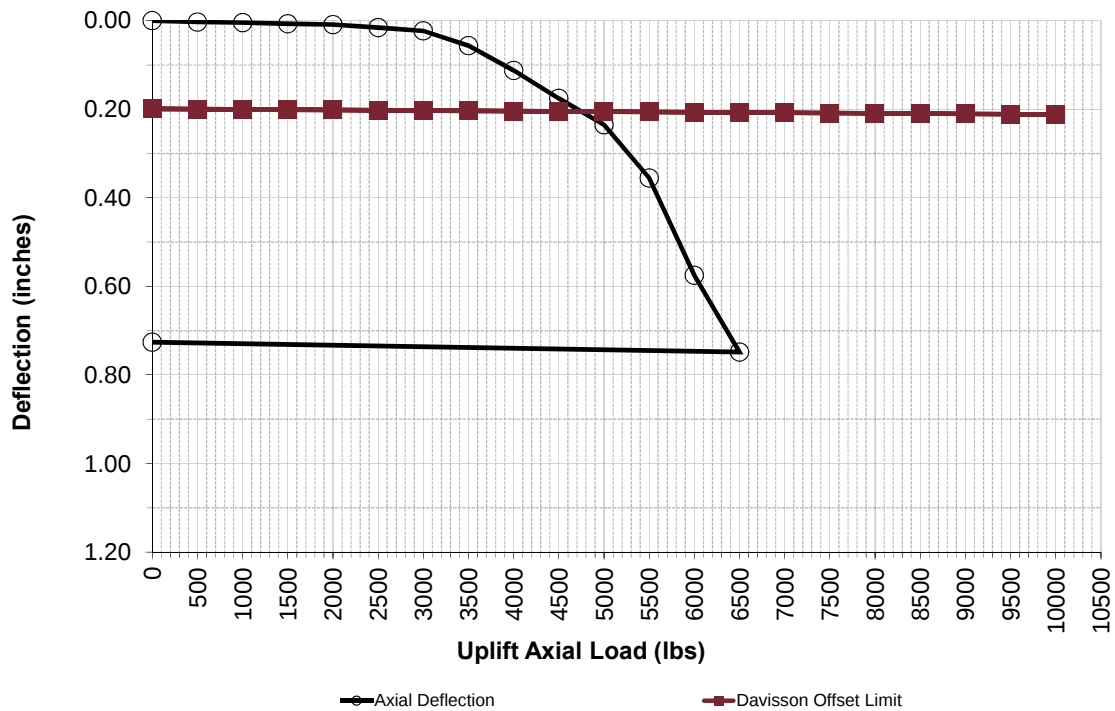
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/21/2021

Pile Information

Pile ID: PLT-B-11A
Latitude: 39.62375
Longitude: -83.11321
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 63.85

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.004	0.001	0.200	
10%	1000	0.005	0.001	0.200	
15%	1500	0.007	0.002	0.201	
20%	2000	0.009	0.003	0.202	
25%	2500	0.016	0.003	0.202	
30%	3000	0.023	0.004	0.203	
35%	3500	0.057	0.004	0.204	
40%	4000	0.113	0.005	0.204	
45%	4500	0.176	0.006	0.205	
50%	5000	0.235	0.006	0.205	
55%	5500	0.356	0.007	0.206	
60%	6000	0.575	0.008	0.207	
65%	6500	0.748	0.008	0.207	
70%	7000		0.009	0.208	
75%	7500		0.009	0.209	
80%	8000		0.010	0.209	
85%	8500		0.011	0.210	
90%	9000		0.011	0.210	
95%	9500		0.012	0.211	
100%	10000		0.013	0.212	
0%	0	0.726	0.000	0.199	



Tension Load Test Result for PLT-B-11B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

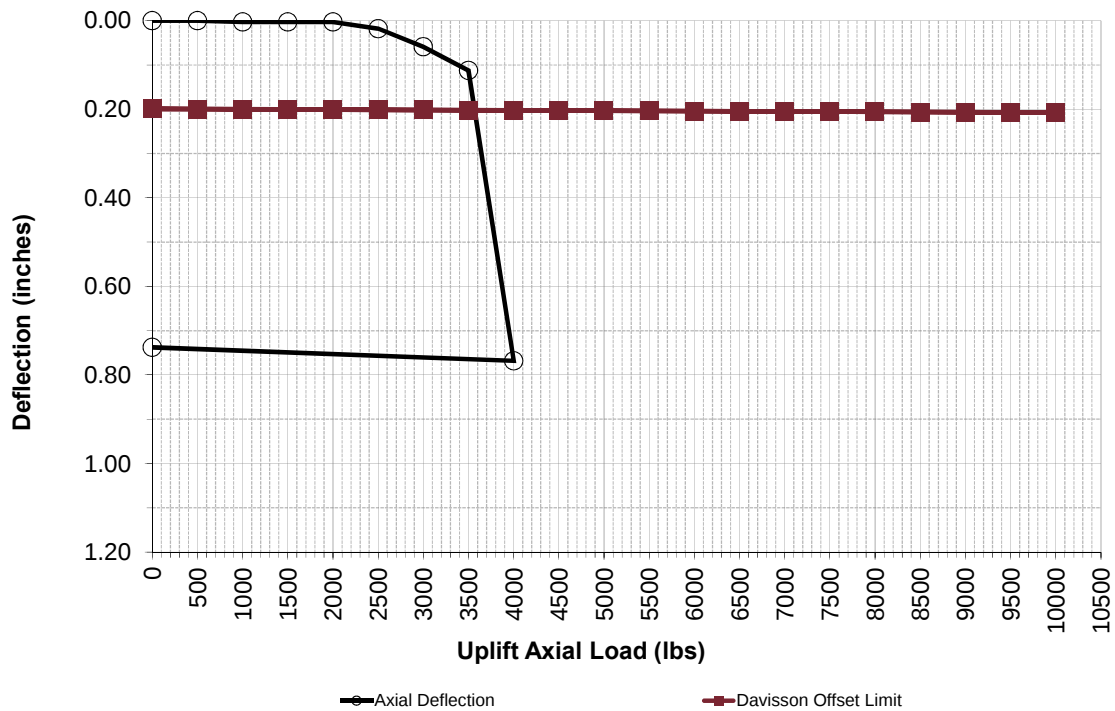
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/21/2021

Pile Information

Pile ID: PLT-B-11B
Latitude: 39.62375
Longitude: -83.11321
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 19.97

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.000	0.000	0.200	
10%	1000	0.003	0.001	0.200	
15%	1500	0.003	0.001	0.200	
20%	2000	0.003	0.002	0.201	
25%	2500	0.018	0.002	0.201	
30%	3000	0.059	0.003	0.202	
35%	3500	0.113	0.003	0.202	
40%	4000	0.768	0.003	0.203	
45%	4500		0.004	0.203	
50%	5000		0.004	0.203	
55%	5500		0.005	0.204	
60%	6000		0.005	0.204	
65%	6500		0.005	0.205	
70%	7000		0.006	0.205	
75%	7500		0.006	0.205	
80%	8000		0.007	0.206	
85%	8500		0.007	0.206	
90%	9000		0.008	0.207	
95%	9500		0.008	0.207	
100%	10000		0.008	0.208	
0%	0	0.738	0.000	0.199	



Tension Load Test Result for PLT-B-12A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

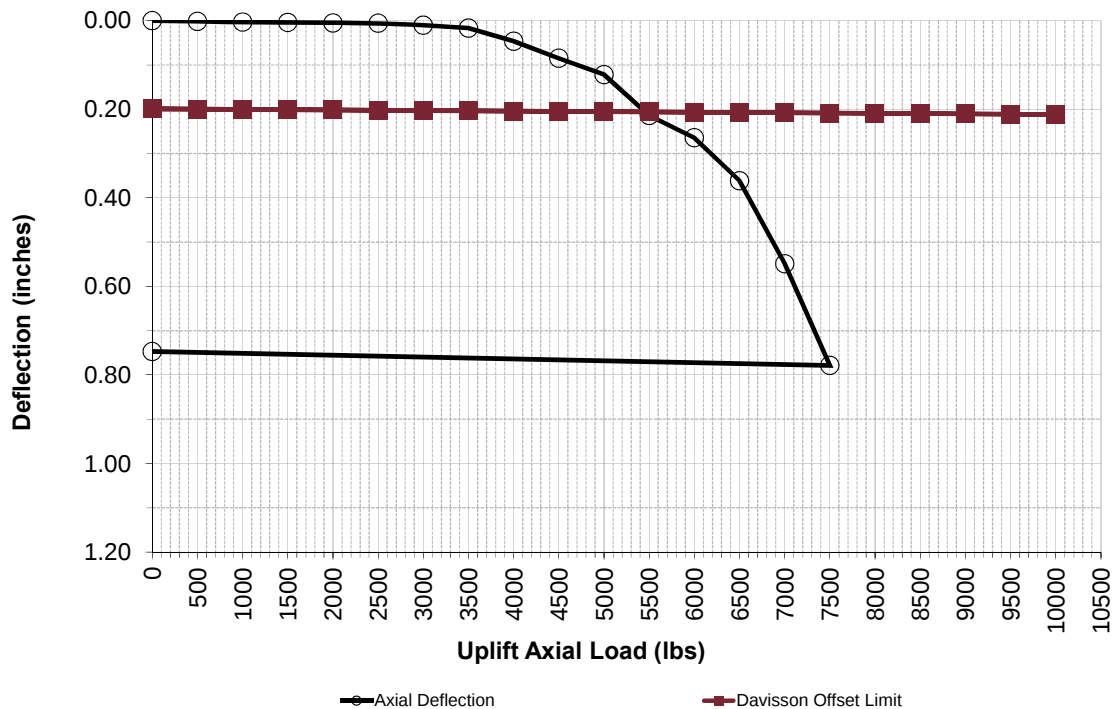
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/21/2021

Pile Information

Pile ID: PLT-B-12A
Latitude: 39.61610
Longitude: -83.10991
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 104.01

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) ($0.15+D/120+(PL/AE)$)	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.002	0.001	0.200	
10%	1000	0.003	0.001	0.200	
15%	1500	0.004	0.002	0.201	
20%	2000	0.006	0.003	0.202	
25%	2500	0.006	0.003	0.202	
30%	3000	0.011	0.004	0.203	
35%	3500	0.017	0.004	0.204	
40%	4000	0.047	0.005	0.204	
45%	4500	0.085	0.006	0.205	
50%	5000	0.122	0.006	0.205	
55%	5500	0.214	0.007	0.206	
60%	6000	0.264	0.008	0.207	
65%	6500	0.362	0.008	0.207	
70%	7000	0.549	0.009	0.208	
75%	7500	0.779	0.009	0.209	
80%	8000		0.010	0.209	
85%	8500		0.011	0.210	
90%	9000		0.011	0.210	
95%	9500		0.012	0.211	
100%	10000		0.013	0.212	
0%	0	0.747	0.000	0.199	



Tension Load Test Result for PLT-B-12B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

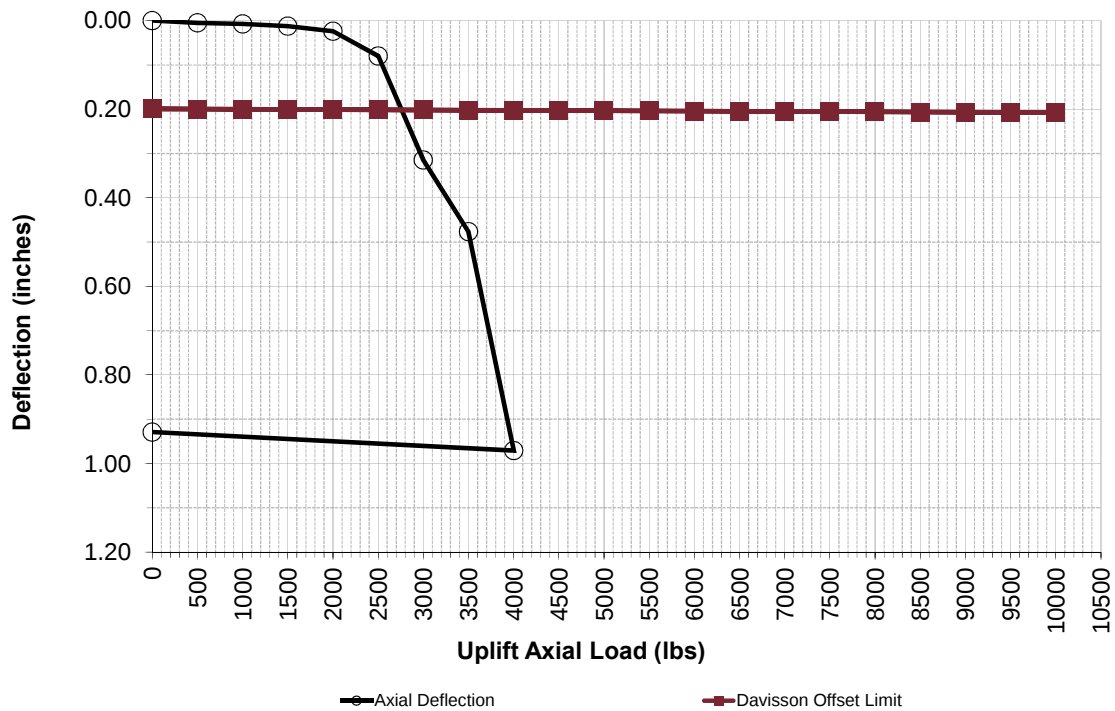
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/21/2021

Pile Information

Pile ID: PLT-B-12B
Latitude: 39.61610
Longitude: -83.10991
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 30.85

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.005	0.000	0.200	
10%	1000	0.007	0.001	0.200	
15%	1500	0.012	0.001	0.200	
20%	2000	0.024	0.002	0.201	
25%	2500	0.080	0.002	0.201	
30%	3000	0.315	0.003	0.202	
35%	3500	0.477	0.003	0.202	
40%	4000	0.971	0.003	0.203	
45%	4500		0.004	0.203	
50%	5000		0.004	0.203	
55%	5500		0.005	0.204	
60%	6000		0.005	0.204	
65%	6500		0.005	0.205	
70%	7000		0.006	0.205	
75%	7500		0.006	0.205	
80%	8000		0.007	0.206	
85%	8500		0.007	0.206	
90%	9000		0.008	0.207	
95%	9500		0.008	0.207	
100%	10000		0.008	0.208	
0%	0	0.929	0.000	0.199	



Tension Load Test Result for PLT-B-14A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

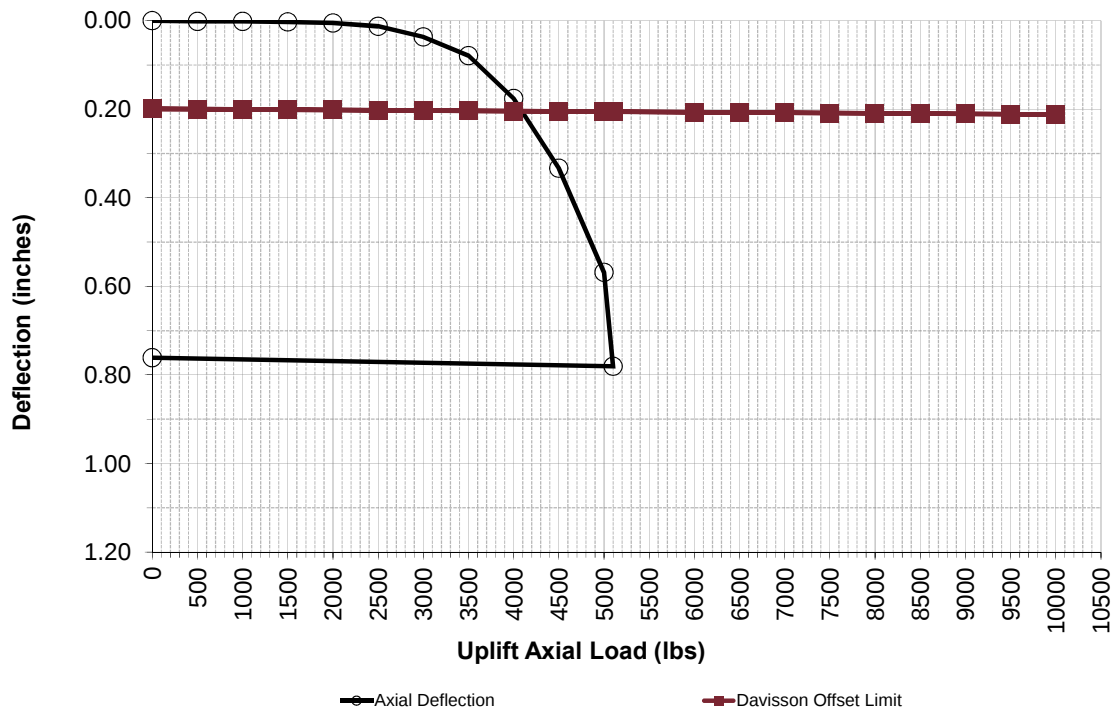
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/23/2021

Pile Information

Pile ID: PLT-B-14A
Latitude: 39.60907
Longitude: -83.14386
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 37.43

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.002	0.001	0.200	
10%	1000	0.002	0.001	0.200	
15%	1500	0.003	0.002	0.201	
20%	2000	0.006	0.003	0.202	
25%	2500	0.013	0.003	0.202	
30%	3000	0.037	0.004	0.203	
35%	3500	0.079	0.004	0.204	
40%	4000	0.176	0.005	0.204	
45%	4500	0.333	0.006	0.205	
50%	5000	0.569	0.006	0.205	
51%	5100	0.781	0.006	0.206	
60%	6000		0.008	0.207	
65%	6500		0.008	0.207	
70%	7000		0.009	0.208	
75%	7500		0.009	0.209	
80%	8000		0.010	0.209	
85%	8500		0.011	0.210	
90%	9000		0.011	0.210	
95%	9500		0.012	0.211	
100%	10000		0.013	0.212	
0%	0	0.761	0.000	0.199	



Tension Load Test Result for PLT-B-14B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

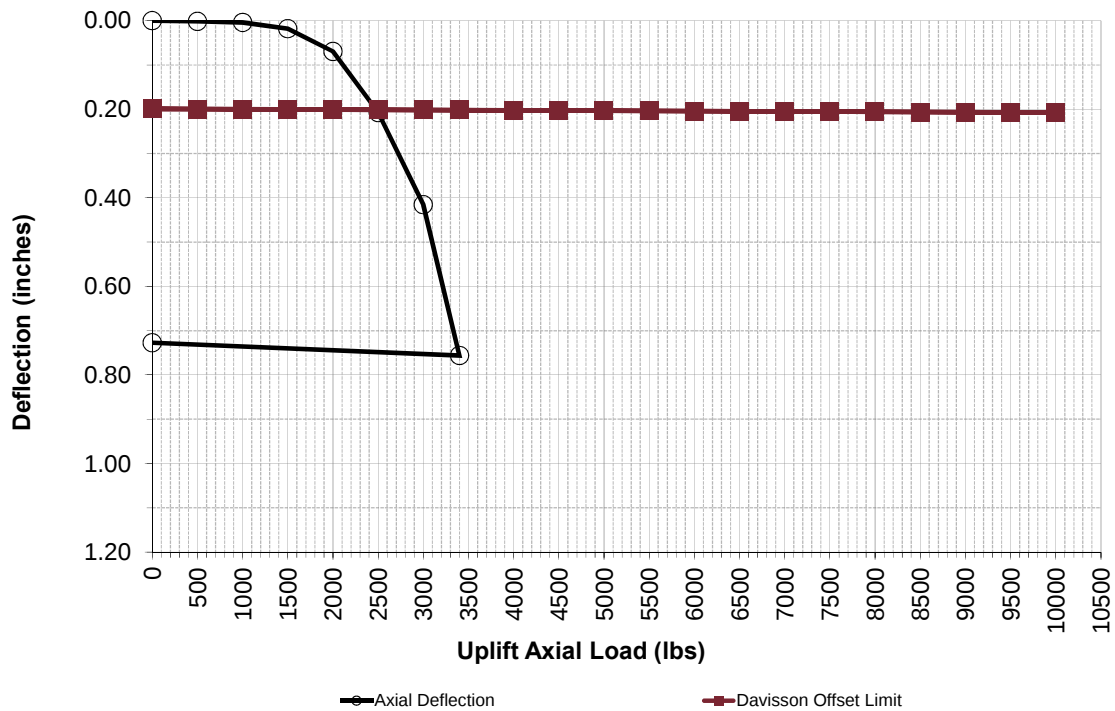
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/23/2021

Pile Information

Pile ID: PLT-B-14B
Latitude: 39.60907
Longitude: -83.14386
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 24.45

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.002	0.000	0.200	
10%	1000	0.004	0.001	0.200	
15%	1500	0.018	0.001	0.200	
20%	2000	0.070	0.002	0.201	
25%	2500	0.208	0.002	0.201	
30%	3000	0.416	0.003	0.202	
34%	3400	0.756	0.003	0.202	
40%	4000		0.003	0.203	
45%	4500		0.004	0.203	
50%	5000		0.004	0.203	
55%	5500		0.005	0.204	
60%	6000		0.005	0.204	
65%	6500		0.005	0.205	
70%	7000		0.006	0.205	
75%	7500		0.006	0.205	
80%	8000		0.007	0.206	
85%	8500		0.007	0.206	
90%	9000		0.008	0.207	
95%	9500		0.008	0.207	
100%	10000		0.008	0.208	
0%	0	0.727	0.000	0.199	



Tension Load Test Result for PLT-B-17A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

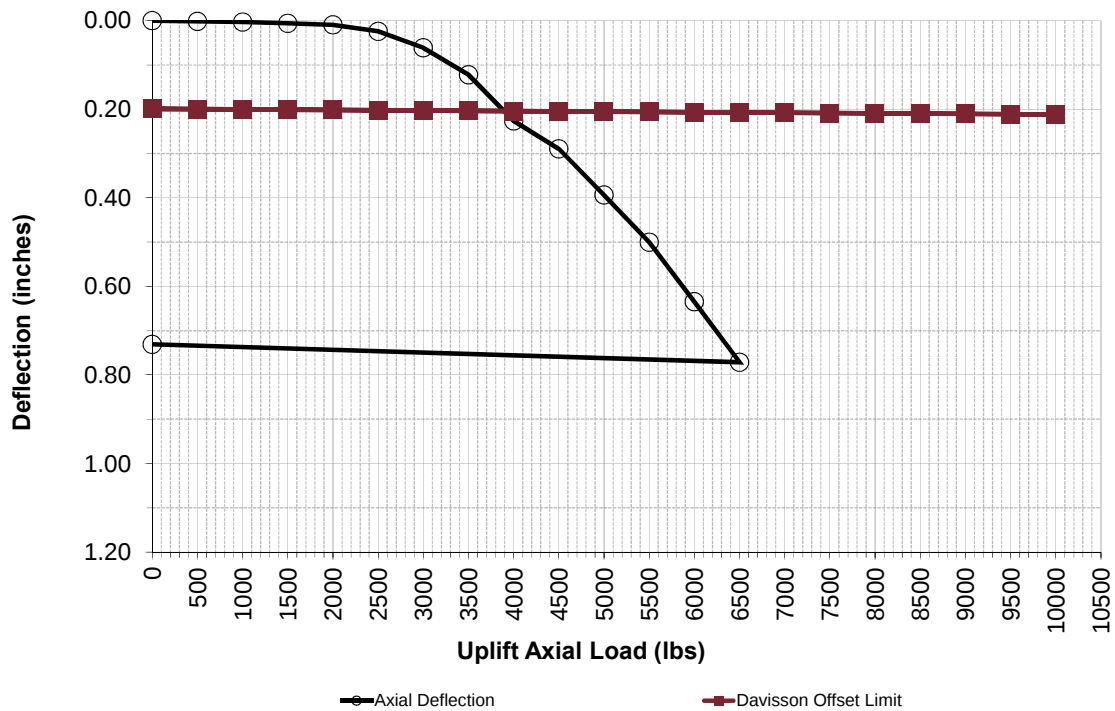
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/23/2021

Pile Information

Pile ID: PLT-B-17A
Latitude: 39.60674
Longitude: -83.13773
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 57.14

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.002	0.001	0.200	
10%	1000	0.004	0.001	0.200	
15%	1500	0.006	0.002	0.201	
20%	2000	0.010	0.003	0.202	
25%	2500	0.025	0.003	0.202	
30%	3000	0.061	0.004	0.203	
35%	3500	0.123	0.004	0.204	
40%	4000	0.227	0.005	0.204	
45%	4500	0.290	0.006	0.205	
50%	5000	0.394	0.006	0.205	
55%	5500	0.500	0.007	0.206	
60%	6000	0.635	0.008	0.207	
65%	6500	0.771	0.008	0.207	
70%	7000		0.009	0.208	
75%	7500		0.009	0.209	
80%	8000		0.010	0.209	
85%	8500		0.011	0.210	
90%	9000		0.011	0.210	
95%	9500		0.012	0.211	
100%	10000		0.013	0.212	
0%	0	0.731	0.000	0.199	



Tension Load Test Result for PLT-B-17B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

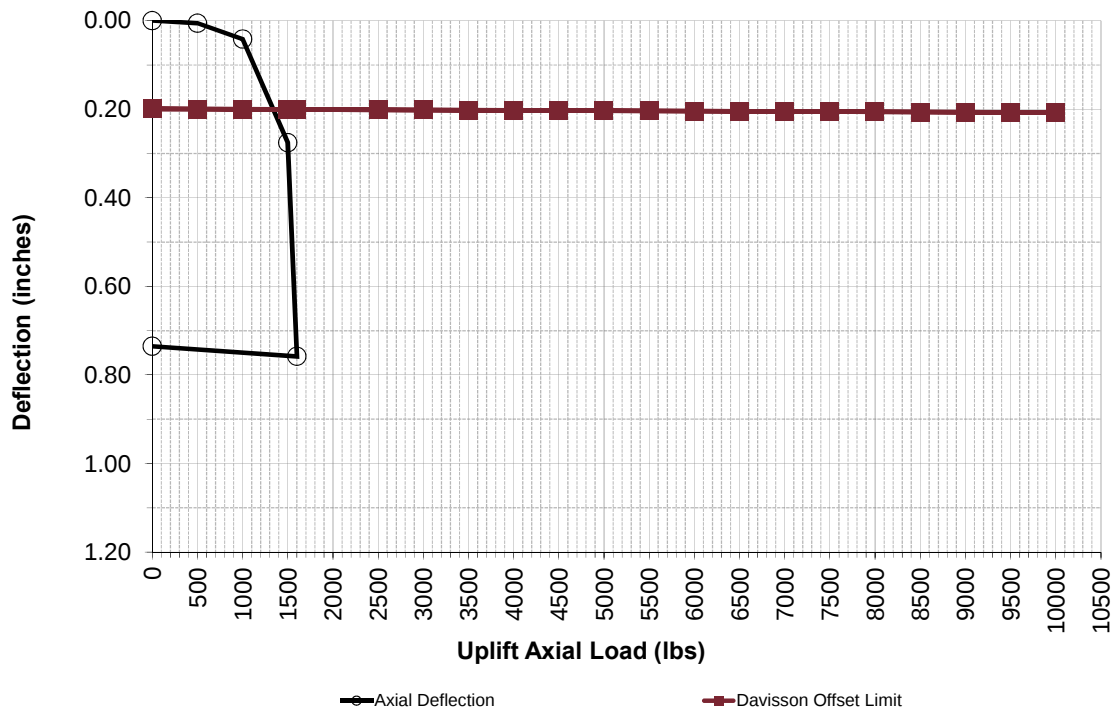
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/23/2021

Pile Information

Pile ID: PLT-B-17B
Latitude: 39.60674
Longitude: -83.13773
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 25.34

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.006	0.000	0.200	
10%	1000	0.042	0.001	0.200	
15%	1500	0.276	0.001	0.200	
16%	1600	0.758	0.001	0.201	
25%	2500		0.002	0.201	
30%	3000		0.003	0.202	
35%	3500		0.003	0.202	
40%	4000		0.003	0.203	
45%	4500		0.004	0.203	
50%	5000		0.004	0.203	
55%	5500		0.005	0.204	
60%	6000		0.005	0.204	
65%	6500		0.005	0.205	
70%	7000		0.006	0.205	
75%	7500		0.006	0.205	
80%	8000		0.007	0.206	
85%	8500		0.007	0.206	
90%	9000		0.008	0.207	
95%	9500		0.008	0.207	
100%	10000		0.008	0.208	
0%	0	0.735	0.000	0.199	



Tension Load Test Result for PLT-B-18A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

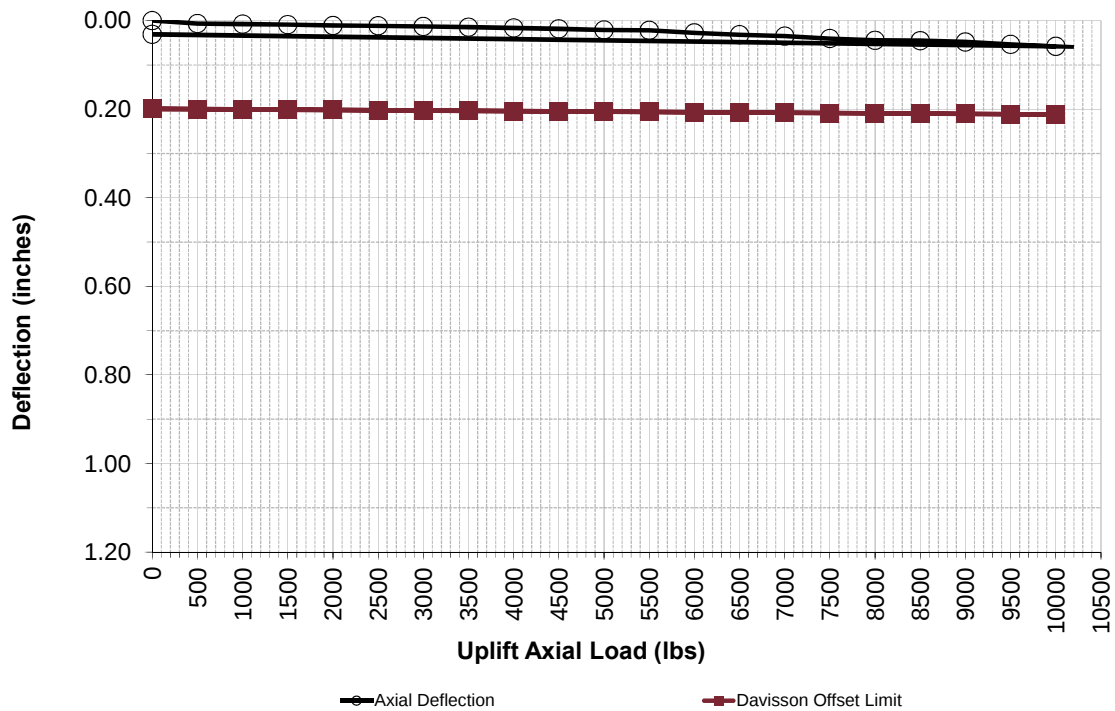
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/22/2021

Pile Information

Pile ID: PLT-B-18A
Latitude: 39.60553
Longitude: -83.13114
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 151.73

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.007	0.001	0.200	
10%	1000	0.008	0.001	0.200	
15%	1500	0.009	0.002	0.201	
20%	2000	0.011	0.003	0.202	
25%	2500	0.012	0.003	0.202	
30%	3000	0.013	0.004	0.203	
35%	3500	0.015	0.004	0.204	
40%	4000	0.017	0.005	0.204	
45%	4500	0.019	0.006	0.205	
50%	5000	0.021	0.006	0.205	
55%	5500	0.022	0.007	0.206	
60%	6000	0.028	0.008	0.207	
65%	6500	0.032	0.008	0.207	
70%	7000	0.035	0.009	0.208	
75%	7500	0.040	0.009	0.209	
80%	8000	0.045	0.010	0.209	
85%	8500	0.045	0.011	0.210	
90%	9000	0.048	0.011	0.210	
95%	9500	0.054	0.012	0.211	
100%	10000	0.058	0.013	0.212	
0%	0	0.031	0.000	0.199	



Tension Load Test Result for PLT-B-18B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

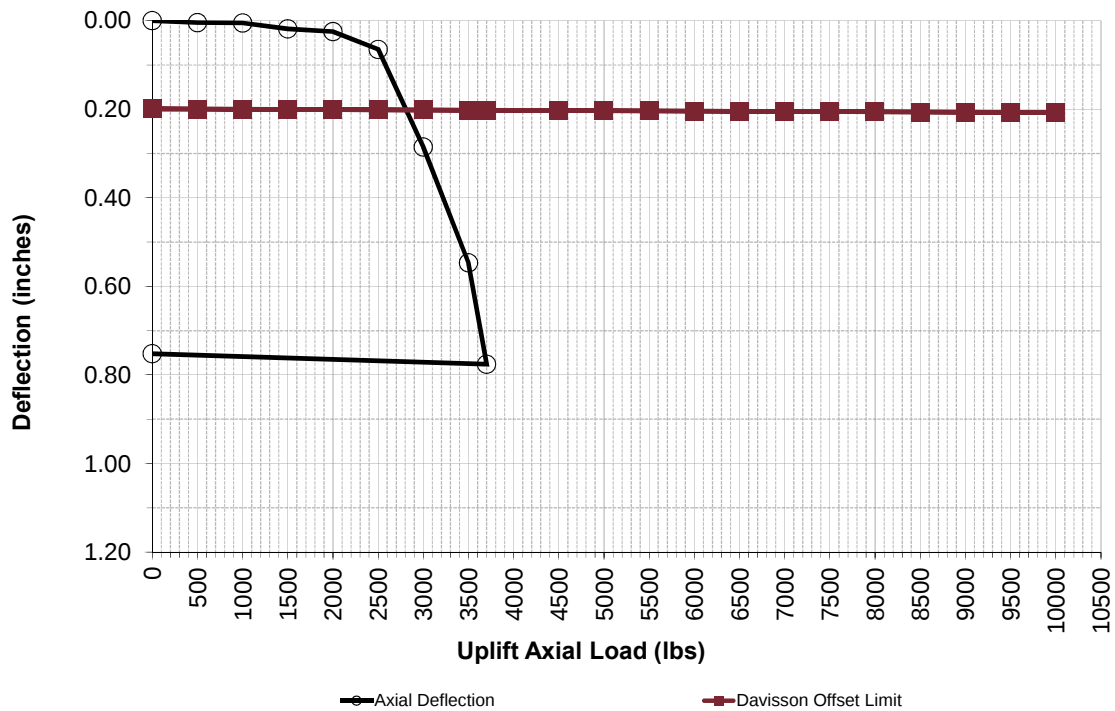
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/22/2021

Pile Information

Pile ID: PLT-B-18B
Latitude: 39.60553
Longitude: -83.13114
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 25.56

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.005	0.000	0.200	
10%	1000	0.005	0.001	0.200	
15%	1500	0.019	0.001	0.200	
20%	2000	0.025	0.002	0.201	
25%	2500	0.065	0.002	0.201	
30%	3000	0.286	0.003	0.202	
35%	3500	0.547	0.003	0.202	
37%	3700	0.776	0.003	0.202	
45%	4500		0.004	0.203	
50%	5000		0.004	0.203	
55%	5500		0.005	0.204	
60%	6000		0.005	0.204	
65%	6500		0.005	0.205	
70%	7000		0.006	0.205	
75%	7500		0.006	0.205	
80%	8000		0.007	0.206	
85%	8500		0.007	0.206	
90%	9000		0.008	0.207	
95%	9500		0.008	0.207	
100%	10000		0.008	0.208	
0%	0	0.752	0.000	0.199	



Tension Load Test Result for PLT-B-21A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

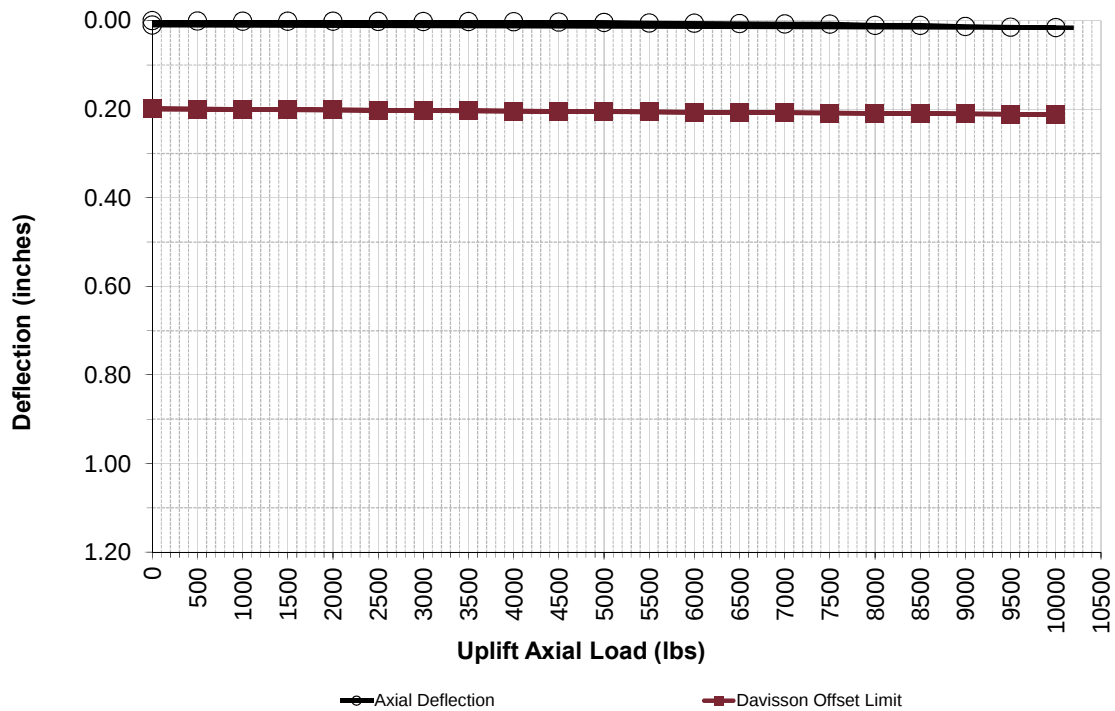
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/22/2021

Pile Information

Pile ID: PLT-B-21A
Latitude: 39.59393
Longitude: -83.13909
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 196.4

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.001	0.001	0.200	
10%	1000	0.001	0.001	0.200	
15%	1500	0.001	0.002	0.201	
20%	2000	0.001	0.003	0.202	
25%	2500	0.002	0.003	0.202	
30%	3000	0.002	0.004	0.203	
35%	3500	0.002	0.004	0.204	
40%	4000	0.003	0.005	0.204	
45%	4500	0.003	0.006	0.205	
50%	5000	0.004	0.006	0.205	
55%	5500	0.005	0.007	0.206	
60%	6000	0.006	0.008	0.207	
65%	6500	0.007	0.008	0.207	
70%	7000	0.007	0.009	0.208	
75%	7500	0.008	0.009	0.209	
80%	8000	0.011	0.010	0.209	
85%	8500	0.011	0.011	0.210	
90%	9000	0.013	0.011	0.210	
95%	9500	0.015	0.012	0.211	
100%	10000	0.016	0.013	0.212	
0%	0	0.010	0.000	0.199	



Tension Load Test Result for PLT-B-21B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

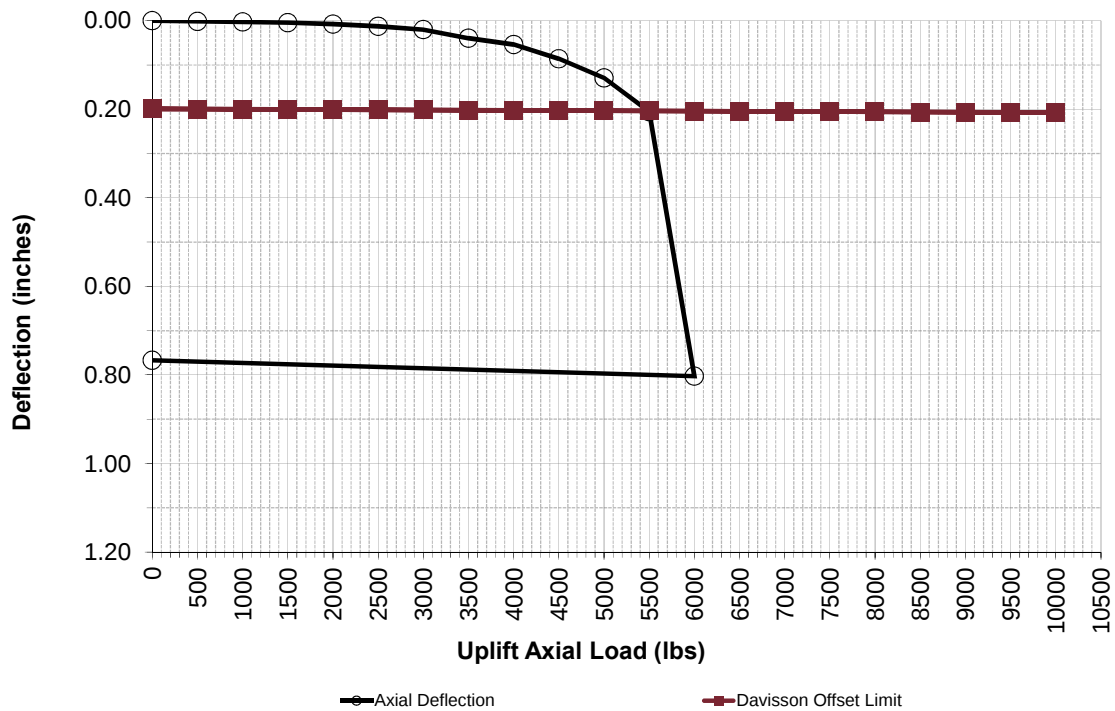
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/22/2021

Pile Information

Pile ID: PLT-B-21B
Latitude: 39.59393
Longitude: -83.13909
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 45.07

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.002	0.000	0.200	
10%	1000	0.003	0.001	0.200	
15%	1500	0.005	0.001	0.200	
20%	2000	0.008	0.002	0.201	
25%	2500	0.013	0.002	0.201	
30%	3000	0.020	0.003	0.202	
35%	3500	0.040	0.003	0.202	
40%	4000	0.054	0.003	0.203	
45%	4500	0.086	0.004	0.203	
50%	5000	0.129	0.004	0.203	
55%	5500	0.206	0.005	0.204	
60%	6000	0.803	0.005	0.204	
65%	6500		0.005	0.205	
70%	7000		0.006	0.205	
75%	7500		0.006	0.205	
80%	8000		0.007	0.206	
85%	8500		0.007	0.206	
90%	9000		0.008	0.207	
95%	9500		0.008	0.207	
100%	10000		0.008	0.208	
0%	0	0.767	0.000	0.199	



Tension Load Test Result for PLT-B-22A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

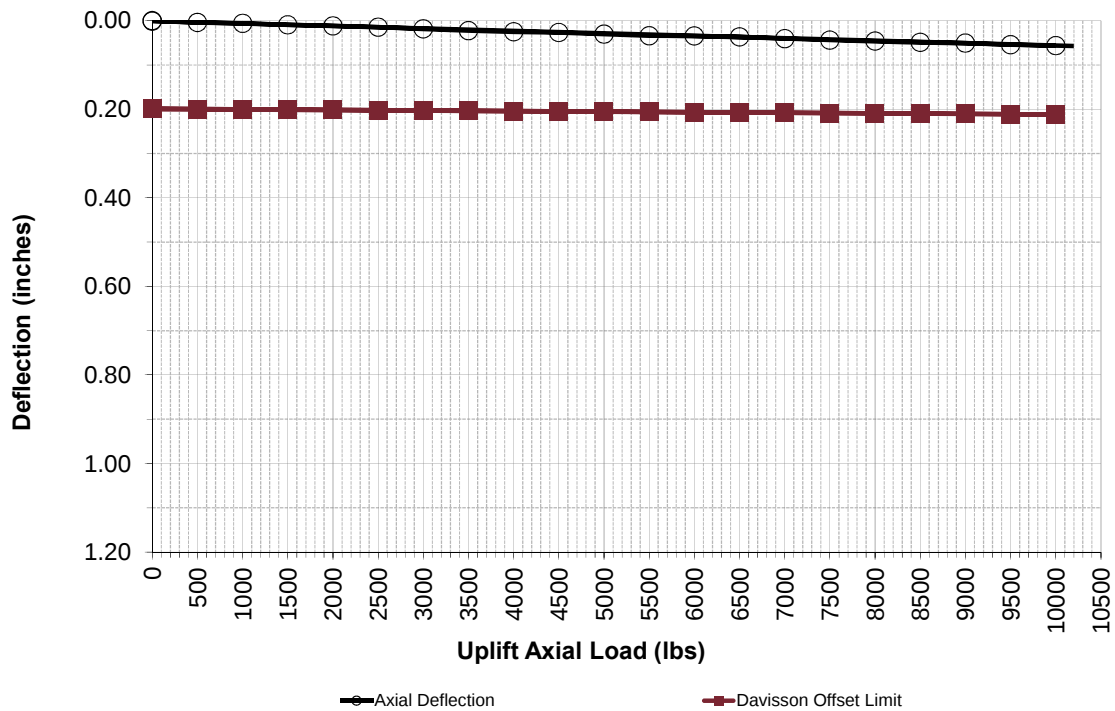
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/22/2021

Pile Information

Pile ID: PLT-B-22A
Latitude: 39.59593
Longitude: -83.13003
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 352.14

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.004	0.001	0.200	
10%	1000	0.006	0.001	0.200	
15%	1500	0.010	0.002	0.201	
20%	2000	0.012	0.003	0.202	
25%	2500	0.015	0.003	0.202	
30%	3000	0.019	0.004	0.203	
35%	3500	0.023	0.004	0.204	
40%	4000	0.025	0.005	0.204	
45%	4500	0.027	0.006	0.205	
50%	5000	0.031	0.006	0.205	
55%	5500	0.034	0.007	0.206	
60%	6000	0.035	0.008	0.207	
65%	6500	0.037	0.008	0.207	
70%	7000	0.041	0.009	0.208	
75%	7500	0.044	0.009	0.209	
80%	8000	0.046	0.010	0.209	
85%	8500	0.049	0.011	0.210	
90%	9000	0.051	0.011	0.210	
95%	9500	0.055	0.012	0.211	
100%	10000	0.057	0.013	0.212	
0%	0	0.001	0.000	0.199	



Tension Load Test Result for PLT-B-22B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

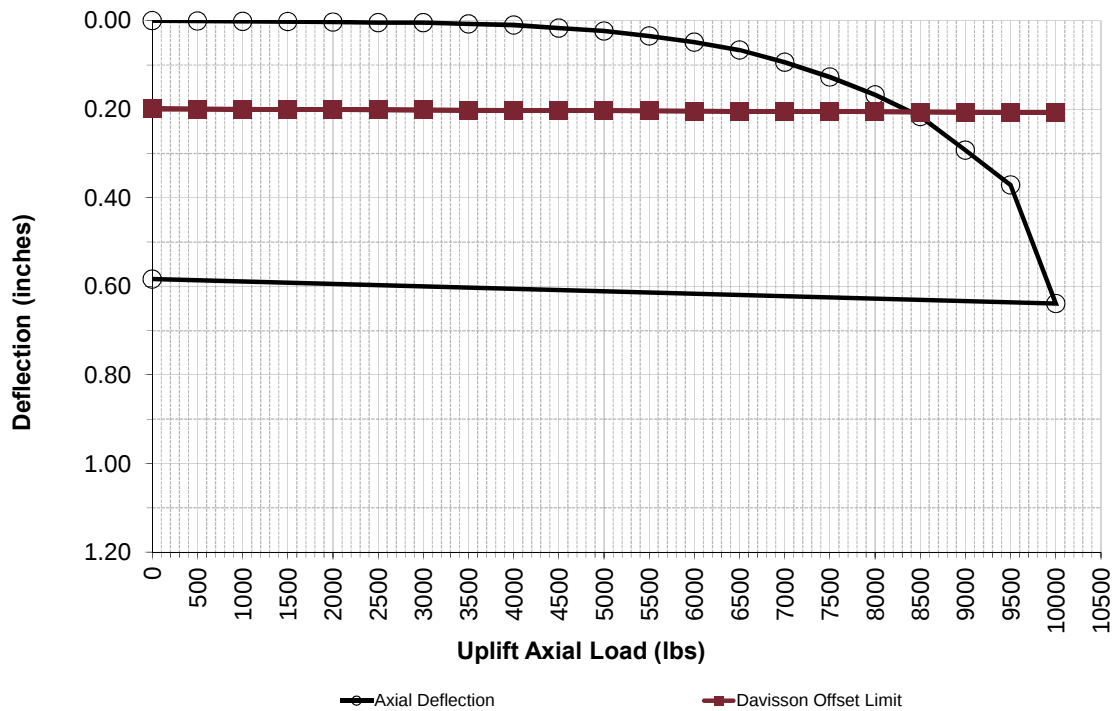
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/22/2021

Pile Information

Pile ID: PLT-B-22B
Latitude: 39.59593
Longitude: -83.13003
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 31.83

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.001	0.000	0.200	
10%	1000	0.002	0.001	0.200	
15%	1500	0.002	0.001	0.200	
20%	2000	0.004	0.002	0.201	
25%	2500	0.005	0.002	0.201	
30%	3000	0.005	0.003	0.202	
35%	3500	0.007	0.003	0.202	
40%	4000	0.010	0.003	0.203	
45%	4500	0.017	0.004	0.203	
50%	5000	0.024	0.004	0.203	
55%	5500	0.035	0.005	0.204	
60%	6000	0.049	0.005	0.204	
65%	6500	0.066	0.005	0.205	
70%	7000	0.094	0.006	0.205	
75%	7500	0.128	0.006	0.205	
80%	8000	0.168	0.007	0.206	
85%	8500	0.217	0.007	0.206	
90%	9000	0.293	0.008	0.207	
95%	9500	0.371	0.008	0.207	
100%	10000	0.639	0.008	0.208	
0%	0	0.584	0.000	0.199	



Tension Load Test Result for PLT-B-30A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

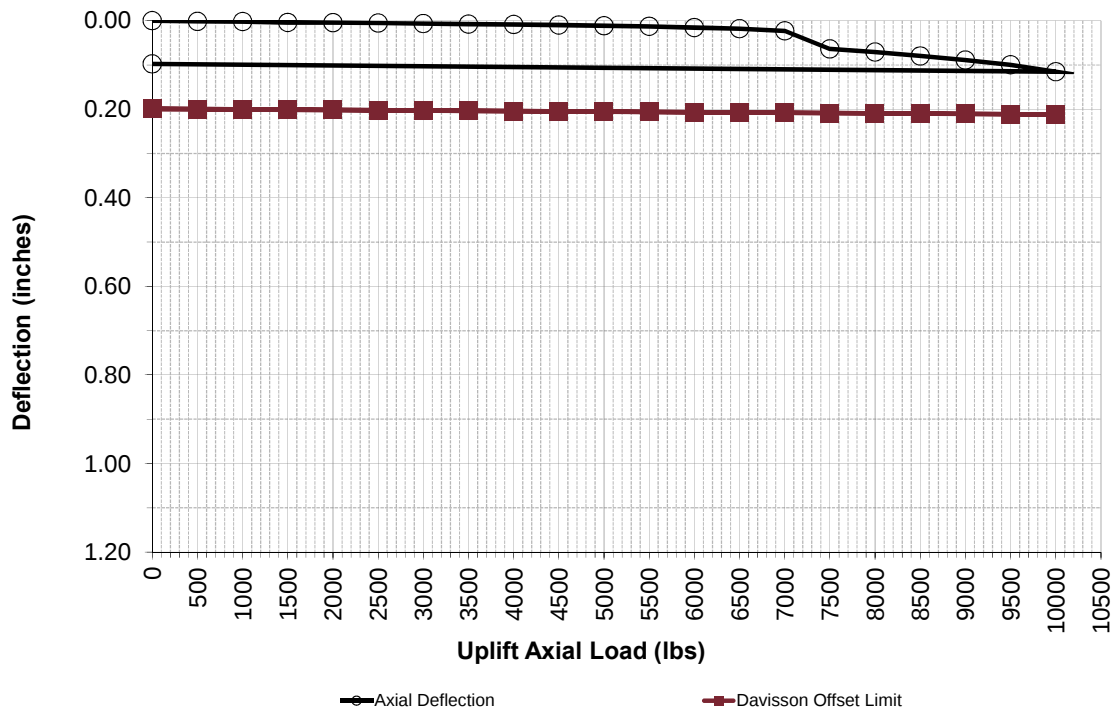
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/21/2021

Pile Information

Pile ID: PLT-B-30A
Latitude: 39.61464
Longitude: -83.06897
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 217.29

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.002	0.001	0.200	
10%	1000	0.002	0.001	0.200	
15%	1500	0.004	0.002	0.201	
20%	2000	0.005	0.003	0.202	
25%	2500	0.005	0.003	0.202	
30%	3000	0.007	0.004	0.203	
35%	3500	0.008	0.004	0.204	
40%	4000	0.009	0.005	0.204	
45%	4500	0.010	0.006	0.205	
50%	5000	0.012	0.006	0.205	
55%	5500	0.013	0.007	0.206	
60%	6000	0.016	0.008	0.207	
65%	6500	0.018	0.008	0.207	
70%	7000	0.023	0.009	0.208	
75%	7500	0.064	0.009	0.209	
80%	8000	0.071	0.010	0.209	
85%	8500	0.080	0.011	0.210	
90%	9000	0.089	0.011	0.210	
95%	9500	0.100	0.012	0.211	
100%	10000	0.115	0.013	0.212	
0%	0	0.098	0.000	0.199	



Tension Load Test Result for PLT-B-30B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

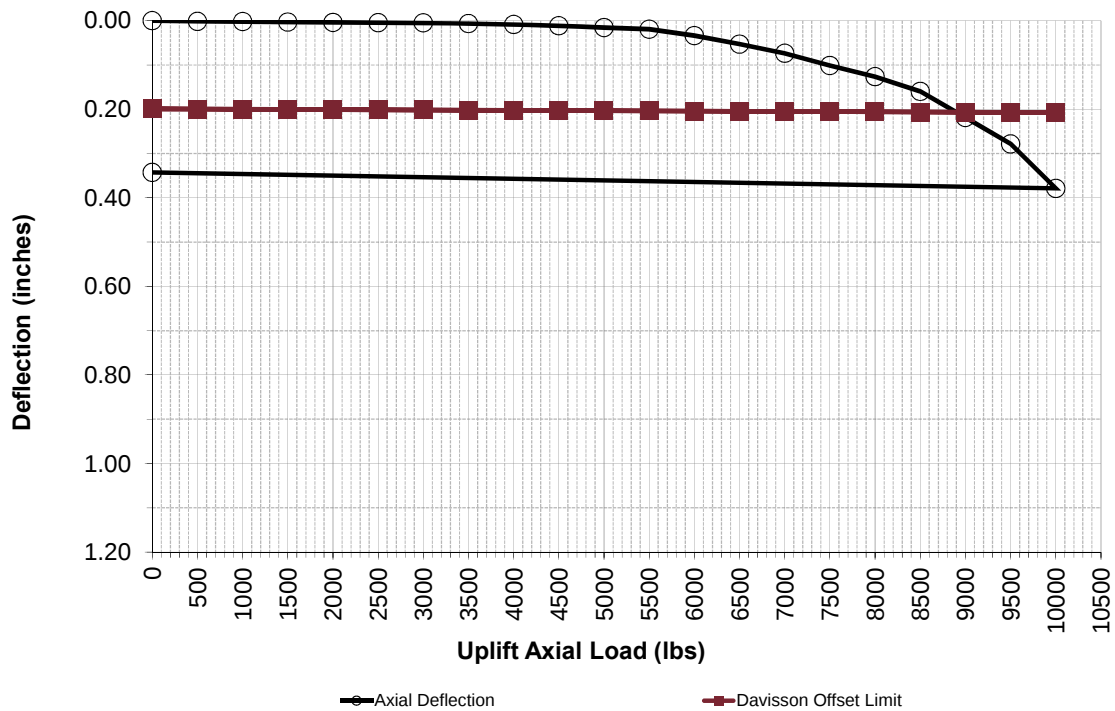
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/21/2021

Pile Information

Pile ID: PLT-B-30B
Latitude: 39.61464
Longitude: -83.06897
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 51.42

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.002	0.000	0.200	
10%	1000	0.002	0.001	0.200	
15%	1500	0.004	0.001	0.200	
20%	2000	0.004	0.002	0.201	
25%	2500	0.005	0.002	0.201	
30%	3000	0.005	0.003	0.202	
35%	3500	0.007	0.003	0.202	
40%	4000	0.009	0.003	0.203	
45%	4500	0.012	0.004	0.203	
50%	5000	0.016	0.004	0.203	
55%	5500	0.020	0.005	0.204	
60%	6000	0.034	0.005	0.204	
65%	6500	0.053	0.005	0.205	
70%	7000	0.074	0.006	0.205	
75%	7500	0.101	0.006	0.205	
80%	8000	0.127	0.007	0.206	
85%	8500	0.160	0.007	0.206	
90%	9000	0.219	0.008	0.207	
95%	9500	0.279	0.008	0.207	
100%	10000	0.379	0.008	0.208	
0%	0	0.343	0.000	0.199	



Tension Load Test Result for PLT-B-33A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

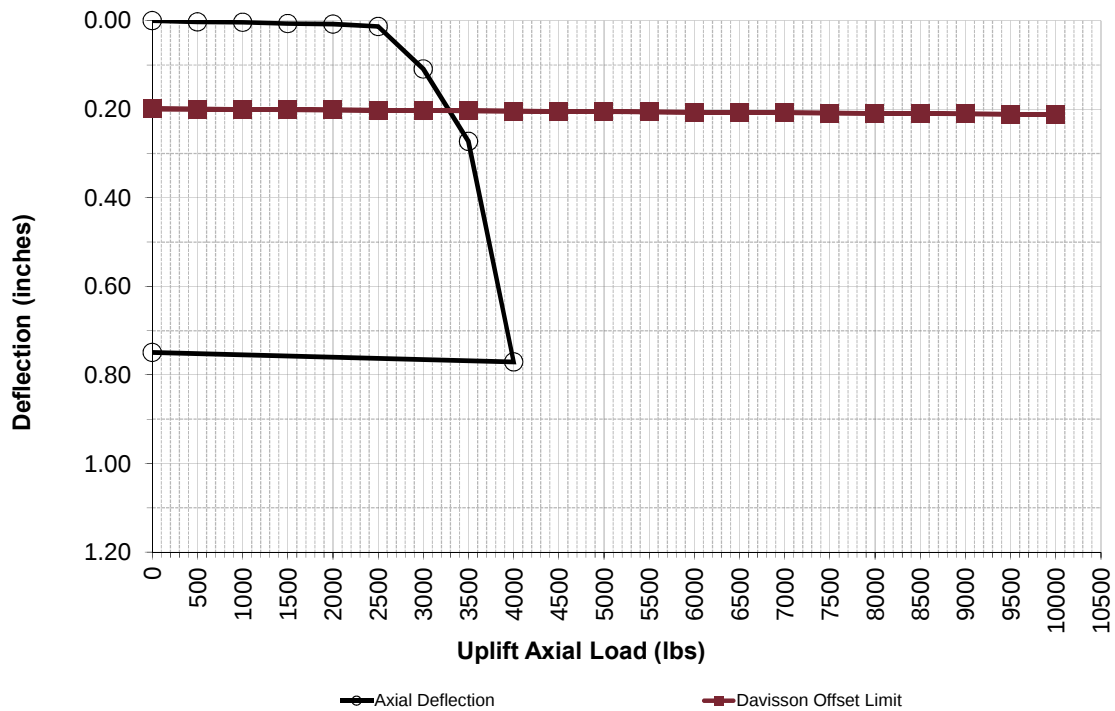
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/22/2021

Pile Information

Pile ID: PLT-B-33A
Latitude: 39.58505
Longitude: -83.08684
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 54.24

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) ($0.15+D/120+(PL/AE)$)	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.003	0.001	0.200	
10%	1000	0.004	0.001	0.200	
15%	1500	0.007	0.002	0.201	
20%	2000	0.008	0.003	0.202	
25%	2500	0.013	0.003	0.202	
30%	3000	0.109	0.004	0.203	
35%	3500	0.273	0.004	0.204	
40%	4000	0.771	0.005	0.204	
45%	4500		0.006	0.205	
50%	5000		0.006	0.205	
55%	5500		0.007	0.206	
60%	6000		0.008	0.207	
65%	6500		0.008	0.207	
70%	7000		0.009	0.208	
75%	7500		0.009	0.209	
80%	8000		0.010	0.209	
85%	8500		0.011	0.210	
90%	9000		0.011	0.210	
95%	9500		0.012	0.211	
100%	10000		0.013	0.212	
0%	0	0.749	0.000	0.199	



Tension Load Test Result for PLT-B-33B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

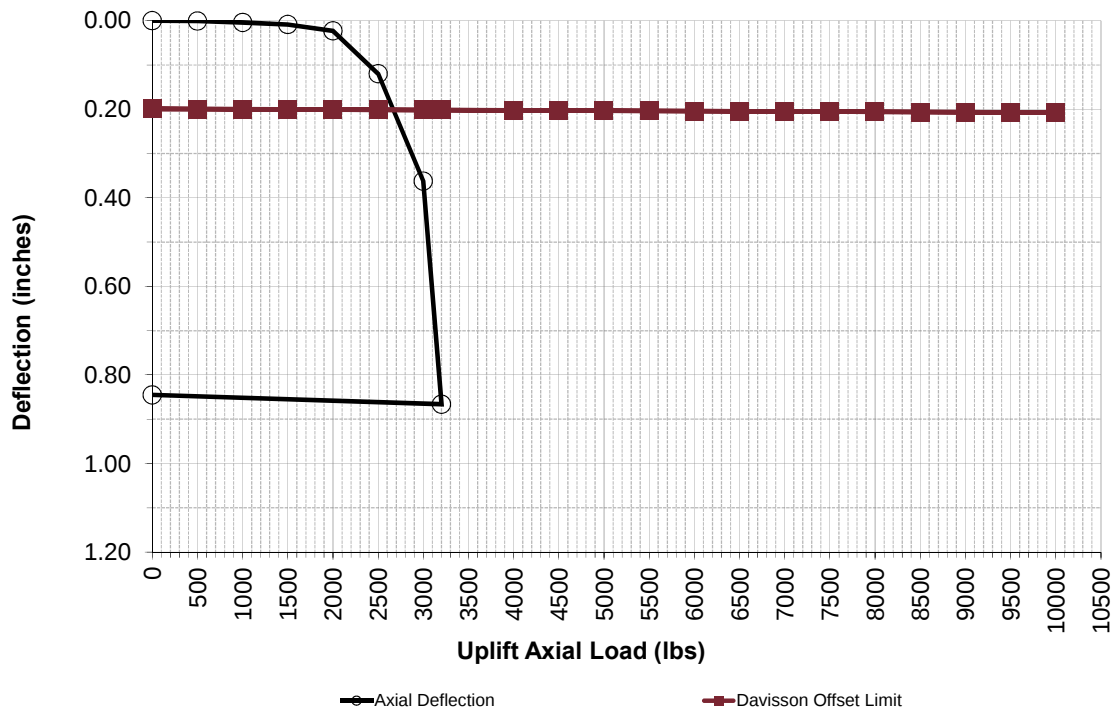
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/22/2021

Pile Information

Pile ID: PLT-B-33B
Latitude: 39.58505
Longitude: -83.08684
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 21.93

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.001	0.000	0.200	
10%	1000	0.004	0.001	0.200	
15%	1500	0.009	0.001	0.200	
20%	2000	0.023	0.002	0.201	
25%	2500	0.120	0.002	0.201	
30%	3000	0.363	0.003	0.202	
32%	3200	0.866	0.003	0.202	
40%	4000		0.003	0.203	
45%	4500		0.004	0.203	
50%	5000		0.004	0.203	
55%	5500		0.005	0.204	
60%	6000		0.005	0.204	
65%	6500		0.005	0.205	
70%	7000		0.006	0.205	
75%	7500		0.006	0.205	
80%	8000		0.007	0.206	
85%	8500		0.007	0.206	
90%	9000		0.008	0.207	
95%	9500		0.008	0.207	
100%	10000		0.008	0.208	
0%	0	0.845	0.000	0.199	



Tension Load Test Result for PLT-B-35A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

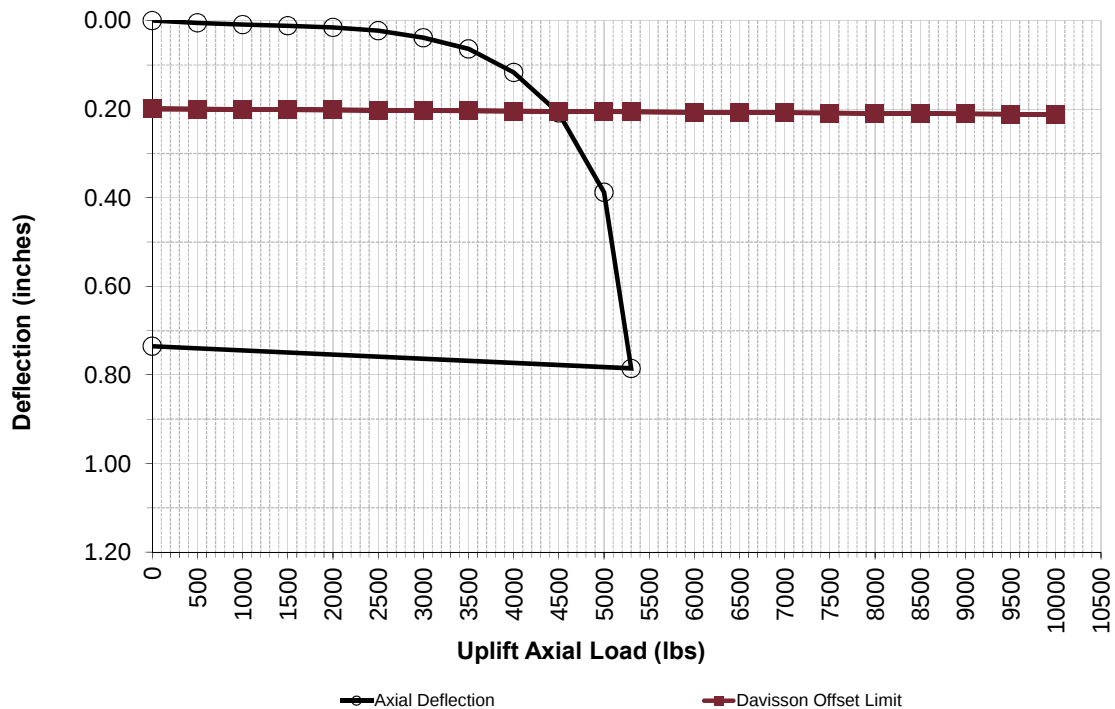
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/22/2021

Pile Information

Pile ID: PLT-B-35A
Latitude: 39.57661
Longitude: -83.08214
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 43.96

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.005	0.001	0.200	
10%	1000	0.009	0.001	0.200	
15%	1500	0.012	0.002	0.201	
20%	2000	0.015	0.003	0.202	
25%	2500	0.023	0.003	0.202	
30%	3000	0.039	0.004	0.203	
35%	3500	0.064	0.004	0.204	
40%	4000	0.117	0.005	0.204	
45%	4500	0.209	0.006	0.205	
50%	5000	0.388	0.006	0.205	
53%	5300	0.785	0.007	0.206	
60%	6000		0.008	0.207	
65%	6500		0.008	0.207	
70%	7000		0.009	0.208	
75%	7500		0.009	0.209	
80%	8000		0.010	0.209	
85%	8500		0.011	0.210	
90%	9000		0.011	0.210	
95%	9500		0.012	0.211	
100%	10000		0.013	0.212	
0%	0	0.735	0.000	0.199	



Tension Load Test Result for PLT-B-35B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

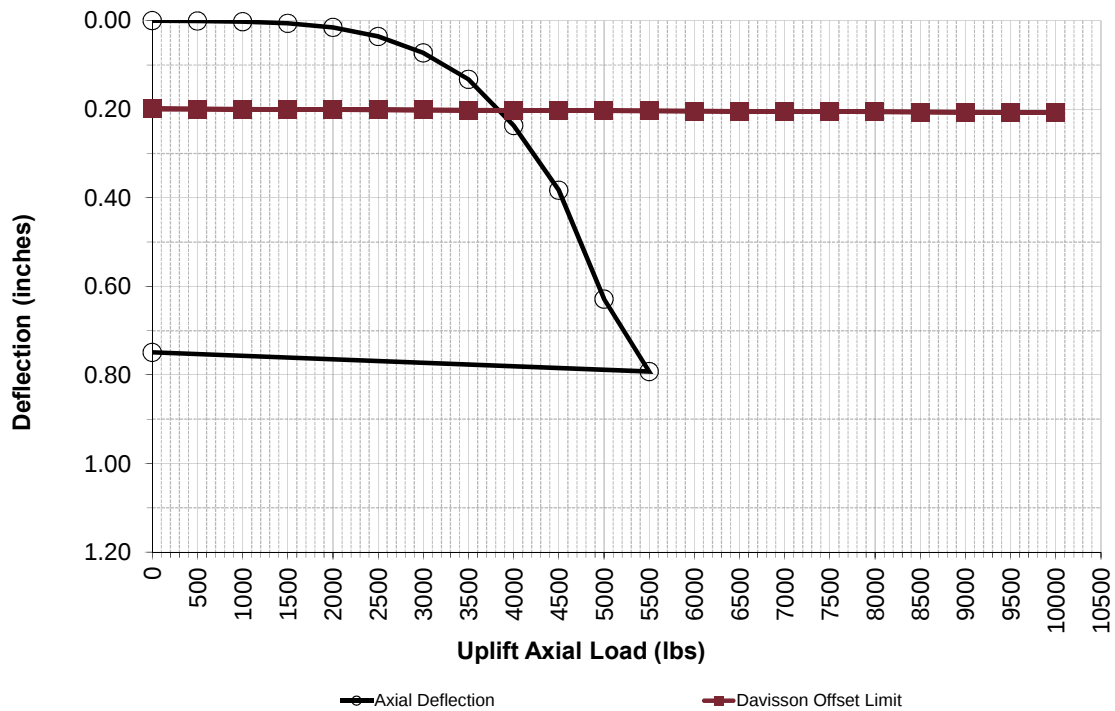
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/22/2021

Pile Information

Pile ID: PLT-B-35B
Latitude: 39.57661
Longitude: -83.08214
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 29.49

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.001	0.000	0.200	
10%	1000	0.003	0.001	0.200	
15%	1500	0.006	0.001	0.200	
20%	2000	0.015	0.002	0.201	
25%	2500	0.036	0.002	0.201	
30%	3000	0.073	0.003	0.202	
35%	3500	0.133	0.003	0.202	
40%	4000	0.237	0.003	0.203	
45%	4500	0.383	0.004	0.203	
50%	5000	0.629	0.004	0.203	
55%	5500	0.793	0.005	0.204	
60%	6000		0.005	0.204	
65%	6500		0.005	0.205	
70%	7000		0.006	0.205	
75%	7500		0.006	0.205	
80%	8000		0.007	0.206	
85%	8500		0.007	0.206	
90%	9000		0.008	0.207	
95%	9500		0.008	0.207	
100%	10000		0.008	0.208	
0%	0	0.749	0.000	0.199	



Tension Load Test Result for PLT-B-36A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

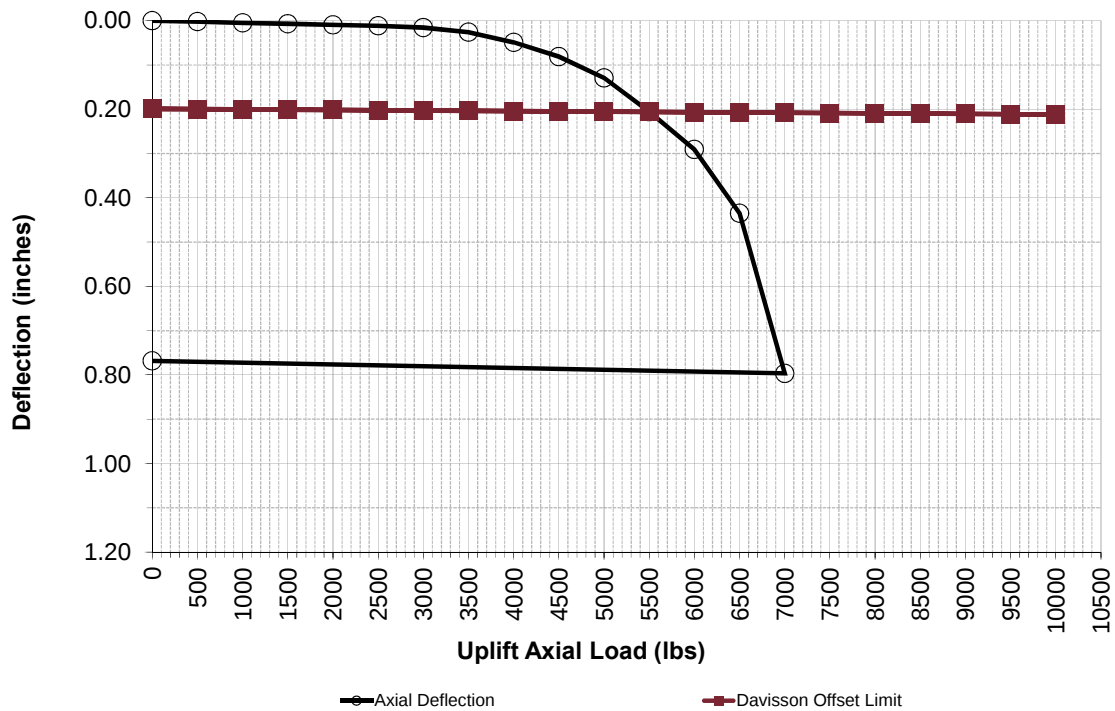
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/21/2021

Pile Information

Pile ID: PLT-B-36A
Latitude: 39.62069
Longitude: -83.06238
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 64.85

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.002	0.001	0.200	
10%	1000	0.005	0.001	0.200	
15%	1500	0.007	0.002	0.201	
20%	2000	0.010	0.003	0.202	
25%	2500	0.012	0.003	0.202	
30%	3000	0.016	0.004	0.203	
35%	3500	0.026	0.004	0.204	
40%	4000	0.049	0.005	0.204	
45%	4500	0.081	0.006	0.205	
50%	5000	0.130	0.006	0.205	
55%	5500	0.206	0.007	0.206	
60%	6000	0.291	0.008	0.207	
65%	6500	0.435	0.008	0.207	
70%	7000	0.797	0.009	0.208	
75%	7500		0.009	0.209	
80%	8000		0.010	0.209	
85%	8500		0.011	0.210	
90%	9000		0.011	0.210	
95%	9500		0.012	0.211	
100%	10000		0.013	0.212	
0%	0	0.768	0.000	0.199	



Tension Load Test Result for PLT-B-36B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Axial Load Test Set Up

Number of Gauges: 2
Height of Gauges [in]: 6
Load Cell: 25k Ed Jr.

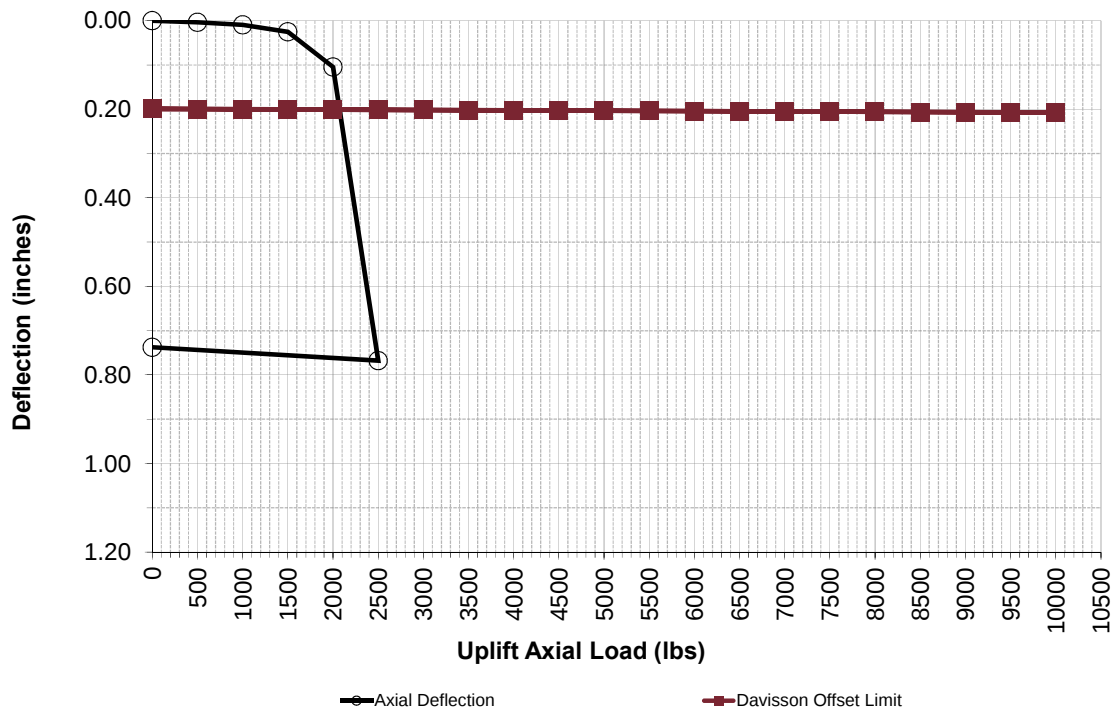
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/21/2021

Pile Information

Pile ID: PLT-B-36B
Latitude: 39.62069
Longitude: -83.06238
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Diameter [in]: 5.9
Pile Stick-Up [in]: 24
Axial Design Load [lbs]: 10000
Pile Area [sq. in]: 2.96
Elastic Modulus [ksi]: 29,000
Drive Time [sec]: 21.21

Tension Test Results			Davisson Offset Limit Lines		
% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Elastic Data (in) (PL/AE)	Davisson Offset Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.004	0.000	0.200	
10%	1000	0.010	0.001	0.200	
15%	1500	0.025	0.001	0.200	
20%	2000	0.105	0.002	0.201	
25%	2500	0.768	0.002	0.201	
30%	3000		0.003	0.202	
35%	3500		0.003	0.202	
40%	4000		0.003	0.203	
45%	4500		0.004	0.203	
50%	5000		0.004	0.203	
55%	5500		0.005	0.204	
60%	6000		0.005	0.204	
65%	6500		0.005	0.205	
70%	7000		0.006	0.205	
75%	7500		0.006	0.205	
80%	8000		0.007	0.206	
85%	8500		0.007	0.206	
90%	9000		0.008	0.207	
95%	9500		0.008	0.207	
100%	10000		0.008	0.208	
0%	0	0.738	0.000	0.199	



PILE LOAD TEST RESULTS – LATERAL LOAD

Contents:

Lateral Load Test Results (28 pages)

Note: All attachments are one page unless noted above.

Lateral Load Test Result for PLT-B-01A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

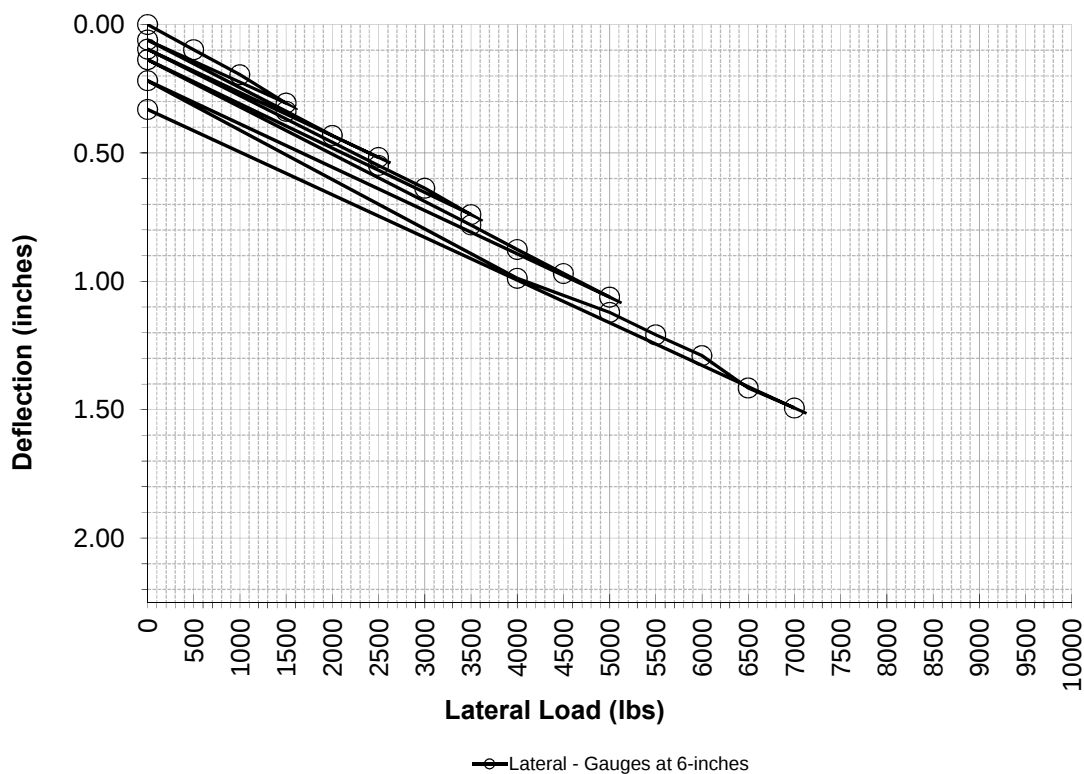
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/23/2021

Pile Information

Pile ID: PLT-B-01A
Latitude: 39.63757
Longitude: -83.14109
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 79.14

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.098	
10%	1000	0.196	
15%	1500	0.306	
0%	0	0.061	
15%	1500	0.338	
20%	2000	0.432	
25%	2500	0.518	
0%	0	0.096	
25%	2500	0.549	
30%	3000	0.638	
35%	3500	0.741	
0%	0	0.137	
35%	3500	0.781	
40%	4000	0.877	
45%	4500	0.970	
50%	5000	1.062	
0%	0	0.219	
40%	4000	0.989	
50%	5000	1.121	
55%	5500	1.209	
60%	6000	1.290	
65%	6500	1.416	
70%	7000	1.494	
0%	0	0.331	



Lateral Load Test Result for PLT-B-01B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

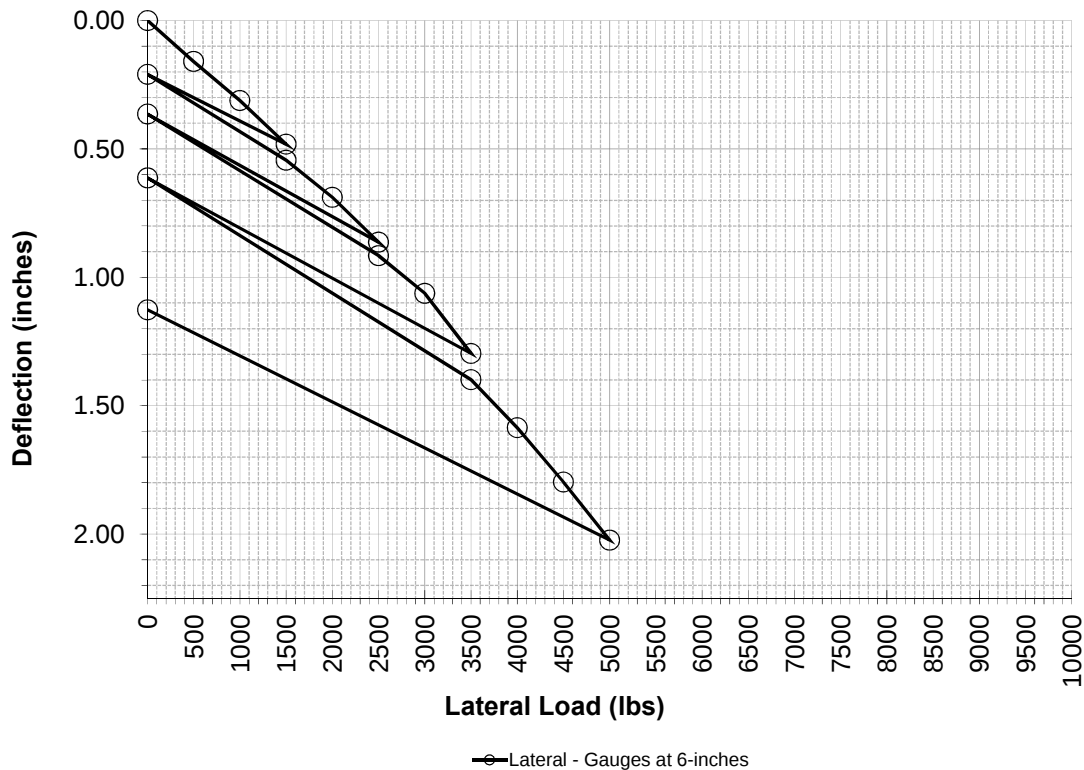
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/23/2021

Pile Information

Pile ID: PLT-B-01B
Latitude: 39.63757
Longitude: -83.14109
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 32.88

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.160	
10%	1000	0.311	
15%	1500	0.482	
0%	0	0.210	
15%	1500	0.545	
20%	2000	0.689	
25%	2500	0.864	
0%	0	0.365	
25%	2500	0.916	
30%	3000	1.063	
35%	3500	1.297	
0%	0	0.613	
35%	3500	1.399	
40%	4000	1.586	
45%	4500	1.797	
50%	5000	2.024	
0%	0		
40%	4000		
50%	5000		
55%	5500		
60%	6000		
65%	6500		
70%	7000		
0%	0	1.127	



Lateral Load Test Result for PLT-B-04A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

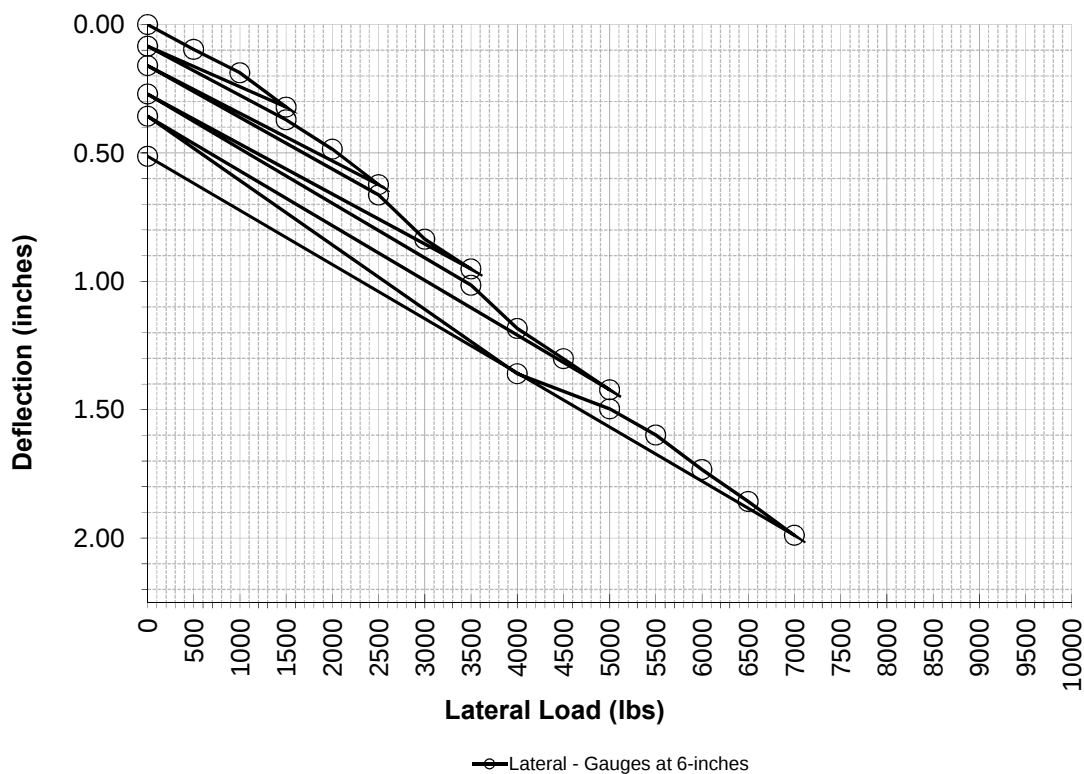
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/23/2021

Pile Information

Pile ID: PLT-B-04A
Latitude: 39.63657
Longitude: -83.12404
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 61.95

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.097	
10%	1000	0.188	
15%	1500	0.322	
0%	0	0.085	
15%	1500	0.372	
20%	2000	0.486	
25%	2500	0.624	
0%	0	0.160	
25%	2500	0.664	
30%	3000	0.836	
35%	3500	0.953	
0%	0	0.271	
35%	3500	1.015	
40%	4000	1.184	
45%	4500	1.302	
50%	5000	1.423	
0%	0	0.357	
40%	4000	1.360	
50%	5000	1.497	
55%	5500	1.599	
60%	6000	1.733	
65%	6500	1.858	
70%	7000	1.989	
0%	0	0.513	



Lateral Load Test Result for PLT-B-04B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

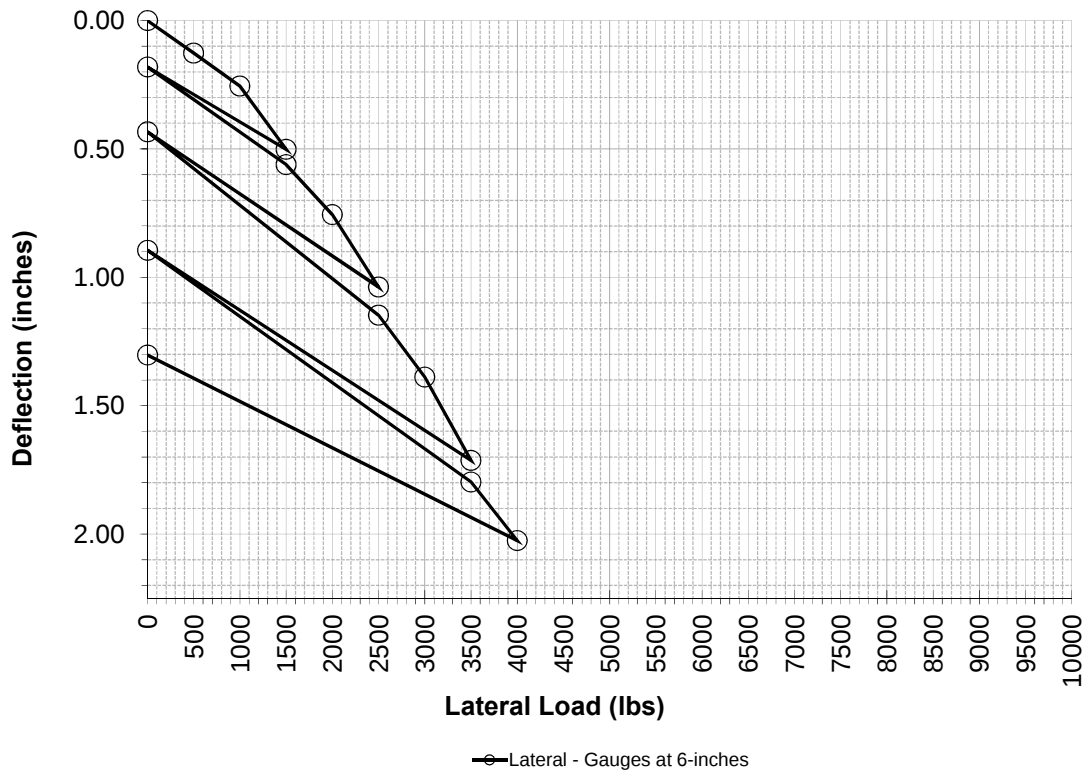
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/23/2021

Pile Information

Pile ID: PLT-B-04B
Latitude: 39.63657
Longitude: -83.12404
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 29.23

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.127	
10%	1000	0.256	
15%	1500	0.502	
0%	0	0.181	
15%	1500	0.562	
20%	2000	0.756	
25%	2500	1.038	
0%	0	0.434	
25%	2500	1.148	
30%	3000	1.389	
35%	3500	1.713	
0%	0	0.895	
35%	3500	1.798	
40%	4000	2.026	
45%	4500		
50%	5000		
0%	0		
40%	4000		
50%	5000		
55%	5500		
60%	6000		
65%	6500		
70%	7000		
0%	0	1.303	



Lateral Load Test Result for PLT-B-06A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

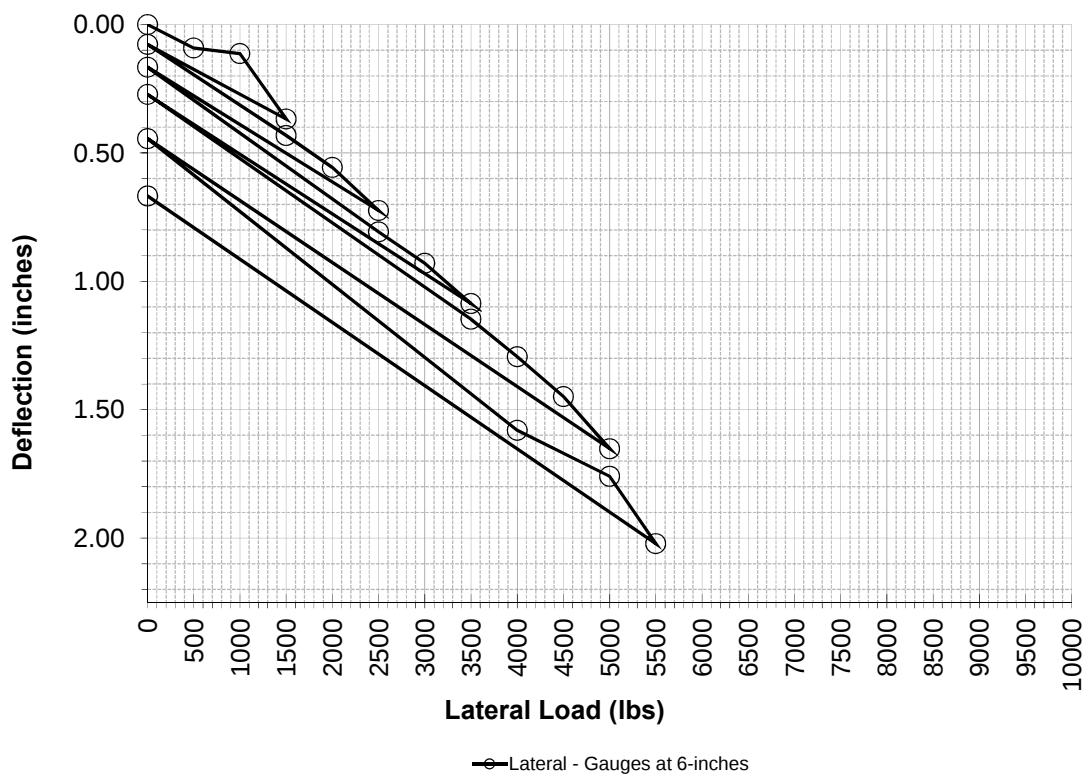
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/23/2021

Pile Information

Pile ID: PLT-B-06A
Latitude: 39.61752
Longitude: -83.13347
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 18.92

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.092	
10%	1000	0.113	
15%	1500	0.368	
0%	0	0.077	
15%	1500	0.432	
20%	2000	0.556	
25%	2500	0.724	
0%	0	0.167	
25%	2500	0.808	
30%	3000	0.930	
35%	3500	1.086	
0%	0	0.272	
35%	3500	1.148	
40%	4000	1.294	
45%	4500	1.449	
50%	5000	1.653	
0%	0	0.445	
40%	4000	1.580	
50%	5000	1.759	
55%	5500	2.022	
60%	6000		
65%	6500		
70%	7000		
0%	0	0.668	



Lateral Load Test Result for PLT-B-06B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

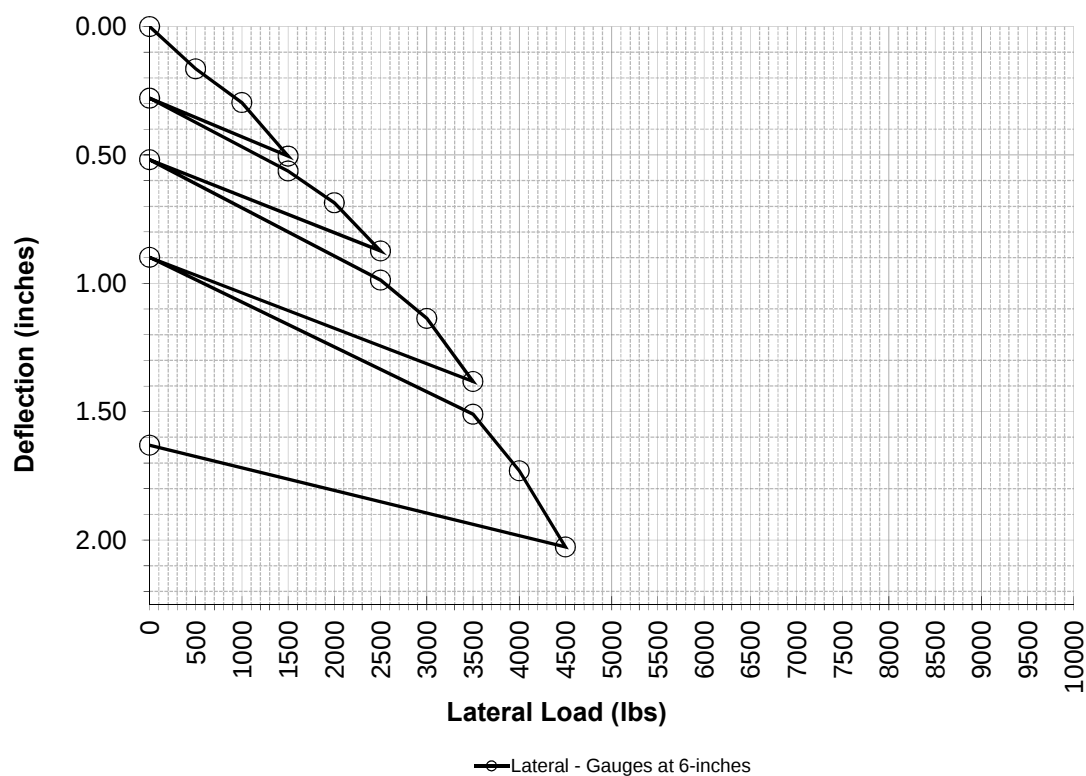
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/23/2021

Pile Information

Pile ID: PLT-B-06B
Latitude: 39.61752
Longitude: -83.13347
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 18.2

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.165	
10%	1000	0.296	
15%	1500	0.505	
0%	0	0.279	
15%	1500	0.563	
20%	2000	0.687	
25%	2500	0.875	
0%	0	0.519	
25%	2500	0.988	
30%	3000	1.137	
35%	3500	1.383	
0%	0	0.899	
35%	3500	1.510	
40%	4000	1.731	
45%	4500	2.027	
50%	5000		
0%	0		
40%	4000		
50%	5000		
55%	5500		
60%	6000		
65%	6500		
70%	7000		
0%	0	1.631	



Lateral Load Test Result for PLT-B-11A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

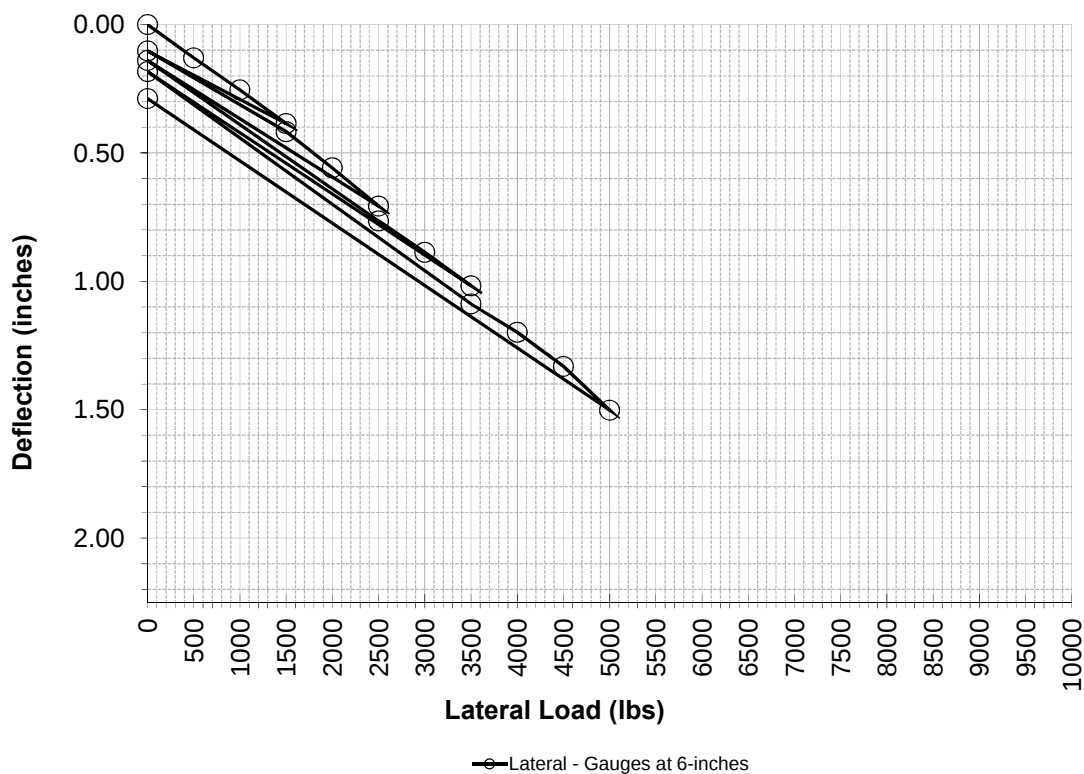
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/21/2021

Pile Information

Pile ID: PLT-B-11A
Latitude: 39.62375
Longitude: -83.11321
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 63.85

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.130	
10%	1000	0.255	
15%	1500	0.386	
0%	0	0.103	
15%	1500	0.418	
20%	2000	0.558	
25%	2500	0.708	
0%	0	0.140	
25%	2500	0.765	
30%	3000	0.888	
35%	3500	1.018	
0%	0	0.184	
35%	3500	1.088	
40%	4000	1.199	
45%	4500	1.332	
50%	5000	1.502	Pulling B Pile
0%	0		
40%	4000		
50%	5000		
55%	5500		
60%	6000		
65%	6500		
70%	7000		
0%	0	0.289	



Lateral Load Test Result for PLT-B-11B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

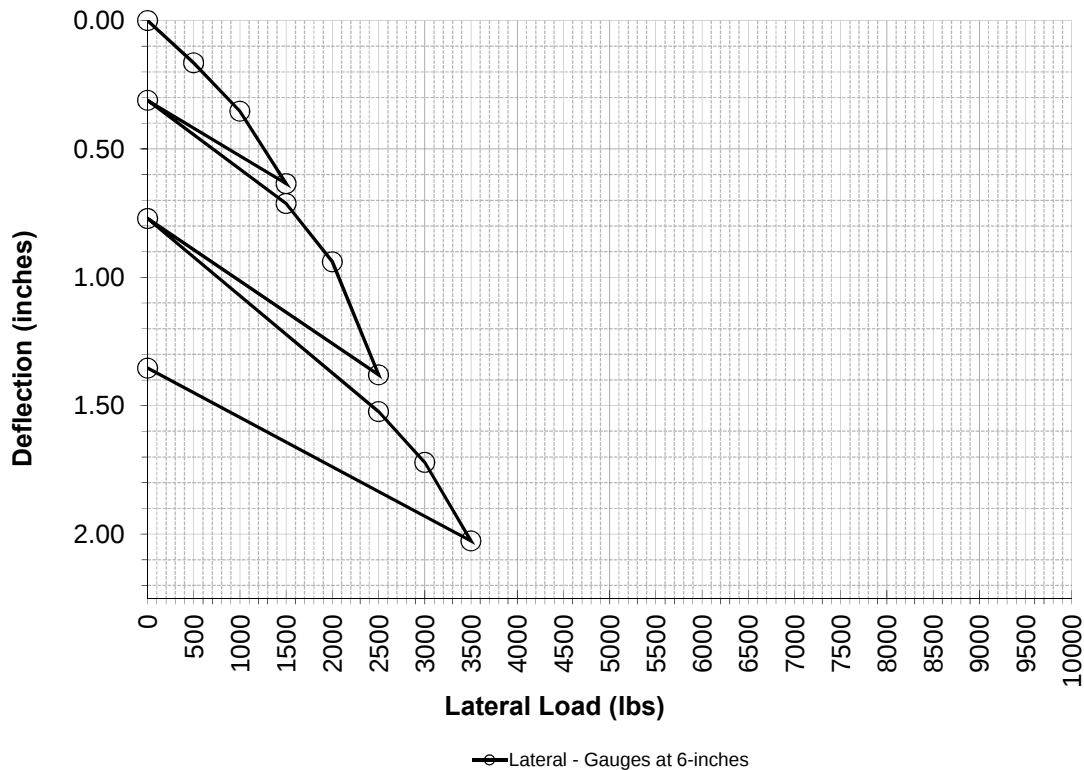
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/21/2021

Pile Information

Pile ID: PLT-B-11B
Latitude: 39.62375
Longitude: -83.11321
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 19.97

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.165	
10%	1000	0.353	
15%	1500	0.635	
0%	0	0.311	
15%	1500	0.713	
20%	2000	0.940	
25%	2500	1.381	
0%	0	0.771	
25%	2500	1.523	
30%	3000	1.721	
35%	3500	2.027	
0%	0		
35%	3500		
40%	4000		
45%	4500		
50%	5000		
0%	0		
40%	4000		
50%	5000		
55%	5500		
60%	6000		
65%	6500		
70%	7000		
0%	0	1.354	



Lateral Load Test Result for PLT-B-12A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

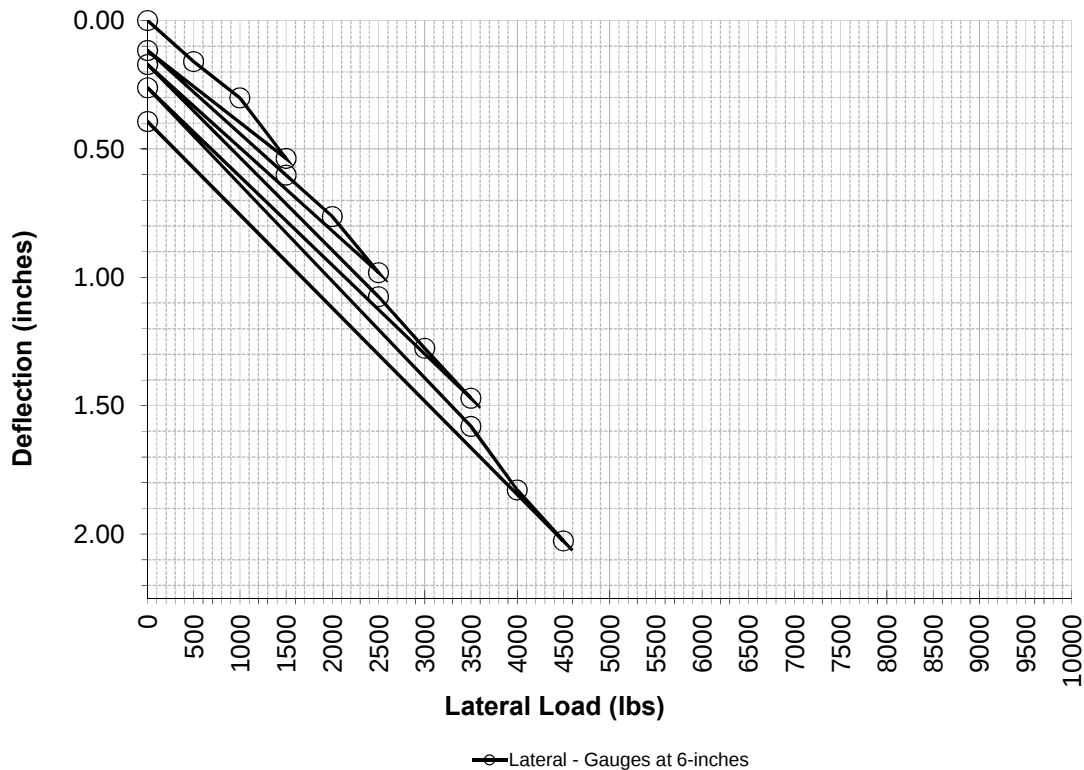
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/21/2021

Pile Information

Pile ID: PLT-B-12A
Latitude: 39.61610
Longitude: -83.10991
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 104.01

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.160	
10%	1000	0.302	
15%	1500	0.537	
0%	0	0.117	
15%	1500	0.602	
20%	2000	0.764	
25%	2500	0.983	
0%	0	0.172	
25%	2500	1.076	
30%	3000	1.277	
35%	3500	1.472	
0%	0	0.262	
35%	3500	1.582	
40%	4000	1.829	
45%	4500	2.027	
50%	5000		
0%	0		
40%	4000		
50%	5000		
55%	5500		
60%	6000		
65%	6500		
70%	7000		
0%	0	0.394	



Lateral Load Test Result for PLT-B-12B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

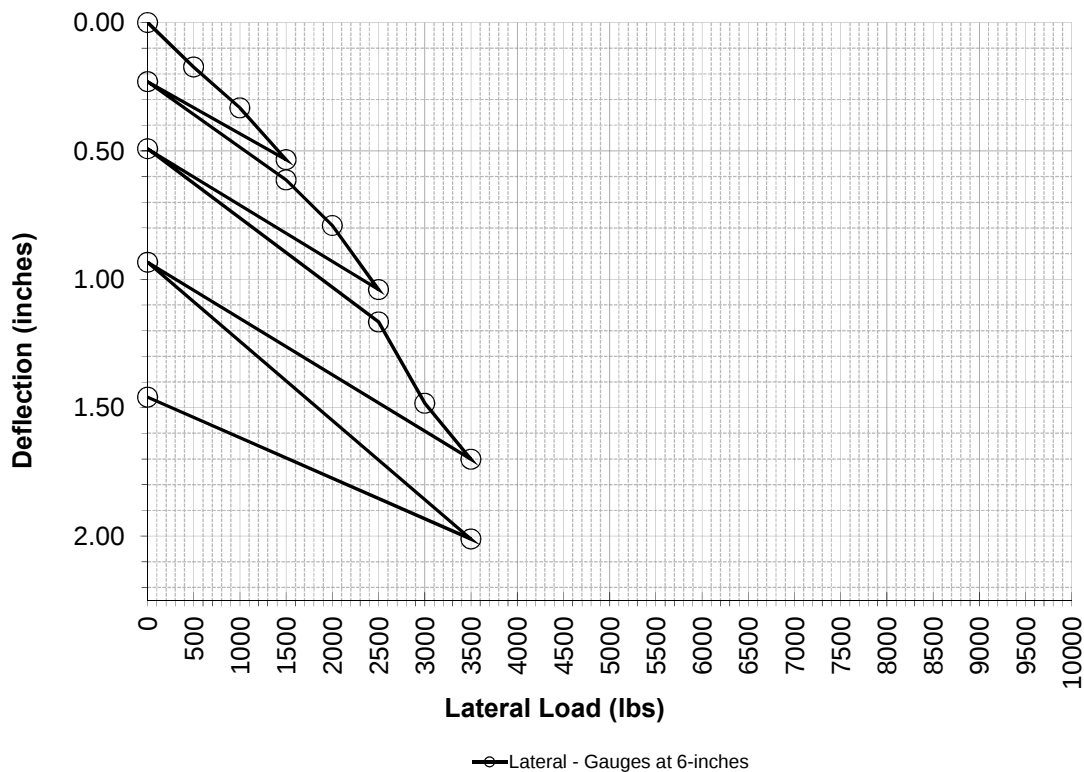
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/21/2021

Pile Information

Pile ID: PLT-B-12B
Latitude: 39.61610
Longitude: -83.10991
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 30.85

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.173	
10%	1000	0.332	
15%	1500	0.534	
0%	0	0.231	
15%	1500	0.613	
20%	2000	0.791	
25%	2500	1.040	
0%	0	0.492	
25%	2500	1.167	
30%	3000	1.483	
35%	3500	1.701	
0%	0	0.933	
35%	3500	2.012	
40%	4000		
45%	4500		
50%	5000		
0%	0		
40%	4000		
50%	5000		
55%	5500		
60%	6000		
65%	6500		
70%	7000		
0%	0	1.459	



Lateral Load Test Result for PLT-B-14A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

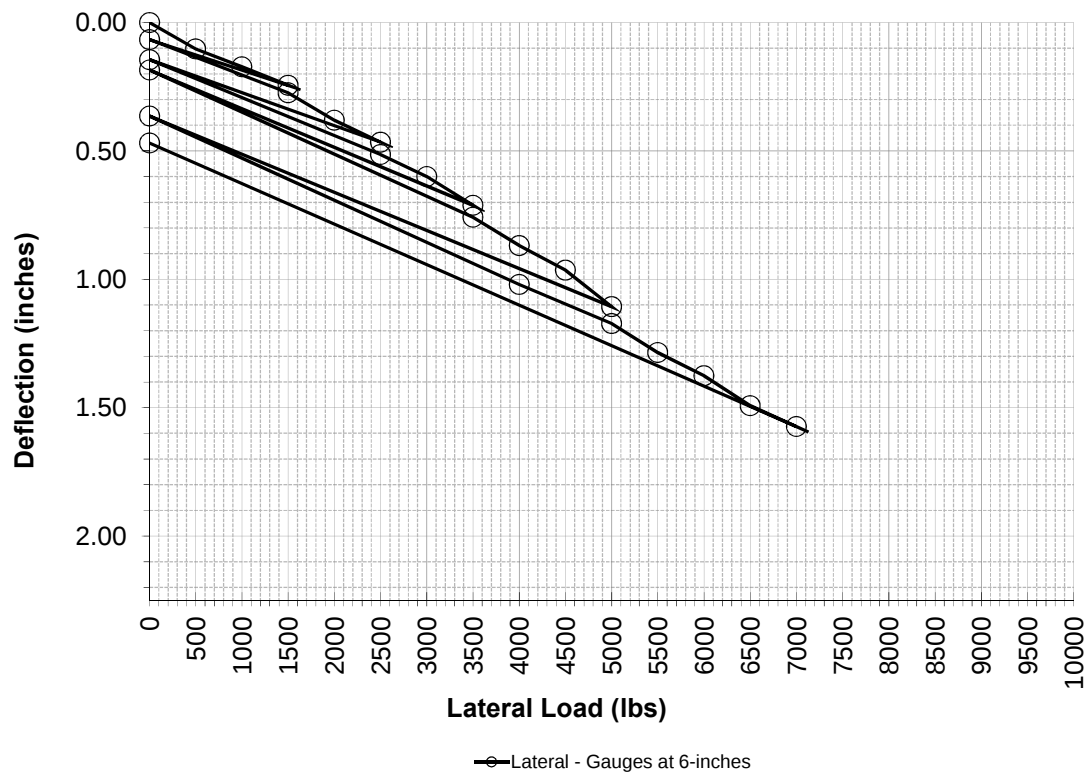
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/23/2021

Pile Information

Pile ID: PLT-B-14A
Latitude: 39.60907
Longitude: -83.14386
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 37.43

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.103	
10%	1000	0.173	
15%	1500	0.244	
0%	0	0.067	
15%	1500	0.274	
20%	2000	0.381	
25%	2500	0.466	
0%	0	0.145	
25%	2500	0.514	
30%	3000	0.600	
35%	3500	0.712	
0%	0	0.185	
35%	3500	0.758	
40%	4000	0.869	
45%	4500	0.965	
50%	5000	1.107	
0%	0	0.365	
40%	4000	1.020	
50%	5000	1.173	
55%	5500	1.286	
60%	6000	1.375	
65%	6500	1.492	
70%	7000	1.574	
0%	0	0.470	



Lateral Load Test Result for PLT-B-14B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

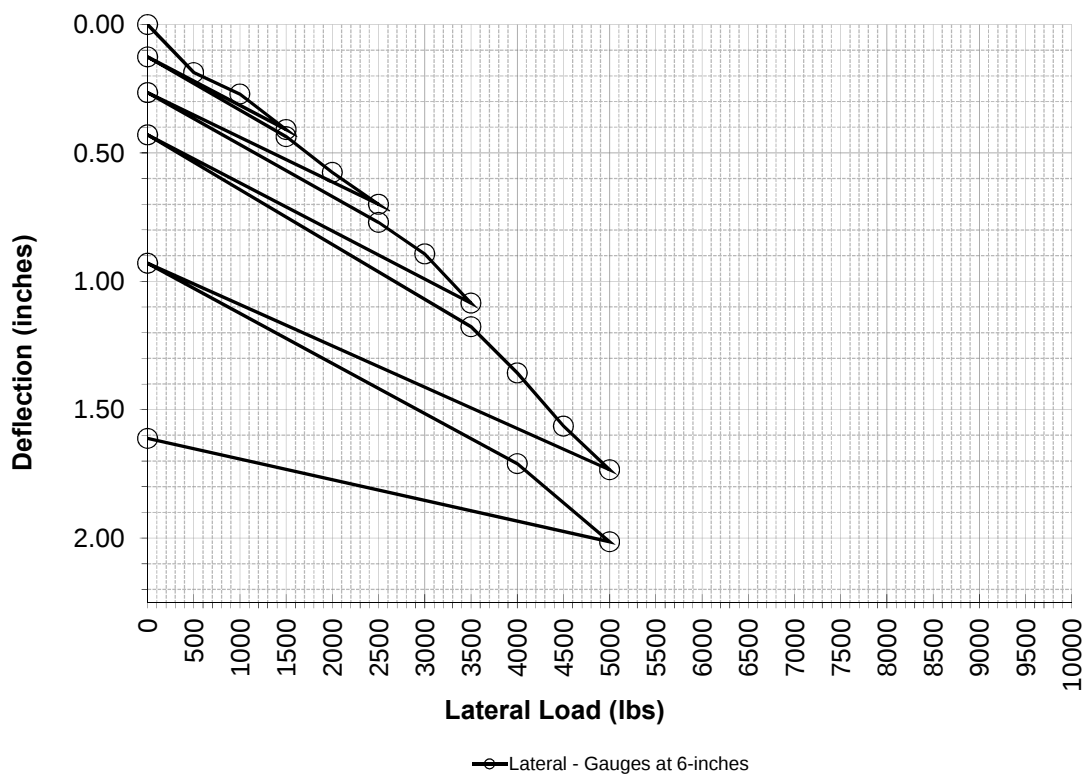
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/23/2021

Pile Information

Pile ID: PLT-B-14B
Latitude: 39.60907
Longitude: -83.14386
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 24.45

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.187	
10%	1000	0.271	
15%	1500	0.409	
0%	0	0.126	
15%	1500	0.437	
20%	2000	0.576	
25%	2500	0.700	
0%	0	0.265	
25%	2500	0.771	
30%	3000	0.894	
35%	3500	1.085	
0%	0	0.430	
35%	3500	1.177	
40%	4000	1.357	
45%	4500	1.565	
50%	5000	1.734	
0%	0	0.930	
40%	4000	1.711	
50%	5000	2.015	
55%	5500		
60%	6000		
65%	6500		
70%	7000		
0%	0	1.612	



Lateral Load Test Result for PLT-B-17A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

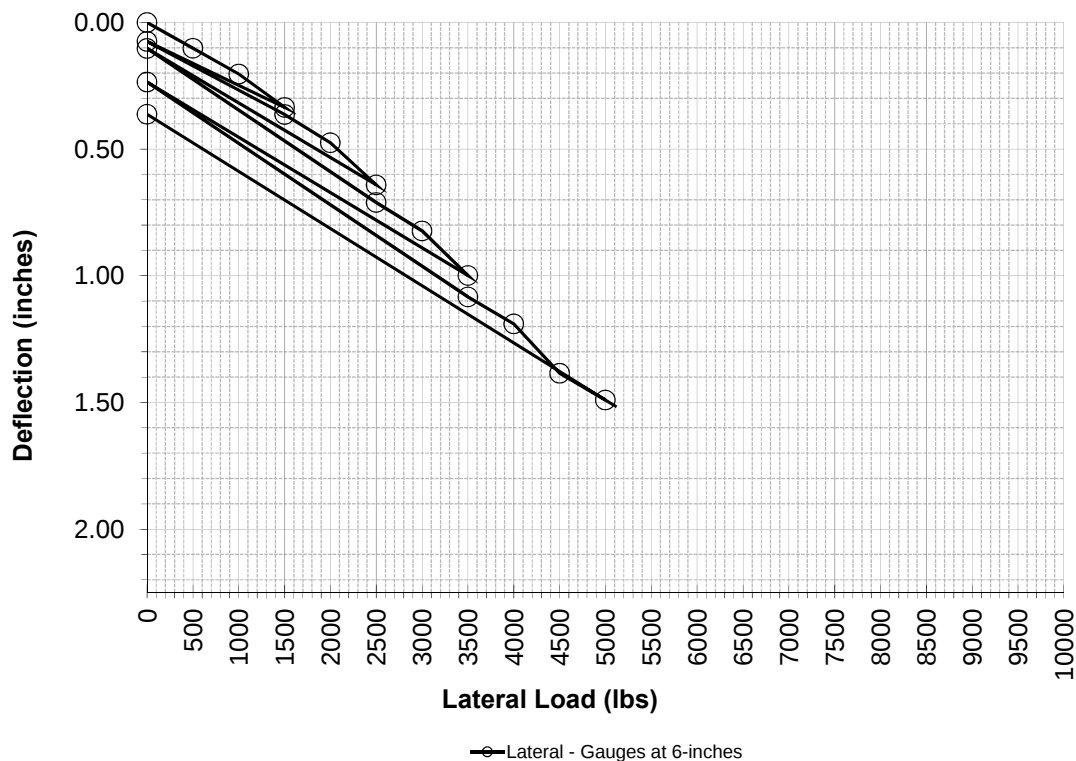
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/23/2021

Pile Information

Pile ID: PLT-B-17A
Latitude: 39.60674
Longitude: -83.13773
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 57.14

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.102	
10%	1000	0.204	
15%	1500	0.336	
0%	0	0.075	
15%	1500	0.363	
20%	2000	0.475	
25%	2500	0.641	
0%	0	0.103	
25%	2500	0.711	
30%	3000	0.823	
35%	3500	0.999	
0%	0	0.236	
35%	3500	1.084	
40%	4000	1.190	
45%	4500	1.385	
50%	5000	1.491	Pull B pile; ran out of ran
0%	0		
40%	4000		
50%	5000		
55%	5500		
60%	6000		
65%	6500		
70%	7000		
0%	0	0.362	



Lateral Load Test Result for PLT-B-17B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

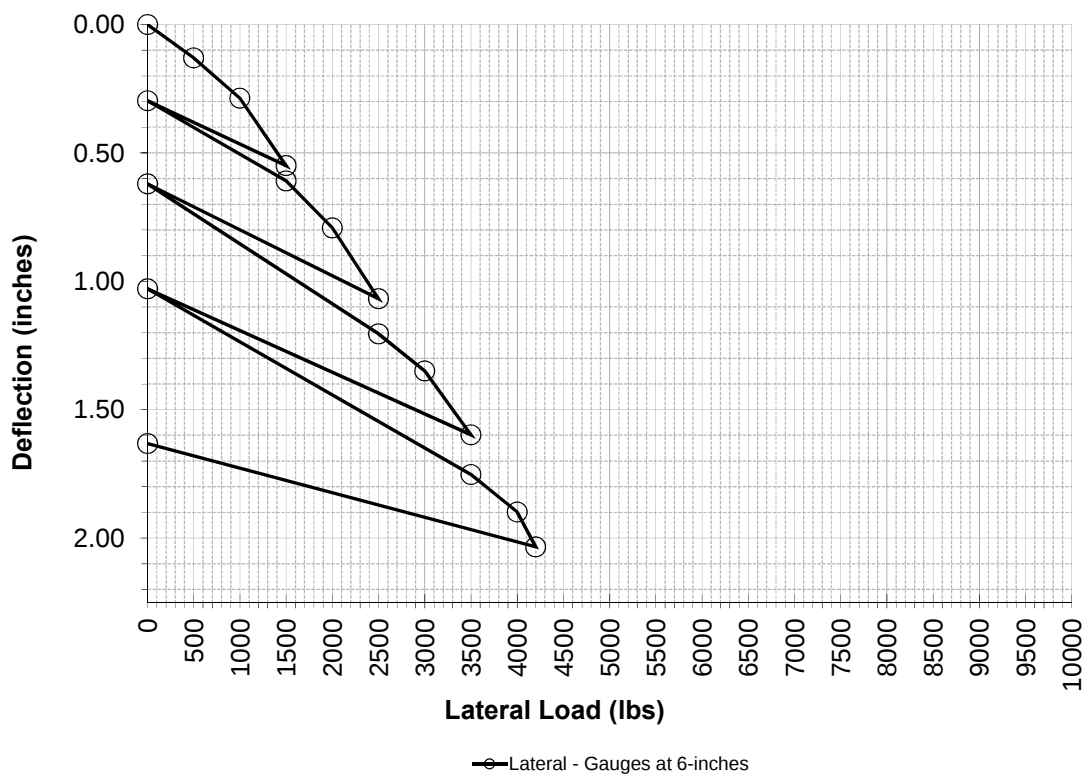
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/23/2021

Pile Information

Pile ID: PLT-B-17B
Latitude: 39.60674
Longitude: -83.13773
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 25.34

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.130	
10%	1000	0.287	
15%	1500	0.550	
0%	0	0.297	
15%	1500	0.609	
20%	2000	0.793	
25%	2500	1.068	
0%	0	0.621	
25%	2500	1.205	
30%	3000	1.349	
35%	3500	1.599	
0%	0	1.030	
35%	3500	1.753	
40%	4000	1.899	
42%	4200	2.035	
50%	5000		
0%	0		
40%	4000		
50%	5000		
55%	5500		
60%	6000		
65%	6500		
70%	7000		
0%	0	1.632	



Lateral Load Test Result for PLT-B-18A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

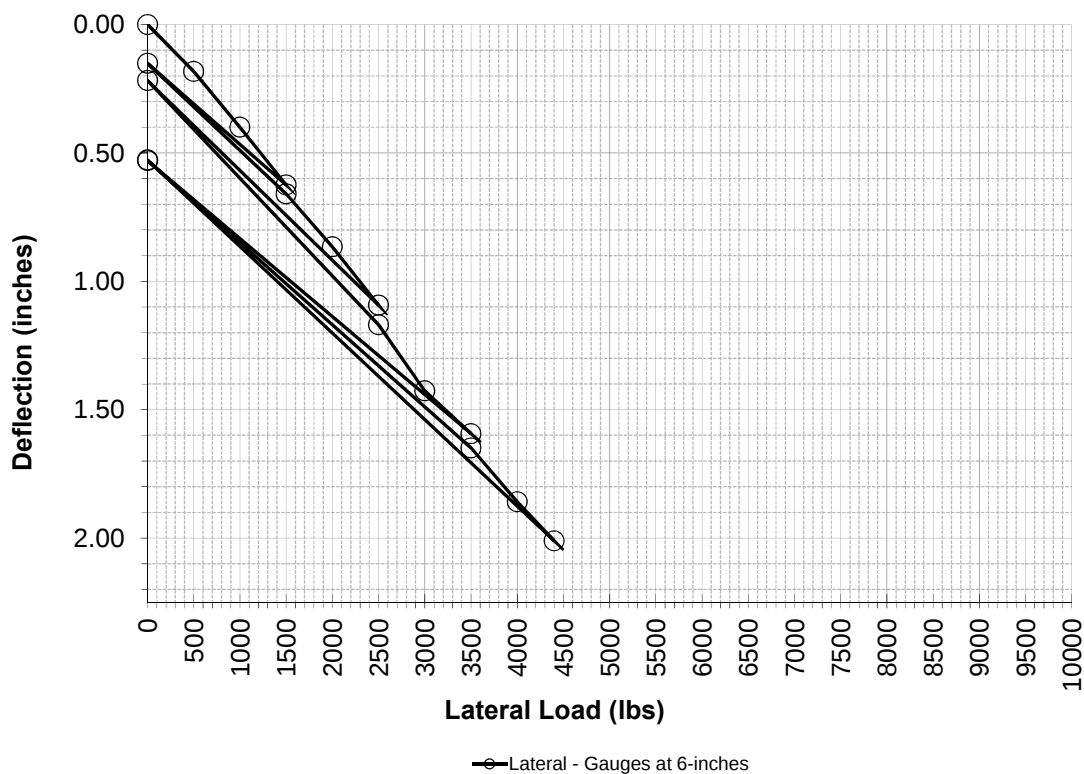
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/22/2021

Pile Information

Pile ID: PLT-B-18A
Latitude: 39.60553
Longitude: -83.13114
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 151.73

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.183	
10%	1000	0.400	
15%	1500	0.625	
0%	0	0.151	
15%	1500	0.660	
20%	2000	0.866	
25%	2500	1.093	
0%	0	0.218	
25%	2500	1.170	
30%	3000	1.427	
35%	3500	1.594	
0%	0	0.530	
35%	3500	1.649	
40%	4000	1.858	
44%	4400	2.011	
50%	5000		
0%	0		
40%	4000		
50%	5000		
55%	5500		
60%	6000		
65%	6500		
70%	7000		
0%	0	0.527	



Lateral Load Test Result for PLT-B-18B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

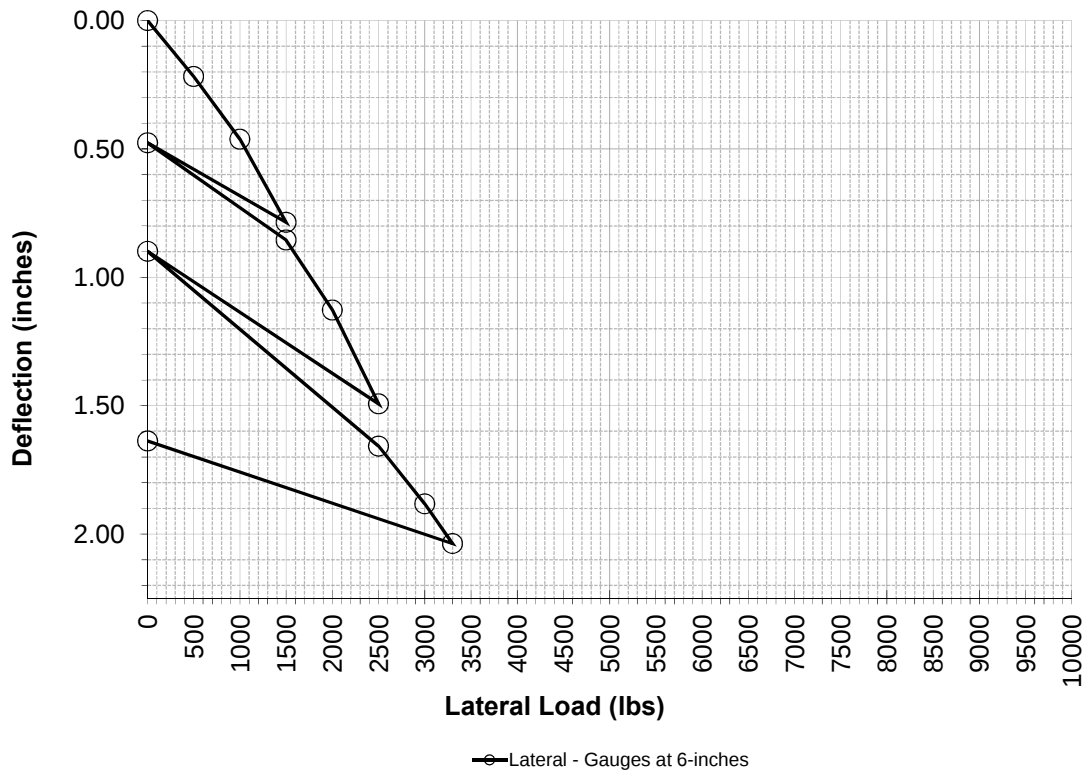
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/22/2021

Pile Information

Pile ID: PLT-B-18B
Latitude: 39.60553
Longitude: -83.13114
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 25.56

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.219	
10%	1000	0.462	
15%	1500	0.786	
0%	0	0.477	
15%	1500	0.855	
20%	2000	1.128	
25%	2500	1.493	
0%	0	0.899	
25%	2500	1.658	
30%	3000	1.883	
33%	3300	2.037	
0%	0		
35%	3500		
40%	4000		
45%	4500		
50%	5000		
0%	0		
40%	4000		
50%	5000		
55%	5500		
60%	6000		
65%	6500		
70%	7000		
0%	0	1.637	



Lateral Load Test Result for PLT-B-21A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

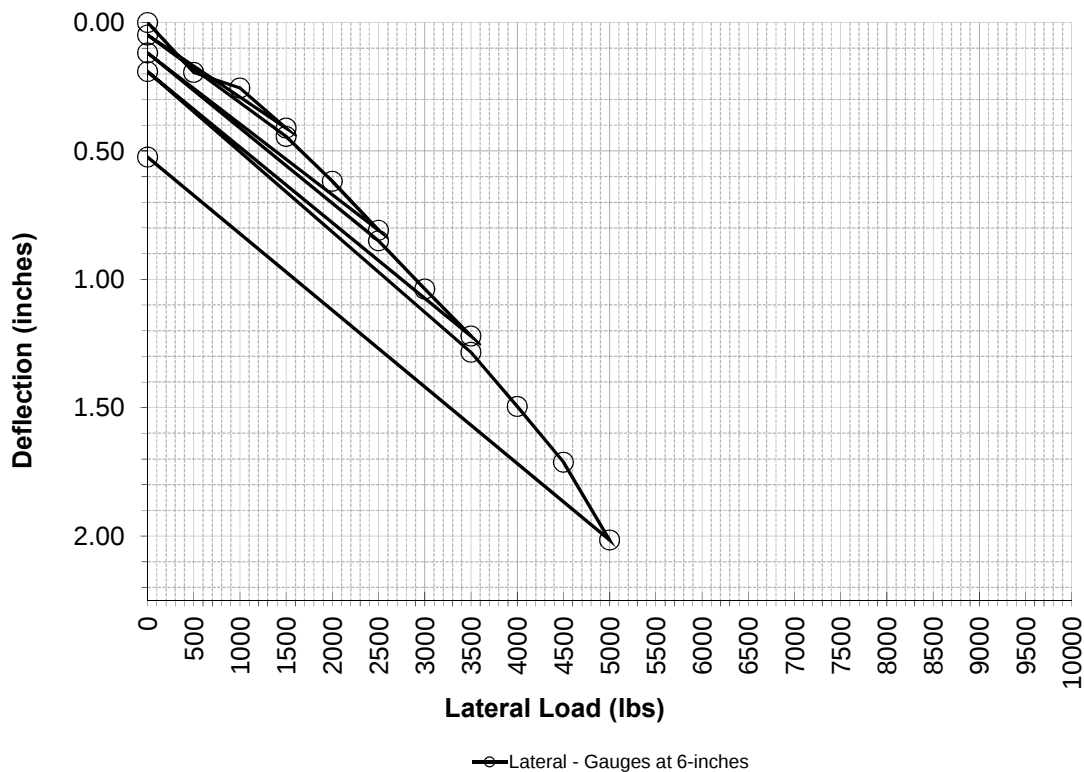
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/22/2021

Pile Information

Pile ID: PLT-B-21A
Latitude: 39.59393
Longitude: -83.13909
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 196.4

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.194	
10%	1000	0.255	
15%	1500	0.412	
0%	0	0.049	
15%	1500	0.444	
20%	2000	0.619	
25%	2500	0.810	
0%	0	0.119	
25%	2500	0.851	
30%	3000	1.038	
35%	3500	1.221	
0%	0	0.191	
35%	3500	1.284	
40%	4000	1.496	
45%	4500	1.712	
50%	5000	2.016	
0%	0		
40%	4000		
50%	5000		
55%	5500		
60%	6000		
65%	6500		
70%	7000		
0%	0	0.524	



Lateral Load Test Result for PLT-B-21B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

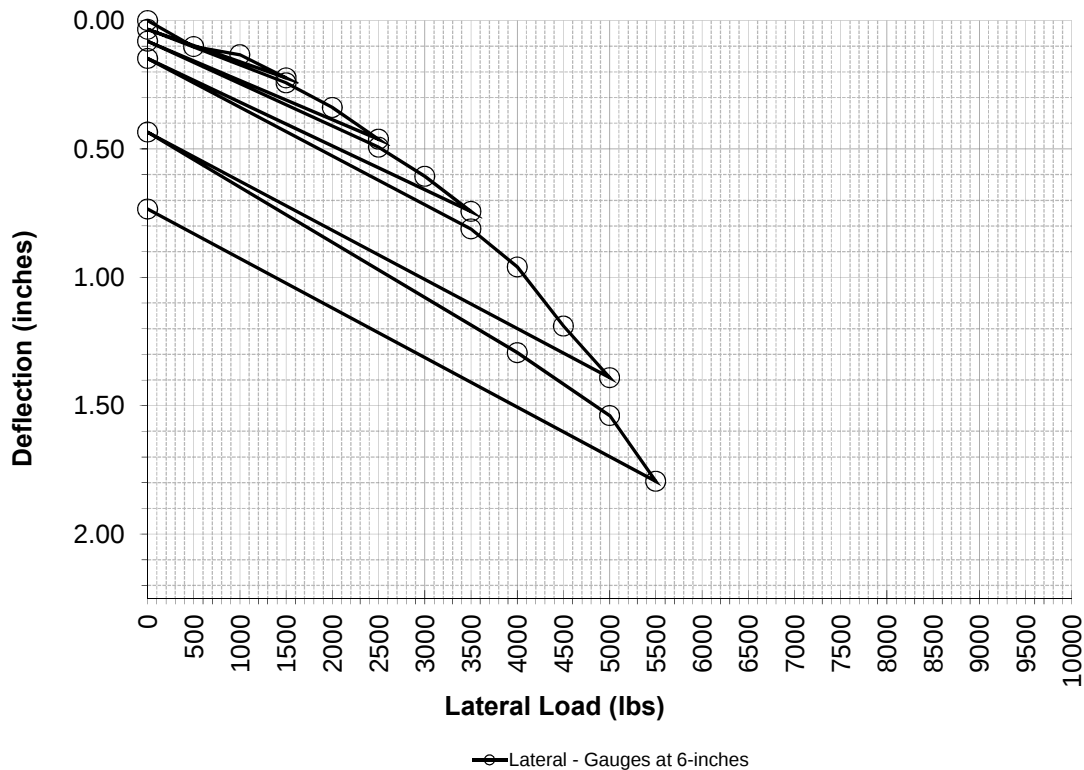
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/22/2021

Pile Information

Pile ID: PLT-B-21B
Latitude: 39.59393
Longitude: -83.13909
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 45.07

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.102	
10%	1000	0.133	
15%	1500	0.223	
0%	0	0.034	
15%	1500	0.243	
20%	2000	0.339	
25%	2500	0.462	
0%	0	0.081	
25%	2500	0.493	
30%	3000	0.607	
35%	3500	0.744	
0%	0	0.148	
35%	3500	0.811	
40%	4000	0.960	
45%	4500	1.190	
50%	5000	1.391	
0%	0	0.434	
40%	4000	1.294	
50%	5000	1.538	
55%	5500	1.795	Pulling B Pile
60%	6000		
65%	6500		
70%	7000		
0%	0	0.734	



Lateral Load Test Result for PLT-B-22A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

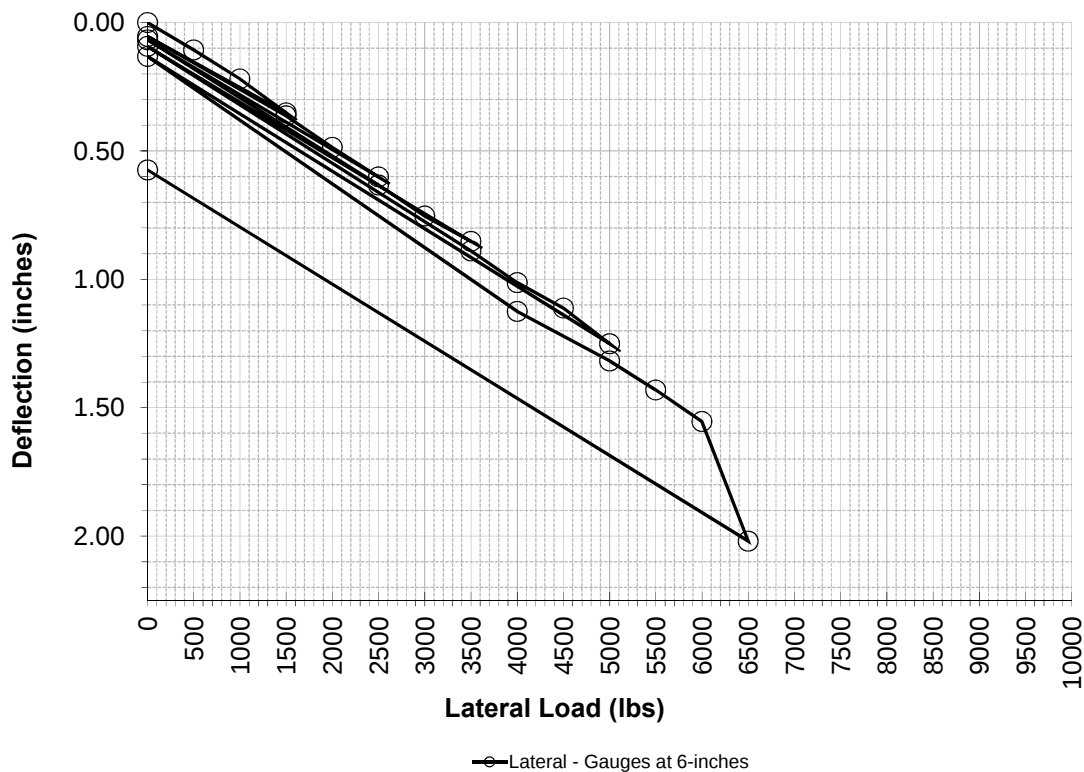
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/22/2021

Pile Information

Pile ID: PLT-B-22A
Latitude: 39.59593
Longitude: -83.13003
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 352.14

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.107	
10%	1000	0.220	
15%	1500	0.352	
0%	0	0.054	
15%	1500	0.363	
20%	2000	0.486	
25%	2500	0.601	
0%	0	0.067	
25%	2500	0.633	
30%	3000	0.753	
35%	3500	0.853	
0%	0	0.093	
35%	3500	0.889	
40%	4000	1.013	
45%	4500	1.112	
50%	5000	1.251	
0%	0	0.132	
40%	4000	1.125	
50%	5000	1.319	
55%	5500	1.431	
60%	6000	1.554	
65%	6500	2.020	
70%	7000		
0%	0	0.574	



Lateral Load Test Result for PLT-B-22B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

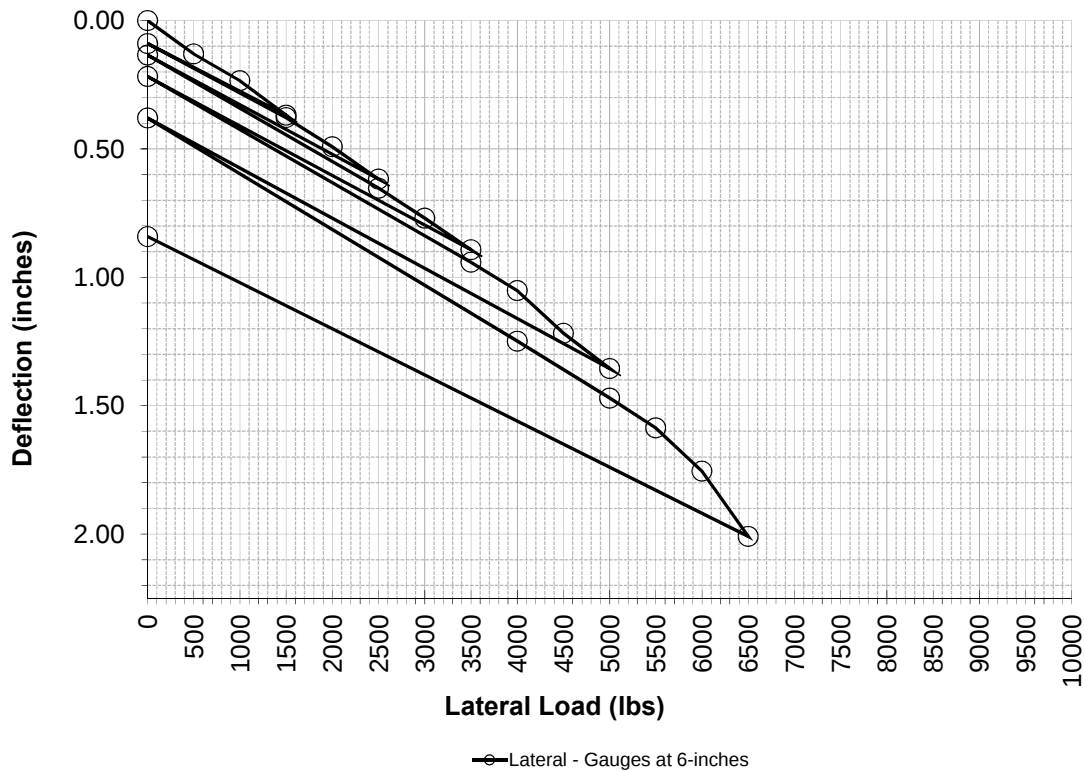
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/22/2021

Pile Information

Pile ID: PLT-B-22B
Latitude: 39.59593
Longitude: -83.13003
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 31.83

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.130	
10%	1000	0.235	
15%	1500	0.369	
0%	0	0.090	
15%	1500	0.378	
20%	2000	0.492	
25%	2500	0.617	
0%	0	0.135	
25%	2500	0.654	
30%	3000	0.770	
35%	3500	0.893	
0%	0	0.219	
35%	3500	0.942	
40%	4000	1.052	
45%	4500	1.218	
50%	5000	1.355	
0%	0	0.380	
40%	4000	1.249	
50%	5000	1.471	
55%	5500	1.587	
60%	6000	1.755	
65%	6500	2.009	
70%	7000		
0%	0	0.842	



Lateral Load Test Result for PLT-B-30A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

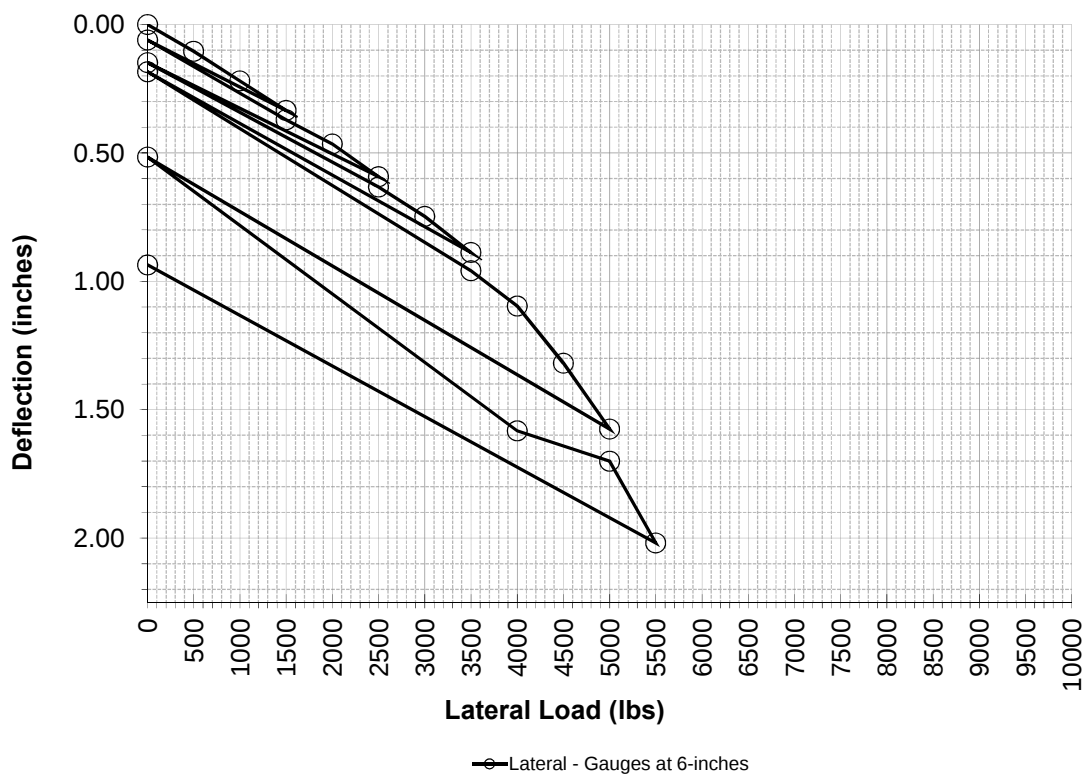
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/21/2021

Pile Information

Pile ID: PLT-B-30A
Latitude: 39.61464
Longitude: -83.06897
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 217.29

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.105	
10%	1000	0.220	
15%	1500	0.335	
0%	0	0.061	
15%	1500	0.371	
20%	2000	0.466	
25%	2500	0.593	
0%	0	0.149	
25%	2500	0.633	
30%	3000	0.747	
35%	3500	0.888	
0%	0	0.184	
35%	3500	0.959	
40%	4000	1.097	
45%	4500	1.320	
50%	5000	1.576	
0%	0	0.517	
40%	4000	1.583	
50%	5000	1.701	
55%	5500	2.020	
60%	6000		
65%	6500		
70%	7000		
0%	0	0.937	



Lateral Load Test Result for PLT-B-30B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

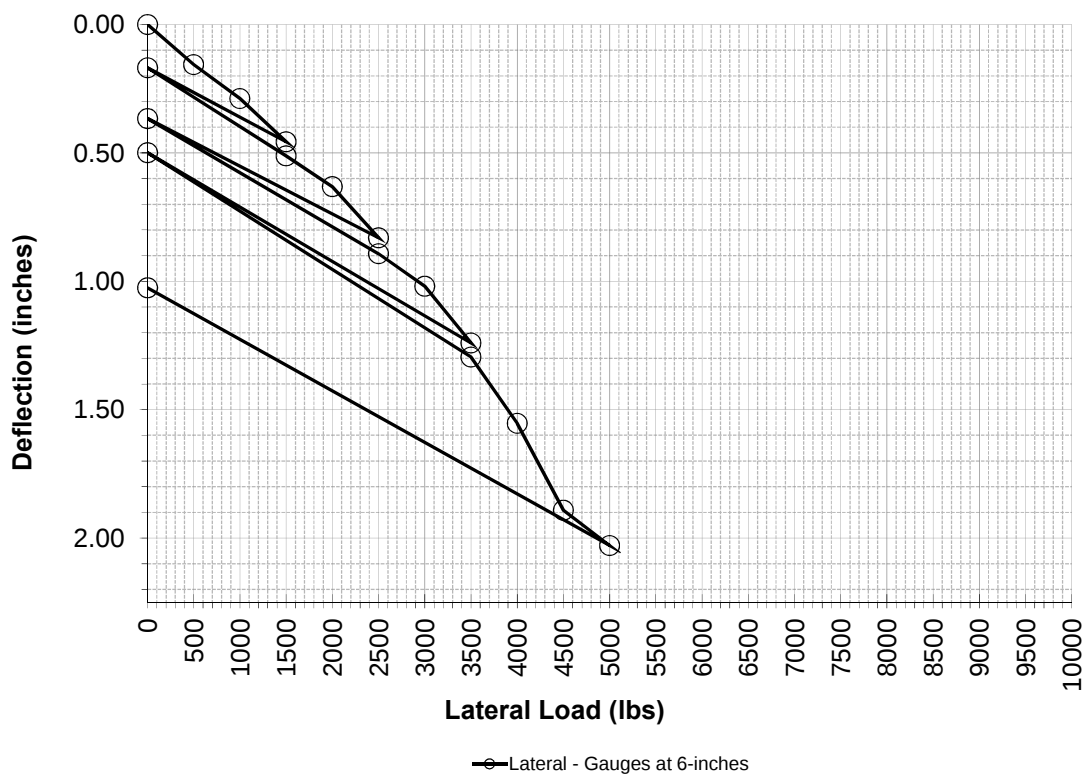
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/21/2021

Pile Information

Pile ID: PLT-B-30B
Latitude: 39.61464
Longitude: -83.06897
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 51.42

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.156	
10%	1000	0.289	
15%	1500	0.457	
0%	0	0.169	
15%	1500	0.512	
20%	2000	0.632	
25%	2500	0.831	
0%	0	0.367	
25%	2500	0.892	
30%	3000	1.020	
35%	3500	1.240	
0%	0	0.499	
35%	3500	1.296	
40%	4000	1.554	
45%	4500	1.892	
50%	5000	2.029	
0%	0		
40%	4000		
50%	5000		
55%	5500		
60%	6000		
65%	6500		
70%	7000		
0%	0	1.025	



Lateral Load Test Result for PLT-B-33A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

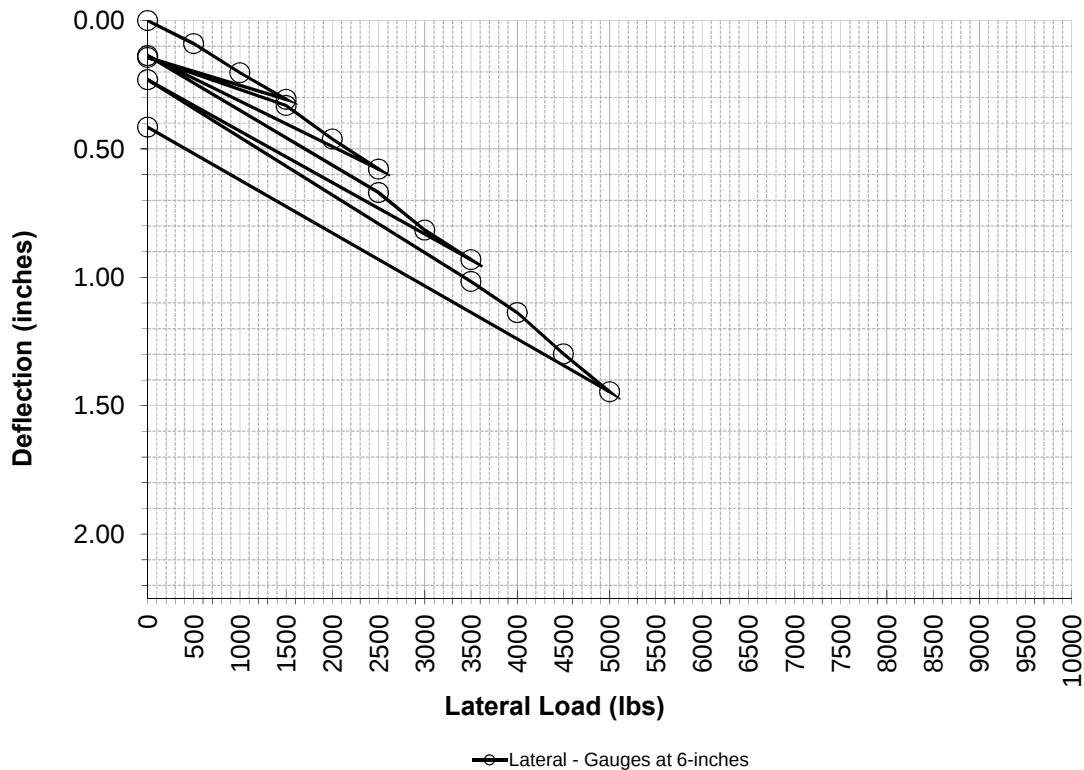
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/22/2021

Pile Information

Pile ID: PLT-B-33A
Latitude: 39.58505
Longitude: -83.08684
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 54.24

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.090	
10%	1000	0.204	
15%	1500	0.307	
0%	0	0.144	
15%	1500	0.331	
20%	2000	0.461	
25%	2500	0.579	
0%	0	0.137	
25%	2500	0.670	
30%	3000	0.816	
35%	3500	0.932	
0%	0	0.231	
35%	3500	1.017	
40%	4000	1.137	
45%	4500	1.298	
50%	5000	1.446	
0%	0		
40%	4000		
50%	5000		
55%	5500		
60%	6000		
65%	6500		
70%	7000		
0%	0	0.415	



Lateral Load Test Result for PLT-B-33B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

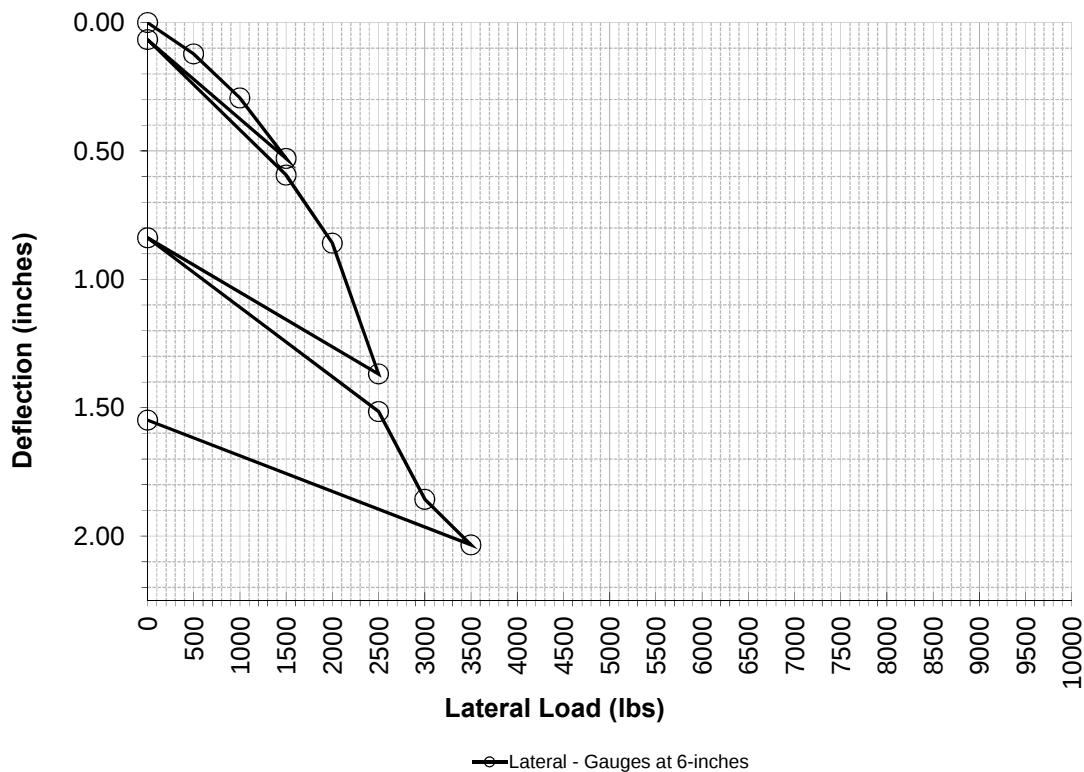
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/22/2021

Pile Information

Pile ID: PLT-B-33B
Latitude: 39.58505
Longitude: -83.08684
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 21.93

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.123	
10%	1000	0.294	
15%	1500	0.530	
0%	0	0.067	
15%	1500	0.594	
20%	2000	0.860	
25%	2500	1.369	
0%	0	0.838	
25%	2500	1.515	
30%	3000	1.857	
35%	3500	2.035	
0%	0		
35%	3500		
40%	4000		
45%	4500		
50%	5000		
0%	0		
40%	4000		
50%	5000		
55%	5500		
60%	6000		
65%	6500		
70%	7000		
0%	0	1.549	



Lateral Load Test Result for PLT-B-35A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

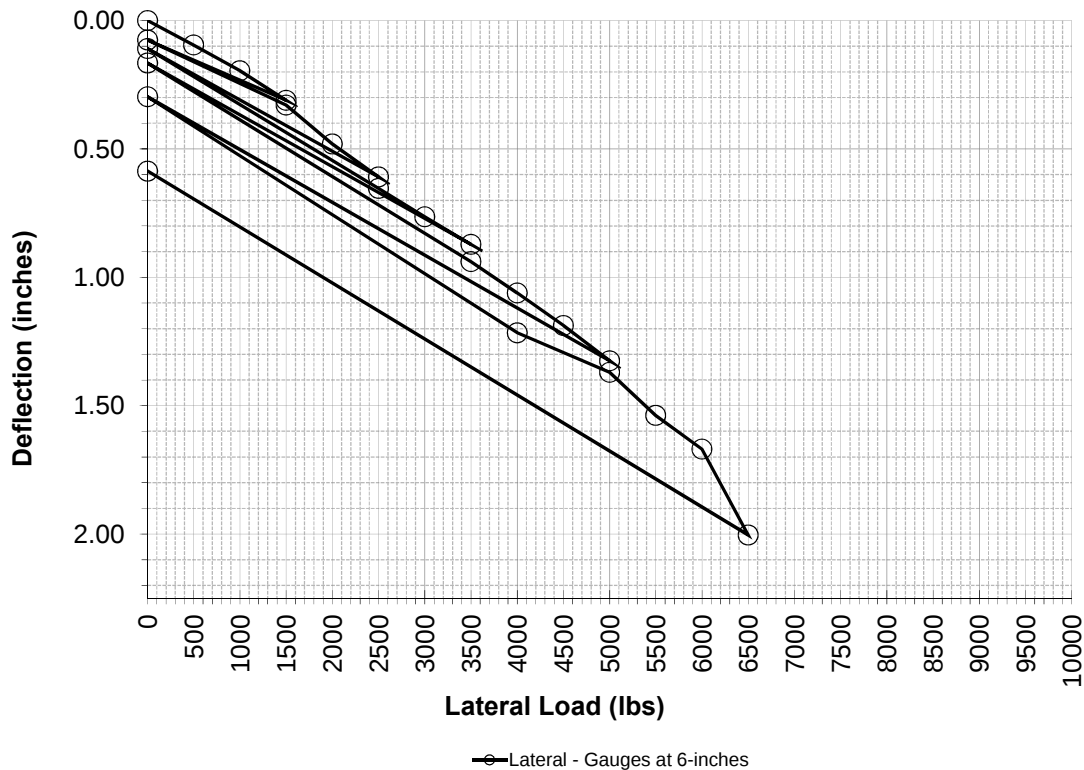
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/22/2021

Pile Information

Pile ID: PLT-B-35A
Latitude: 39.57661
Longitude: -83.08214
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 43.96

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.095	
10%	1000	0.196	
15%	1500	0.311	
0%	0	0.076	
15%	1500	0.330	
20%	2000	0.481	
25%	2500	0.609	
0%	0	0.110	
25%	2500	0.654	
30%	3000	0.765	
35%	3500	0.872	
0%	0	0.166	
35%	3500	0.939	
40%	4000	1.061	
45%	4500	1.188	
50%	5000	1.325	
0%	0	0.297	
40%	4000	1.216	
50%	5000	1.370	
55%	5500	1.538	
60%	6000	1.670	
65%	6500	2.004	
70%	7000		
0%	0	0.587	



Lateral Load Test Result for PLT-B-35B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

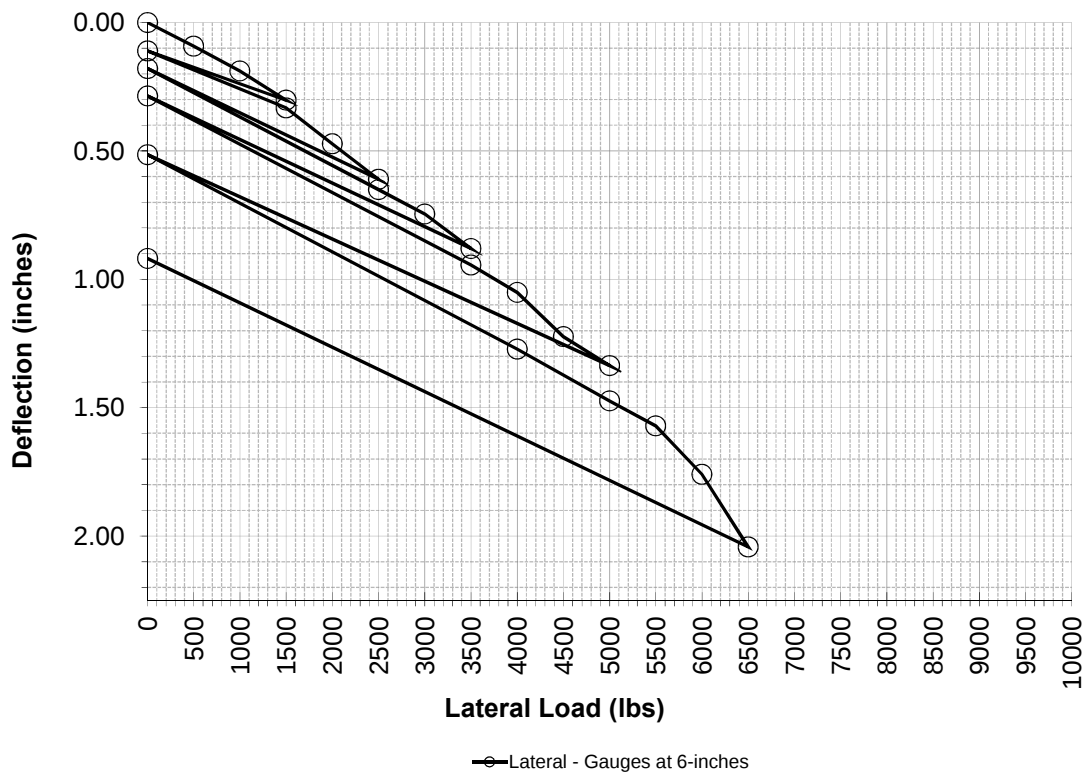
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/22/2021

Pile Information

Pile ID: PLT-B-35B
Latitude: 39.57661
Longitude: -83.08214
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 29.49

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.093	
10%	1000	0.189	
15%	1500	0.302	
0%	0	0.111	
15%	1500	0.333	
20%	2000	0.472	
25%	2500	0.611	
0%	0	0.179	
25%	2500	0.651	
30%	3000	0.746	
35%	3500	0.881	
0%	0	0.286	
35%	3500	0.945	
40%	4000	1.051	
45%	4500	1.223	
50%	5000	1.337	
0%	0	0.515	
40%	4000	1.272	
50%	5000	1.474	
55%	5500	1.571	
60%	6000	1.759	
65%	6500	2.043	
70%	7000		
0%	0	0.919	



Lateral Load Test Result for PLT-B-36A

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

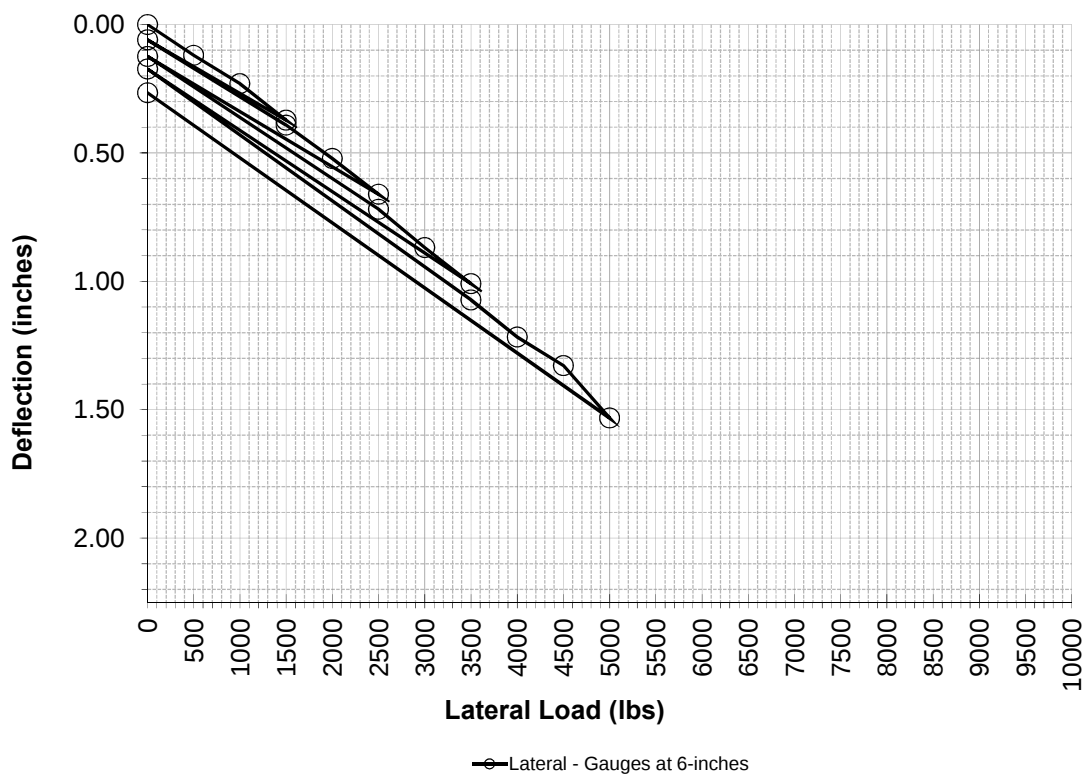
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/21/2021

Pile Information

Pile ID: PLT-B-36A
Latitude: 39.62069
Longitude: -83.06238
Pile Type: W6X9
Pile Embedment Depth [in]: 108
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 64.85

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.120	
10%	1000	0.231	
15%	1500	0.373	
0%	0	0.060	
15%	1500	0.392	
20%	2000	0.522	
25%	2500	0.661	
0%	0	0.125	
25%	2500	0.719	
30%	3000	0.869	
35%	3500	1.009	
0%	0	0.174	
35%	3500	1.073	
40%	4000	1.218	
45%	4500	1.329	
50%	5000	1.533	Pulling B Pile
0%	0		
40%	4000		
50%	5000		
55%	5500		
60%	6000		
65%	6500		
70%	7000		
0%	0	0.266	



Lateral Load Test Result for PLT-B-36B

Project Information

Project Name: Chipmunk Solar
Project Location: Williamsport, Ohio
Project Number: N4215086

Lateral Load Test Set Up

Number of Top Gauges: 0
Number of Bottom Gauges: 2
Height of Top Gauges [in]: 6
Height of Bottom Gauges [in]: 6
Height of Applied Load [in]: 24
Load Cell: 25k Ed Jr.

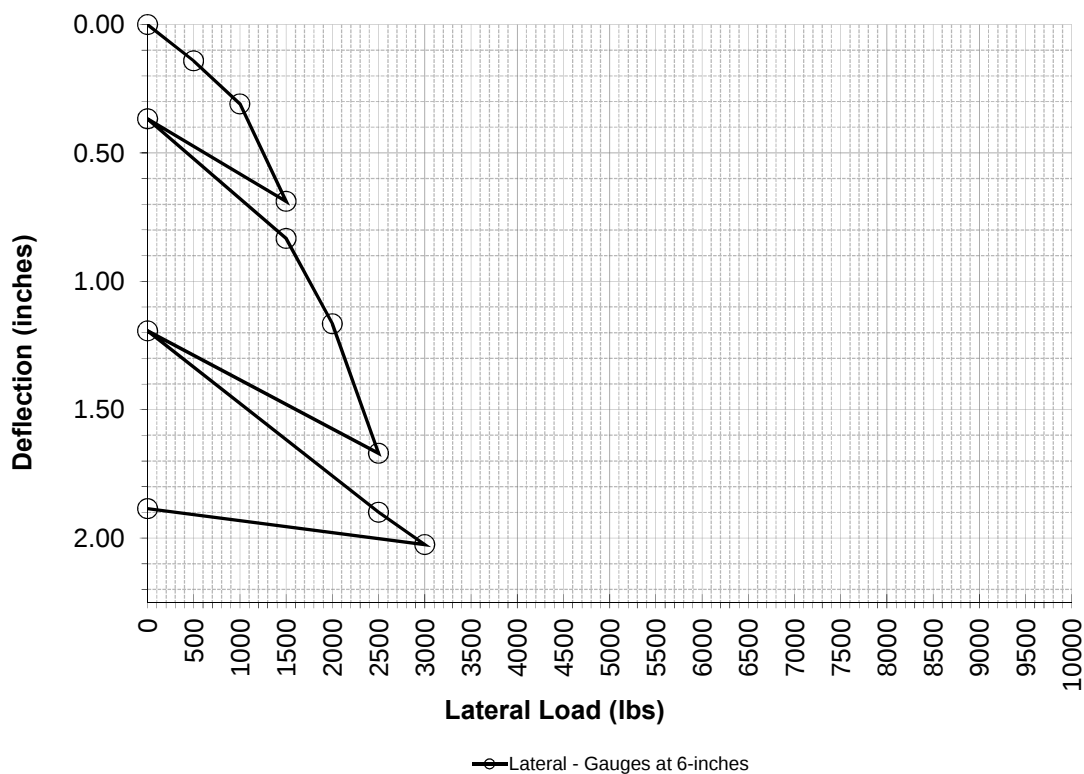
Test Date and Representative

Tested By Terracon Rep: I. McGougan
Date Tested: 4/21/2021

Pile Information

Pile ID: PLT-B-36B
Latitude: 39.62069
Longitude: -83.06238
Pile Type: W6X9
Pile Embedment Depth [in]: 72
Pile Stick-Up [in]: 24
Lateral Design Load [lbs]: 10000
Drive Time [sec]: 21.21

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
5%	500	0.142	
10%	1000	0.309	
15%	1500	0.689	
0%	0	0.368	
15%	1500	0.834	
20%	2000	1.166	
25%	2500	1.670	
0%	0	1.194	
25%	2500	1.900	
30%	3000	2.026	
35%	3500		
0%	0		
35%	3500		
40%	4000		
45%	4500		
50%	5000		
0%	0		
40%	4000		
50%	5000		
55%	5500		
60%	6000		
65%	6500		
70%	7000		
0%	0	1.886	



**This foregoing document was electronically filed with the Public Utilities
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3/2/2022 5:22:52 PM

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Case No(s). 21-0960-EL-BGN

Summary: Application Exhibit C (Preliminary Geotechnical Report, 2 of 2)
electronically filed by Mr. Michael J. Settineri on behalf of Chipmunk Solar LLC