Tension Load Test Result for PLT-42A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

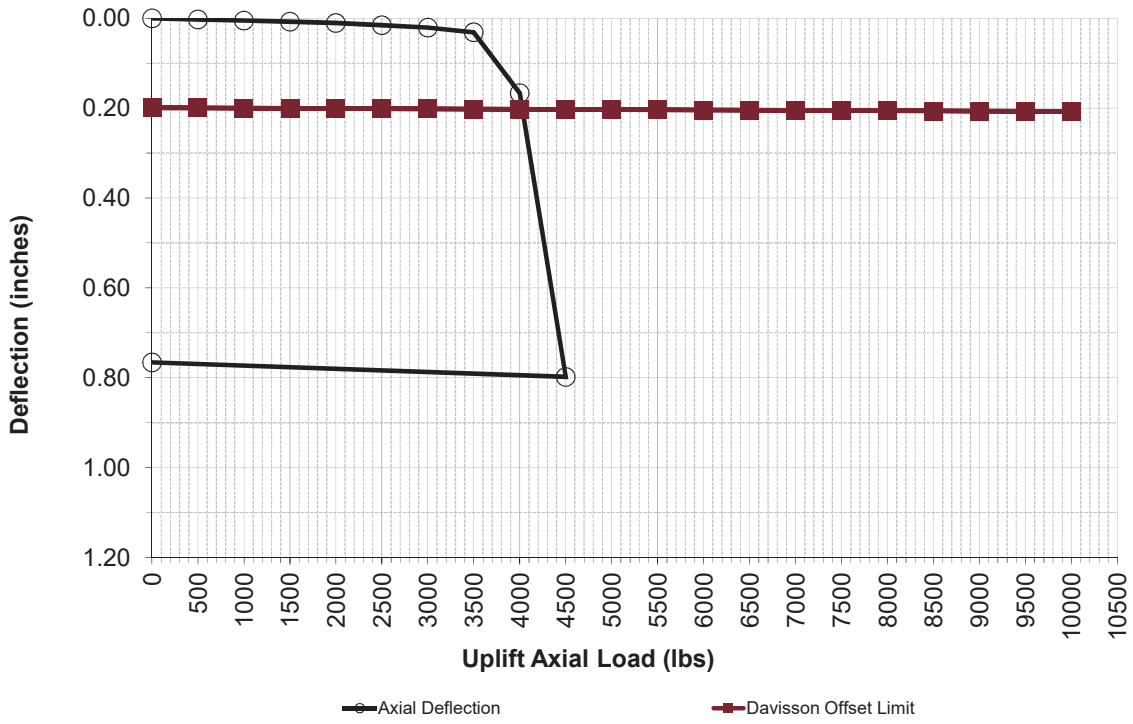
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/21/2022

Pile Information

Pile ID:	PLT-42A
Latitude:	39.25020
Longitude:	-83.83420
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	36
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	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 Offest Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.003	0.000	0.200	
10%	1000	0.005	0.001	0.200	
15%	1500	0.008	0.001	0.200	
20%	2000	0.011	0.002	0.201	
25%	2500	0.016	0.002	0.201	
30%	3000	0.021	0.003	0.202	
35%	3500	0.031	0.003	0.202	
40%	4000	0.167	0.003	0.203	
45%	4500	0.798	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	0.766	0.000	0.199	



Tension Load Test Result for PLT-42B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

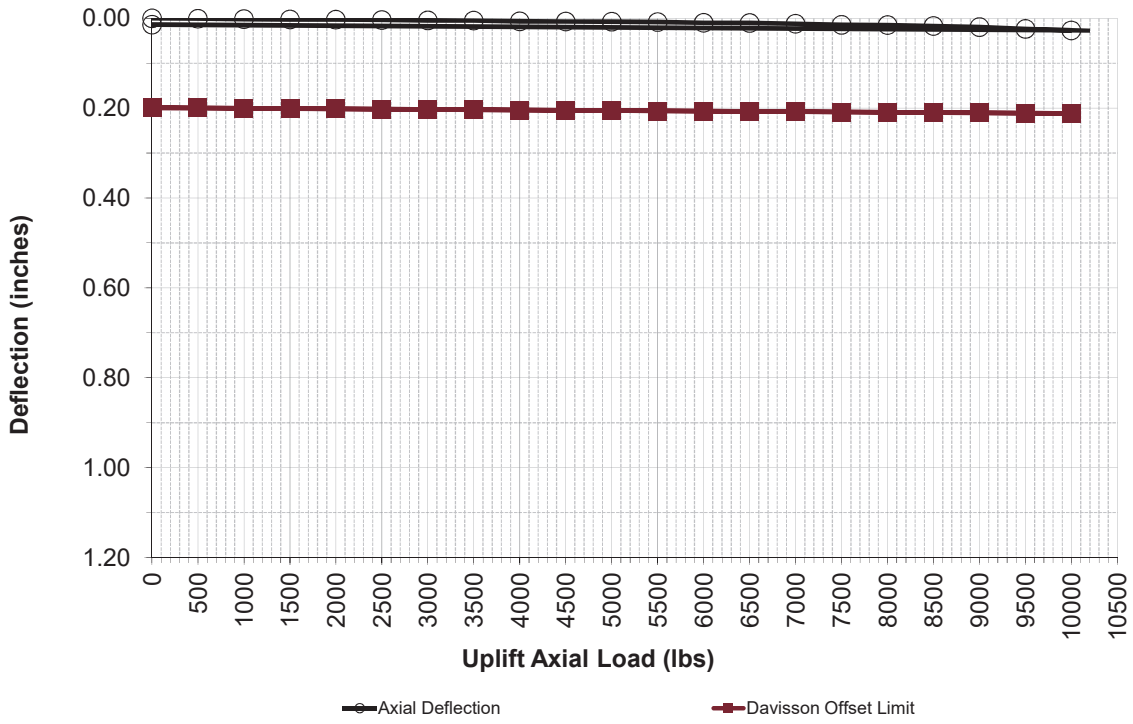
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/21/2022

Pile Information

Pile ID:	PLT-42B
Latitude:	39.25020
Longitude:	-83.83420
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	48
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	114

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 Offest 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	0.002	0.001	0.200	
15%	1500	0.003	0.002	0.201	
20%	2000	0.003	0.003	0.202	
25%	2500	0.004	0.003	0.202	
30%	3000	0.005	0.004	0.203	
35%	3500	0.005	0.004	0.204	
40%	4000	0.007	0.005	0.204	
45%	4500	0.007	0.006	0.205	
50%	5000	0.008	0.006	0.205	
55%	5500	0.009	0.007	0.206	
60%	6000	0.010	0.008	0.207	
65%	6500	0.011	0.008	0.207	
70%	7000	0.012	0.009	0.208	
75%	7500	0.015	0.009	0.209	
80%	8000	0.015	0.010	0.209	
85%	8500	0.017	0.011	0.210	
90%	9000	0.020	0.011	0.210	
95%	9500	0.024	0.012	0.211	
100%	10000	0.027	0.013	0.212	
0%	0	0.014	0.000	0.199	



Tension Load Test Result for PLT-43A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

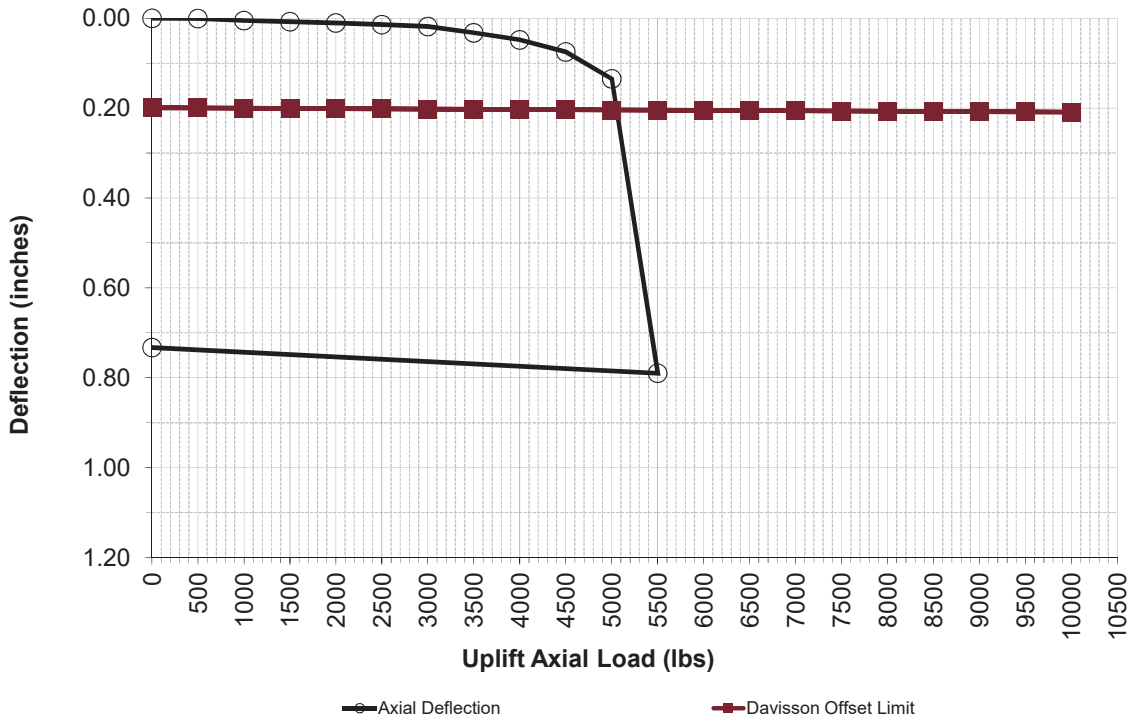
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/23/2022

Pile Information

Pile ID:	PLT-43A
Latitude:	39.25160
Longitude:	-83.82920
Pile Type:	W6X9
Pile Embedment Depth [in]:	84
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	36
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	40

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 Offest 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	0.005	0.001	0.200	
15%	1500	0.008	0.001	0.201	
20%	2000	0.011	0.002	0.201	
25%	2500	0.014	0.002	0.202	
30%	3000	0.018	0.003	0.202	
35%	3500	0.032	0.003	0.203	
40%	4000	0.048	0.004	0.203	
45%	4500	0.075	0.004	0.204	
50%	5000	0.135	0.005	0.204	
55%	5500	0.790	0.005	0.205	
60%	6000		0.006	0.205	
65%	6500		0.006	0.206	
70%	7000		0.007	0.206	
75%	7500		0.007	0.207	
80%	8000		0.008	0.207	
85%	8500		0.008	0.207	
90%	9000		0.009	0.208	
95%	9500		0.009	0.208	
100%	10000		0.010	0.209	
0%	0	0.733	0.000	0.199	



Tension Load Test Result for PLT-43B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

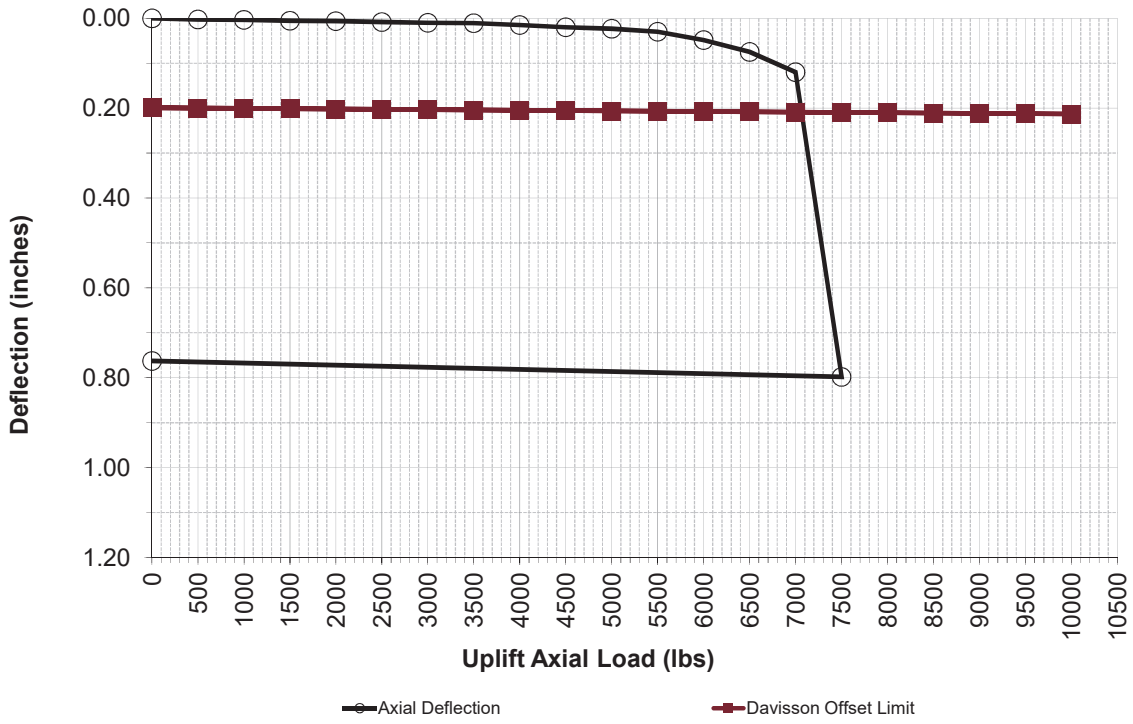
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/23/2022

Pile Information

Pile ID:	PLT-43B
Latitude:	39.25160
Longitude:	-83.82920
Pile Type:	W6X9
Pile Embedment Depth [in]:	120
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	48
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	115

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 Offest 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	0.201	
15%	1500	0.006	0.002	0.201	
20%	2000	0.007	0.003	0.202	
25%	2500	0.009	0.003	0.203	
30%	3000	0.010	0.004	0.203	
35%	3500	0.011	0.005	0.204	
40%	4000	0.015	0.006	0.205	
45%	4500	0.020	0.006	0.205	
50%	5000	0.023	0.007	0.206	
55%	5500	0.030	0.008	0.207	
60%	6000	0.049	0.008	0.208	
65%	6500	0.075	0.009	0.208	
70%	7000	0.120	0.010	0.209	
75%	7500	0.798	0.010	0.210	
80%	8000		0.011	0.210	
85%	8500		0.012	0.211	
90%	9000		0.013	0.212	
95%	9500		0.013	0.212	
100%	10000		0.014	0.213	
0%	0	0.763	0.000	0.199	



Tension Load Test Result for PLT-44A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

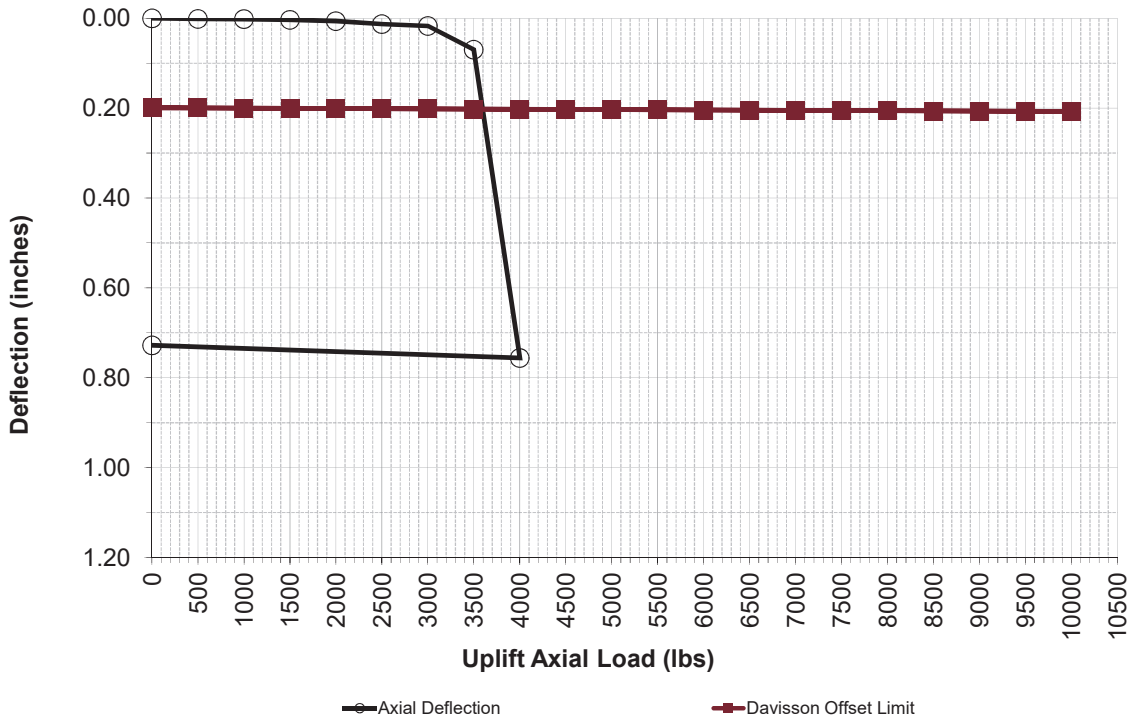
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/23/2022

Pile Information

Pile ID:	PLT-44A
Latitude:	39.24670
Longitude:	-83.83330
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	36
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	27

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 Offest 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	0.007	0.002	0.201	
25%	2500	0.013	0.002	0.201	
30%	3000	0.017	0.003	0.202	
35%	3500	0.070	0.003	0.202	
40%	4000	0.756	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	0.728	0.000	0.199	



Tension Load Test Result for PLT-44B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

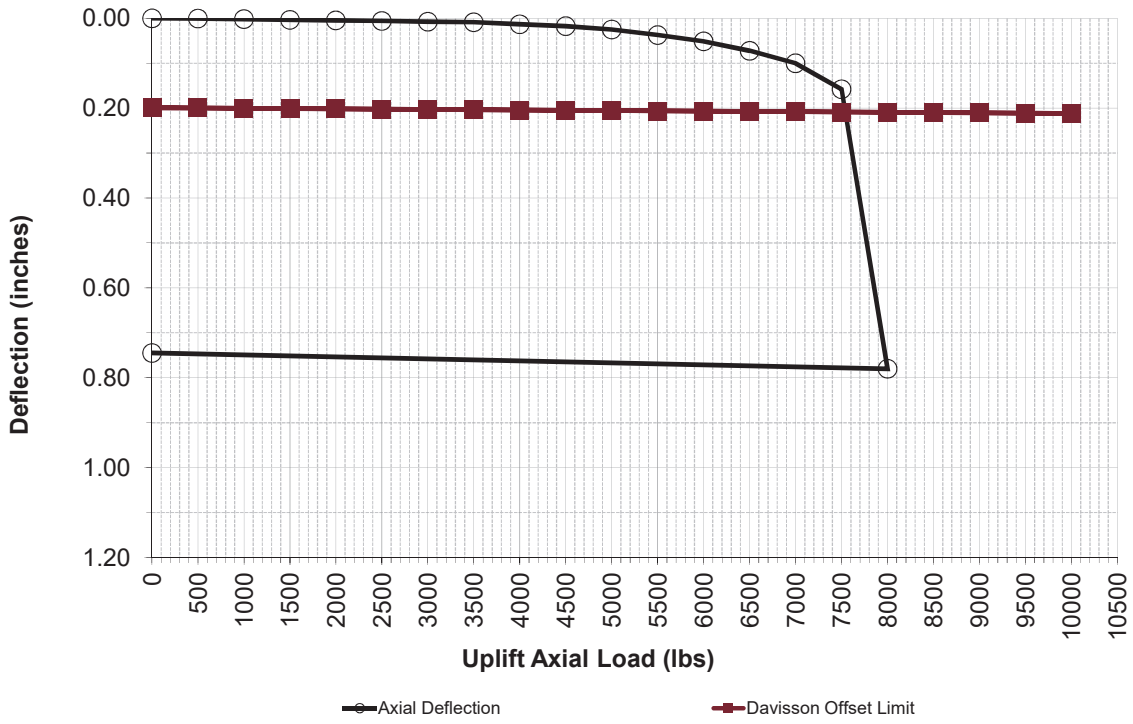
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/23/2022

Pile Information

Pile ID:	PLT-44B
Latitude:	39.24670
Longitude:	-83.83330
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	48
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	106

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 Offest 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	0.002	0.001	0.200	
15%	1500	0.004	0.002	0.201	
20%	2000	0.005	0.003	0.202	
25%	2500	0.006	0.003	0.202	
30%	3000	0.008	0.004	0.203	
35%	3500	0.009	0.004	0.204	
40%	4000	0.014	0.005	0.204	
45%	4500	0.018	0.006	0.205	
50%	5000	0.025	0.006	0.205	
55%	5500	0.038	0.007	0.206	
60%	6000	0.052	0.008	0.207	
65%	6500	0.073	0.008	0.207	
70%	7000	0.100	0.009	0.208	
75%	7500	0.158	0.009	0.209	
80%	8000	0.780	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	0.745	0.000	0.199	



Tension Load Test Result for PLT-45A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

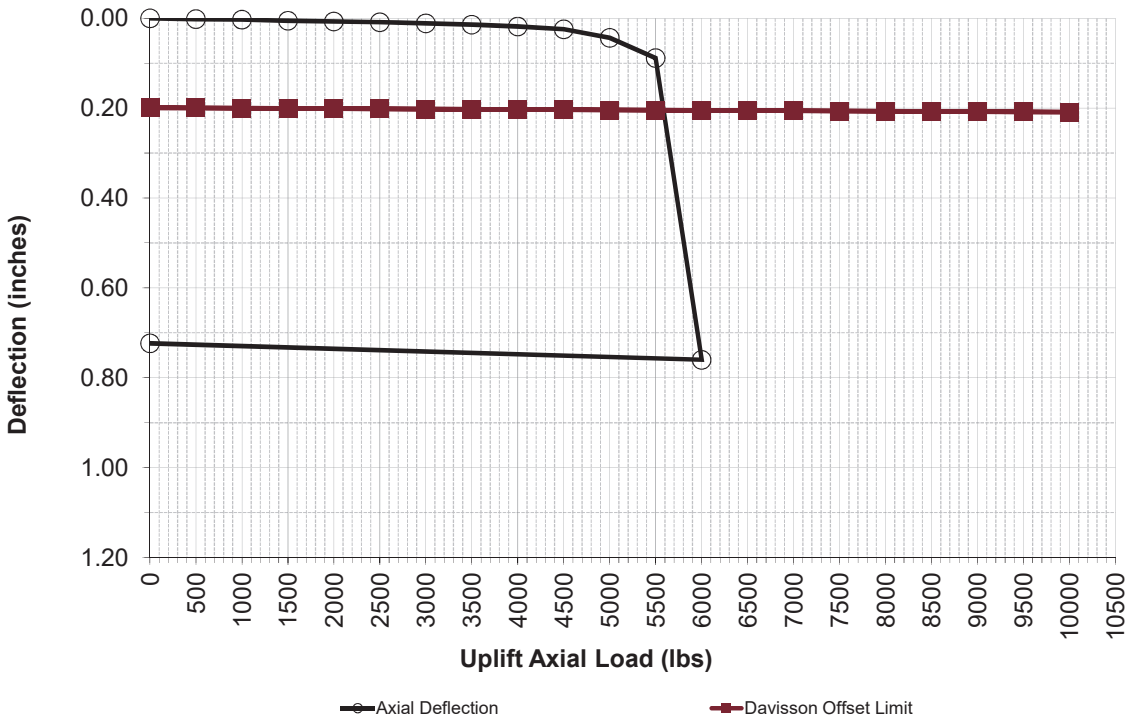
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/23/2022

Pile Information

Pile ID:	PLT-45A
Latitude:	39.24810
Longitude:	-83.82600
Pile Type:	W6X9
Pile Embedment Depth [in]:	84
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	36
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	161

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 Offest 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	0.006	0.001	0.201	
20%	2000	0.007	0.002	0.201	
25%	2500	0.009	0.002	0.202	
30%	3000	0.012	0.003	0.202	
35%	3500	0.014	0.003	0.203	
40%	4000	0.019	0.004	0.203	
45%	4500	0.025	0.004	0.204	
50%	5000	0.044	0.005	0.204	
55%	5500	0.089	0.005	0.205	
60%	6000	0.760	0.006	0.205	
65%	6500		0.006	0.206	
70%	7000		0.007	0.206	
75%	7500		0.007	0.207	
80%	8000		0.008	0.207	
85%	8500		0.008	0.207	
90%	9000		0.009	0.208	
95%	9500		0.009	0.208	
100%	10000		0.010	0.209	
0%	0	0.724	0.000	0.199	



Tension Load Test Result for PLT-45B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

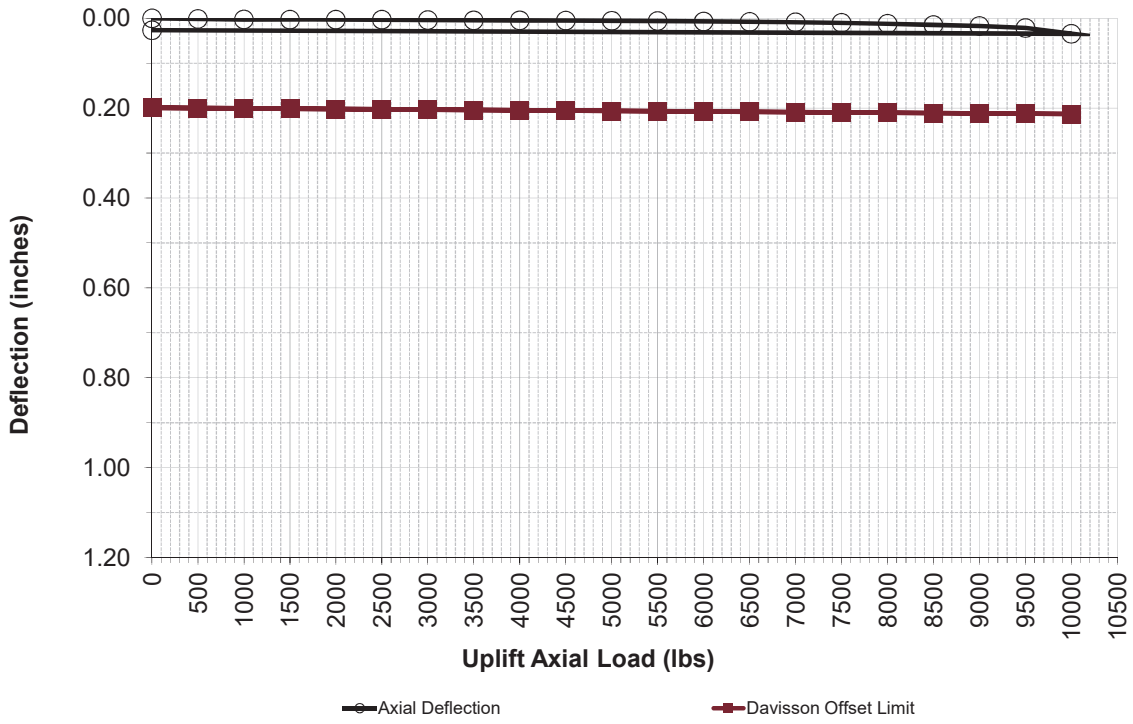
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/23/2022

Pile Information

Pile ID:	PLT-45B
Latitude:	39.24810
Longitude:	-83.82600
Pile Type:	W6X9
Pile Embedment Depth [in]:	120
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	48
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	117

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 Offest 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	0.201	
15%	1500	0.003	0.002	0.201	
20%	2000	0.003	0.003	0.202	
25%	2500	0.003	0.003	0.203	
30%	3000	0.004	0.004	0.203	
35%	3500	0.005	0.005	0.204	
40%	4000	0.005	0.006	0.205	
45%	4500	0.005	0.006	0.205	
50%	5000	0.006	0.007	0.206	
55%	5500	0.006	0.008	0.207	
60%	6000	0.007	0.008	0.208	
65%	6500	0.008	0.009	0.208	
70%	7000	0.009	0.010	0.209	
75%	7500	0.010	0.010	0.210	
80%	8000	0.012	0.011	0.210	
85%	8500	0.015	0.012	0.211	
90%	9000	0.017	0.013	0.212	
95%	9500	0.022	0.013	0.212	
100%	10000	0.035	0.014	0.213	
0%	0	0.027	0.000	0.199	



Tension Load Test Result for PLT-46A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

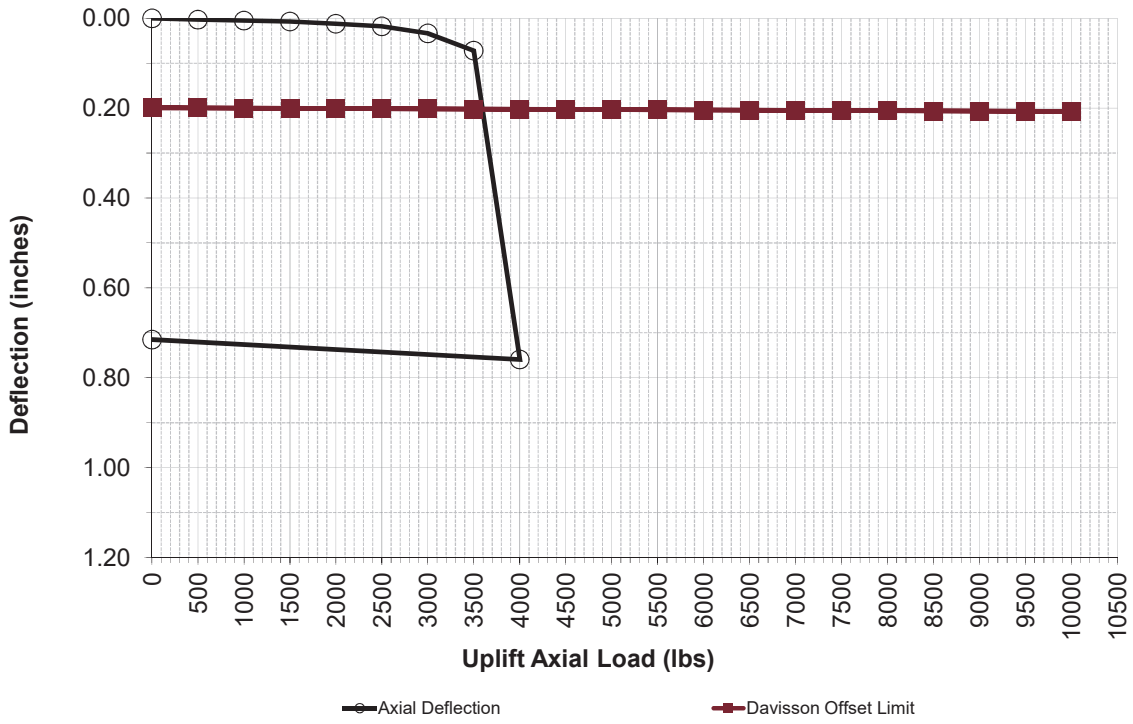
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/23/2022

Pile Information

Pile ID:	PLT-46A
Latitude:	39.25330
Longitude:	-83.82040
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	36
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	31

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 Offest Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.003	0.000	0.200	
10%	1000	0.005	0.001	0.200	
15%	1500	0.007	0.001	0.200	
20%	2000	0.012	0.002	0.201	
25%	2500	0.018	0.002	0.201	
30%	3000	0.034	0.003	0.202	
35%	3500	0.072	0.003	0.202	
40%	4000	0.760	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	0.715	0.000	0.199	



Tension Load Test Result for PLT-46B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

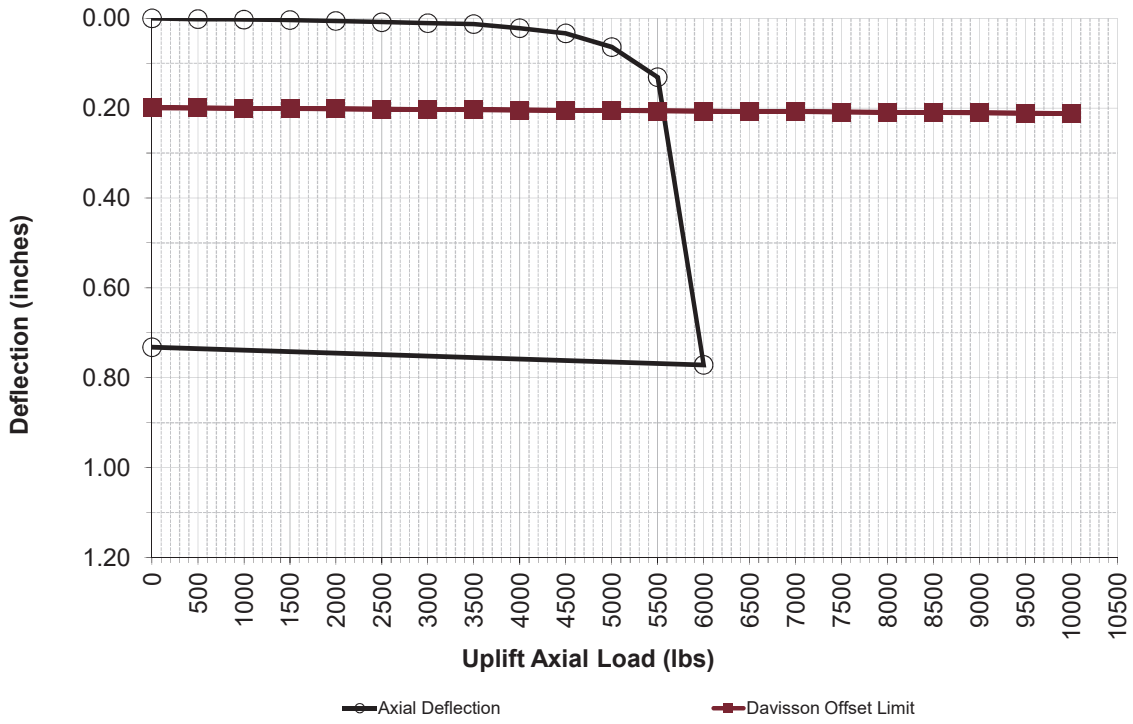
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/23/2022

Pile Information

Pile ID:	PLT-46B
Latitude:	39.25330
Longitude:	-83.82040
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	48
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	90

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 Offest 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	0.009	0.003	0.202	
30%	3000	0.011	0.004	0.203	
35%	3500	0.013	0.004	0.204	
40%	4000	0.022	0.005	0.204	
45%	4500	0.034	0.006	0.205	
50%	5000	0.064	0.006	0.205	
55%	5500	0.131	0.007	0.206	
60%	6000	0.772	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	0.732	0.000	0.199	



Tension Load Test Result for PLT-47A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

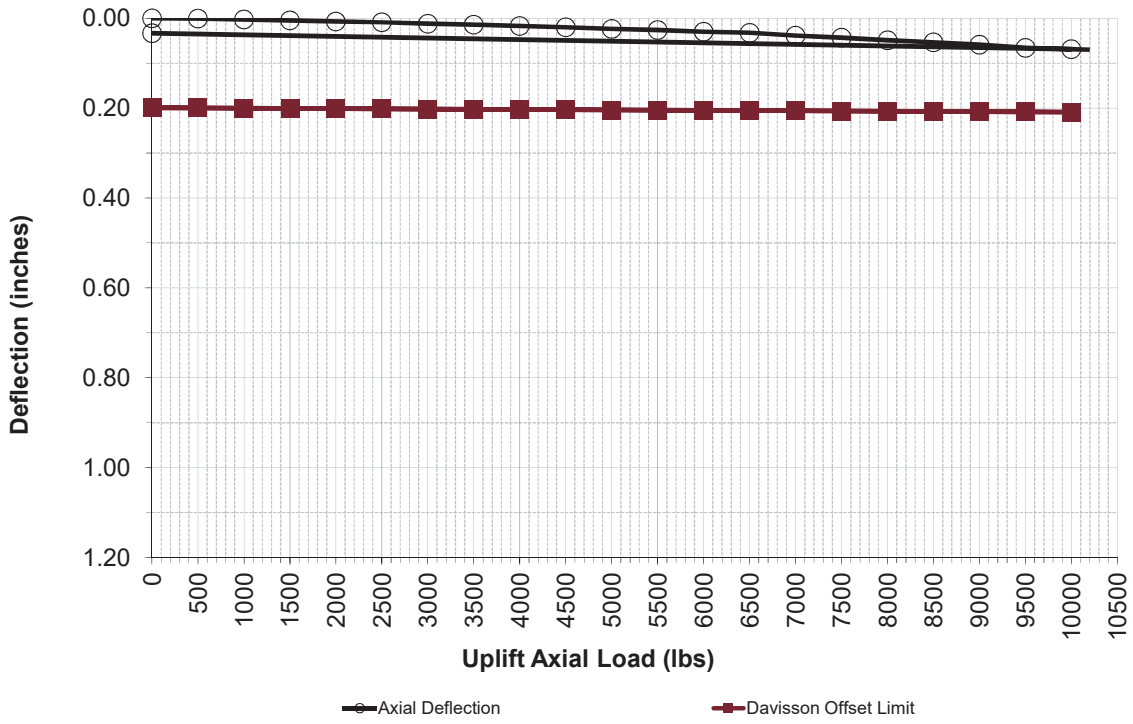
Test Date and Representative

Tested By Terracon Rep:	MC
Date Tested:	6/24/2022

Pile Information

Pile ID:	PLT-47A
Latitude:	39.25370
Longitude:	-83.81070
Pile Type:	W6X9
Pile Embedment Depth [in]:	84
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	36
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	104

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 Offest 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	0.005	0.001	0.201	
20%	2000	0.007	0.002	0.201	
25%	2500	0.009	0.002	0.202	
30%	3000	0.012	0.003	0.202	
35%	3500	0.014	0.003	0.203	
40%	4000	0.017	0.004	0.203	
45%	4500	0.020	0.004	0.204	
50%	5000	0.024	0.005	0.204	
55%	5500	0.026	0.005	0.205	
60%	6000	0.030	0.006	0.205	
65%	6500	0.033	0.006	0.206	
70%	7000	0.039	0.007	0.206	
75%	7500	0.043	0.007	0.207	
80%	8000	0.049	0.008	0.207	
85%	8500	0.053	0.008	0.207	
90%	9000	0.059	0.009	0.208	
95%	9500	0.066	0.009	0.208	
100%	10000	0.069	0.010	0.209	
0%	0	0.033	0.000	0.199	



Tension Load Test Result for PLT-47B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

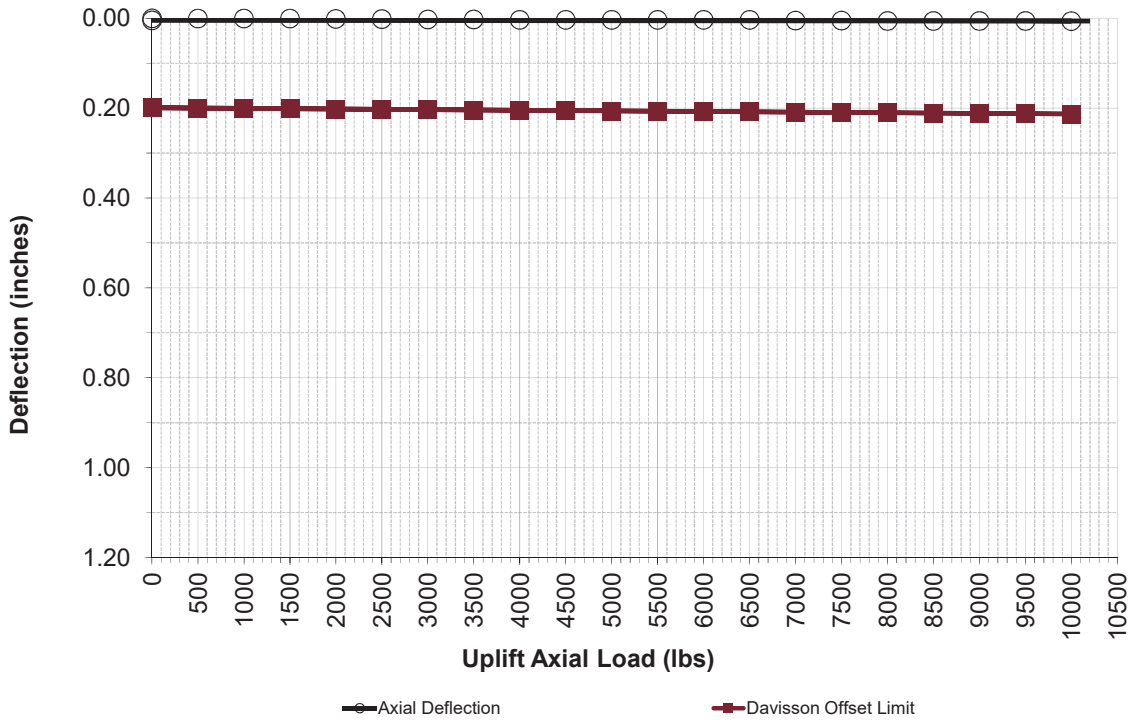
Test Date and Representative

Tested By Terracon Rep:	MC
Date Tested:	6/24/2022

Pile Information

Pile ID:	PLT-47B
Latitude:	39.25370
Longitude:	-83.81070
Pile Type:	W6X9
Pile Embedment Depth [in]:	120
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	48
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	225

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 Offest 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	0.201	
15%	1500	0.001	0.002	0.201	
20%	2000	0.001	0.003	0.202	
25%	2500	0.002	0.003	0.203	
30%	3000	0.003	0.004	0.203	
35%	3500	0.003	0.005	0.204	
40%	4000	0.003	0.006	0.205	
45%	4500	0.004	0.006	0.205	
50%	5000	0.004	0.007	0.206	
55%	5500	0.004	0.008	0.207	
60%	6000	0.004	0.008	0.208	
65%	6500	0.004	0.009	0.208	
70%	7000	0.005	0.010	0.209	
75%	7500	0.005	0.010	0.210	
80%	8000	0.006	0.011	0.210	
85%	8500	0.006	0.012	0.211	
90%	9000	0.006	0.013	0.212	
95%	9500	0.006	0.013	0.212	
100%	10000	0.006	0.014	0.213	
0%	0	0.005	0.000	0.199	



Tension Load Test Result for PLT-48A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

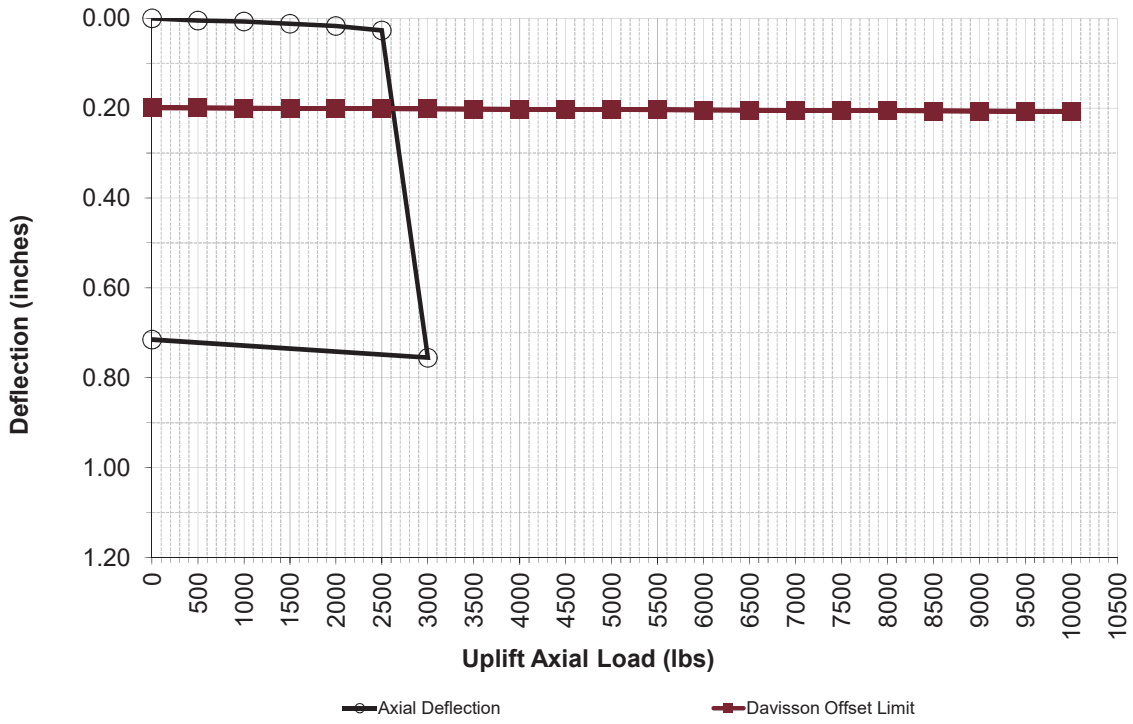
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/16/2022

Pile Information

Pile ID:	PLT-48A
Latitude:	39.29030
Longitude:	-83.81860
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	36
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	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 Offest 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	0.017	0.002	0.201	
25%	2500	0.027	0.002	0.201	
30%	3000	0.756	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	0.715	0.000	0.199	



Tension Load Test Result for PLT-48B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

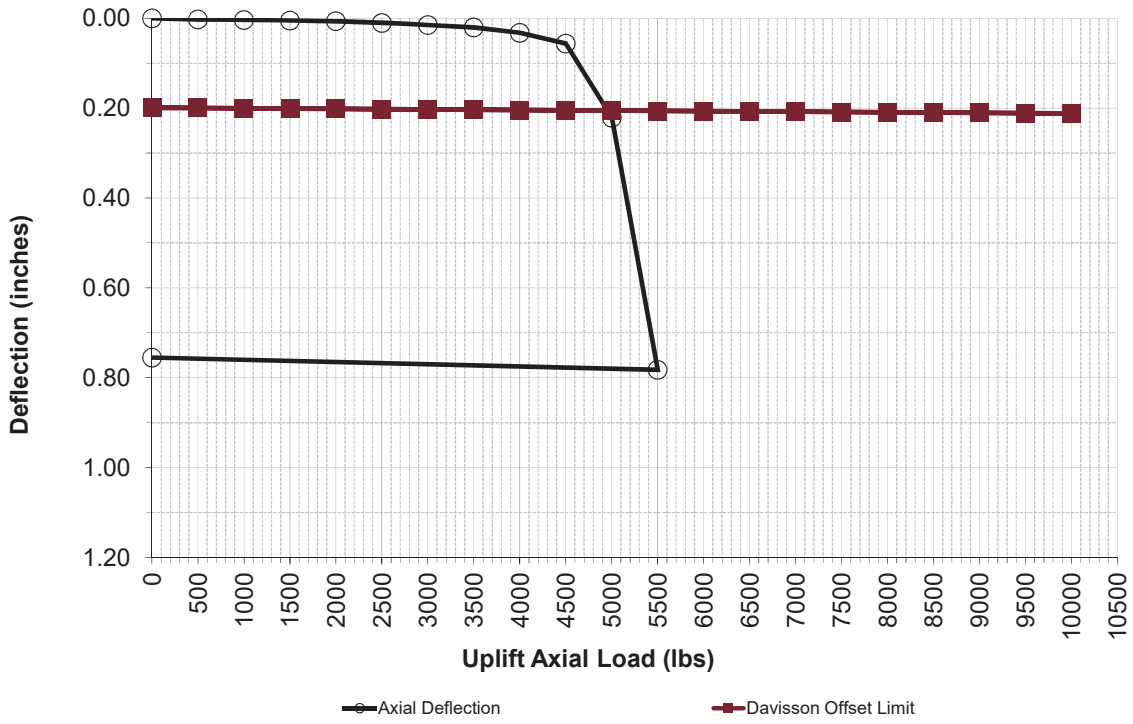
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/16/2022

Pile Information

Pile ID:	PLT-48B
Latitude:	39.29030
Longitude:	-83.81860
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	48
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	54

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 Offest 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	0.005	0.002	0.201	
20%	2000	0.007	0.003	0.202	
25%	2500	0.011	0.003	0.202	
30%	3000	0.015	0.004	0.203	
35%	3500	0.021	0.004	0.204	
40%	4000	0.033	0.005	0.204	
45%	4500	0.057	0.006	0.205	
50%	5000	0.221	0.006	0.205	
55%	5500	0.783	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	0.755	0.000	0.199	



Tension Load Test Result for PLT-49A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

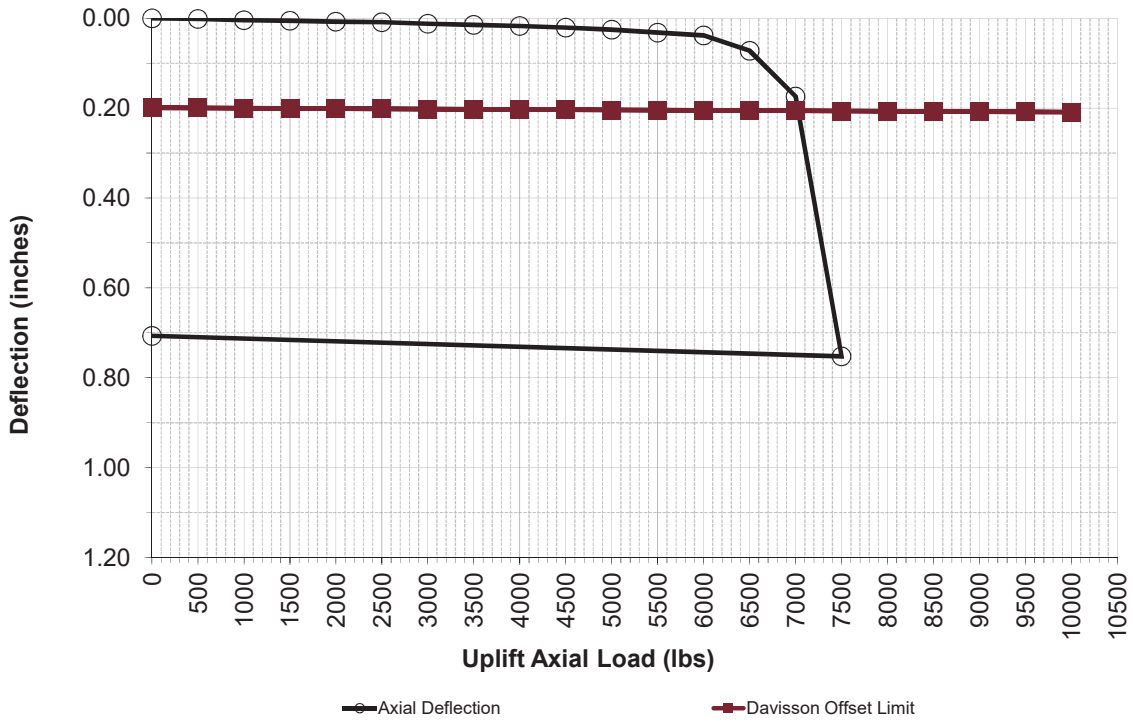
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/16/2022

Pile Information

Pile ID:	PLT-49A
Latitude:	39.28560
Longitude:	-83.82270
Pile Type:	W6X9
Pile Embedment Depth [in]:	84
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	36
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	75

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 Offest 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	0.006	0.001	0.201	
20%	2000	0.008	0.002	0.201	
25%	2500	0.009	0.002	0.202	
30%	3000	0.012	0.003	0.202	
35%	3500	0.015	0.003	0.203	
40%	4000	0.017	0.004	0.203	
45%	4500	0.021	0.004	0.204	
50%	5000	0.026	0.005	0.204	
55%	5500	0.032	0.005	0.205	
60%	6000	0.038	0.006	0.205	
65%	6500	0.073	0.006	0.206	
70%	7000	0.174	0.007	0.206	
75%	7500	0.753	0.007	0.207	
80%	8000		0.008	0.207	
85%	8500		0.008	0.207	
90%	9000		0.009	0.208	
95%	9500		0.009	0.208	
100%	10000		0.010	0.209	
0%	0	0.707	0.000	0.199	



Tension Load Test Result for PLT-49B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

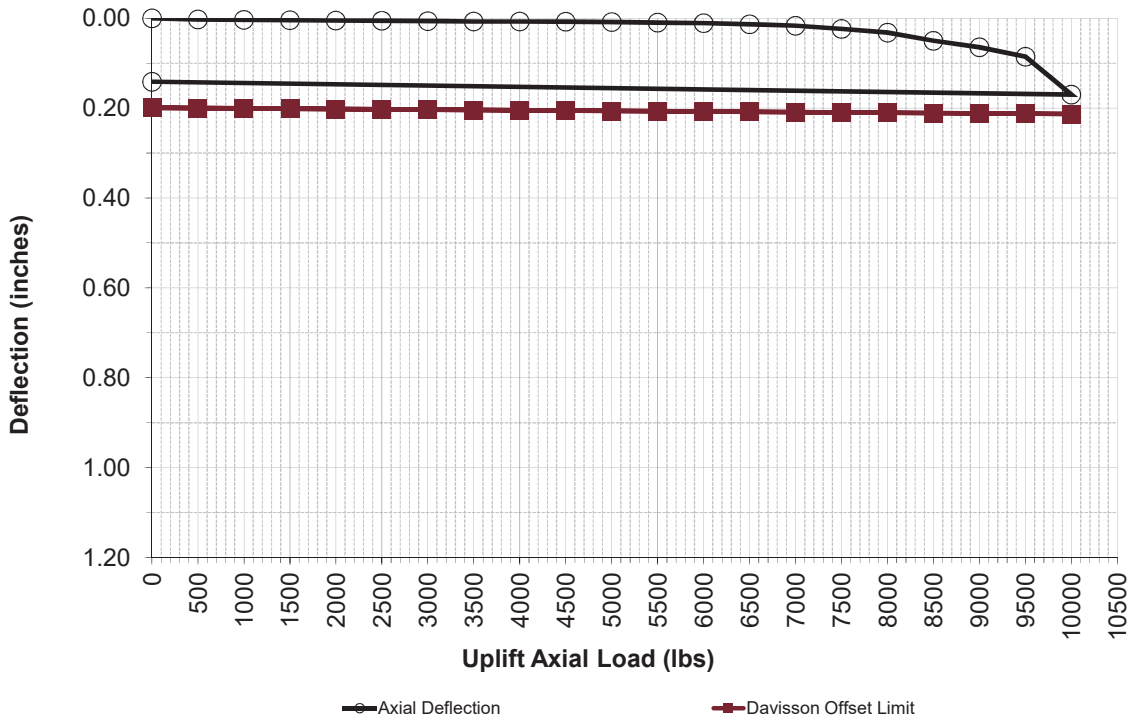
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/16/2022

Pile Information

Pile ID:	PLT-49B
Latitude:	39.28560
Longitude:	-83.82270
Pile Type:	W6X9
Pile Embedment Depth [in]:	120
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	48
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	173

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 Offest 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	0.201	
15%	1500	0.004	0.002	0.201	
20%	2000	0.005	0.003	0.202	
25%	2500	0.006	0.003	0.203	
30%	3000	0.007	0.004	0.203	
35%	3500	0.007	0.005	0.204	
40%	4000	0.007	0.006	0.205	
45%	4500	0.008	0.006	0.205	
50%	5000	0.009	0.007	0.206	
55%	5500	0.010	0.008	0.207	
60%	6000	0.011	0.008	0.208	
65%	6500	0.014	0.009	0.208	
70%	7000	0.017	0.010	0.209	
75%	7500	0.024	0.010	0.210	
80%	8000	0.032	0.011	0.210	
85%	8500	0.050	0.012	0.211	
90%	9000	0.065	0.013	0.212	
95%	9500	0.086	0.013	0.212	
100%	10000	0.170	0.014	0.213	
0%	0	0.142	0.000	0.199	



Tension Load Test Result for PLT-50A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

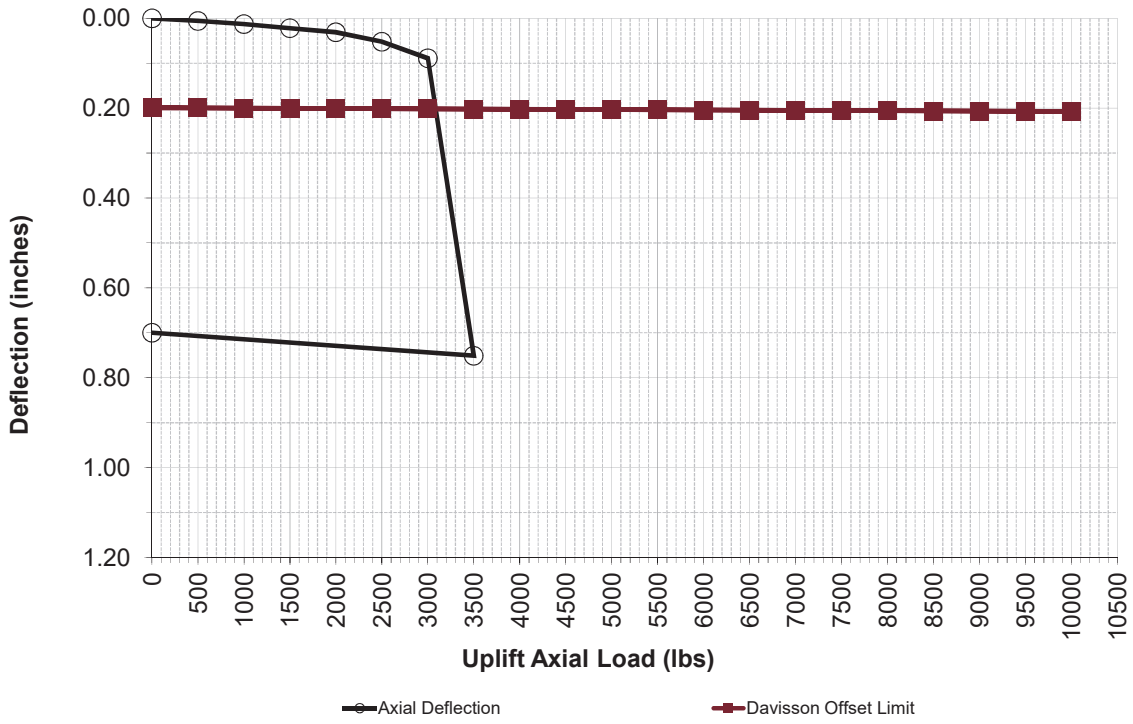
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/16/2022

Pile Information

Pile ID:	PLT-50A
Latitude:	39.29050
Longitude:	-83.82260
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	36
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	20

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 Offest 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	0.013	0.001	0.200	
15%	1500	0.022	0.001	0.200	
20%	2000	0.031	0.002	0.201	
25%	2500	0.052	0.002	0.201	
30%	3000	0.089	0.003	0.202	
35%	3500	0.751	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	0.700	0.000	0.199	



Tension Load Test Result for PLT-50B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

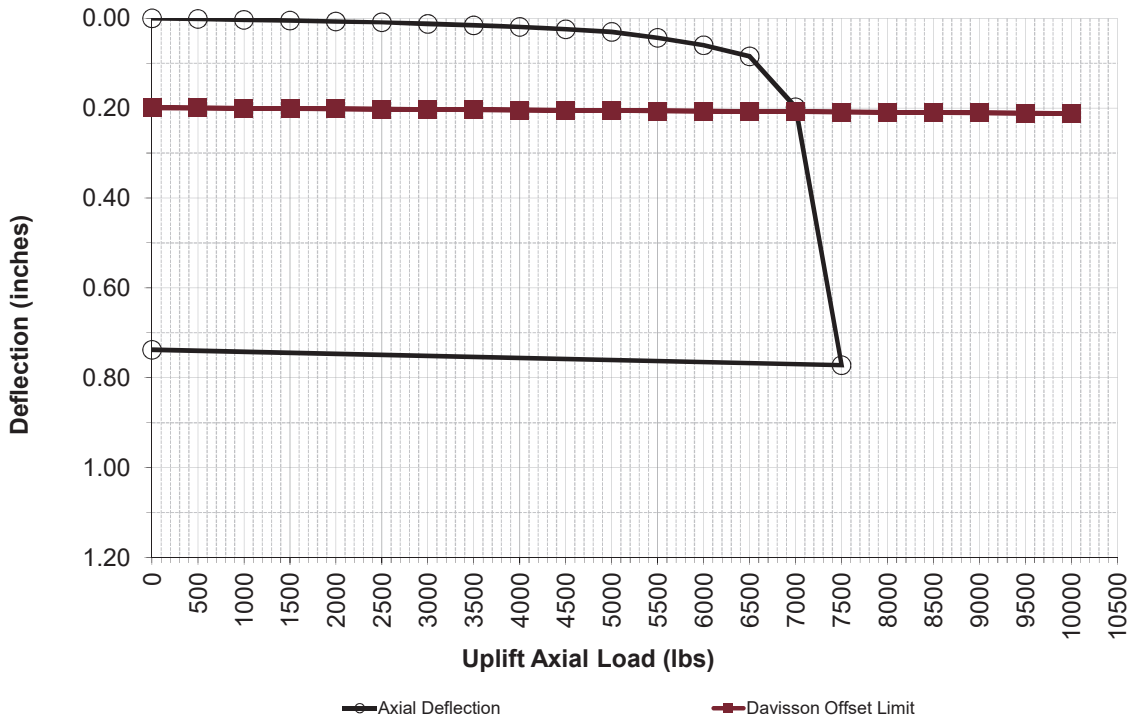
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/16/2022

Pile Information

Pile ID:	PLT-50B
Latitude:	39.29050
Longitude:	-83.82260
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	48
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	63

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 Offest 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	0.005	0.002	0.201	
20%	2000	0.007	0.003	0.202	
25%	2500	0.009	0.003	0.202	
30%	3000	0.013	0.004	0.203	
35%	3500	0.016	0.004	0.204	
40%	4000	0.019	0.005	0.204	
45%	4500	0.025	0.006	0.205	
50%	5000	0.031	0.006	0.205	
55%	5500	0.044	0.007	0.206	
60%	6000	0.060	0.008	0.207	
65%	6500	0.085	0.008	0.207	
70%	7000	0.198	0.009	0.208	
75%	7500	0.772	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	0.738	0.000	0.199	



Tension Load Test Result for PLT-1A

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Axial Load Test Set Up

Number of Gauges:	2
Height of Gauges [in]:	6
Load Cell:	Dillon ED Junior

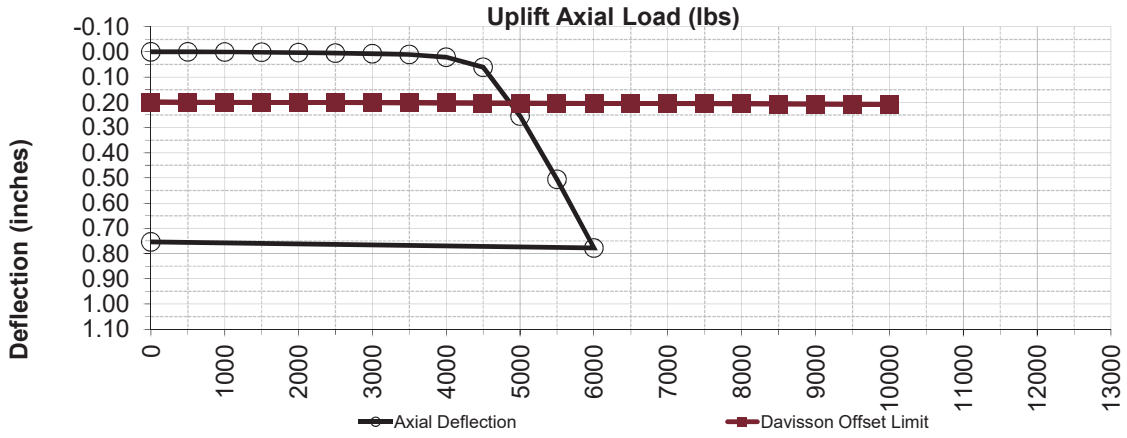
Test Date and Representative

Tested By Terracon Rep:	J. Lombaridi
Date Tested:	8/13/2020

Pile Information

Pile ID:	PLT-1A
Latitude:	39.27433
Longitude:	-83.79885
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	36
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	93.15

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 Offest 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	0.000	0.001	0.200	
15%	1500	0.001	0.001	0.200	
20%	2000	0.002	0.002	0.201	
25%	2500	0.005	0.002	0.201	
30%	3000	0.007	0.003	0.202	
35%	3500	0.010	0.003	0.202	
40%	4000	0.021	0.003	0.203	
45%	4500	0.061	0.004	0.203	
50%	5000	0.254	0.004	0.203	
55%	5500	0.506	0.005	0.204	
60%	6000	0.778	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	0.754	0.000	0.199	



Tension Load Test Result for PLT-1B

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Axial Load Test Set Up

Number of Gauges:	2
Height of Gauges [in]:	6
Load Cell:	Dillon ED Junior

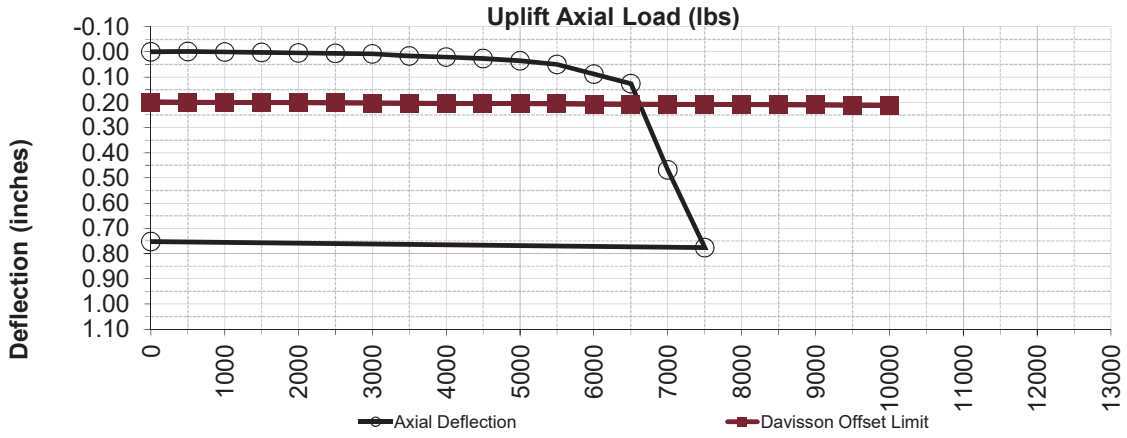
Test Date and Representative

Tested By Terracon Rep:	J. Lombaridi
Date Tested:	8/13/2020

Pile Information

Pile ID:	PLT-1B
Latitude:	39.27433
Longitude:	-83.79885
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	36
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	368.99

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 Offest 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	0.001	0.001	0.200	
15%	1500	0.002	0.002	0.201	
20%	2000	0.004	0.003	0.202	
25%	2500	0.006	0.003	0.202	
30%	3000	0.008	0.004	0.203	
35%	3500	0.016	0.004	0.204	
40%	4000	0.021	0.005	0.204	
45%	4500	0.026	0.006	0.205	
50%	5000	0.035	0.006	0.205	
55%	5500	0.050	0.007	0.206	
60%	6000	0.088	0.008	0.207	
65%	6500	0.125	0.008	0.207	
70%	7000	0.468	0.009	0.208	
75%	7500	0.777	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	0.752	0.000	0.199	



Tension Load Test Result for PLT-2A

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Axial Load Test Set Up

Number of Gauges:	2
Height of Gauges [in]:	6
Load Cell:	Dillon ED Junior

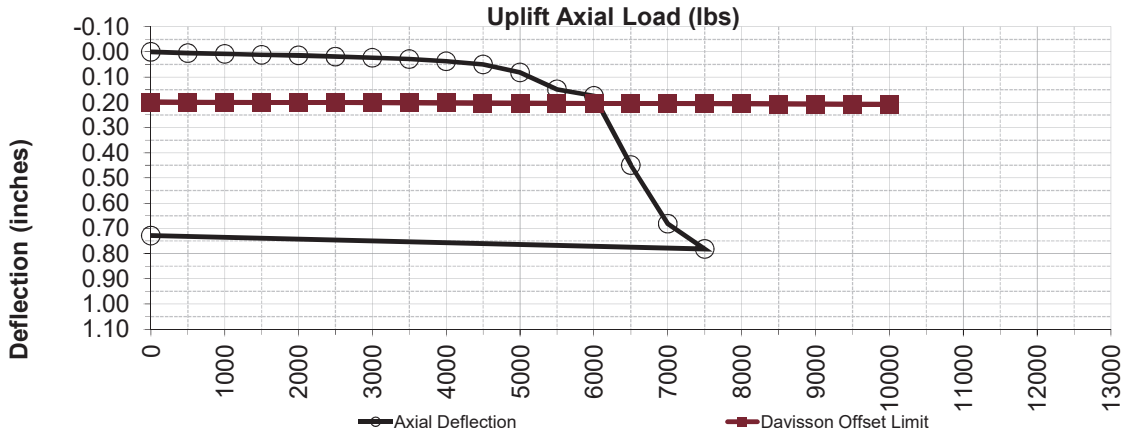
Test Date and Representative

Tested By Terracon Rep:	J. Lombaridi
Date Tested:	8/13/2020

Pile Information

Pile ID:	PLT-2A
Latitude:	39.26245
Longitude:	-83.82553
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	36
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	71.11

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 Offest 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	0.008	0.001	0.200	
15%	1500	0.011	0.001	0.200	
20%	2000	0.014	0.002	0.201	
25%	2500	0.019	0.002	0.201	
30%	3000	0.023	0.003	0.202	
35%	3500	0.029	0.003	0.202	
40%	4000	0.037	0.003	0.203	
45%	4500	0.050	0.004	0.203	
50%	5000	0.081	0.004	0.203	
55%	5500	0.149	0.005	0.204	
60%	6000	0.175	0.005	0.204	
65%	6500	0.449	0.005	0.205	
70%	7000	0.682	0.006	0.205	
75%	7500	0.782	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-2B

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Axial Load Test Set Up

Number of Gauges:	2
Height of Gauges [in]:	6
Load Cell:	Dillon ED Junior

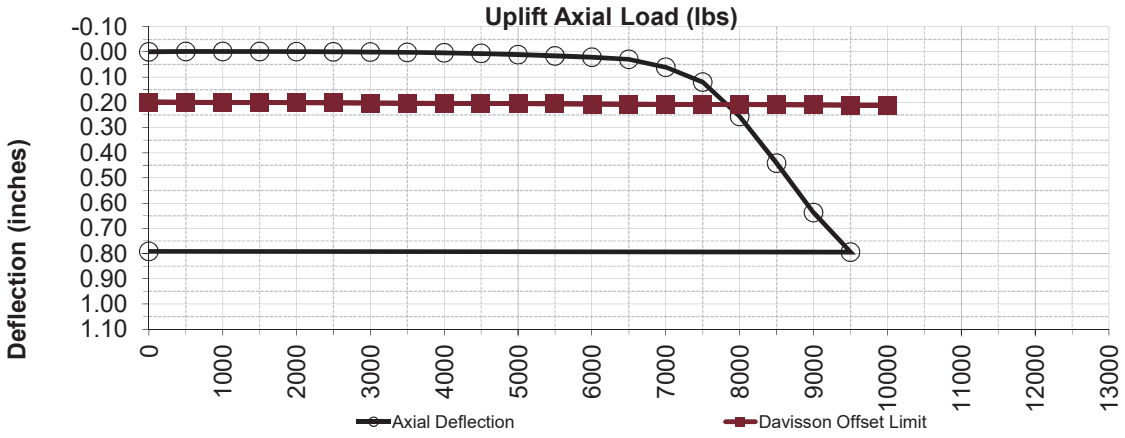
Test Date and Representative

Tested By Terracon Rep:	J. Lombaridi
Date Tested:	8/13/2020

Pile Information

Pile ID:	PLT-2B
Latitude:	39.26245
Longitude:	-83.82553
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	36
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	215.8

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 Offest 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	-0.002	0.002	0.201	
20%	2000	-0.001	0.003	0.202	
25%	2500	0.000	0.003	0.202	
30%	3000	0.001	0.004	0.203	
35%	3500	0.002	0.004	0.204	
40%	4000	0.003	0.005	0.204	
45%	4500	0.005	0.006	0.205	
50%	5000	0.010	0.006	0.205	
55%	5500	0.016	0.007	0.206	
60%	6000	0.021	0.008	0.207	
65%	6500	0.029	0.008	0.207	
70%	7000	0.061	0.009	0.208	
75%	7500	0.120	0.009	0.209	
80%	8000	0.256	0.010	0.209	
85%	8500	0.442	0.011	0.210	
90%	9000	0.638	0.011	0.210	
95%	9500	0.794	0.012	0.211	
100%	10000		0.013	0.212	
0%	0	0.792	0.000	0.199	



Tension Load Test Result for PLT-3A

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Axial Load Test Set Up

Number of Gauges:	2
Height of Gauges [in]:	6
Load Cell:	Dillon ED Junior

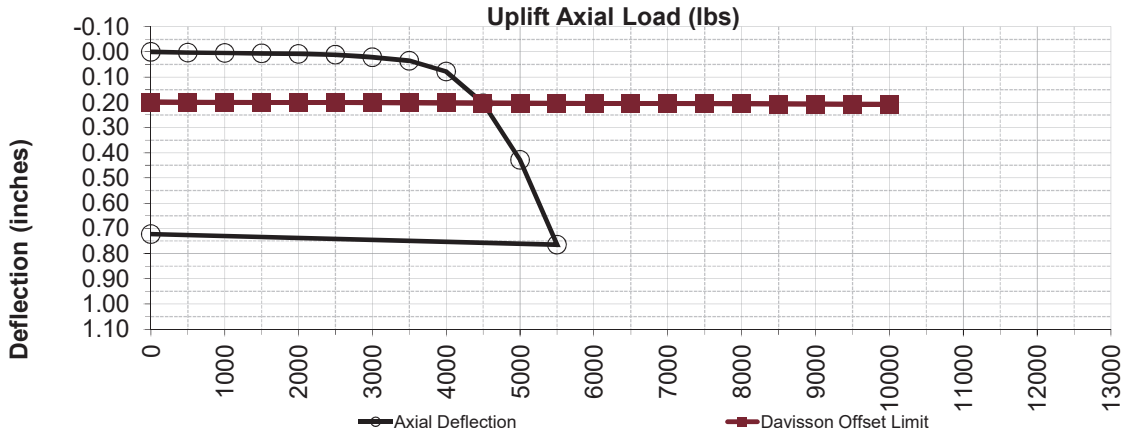
Test Date and Representative

Tested By Terracon Rep:	J. Lombaridi
Date Tested:	8/13/2020

Pile Information

Pile ID:	PLT-3A
Latitude:	39.25659
Longitude:	-83.82340
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	36
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	66.24

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 Offest Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.003	0.000	0.200	
10%	1000	0.004	0.001	0.200	
15%	1500	0.006	0.001	0.200	
20%	2000	0.007	0.002	0.201	
25%	2500	0.011	0.002	0.201	
30%	3000	0.021	0.003	0.202	
35%	3500	0.035	0.003	0.202	
40%	4000	0.078	0.003	0.203	
45%	4500	0.204	0.004	0.203	
50%	5000	0.428	0.004	0.203	
55%	5500	0.765	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	0.723	0.000	0.199	



Tension Load Test Result for PLT-3B

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Axial Load Test Set Up

Number of Gauges:	2
Height of Gauges [in]:	6
Load Cell:	Dillon ED Junior

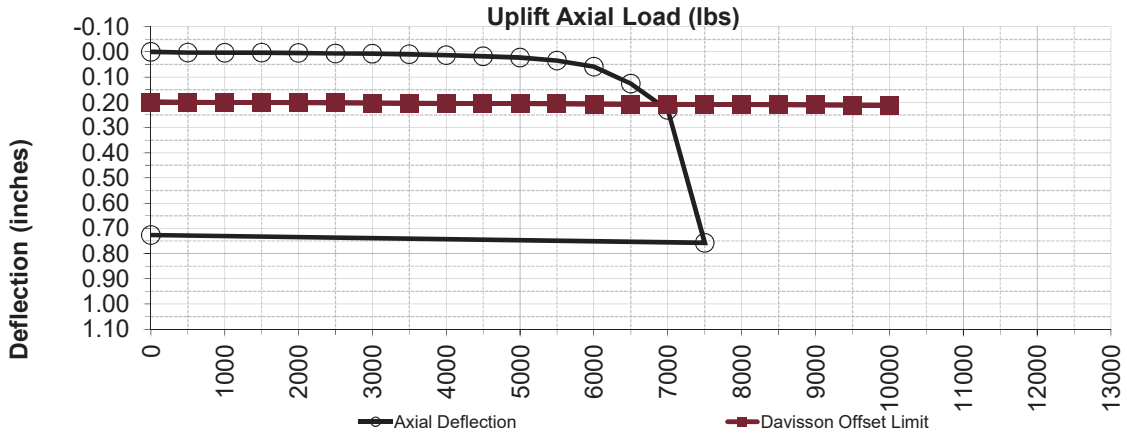
Test Date and Representative

Tested By Terracon Rep:	J. Lombaridi
Date Tested:	8/13/2020

Pile Information

Pile ID:	PLT-3B
Latitude:	39.25659
Longitude:	-83.82340
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	36
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	140.43

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 Offest 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	0.003	0.001	0.200	
15%	1500	0.003	0.002	0.201	
20%	2000	0.004	0.003	0.202	
25%	2500	0.007	0.003	0.202	
30%	3000	0.007	0.004	0.203	
35%	3500	0.010	0.004	0.204	
40%	4000	0.013	0.005	0.204	
45%	4500	0.017	0.006	0.205	
50%	5000	0.023	0.006	0.205	
55%	5500	0.034	0.007	0.206	
60%	6000	0.059	0.008	0.207	
65%	6500	0.126	0.008	0.207	
70%	7000	0.231	0.009	0.208	
75%	7500	0.758	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	0.727	0.000	0.199	



Tension Load Test Result for PLT-4A

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Axial Load Test Set Up

Number of Gauges:	2
Height of Gauges [in]:	6
Load Cell:	Dillon ED Junior

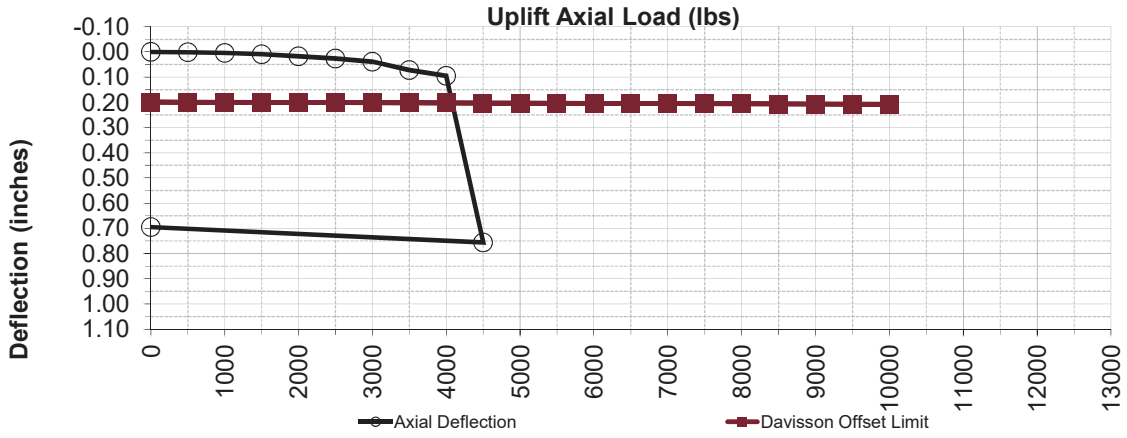
Test Date and Representative

Tested By Terracon Rep:	J. Lombaridi
Date Tested:	8/14/2020

Pile Information

Pile ID:	PLT-4A
Latitude:	39.25756
Longitude:	-83.84239
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	36
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	51.66

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 Offest 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	0.017	0.002	0.201	
25%	2500	0.026	0.002	0.201	
30%	3000	0.039	0.003	0.202	
35%	3500	0.072	0.003	0.202	
40%	4000	0.095	0.003	0.203	
45%	4500	0.756	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	0.695	0.000	0.199	



Tension Load Test Result for PLT-4B

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Axial Load Test Set Up

Number of Gauges:	2
Height of Gauges [in]:	6
Load Cell:	Dillon ED Junior

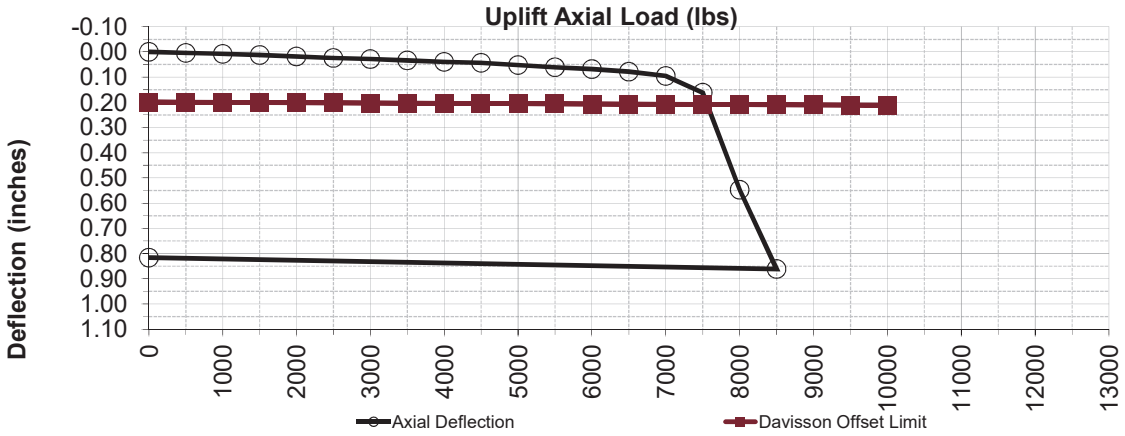
Test Date and Representative

Tested By Terracon Rep:	J. Lombaridi
Date Tested:	8/14/2020

Pile Information

Pile ID:	PLT-4B
Latitude:	39.25756
Longitude:	-83.84239
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	36
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	177.23

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 Offest 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	0.008	0.001	0.200	
15%	1500	0.013	0.002	0.201	
20%	2000	0.018	0.003	0.202	
25%	2500	0.024	0.003	0.202	
30%	3000	0.029	0.004	0.203	
35%	3500	0.034	0.004	0.204	
40%	4000	0.039	0.005	0.204	
45%	4500	0.043	0.006	0.205	
50%	5000	0.052	0.006	0.205	
55%	5500	0.061	0.007	0.206	
60%	6000	0.068	0.008	0.207	
65%	6500	0.079	0.008	0.207	
70%	7000	0.096	0.009	0.208	
75%	7500	0.162	0.009	0.209	
80%	8000	0.547	0.010	0.209	
85%	8500	0.862	0.011	0.210	
90%	9000		0.011	0.210	
95%	9500		0.012	0.211	
100%	10000		0.013	0.212	
0%	0	0.816	0.000	0.199	



Tension Load Test Result for PLT-5A

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Axial Load Test Set Up

Number of Gauges:	2
Height of Gauges [in]:	6
Load Cell:	Dillon ED Junior

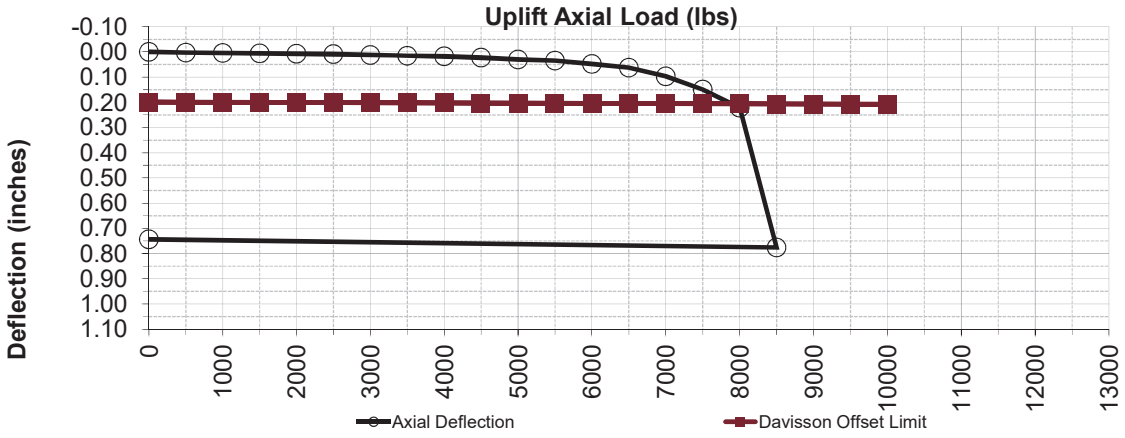
Test Date and Representative

Tested By Terracon Rep:	J. Lombaridi
Date Tested:	8/14/2020

Pile Information

Pile ID:	PLT-5A
Latitude:	39.26657
Longitude:	-83.85300
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	36
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	107.03

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 Offest Limit (in) (0.15+D/120+(PL/AE))	Comments
0%	0	0.000	0.000	0.199	
5%	500	0.003	0.000	0.200	
10%	1000	0.004	0.001	0.200	
15%	1500	0.006	0.001	0.200	
20%	2000	0.007	0.002	0.201	
25%	2500	0.009	0.002	0.201	
30%	3000	0.012	0.003	0.202	
35%	3500	0.015	0.003	0.202	
40%	4000	0.018	0.003	0.203	
45%	4500	0.022	0.004	0.203	
50%	5000	0.030	0.004	0.203	
55%	5500	0.035	0.005	0.204	
60%	6000	0.048	0.005	0.204	
65%	6500	0.062	0.005	0.205	
70%	7000	0.097	0.006	0.205	
75%	7500	0.149	0.006	0.205	
80%	8000	0.221	0.007	0.206	
85%	8500	0.776	0.007	0.206	
90%	9000		0.008	0.207	
95%	9500		0.008	0.207	
100%	10000		0.008	0.208	
0%	0	0.743	0.000	0.199	



Tension Load Test Result for PLT-5B

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Axial Load Test Set Up

Number of Gauges:	2
Height of Gauges [in]:	6
Load Cell:	Dillon ED Junior

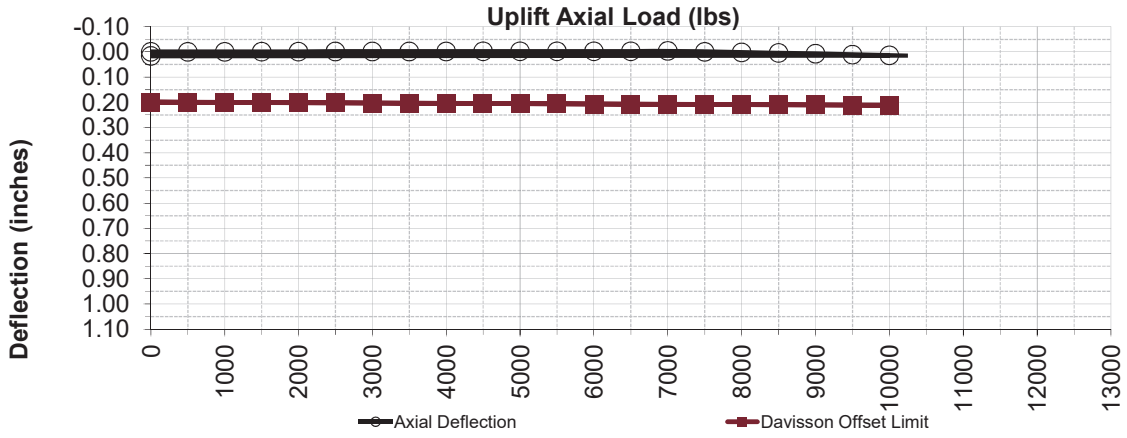
Test Date and Representative

Tested By Terracon Rep:	J. Lombaridi
Date Tested:	8/14/2020

Pile Information

Pile ID:	PLT-5B
Latitude:	39.26657
Longitude:	-83.85300
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	36
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	280.06

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 Offest 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	-0.002	0.005	0.204	
45%	4500	-0.003	0.006	0.205	
50%	5000	-0.003	0.006	0.205	
55%	5500	-0.003	0.007	0.206	
60%	6000	-0.003	0.008	0.207	
65%	6500	-0.003	0.008	0.207	
70%	7000	-0.004	0.009	0.208	
75%	7500	0.000	0.009	0.209	
80%	8000	0.002	0.010	0.209	
85%	8500	0.004	0.011	0.210	
90%	9000	0.007	0.011	0.210	
95%	9500	0.011	0.012	0.211	
100%	10000	0.014	0.013	0.212	
0%	0	0.016	0.000	0.199	



Tension Load Test Result for PLT-6A

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Axial Load Test Set Up

Number of Gauges:	2
Height of Gauges [in]:	6
Load Cell:	Dillon ED Junior

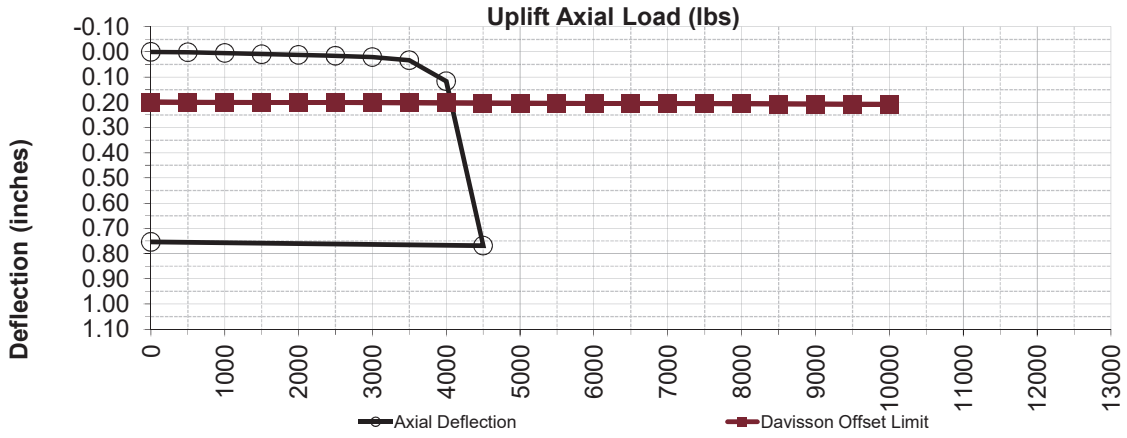
Test Date and Representative

Tested By Terracon Rep:	J. Lombaridi
Date Tested:	8/14/2020

Pile Information

Pile ID:	PLT-6A
Latitude:	39.27376
Longitude:	-83.86502
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	36
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	65.22

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 Offest 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	0.012	0.002	0.201	
25%	2500	0.016	0.002	0.201	
30%	3000	0.020	0.003	0.202	
35%	3500	0.033	0.003	0.202	
40%	4000	0.116	0.003	0.203	
45%	4500	0.769	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	0.754	0.000	0.199	



Tension Load Test Result for PLT-6B

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Axial Load Test Set Up

Number of Gauges:	2
Height of Gauges [in]:	6
Load Cell:	Dillon ED Junior

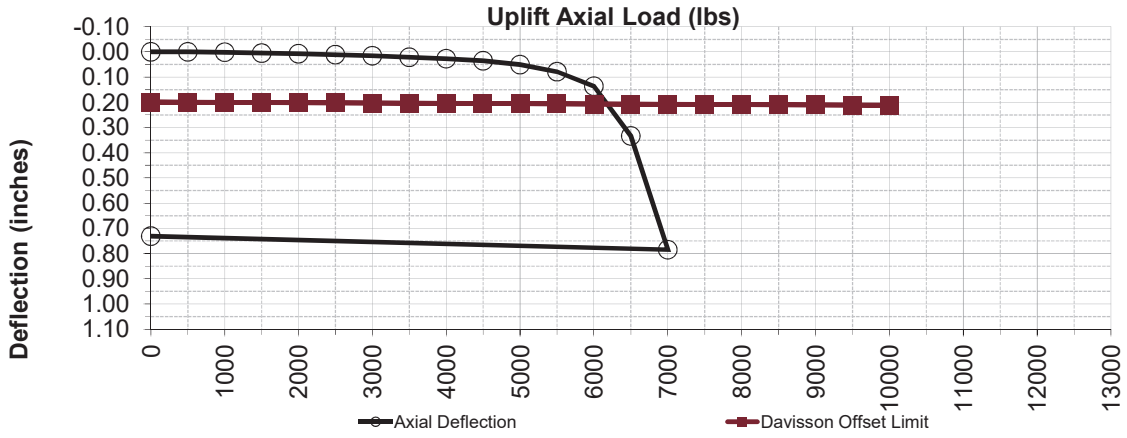
Test Date and Representative

Tested By Terracon Rep:	J. Lombaridi
Date Tested:	8/14/2020

Pile Information

Pile ID:	PLT-6B
Latitude:	39.27376
Longitude:	-83.86502
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	36
Axial Design Load [lbs]:	10000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	243.46

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 Offest 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	0.005	0.002	0.201	
20%	2000	0.007	0.003	0.202	
25%	2500	0.011	0.003	0.202	
30%	3000	0.015	0.004	0.203	
35%	3500	0.021	0.004	0.204	
40%	4000	0.027	0.005	0.204	
45%	4500	0.035	0.006	0.205	
50%	5000	0.051	0.006	0.205	
55%	5500	0.079	0.007	0.206	
60%	6000	0.136	0.008	0.207	
65%	6500	0.333	0.008	0.207	
70%	7000	0.785	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	



LATERAL LOAD TEST RESULT

Lateral Load Test Result for PLT-7A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

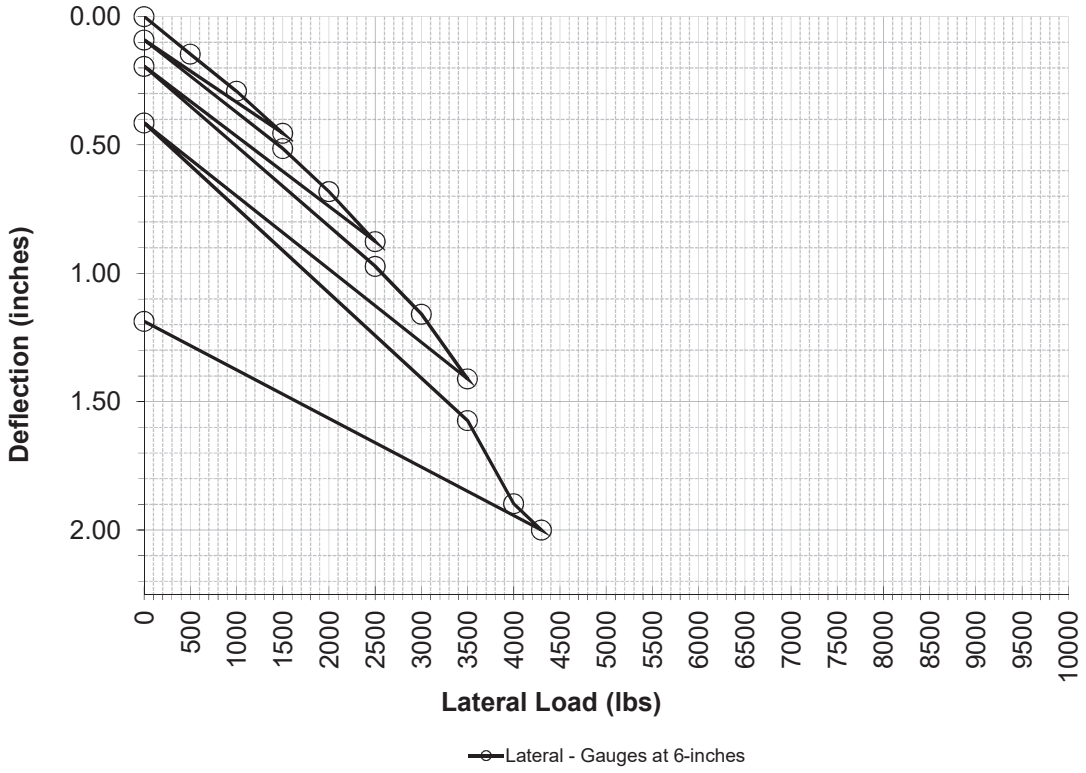
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/20/2022

Pile Information

Pile ID:	PLT-7A
Latitude:	39.28510
Longitude:	-83.83920
Pile Type:	W6X9
Pile Embedment Depth [in]:	84
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	62

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.146	
14%	1000	0.291	
21%	1500	0.454	
0%	0	0.091	
21%	1500	0.514	
29%	2000	0.682	
36%	2500	0.876	
0%	0	0.194	
36%	2500	0.973	
43%	3000	1.159	
50%	3500	1.411	
0%	0	0.414	
50%	3500	1.573	
57%	4000	1.898	
61%	4300	2.000	
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	1.187	



Lateral Load Test Result for PLT-7B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

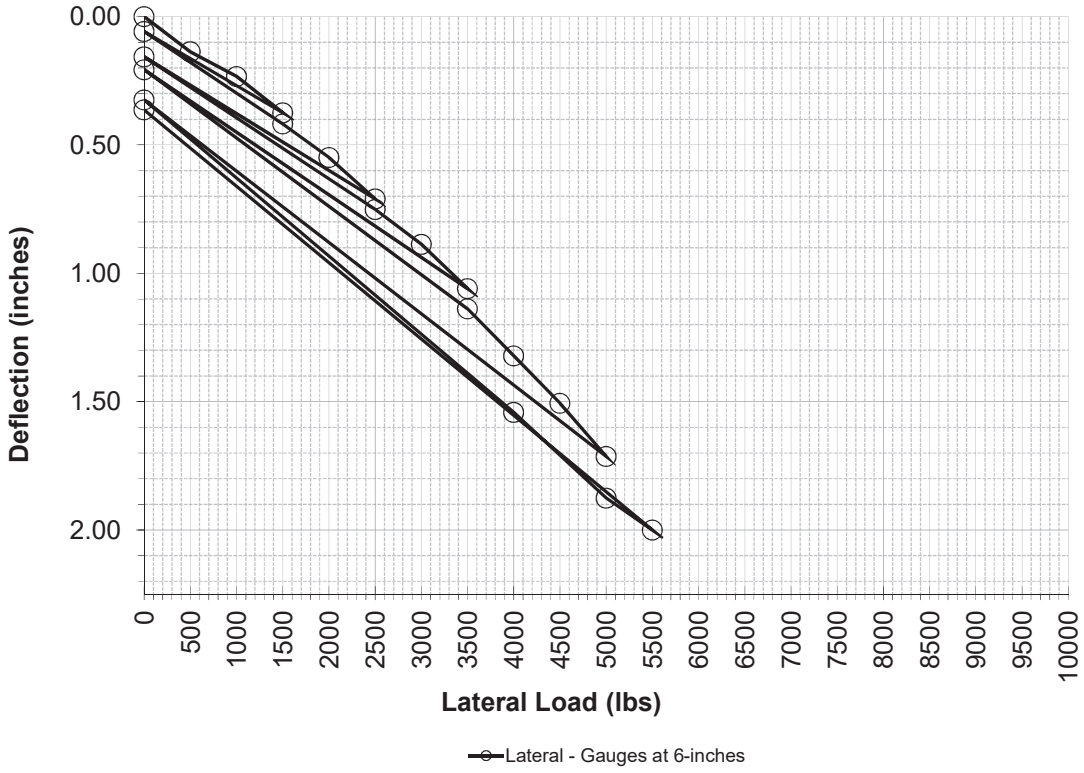
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/20/2022

Pile Information

Pile ID:	PLT-7B
Latitude:	39.28510
Longitude:	-83.83920
Pile Type:	W6X9
Pile Embedment Depth [in]:	120
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	154

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.137	
14%	1000	0.233	
21%	1500	0.375	
0%	0	0.058	
21%	1500	0.418	
29%	2000	0.548	
36%	2500	0.710	
0%	0	0.157	
36%	2500	0.751	
43%	3000	0.887	
50%	3500	1.059	
0%	0	0.207	
50%	3500	1.138	
57%	4000	1.321	
64%	4500	1.506	
71%	5000	1.714	
0%	0	0.325	
57%	4000	1.541	
71%	5000	1.875	
79%	5500	2.000	
86%	6000		
93%	6500		
100%	7000		
0%	0	0.363	



Lateral Load Test Result for PLT-8A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

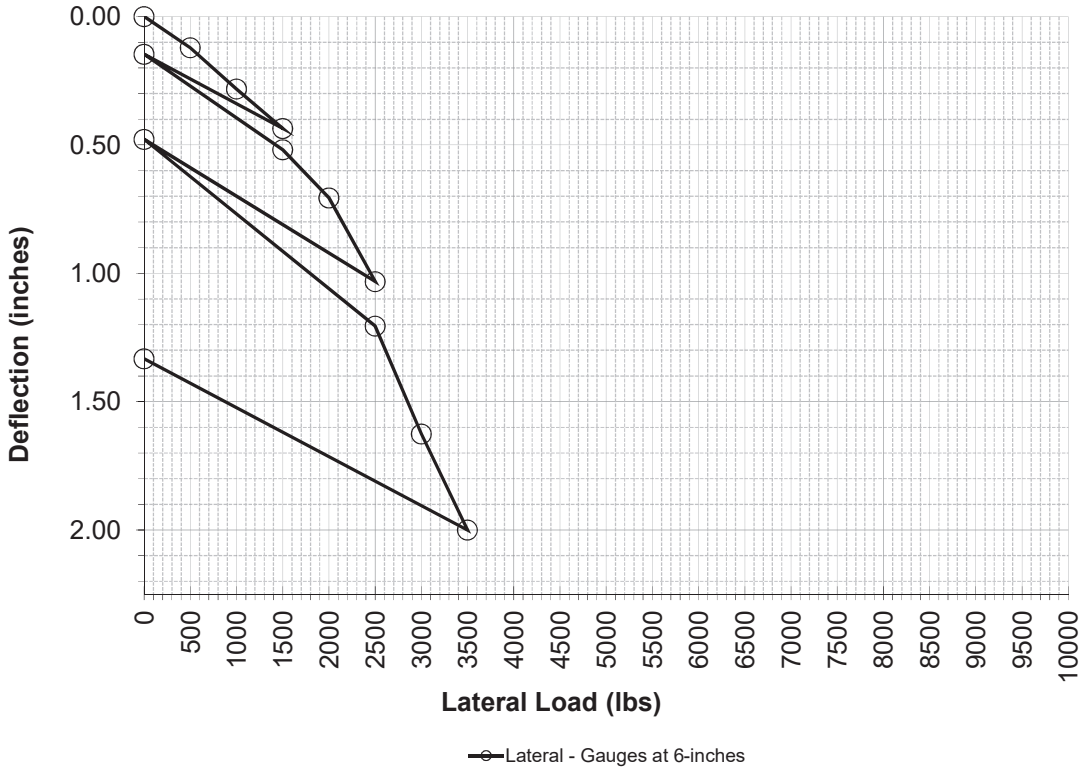
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/20/2022

Pile Information

Pile ID:	PLT-8A
Latitude:	39.27970
Longitude:	-83.84120
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	37

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.122	
14%	1000	0.282	
21%	1500	0.436	
0%	0	0.147	
21%	1500	0.518	
29%	2000	0.706	
36%	2500	1.033	
0%	0	0.479	
36%	2500	1.206	
43%	3000	1.626	
50%	3500	2.000	
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	1.333	



Lateral Load Test Result for PLT-8B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

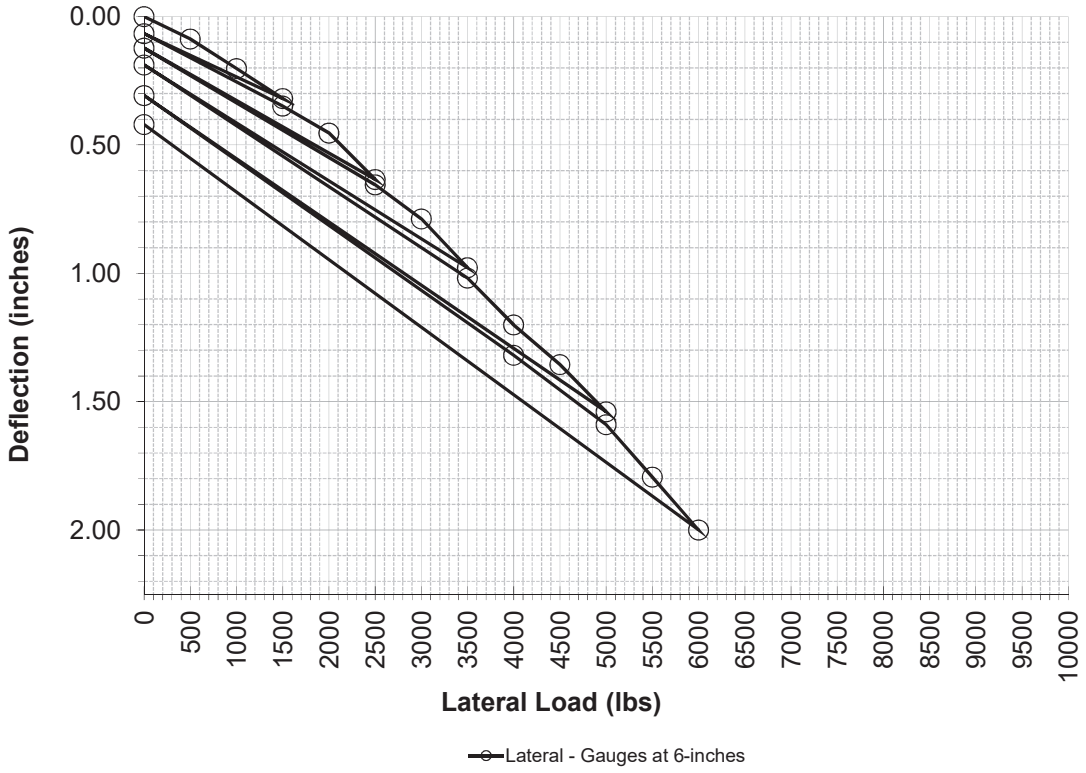
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/20/2022

Pile Information

Pile ID:	PLT-8B
Latitude:	39.27970
Longitude:	-83.84120
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	144

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.087	
14%	1000	0.202	
21%	1500	0.319	
0%	0	0.066	
21%	1500	0.348	
29%	2000	0.454	
36%	2500	0.634	
0%	0	0.123	
36%	2500	0.655	
43%	3000	0.788	
50%	3500	0.979	
0%	0	0.188	
50%	3500	1.019	
57%	4000	1.201	
64%	4500	1.356	
71%	5000	1.539	
0%	0	0.307	
57%	4000	1.319	
71%	5000	1.590	
79%	5500	1.794	
86%	6000	2.000	
93%	6500		
100%	7000		
0%	0	0.420	



Lateral Load Test Result for PLT-9A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

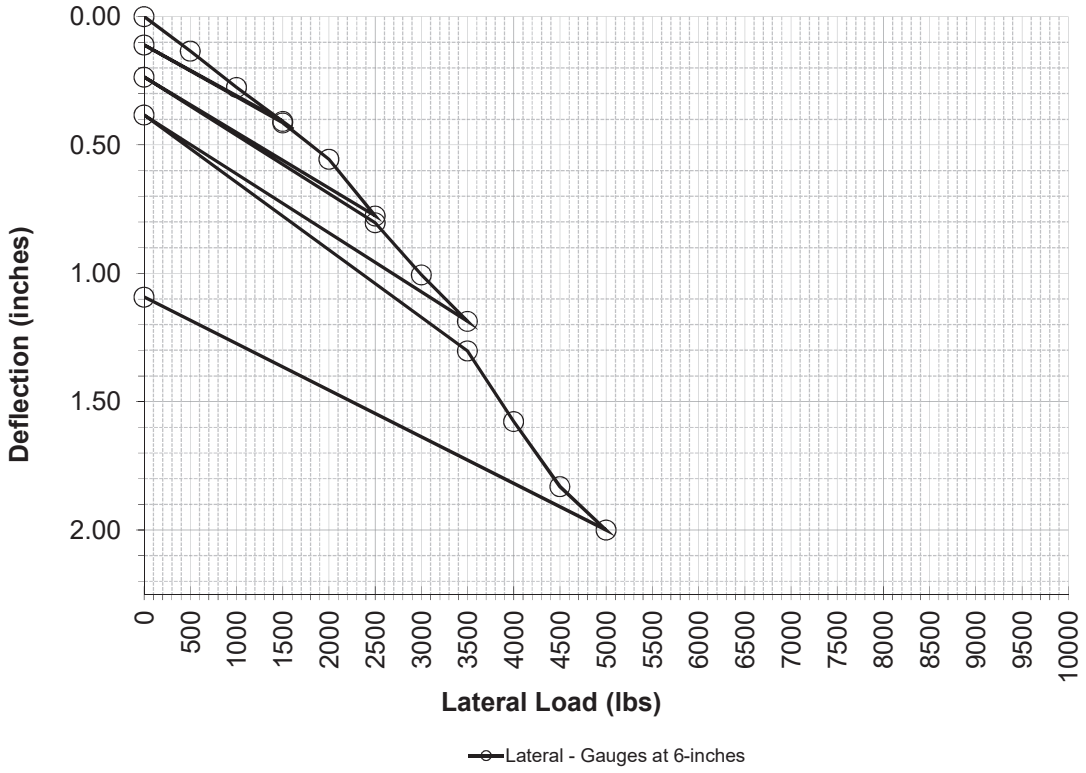
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/17/2022

Pile Information

Pile ID:	PLT-9A
Latitude:	39.28040
Longitude:	-83.83200
Pile Type:	W6X9
Pile Embedment Depth [in]:	84
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	62

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.134	
14%	1000	0.276	
21%	1500	0.408	
0%	0	0.110	
21%	1500	0.414	
29%	2000	0.555	
36%	2500	0.777	
0%	0	0.236	
36%	2500	0.803	
43%	3000	1.006	
50%	3500	1.187	
0%	0	0.383	
50%	3500	1.302	
57%	4000	1.578	
64%	4500	1.831	
71%	5000	2.000	
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	1.093	



Lateral Load Test Result for PLT-9B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

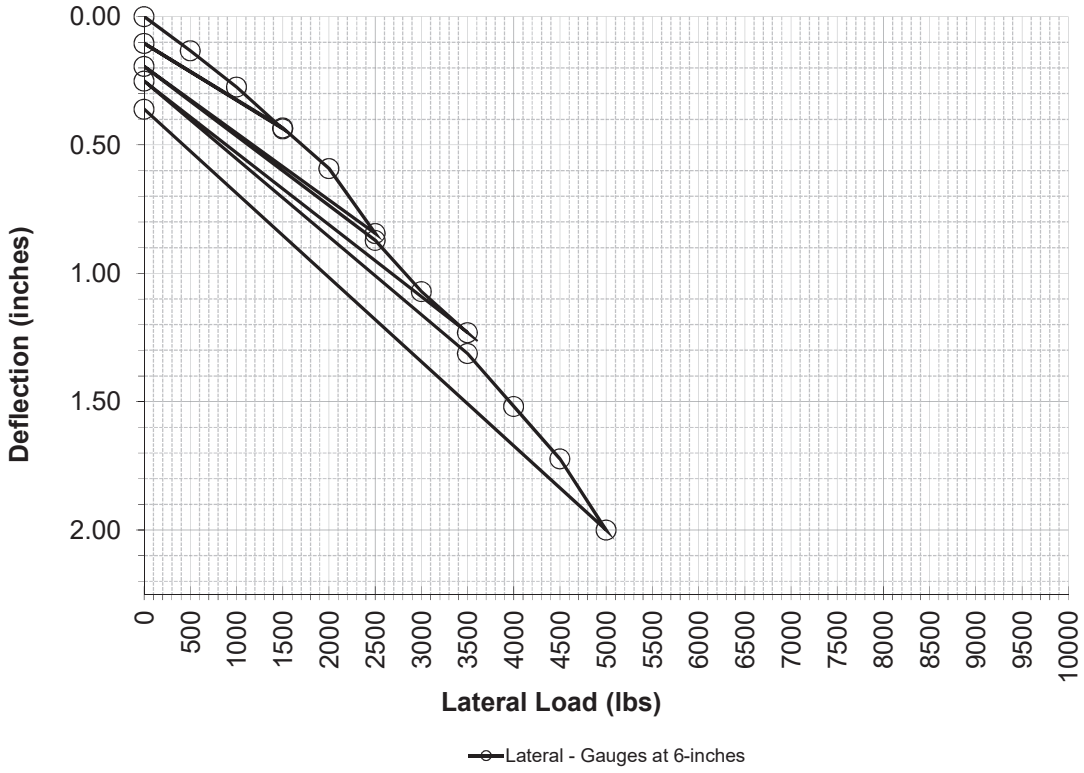
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/17/2022

Pile Information

Pile ID:	PLT-9B
Latitude:	39.28040
Longitude:	-83.83200
Pile Type:	W6X9
Pile Embedment Depth [in]:	120
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	255

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.133	
14%	1000	0.274	
21%	1500	0.437	
0%	0	0.104	
21%	1500	0.433	
29%	2000	0.592	
36%	2500	0.844	
0%	0	0.194	
36%	2500	0.872	
43%	3000	1.071	
50%	3500	1.231	
0%	0	0.251	
50%	3500	1.312	
57%	4000	1.519	
64%	4500	1.723	
71%	5000	2.000	
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.361	



Lateral Load Test Result for PLT-10A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

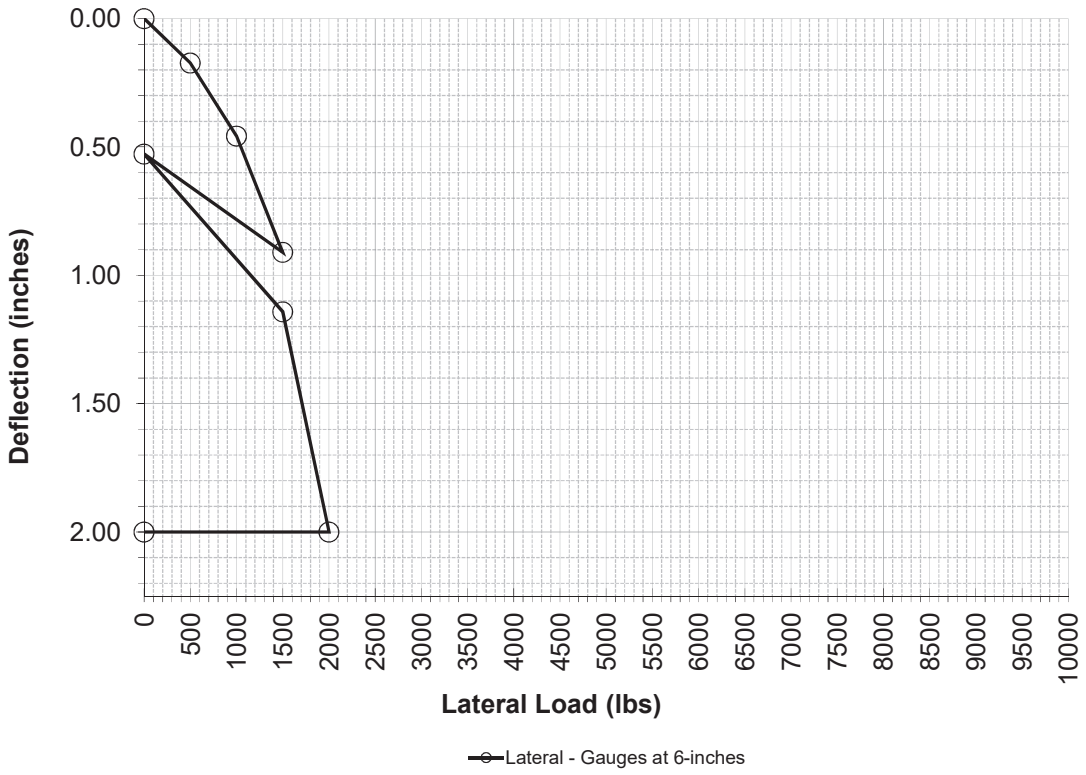
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/16/2022

Pile Information

Pile ID:	PLT-10A
Latitude:	39.28080
Longitude:	-83.82120
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	17

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.173	
14%	1000	0.458	
21%	1500	0.911	
0%	0	0.528	
21%	1500	1.142	
29%	2000	2.000	
36%	2500		
0%	0		
36%	2500		
43%	3000		
50%	3500		
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	2.000	



Lateral Load Test Result for PLT-10B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

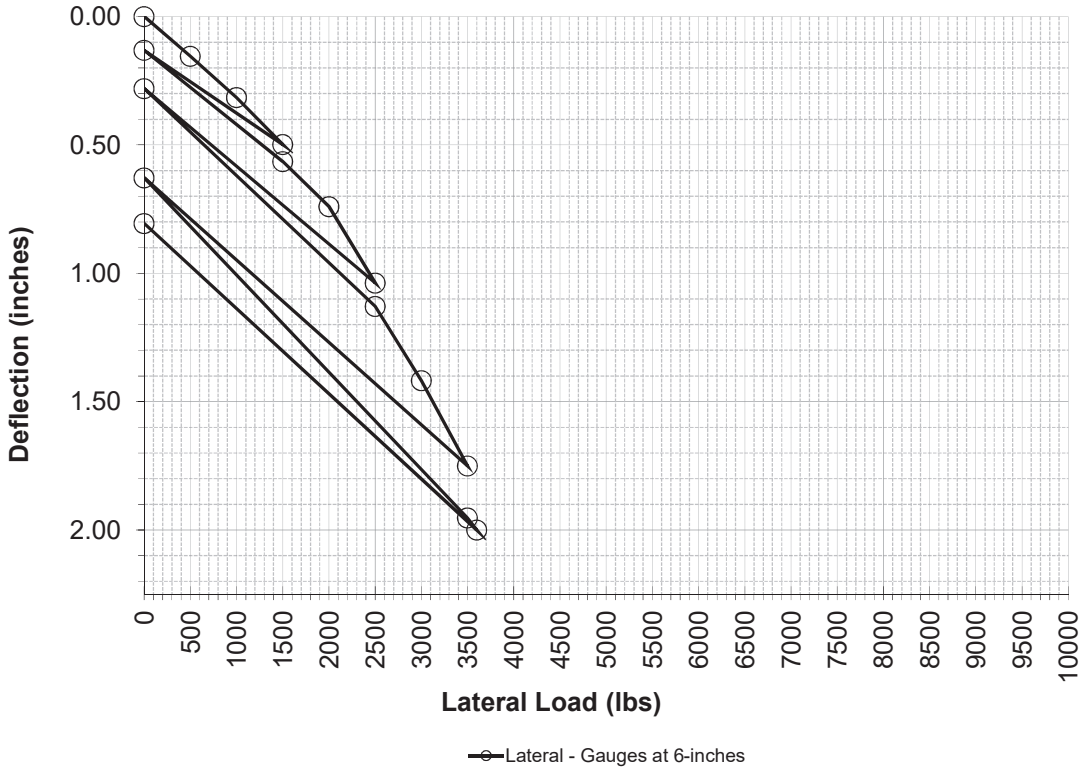
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/16/2022

Pile Information

Pile ID:	PLT-10B
Latitude:	39.28080
Longitude:	-83.82120
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	67

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.155	
14%	1000	0.315	
21%	1500	0.498	
0%	0	0.131	
21%	1500	0.565	
29%	2000	0.740	
36%	2500	1.038	
0%	0	0.280	
36%	2500	1.129	
43%	3000	1.418	
50%	3500	1.751	
0%	0	0.628	
50%	3500	1.953	
51%	3600	2.000	
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.806	



Lateral Load Test Result for PLT-11A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

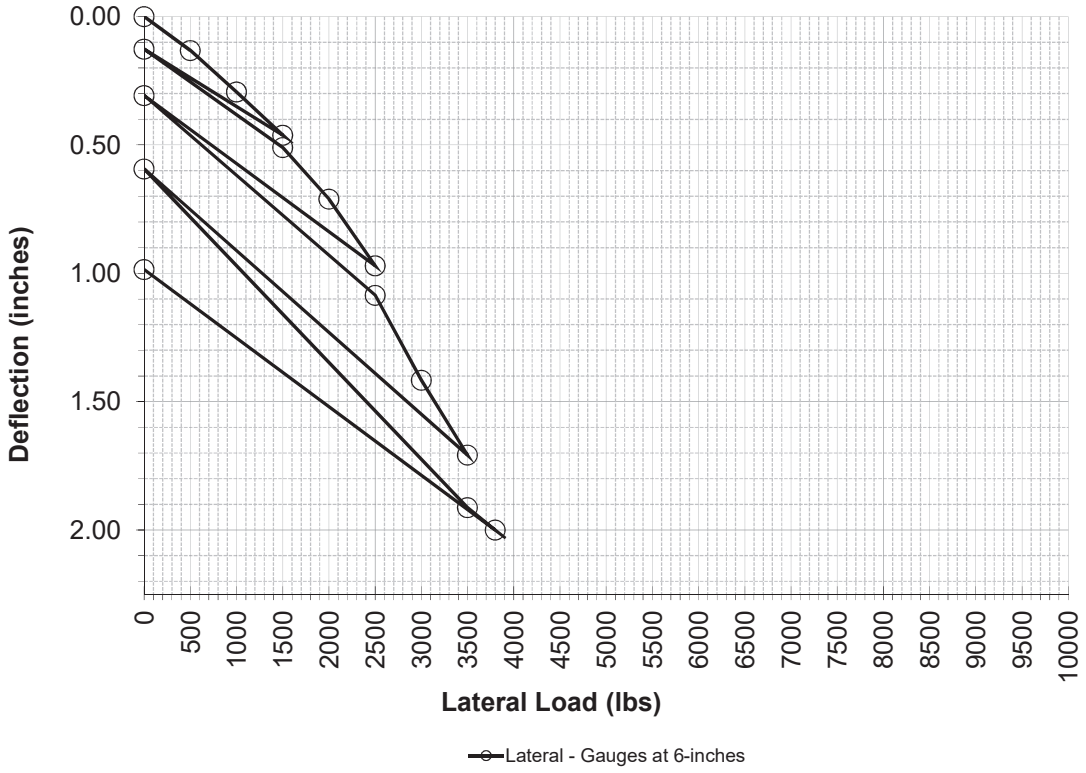
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/14/2022

Pile Information

Pile ID:	PLT-11A
Latitude:	39.27580
Longitude:	-83.81280
Pile Type:	W6X9
Pile Embedment Depth [in]:	84
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	52

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.132	
14%	1000	0.294	
21%	1500	0.462	
0%	0	0.126	
21%	1500	0.510	
29%	2000	0.711	
36%	2500	0.971	
0%	0	0.307	
36%	2500	1.086	
43%	3000	1.417	
50%	3500	1.708	
0%	0	0.594	
50%	3500	1.912	
54%	3800	2.000	
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.985	



Lateral Load Test Result for PLT-11B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

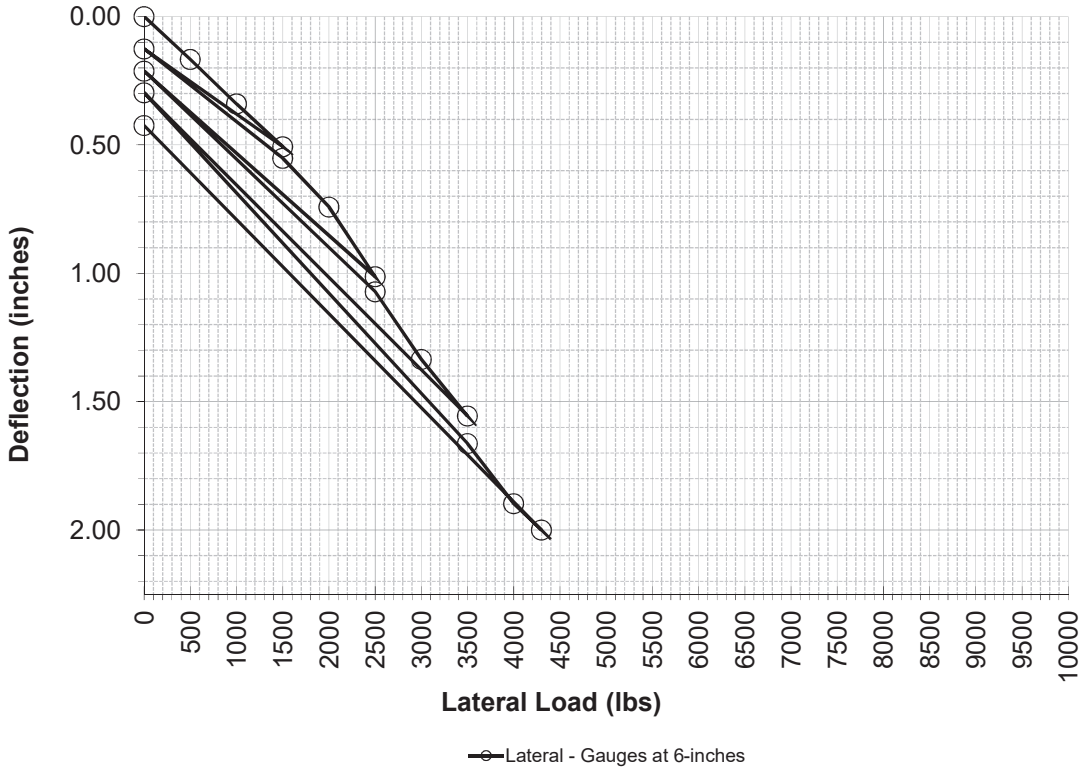
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/14/2022

Pile Information

Pile ID:	PLT-11B
Latitude:	39.27580
Longitude:	-83.81280
Pile Type:	W6X9
Pile Embedment Depth [in]:	120
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	163

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.167	
14%	1000	0.340	
21%	1500	0.507	
0%	0	0.126	
21%	1500	0.552	
29%	2000	0.742	
36%	2500	1.013	
0%	0	0.213	
36%	2500	1.072	
43%	3000	1.335	
50%	3500	1.555	
0%	0	0.296	
50%	3500	1.663	
57%	4000	1.898	
61%	4300	2.000	
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.424	



Lateral Load Test Result for PLT-12A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

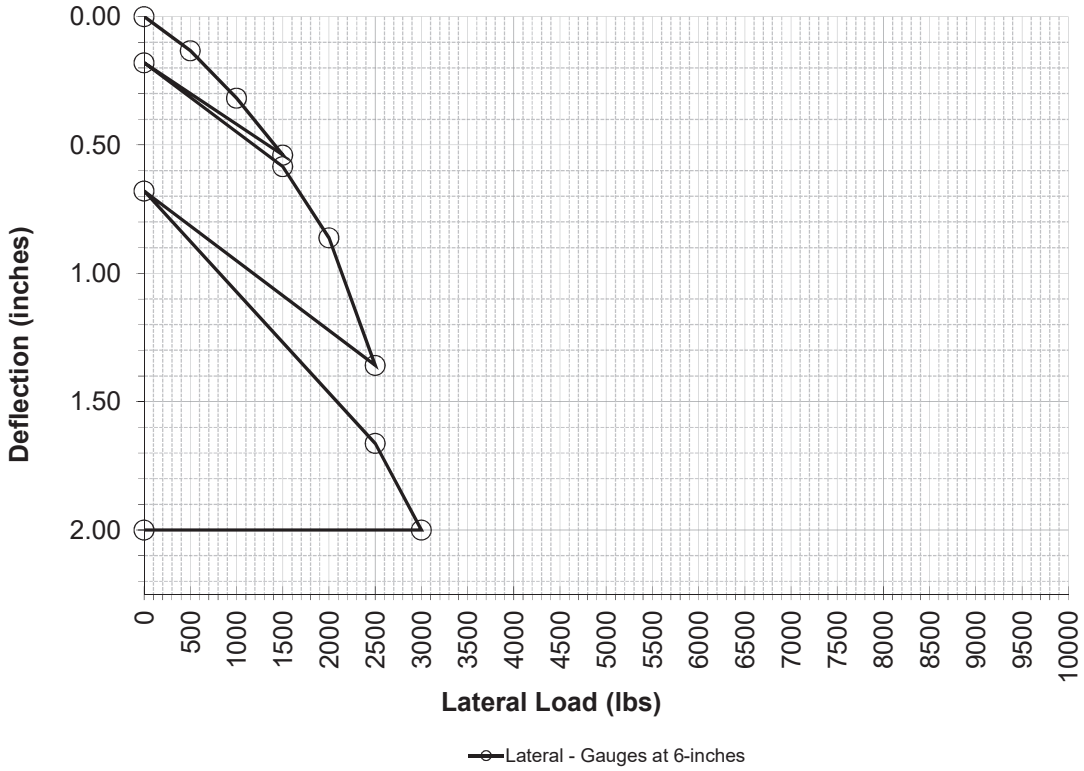
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/15/2022

Pile Information

Pile ID:	PLT-12A
Latitude:	39.27890
Longitude:	-83.80520
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	35

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.133	
14%	1000	0.318	
21%	1500	0.539	
0%	0	0.180	
21%	1500	0.584	
29%	2000	0.862	
36%	2500	1.359	
0%	0	0.679	
36%	2500	1.663	
43%	3000	2.000	
50%	3500		
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	2.000	



Lateral Load Test Result for PLT-12B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

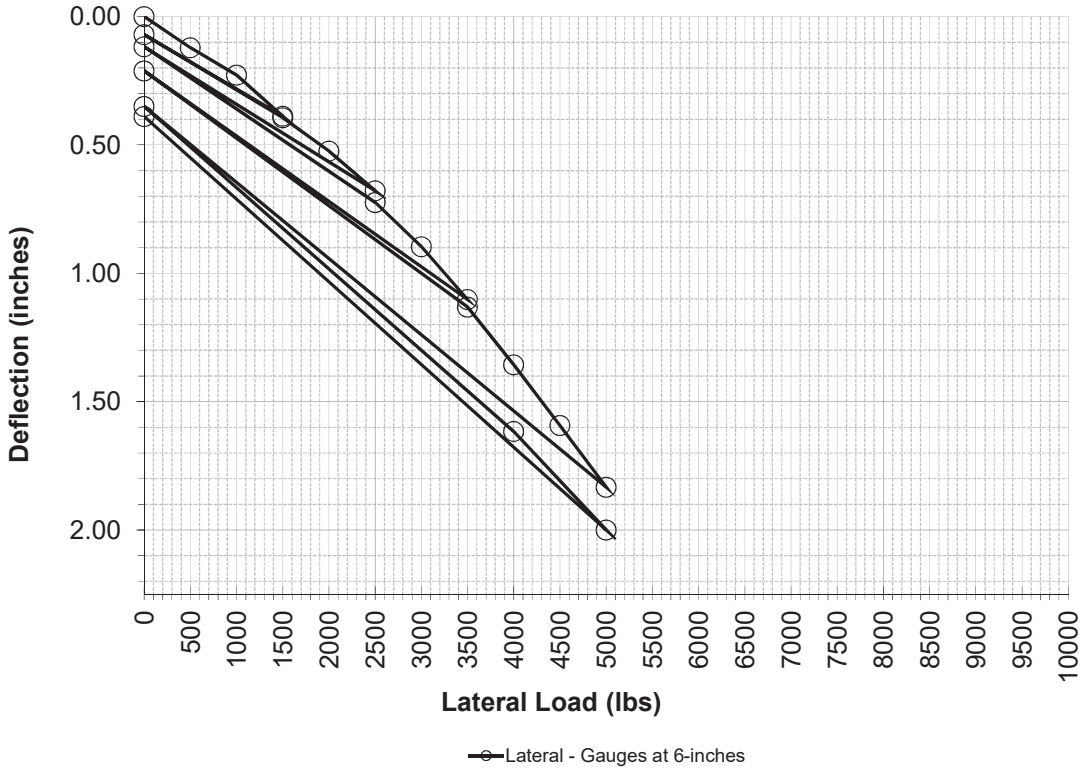
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/15/2022

Pile Information

Pile ID:	PLT-12B
Latitude:	39.27890
Longitude:	-83.80520
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	104

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.122	
14%	1000	0.228	
21%	1500	0.388	
0%	0	0.070	
21%	1500	0.394	
29%	2000	0.524	
36%	2500	0.678	
0%	0	0.118	
36%	2500	0.724	
43%	3000	0.896	
50%	3500	1.102	
0%	0	0.212	
50%	3500	1.131	
57%	4000	1.356	
64%	4500	1.593	
71%	5000	1.833	
0%	0	0.350	
57%	4000	1.616	
71%	5000	2.000	
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.390	



Lateral Load Test Result for PLT-13A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

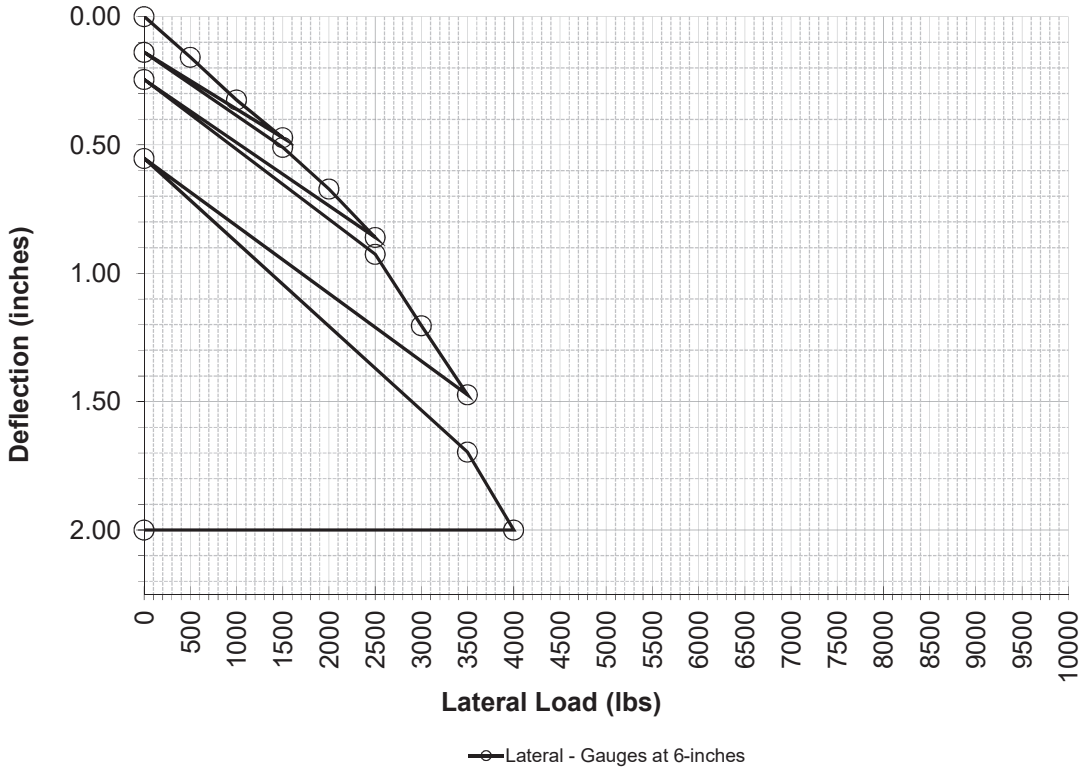
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/15/2022

Pile Information

Pile ID:	PLT-13A
Latitude:	39.27840
Longitude:	-83.79680
Pile Type:	W6X9
Pile Embedment Depth [in]:	84
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	57

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.159	
14%	1000	0.325	
21%	1500	0.472	
0%	0	0.139	
21%	1500	0.509	
29%	2000	0.672	
36%	2500	0.860	
0%	0	0.245	
36%	2500	0.926	
43%	3000	1.204	
50%	3500	1.473	
0%	0	0.553	
50%	3500	1.696	
57%	4000	2.000	
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	2.000	



Lateral Load Test Result for PLT-13B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

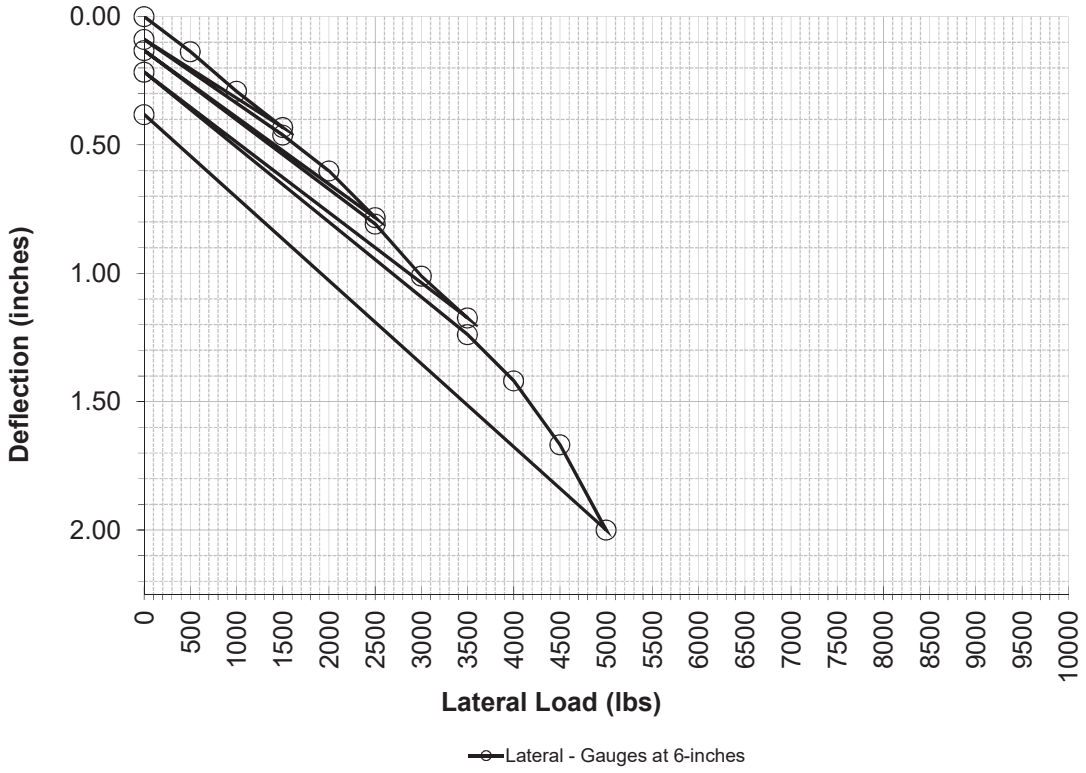
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/15/2022

Pile Information

Pile ID:	PLT-13B
Latitude:	39.27840
Longitude:	-83.79680
Pile Type:	W6X9
Pile Embedment Depth [in]:	120
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	140

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.136	
14%	1000	0.291	
21%	1500	0.432	
0%	0	0.089	
21%	1500	0.461	
29%	2000	0.601	
36%	2500	0.783	
0%	0	0.132	
36%	2500	0.808	
43%	3000	1.011	
50%	3500	1.174	
0%	0	0.216	
50%	3500	1.239	
57%	4000	1.419	
64%	4500	1.667	
71%	5000	2.000	
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.381	



Lateral Load Test Result for PLT-14A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

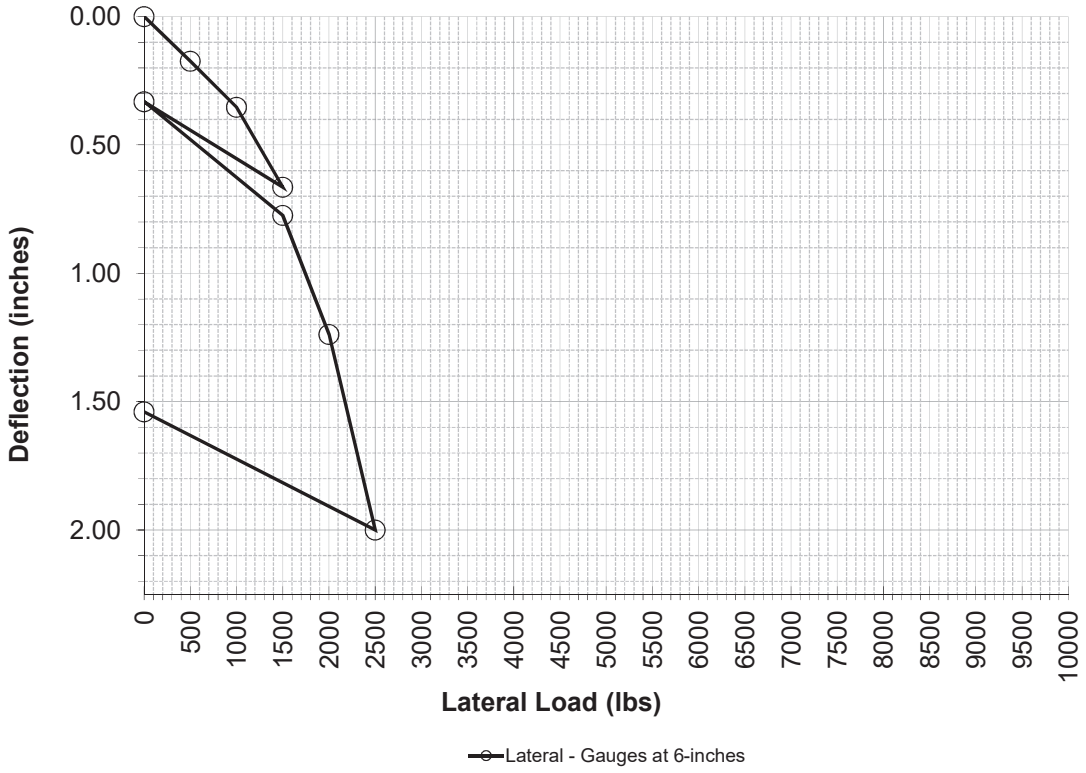
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/15/2022

Pile Information

Pile ID:	PLT-14A
Latitude:	39.28120
Longitude:	-83.79520
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	23

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.174	
14%	1000	0.353	
21%	1500	0.665	
0%	0	0.331	
21%	1500	0.775	
29%	2000	1.238	
36%	2500	2.000	
0%	0		
36%	2500		
43%	3000		
50%	3500		
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	1.540	



Lateral Load Test Result for PLT-14B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

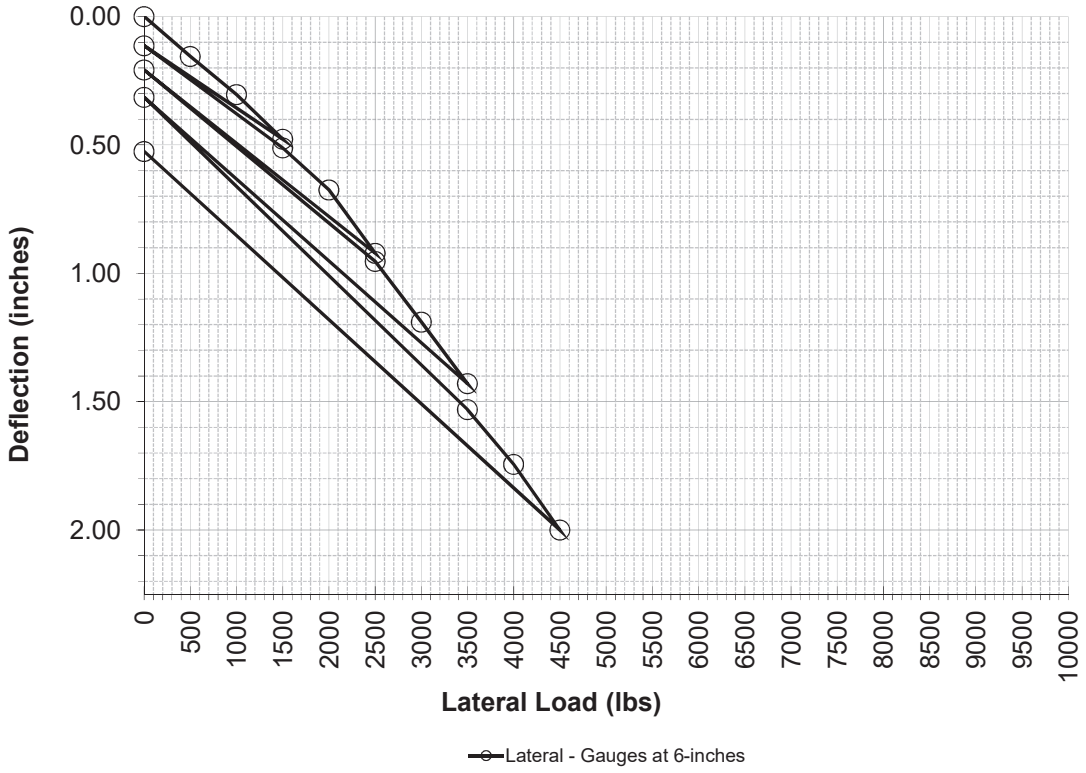
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/15/2022

Pile Information

Pile ID:	PLT-14B
Latitude:	39.28120
Longitude:	-83.79520
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	80

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.155	
14%	1000	0.304	
21%	1500	0.477	
0%	0	0.114	
21%	1500	0.512	
29%	2000	0.675	
36%	2500	0.922	
0%	0	0.208	
36%	2500	0.953	
43%	3000	1.190	
50%	3500	1.429	
0%	0	0.315	
50%	3500	1.531	
57%	4000	1.744	
64%	4500	2.000	
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.525	



Lateral Load Test Result for PLT-15A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

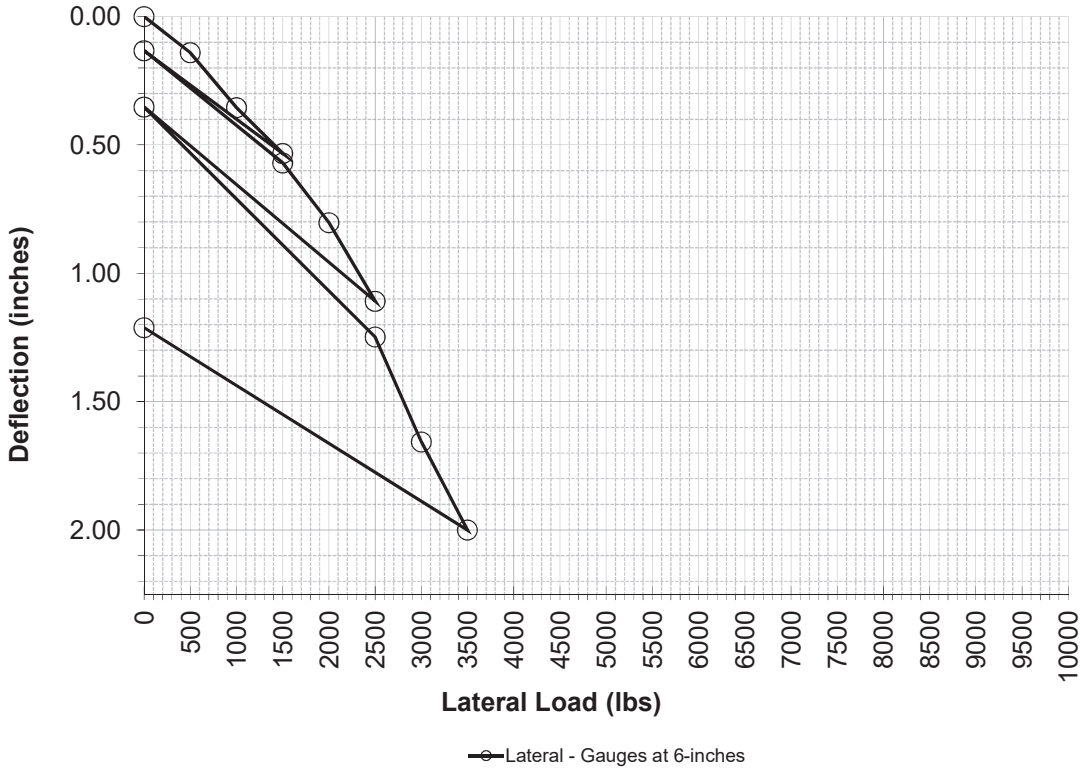
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/15/2022

Pile Information

Pile ID:	PLT-15A
Latitude:	39.27570
Longitude:	-83.80160
Pile Type:	W6X9
Pile Embedment Depth [in]:	0
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	43

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.141	
14%	1000	0.355	
21%	1500	0.533	
0%	0	0.133	
21%	1500	0.570	
29%	2000	0.803	
36%	2500	1.109	
0%	0	0.353	
36%	2500	1.248	
43%	3000	1.657	
50%	3500	2.000	
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	1.212	



Lateral Load Test Result for PLT-15B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

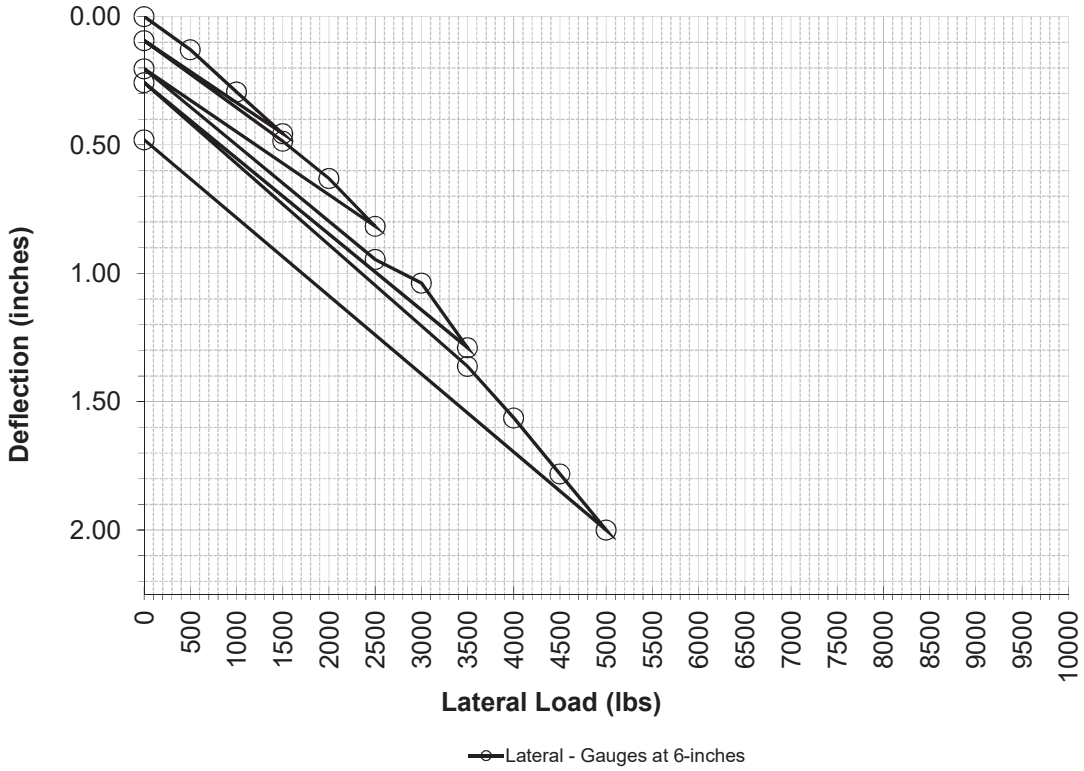
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/15/2022

Pile Information

Pile ID:	PLT-15B
Latitude:	39.27570
Longitude:	-83.80160
Pile Type:	W6X9
Pile Embedment Depth [in]:	0
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	134

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.129	
14%	1000	0.293	
21%	1500	0.456	
0%	0	0.094	
21%	1500	0.485	
29%	2000	0.631	
36%	2500	0.817	
0%	0	0.203	
36%	2500	0.946	
43%	3000	1.038	
50%	3500	1.290	
0%	0	0.258	
50%	3500	1.362	
57%	4000	1.563	
64%	4500	1.781	
71%	5000	2.000	
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.480	



Lateral Load Test Result for PLT-16A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

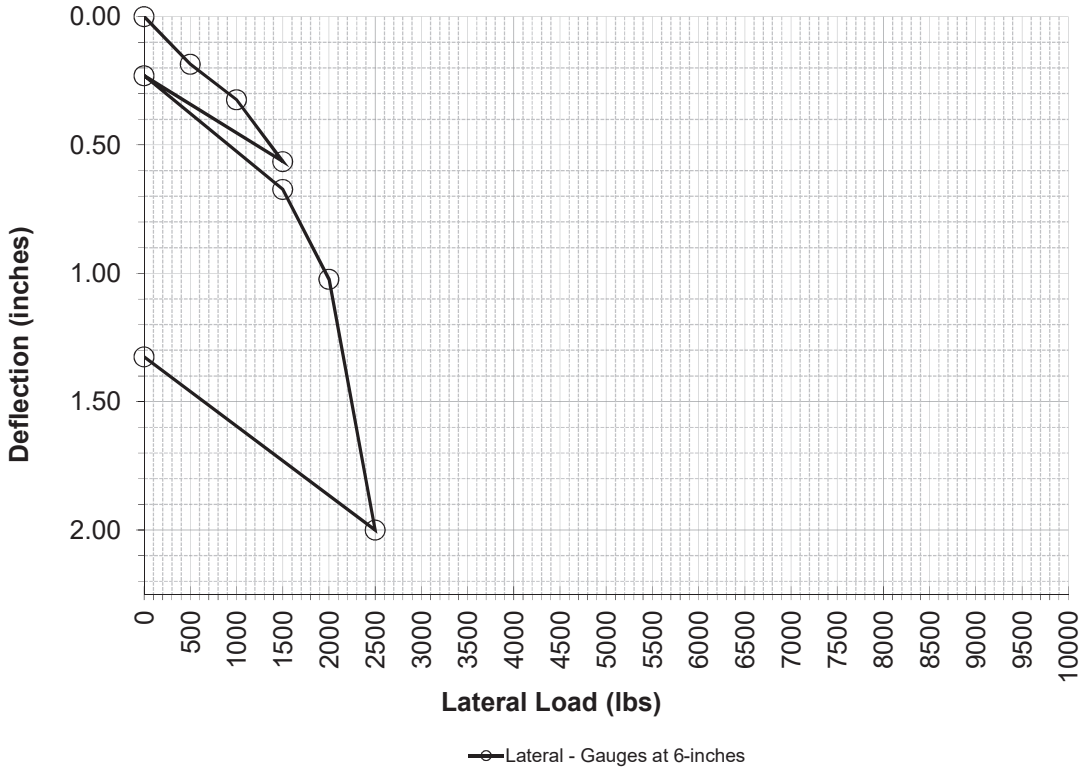
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/15/2022

Pile Information

Pile ID:	PLT-16A
Latitude:	39.27560
Longitude:	-83.79370
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	22

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.185	
14%	1000	0.324	
21%	1500	0.565	
0%	0	0.230	
21%	1500	0.673	
29%	2000	1.023	
36%	2500	2.000	
0%	0		
36%	2500		
43%	3000		
50%	3500		
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	1.326	



Lateral Load Test Result for PLT-16B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

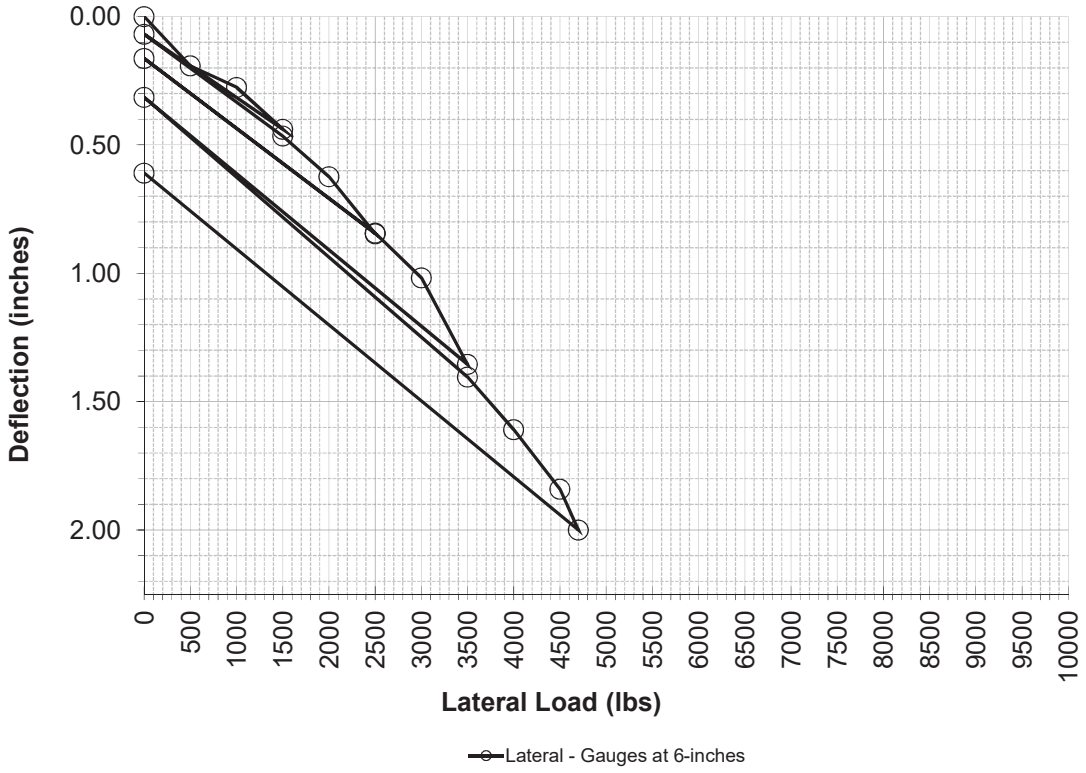
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/15/2022

Pile Information

Pile ID:	PLT-16B
Latitude:	39.27560
Longitude:	-83.79370
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	82

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.192	
14%	1000	0.276	
21%	1500	0.439	
0%	0	0.069	
21%	1500	0.465	
29%	2000	0.624	
36%	2500	0.846	
0%	0	0.163	
36%	2500	0.843	
43%	3000	1.018	
50%	3500	1.354	
0%	0	0.314	
50%	3500	1.404	
57%	4000	1.609	
64%	4500	1.841	
67%	4700	2.000	
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.610	



Lateral Load Test Result for PLT-17A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

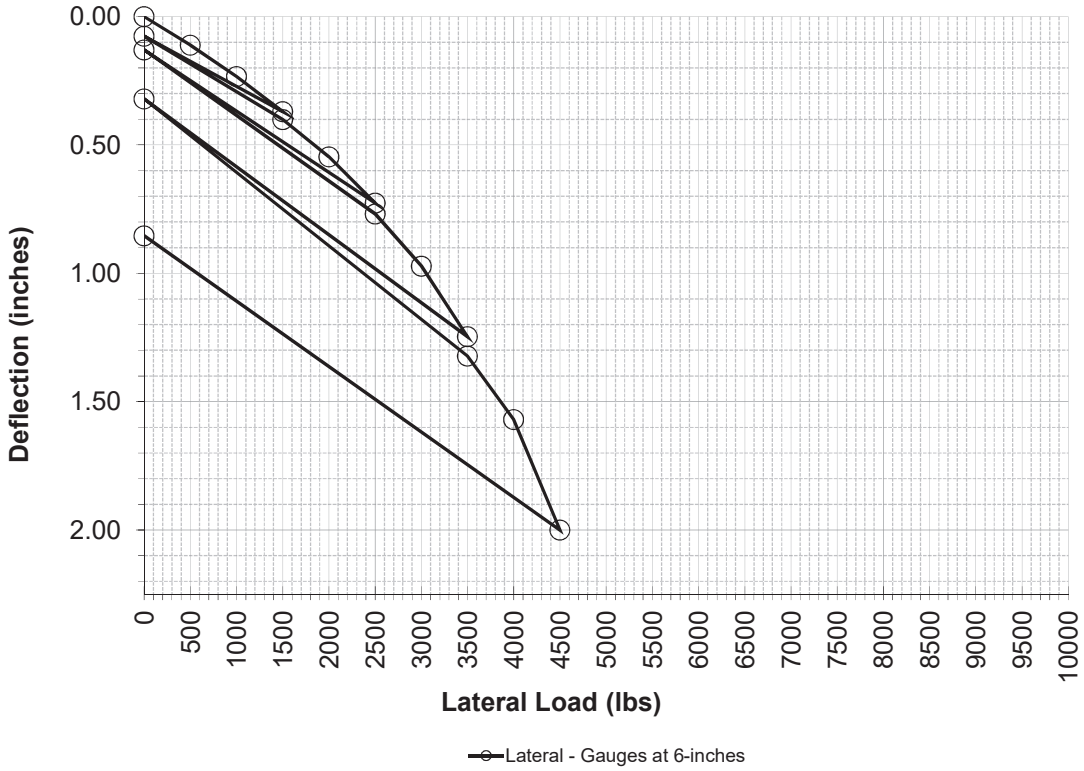
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/20/2022

Pile Information

Pile ID:	PLT-17A
Latitude:	39.27770
Longitude:	-83.86140
Pile Type:	W6X9
Pile Embedment Depth [in]:	84
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	53

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.111	
14%	1000	0.233	
21%	1500	0.370	
0%	0	0.077	
21%	1500	0.401	
29%	2000	0.547	
36%	2500	0.727	
0%	0	0.130	
36%	2500	0.769	
43%	3000	0.972	
50%	3500	1.247	
0%	0	0.321	
50%	3500	1.322	
57%	4000	1.569	
64%	4500	2.000	
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.854	



Lateral Load Test Result for PLT-17B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

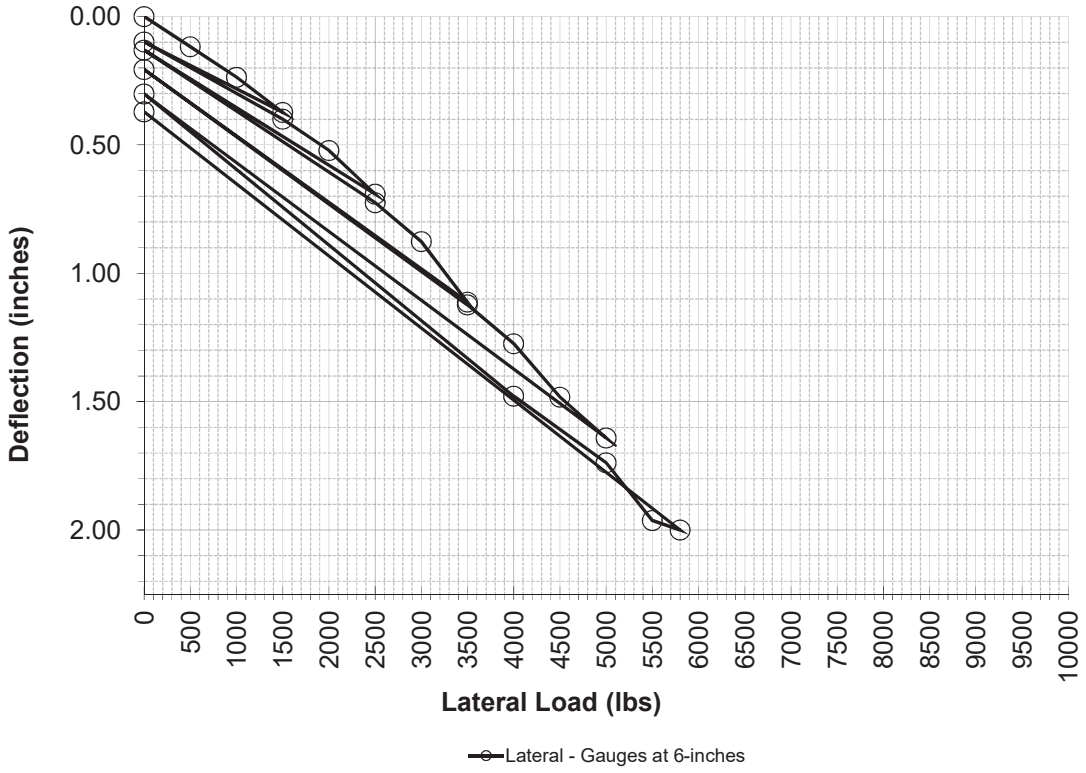
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/20/2022

Pile Information

Pile ID:	PLT-17B
Latitude:	39.27770
Longitude:	-83.86140
Pile Type:	W6X9
Pile Embedment Depth [in]:	120
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	174

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.117	
14%	1000	0.236	
21%	1500	0.373	
0%	0	0.099	
21%	1500	0.399	
29%	2000	0.522	
36%	2500	0.691	
0%	0	0.131	
36%	2500	0.725	
43%	3000	0.877	
50%	3500	1.112	
0%	0	0.206	
50%	3500	1.123	
57%	4000	1.274	
64%	4500	1.482	
71%	5000	1.641	
0%	0	0.302	
57%	4000	1.478	
71%	5000	1.738	
79%	5500	1.963	
83%	5800	2.000	
93%	6500		
100%	7000		
0%	0	0.371	



Lateral Load Test Result for PLT-18A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

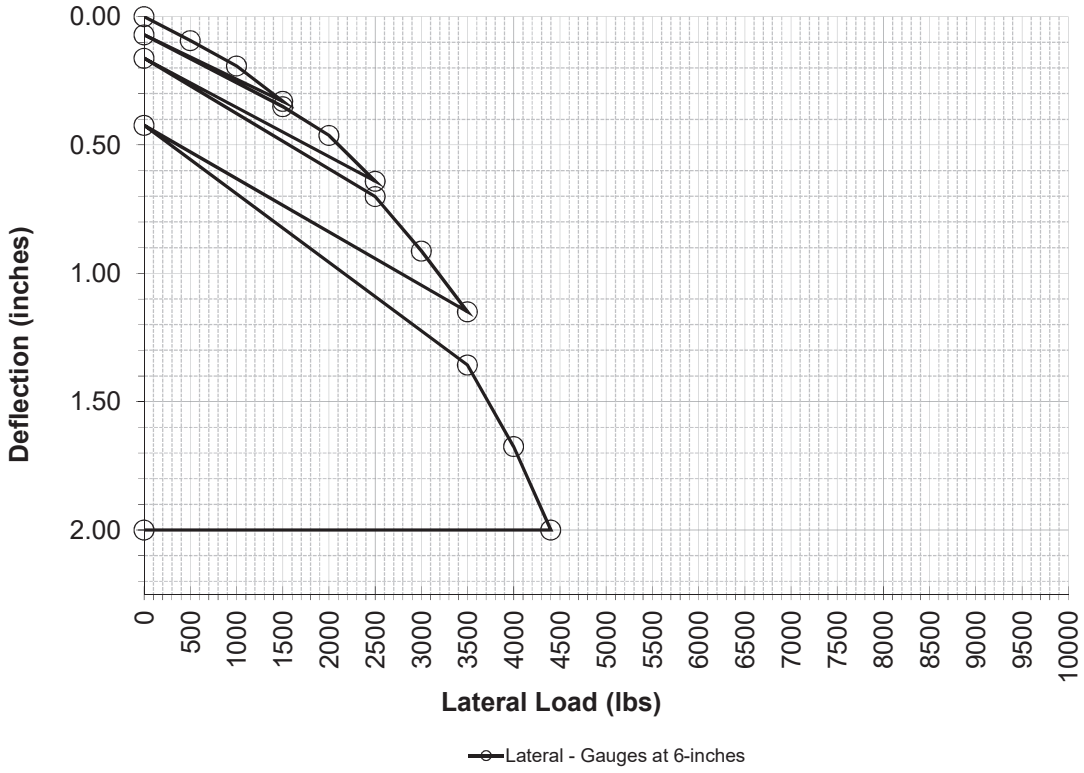
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/20/2022

Pile Information

Pile ID:	PLT-18A
Latitude:	39.27300
Longitude:	-83.85990
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	38

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.094	
14%	1000	0.192	
21%	1500	0.330	
0%	0	0.071	
21%	1500	0.351	
29%	2000	0.463	
36%	2500	0.642	
0%	0	0.162	
36%	2500	0.701	
43%	3000	0.913	
50%	3500	1.150	
0%	0	0.423	
50%	3500	1.357	
57%	4000	1.675	
63%	4400	2.000	
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	2.000	



Lateral Load Test Result for PLT-18B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

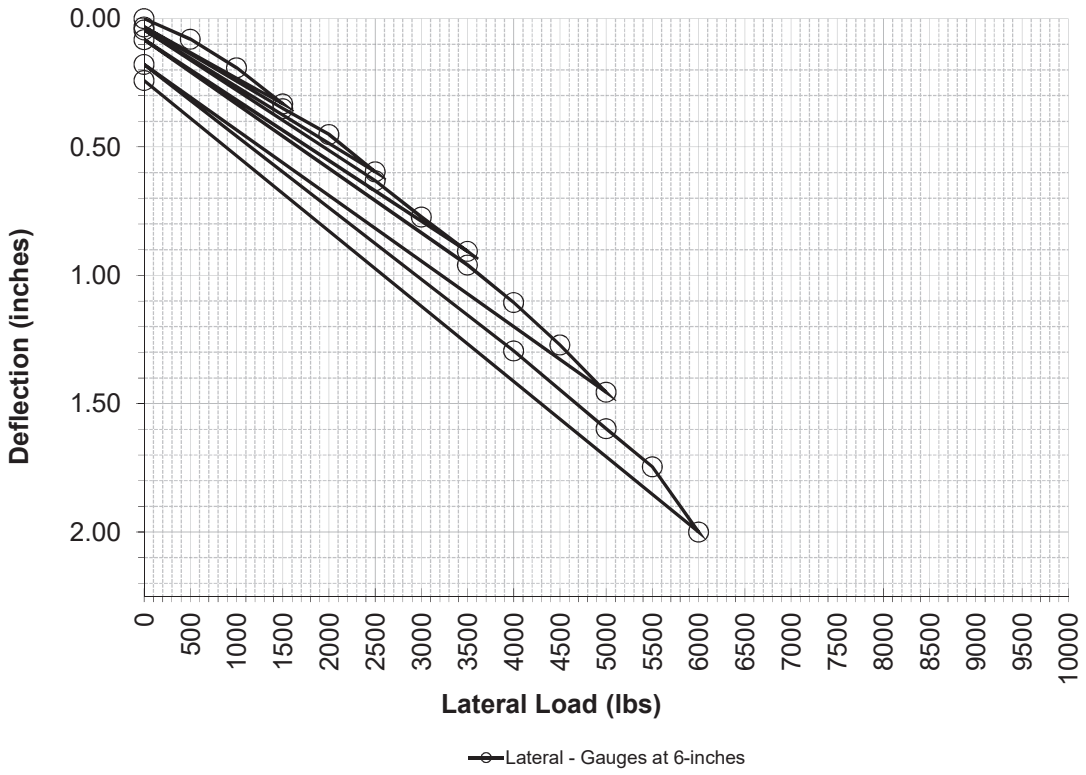
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/20/2022

Pile Information

Pile ID:	PLT-18B
Latitude:	39.27300
Longitude:	-83.85990
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	133

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.080	
14%	1000	0.191	
21%	1500	0.332	
0%	0	0.032	
21%	1500	0.351	
29%	2000	0.451	
36%	2500	0.596	
0%	0	0.044	
36%	2500	0.632	
43%	3000	0.773	
50%	3500	0.907	
0%	0	0.082	
50%	3500	0.960	
57%	4000	1.106	
64%	4500	1.271	
71%	5000	1.455	
0%	0	0.178	
57%	4000	1.295	
71%	5000	1.598	
79%	5500	1.746	
86%	6000	2.000	
93%	6500		
100%	7000		
0%	0	0.241	



Lateral Load Test Result for PLT-19A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

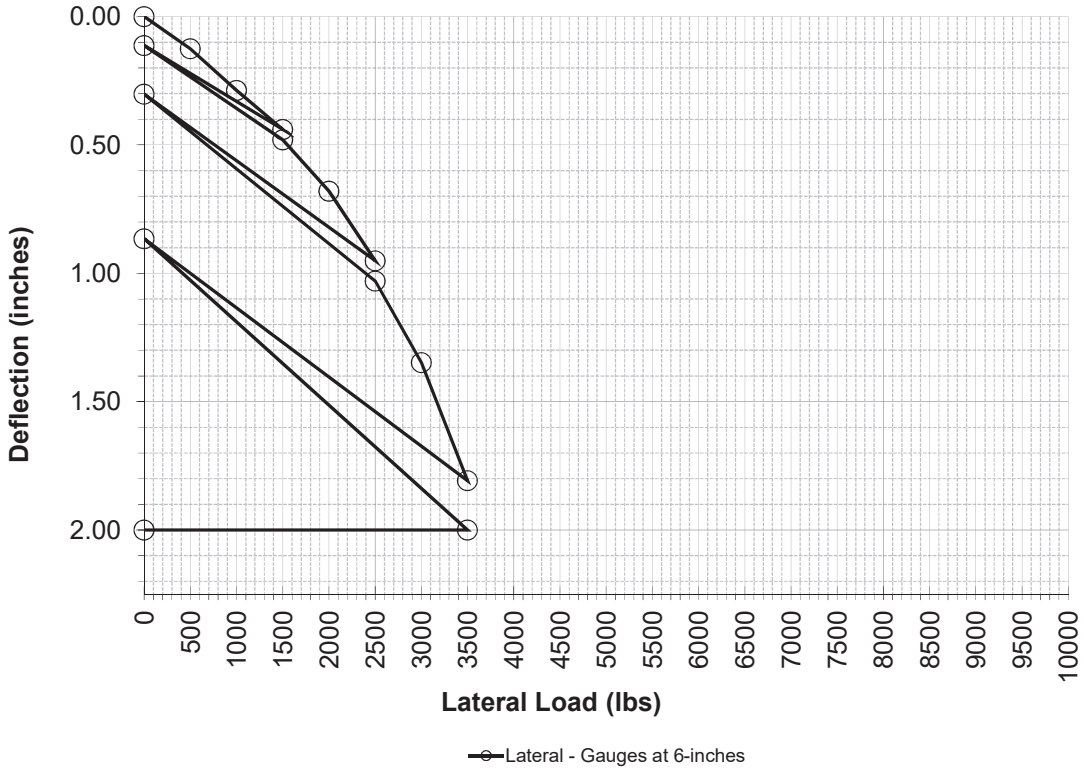
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/17/2022

Pile Information

Pile ID:	PLT-19A
Latitude:	39.27110
Longitude:	-83.86490
Pile Type:	W6X9
Pile Embedment Depth [in]:	84
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	41

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.125	
14%	1000	0.287	
21%	1500	0.439	
0%	0	0.113	
21%	1500	0.480	
29%	2000	0.680	
36%	2500	0.951	
0%	0	0.302	
36%	2500	1.030	
43%	3000	1.347	
50%	3500	1.807	
0%	0	0.866	
50%	3500	2.000	
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	2.000	



Lateral Load Test Result for PLT-19B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

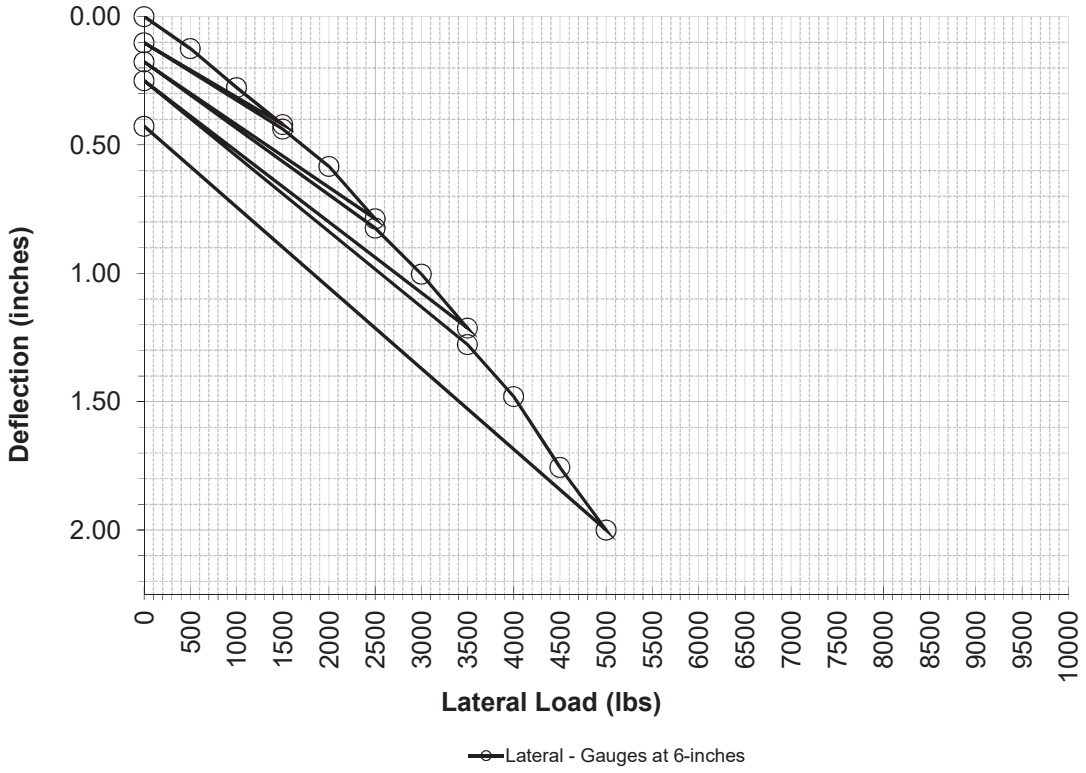
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/17/2022

Pile Information

Pile ID:	PLT-19B
Latitude:	39.27110
Longitude:	-83.86490
Pile Type:	W6X9
Pile Embedment Depth [in]:	120
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	120

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.125	
14%	1000	0.277	
21%	1500	0.420	
0%	0	0.102	
21%	1500	0.438	
29%	2000	0.583	
36%	2500	0.787	
0%	0	0.176	
36%	2500	0.824	
43%	3000	1.003	
50%	3500	1.214	
0%	0	0.249	
50%	3500	1.277	
57%	4000	1.480	
64%	4500	1.756	
71%	5000	2.000	
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.428	



Lateral Load Test Result for PLT-20A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

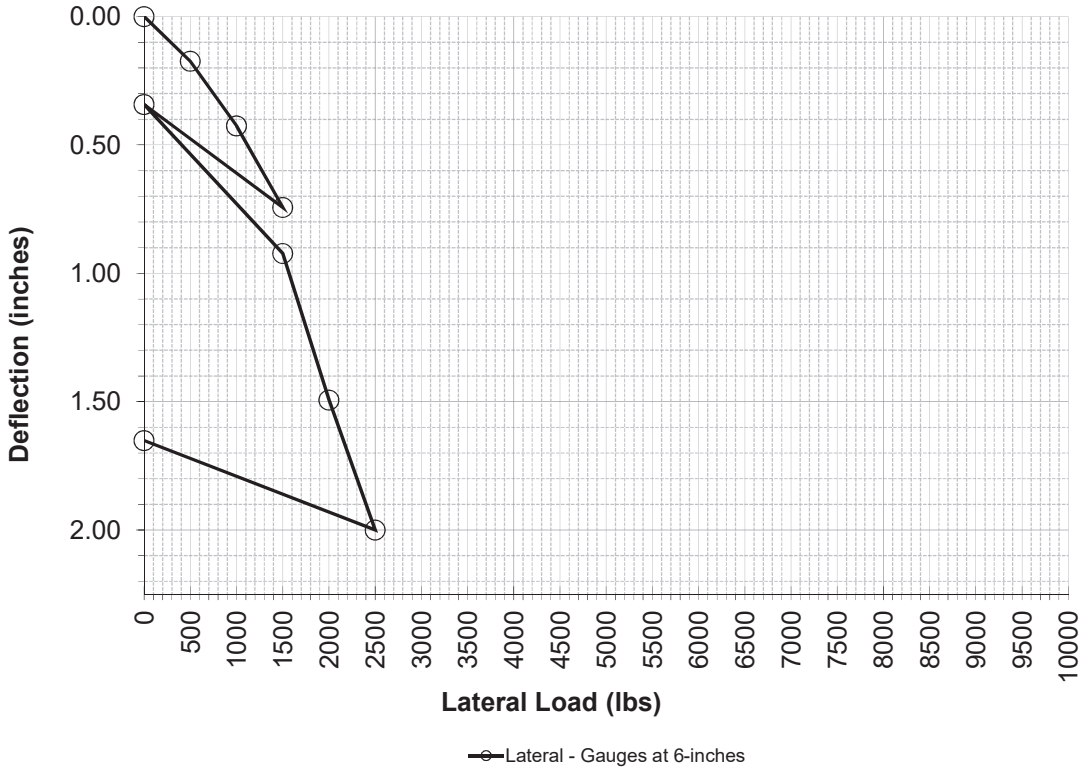
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/20/2022

Pile Information

Pile ID:	PLT-20A
Latitude:	39.27070
Longitude:	-83.85160
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	28

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.174	
14%	1000	0.426	
21%	1500	0.743	
0%	0	0.342	
21%	1500	0.922	
29%	2000	1.494	
36%	2500	2.000	
0%	0		
36%	2500		
43%	3000		
50%	3500		
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	1.651	



Lateral Load Test Result for PLT-20B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

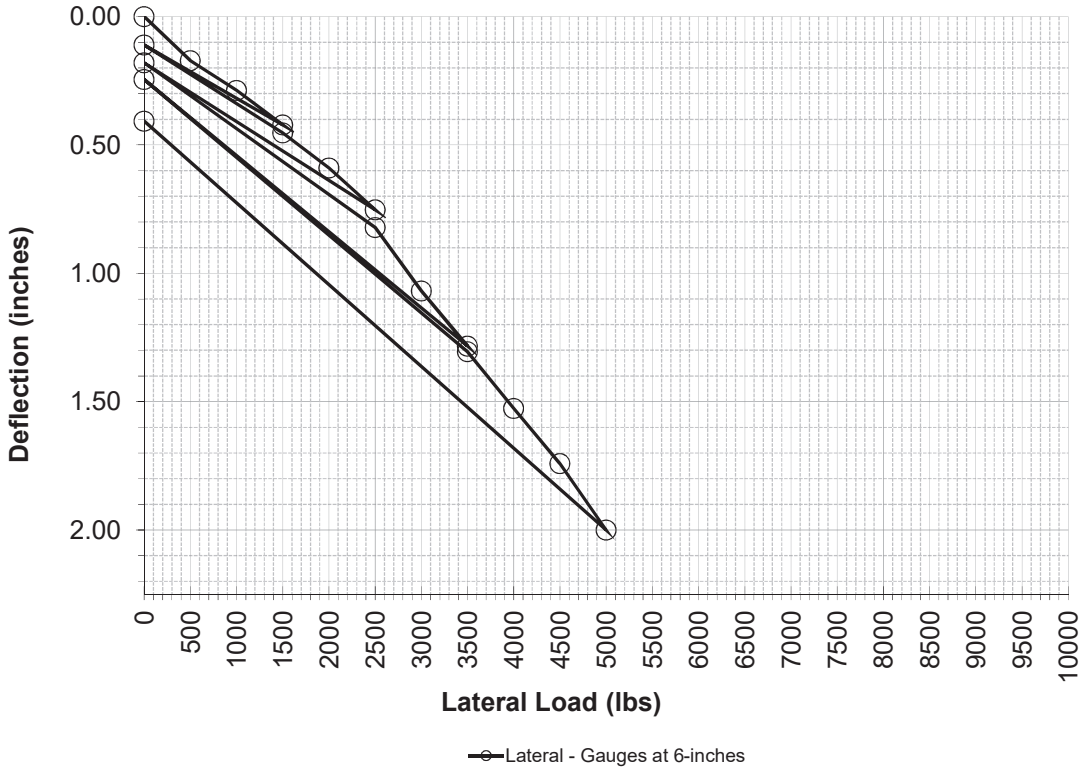
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/20/2022

Pile Information

Pile ID:	PLT-20B
Latitude:	39.27070
Longitude:	-83.85160
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	98

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.172	
14%	1000	0.287	
21%	1500	0.422	
0%	0	0.111	
21%	1500	0.453	
29%	2000	0.589	
36%	2500	0.753	
0%	0	0.180	
36%	2500	0.821	
43%	3000	1.069	
50%	3500	1.284	
0%	0	0.245	
50%	3500	1.306	
57%	4000	1.527	
64%	4500	1.741	
71%	5000	2.000	
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.407	



Lateral Load Test Result for PLT-21A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

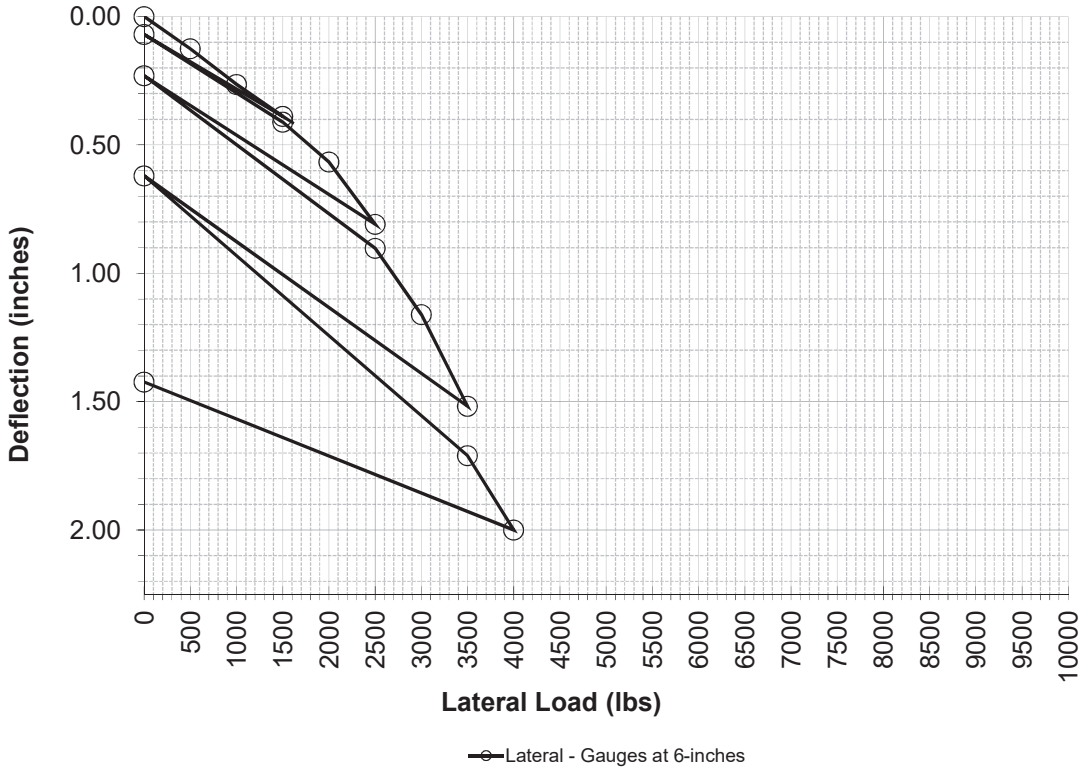
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/17/2022

Pile Information

Pile ID:	PLT-21A
Latitude:	39.26810
Longitude:	-83.85820
Pile Type:	W6X9
Pile Embedment Depth [in]:	84
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	41

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.125	
14%	1000	0.264	
21%	1500	0.389	
0%	0	0.070	
21%	1500	0.411	
29%	2000	0.567	
36%	2500	0.809	
0%	0	0.230	
36%	2500	0.902	
43%	3000	1.161	
50%	3500	1.518	
0%	0	0.621	
50%	3500	1.710	
57%	4000	2.000	
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	1.423	



Lateral Load Test Result for PLT-21B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

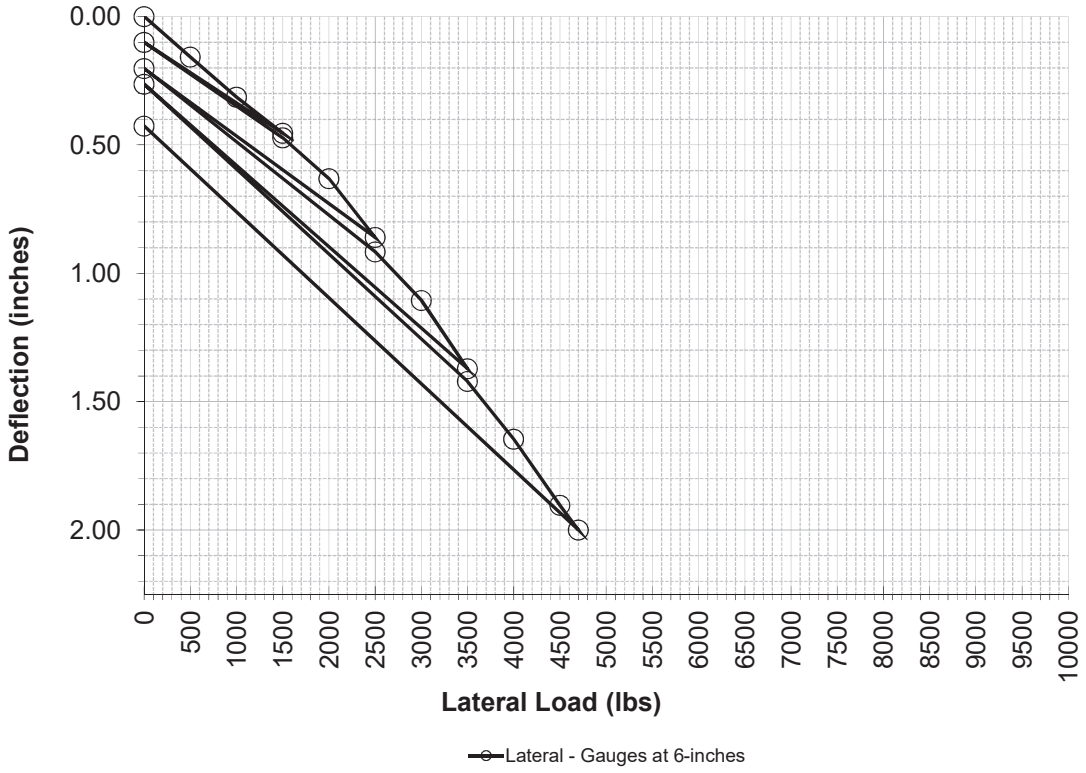
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/17/2022

Pile Information

Pile ID:	PLT-21B
Latitude:	39.26810
Longitude:	-83.85820
Pile Type:	W6X9
Pile Embedment Depth [in]:	120
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	135

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.158	
14%	1000	0.314	
21%	1500	0.454	
0%	0	0.100	
21%	1500	0.472	
29%	2000	0.632	
36%	2500	0.860	
0%	0	0.202	
36%	2500	0.916	
43%	3000	1.106	
50%	3500	1.371	
0%	0	0.263	
50%	3500	1.421	
57%	4000	1.646	
64%	4500	1.903	
67%	4700	2.000	
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.426	



Lateral Load Test Result for PLT-22A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

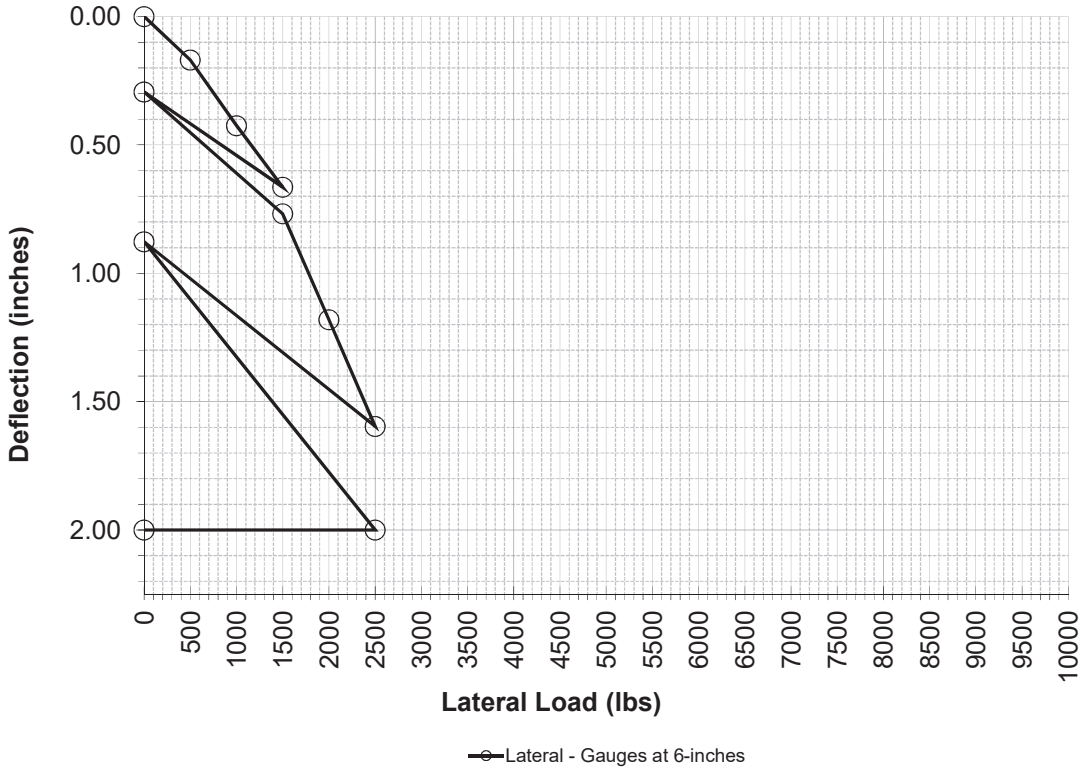
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/17/2022

Pile Information

Pile ID:	PLT-22A
Latitude:	39.26630
Longitude:	-83.86120
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	29

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.169	
14%	1000	0.425	
21%	1500	0.665	
0%	0	0.294	
21%	1500	0.768	
29%	2000	1.181	
36%	2500	1.596	
0%	0	0.877	
36%	2500	2.000	
43%	3000		
50%	3500		
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	2.000	



Lateral Load Test Result for PLT-22B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

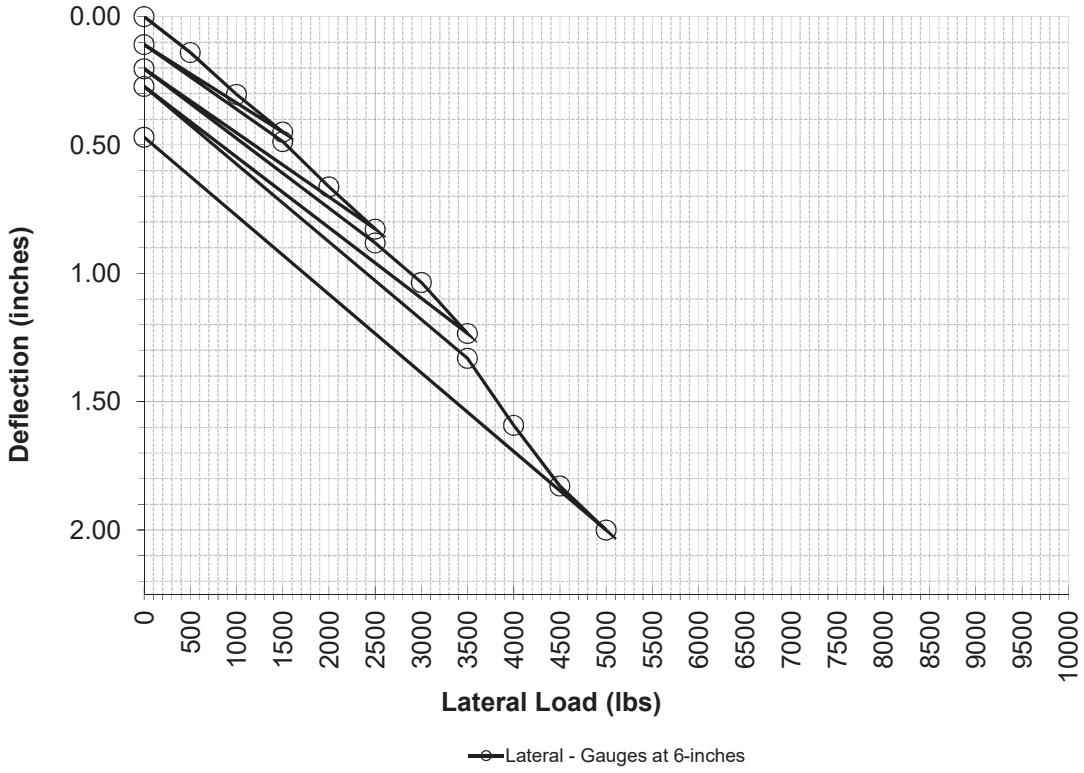
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/17/2022

Pile Information

Pile ID:	PLT-22B
Latitude:	39.26630
Longitude:	-83.86120
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	96

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.140	
14%	1000	0.303	
21%	1500	0.450	
0%	0	0.109	
21%	1500	0.487	
29%	2000	0.663	
36%	2500	0.828	
0%	0	0.203	
36%	2500	0.881	
43%	3000	1.036	
50%	3500	1.234	
0%	0	0.272	
50%	3500	1.331	
57%	4000	1.592	
64%	4500	1.828	
71%	5000	2.000	
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.470	



Lateral Load Test Result for PLT-23A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

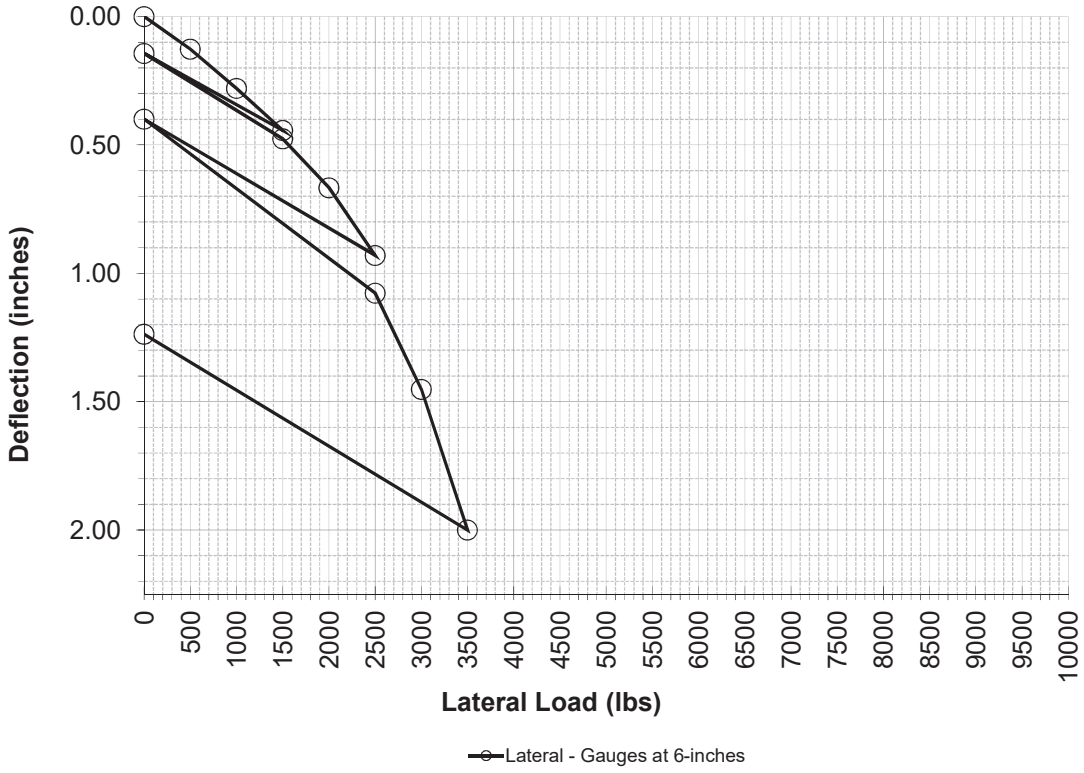
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/17/2022

Pile Information

Pile ID:	PLT-23A
Latitude:	39.26520
Longitude:	-83.84870
Pile Type:	W6X9
Pile Embedment Depth [in]:	84
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	55

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.126	
14%	1000	0.280	
21%	1500	0.443	
0%	0	0.143	
21%	1500	0.476	
29%	2000	0.667	
36%	2500	0.931	
0%	0	0.399	
36%	2500	1.077	
43%	3000	1.452	
50%	3500	2.000	
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	1.237	



Lateral Load Test Result for PLT-23B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

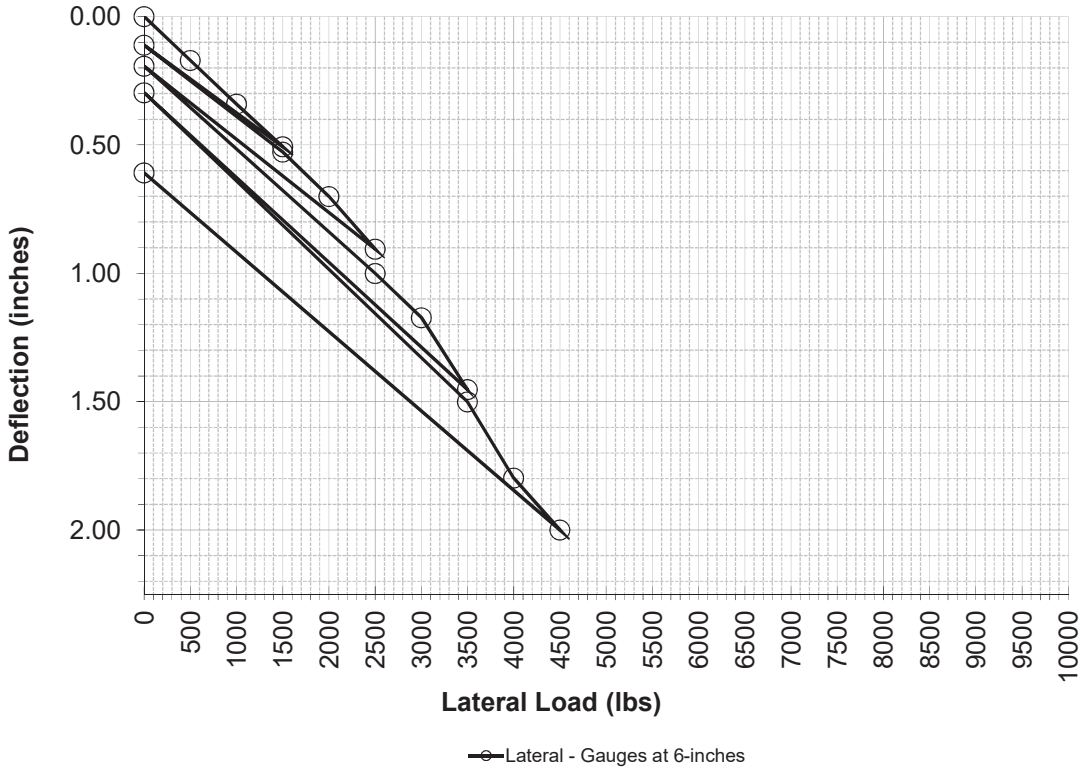
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/17/2022

Pile Information

Pile ID:	PLT-23B
Latitude:	39.26520
Longitude:	-83.84870
Pile Type:	W6X9
Pile Embedment Depth [in]:	120
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	74

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.171	
14%	1000	0.340	
21%	1500	0.507	
0%	0	0.111	
21%	1500	0.528	
29%	2000	0.701	
36%	2500	0.906	
0%	0	0.193	
36%	2500	1.000	
43%	3000	1.173	
50%	3500	1.453	
0%	0	0.296	
50%	3500	1.501	
57%	4000	1.798	
64%	4500	2.000	
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.609	



Lateral Load Test Result for PLT-24A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

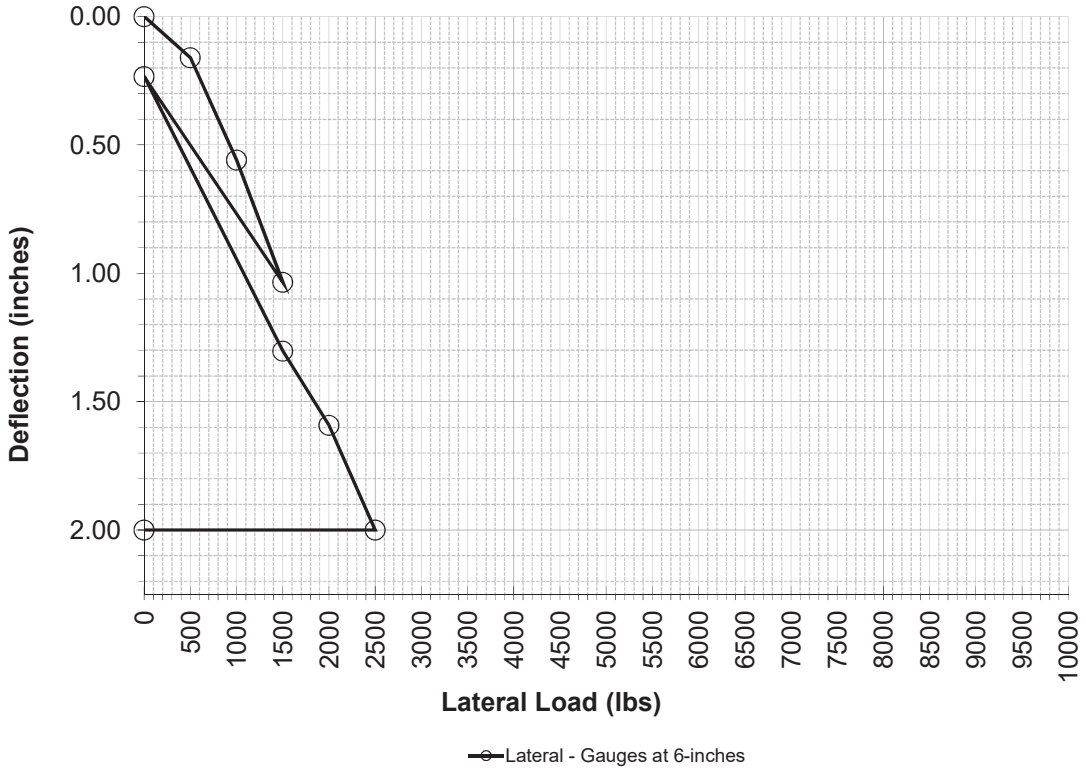
Test Date and Representative

Tested By Terracon Rep:	MC
Date Tested:	6/24/2022

Pile Information

Pile ID:	PLT-24A
Latitude:	39.26950
Longitude:	-83.81880
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	27

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.160	
14%	1000	0.558	
21%	1500	1.035	
0%	0	0.233	
21%	1500	1.303	
29%	2000	1.592	
36%	2500	2.000	
0%	0		
36%	2500		
43%	3000		
50%	3500		
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	2.000	



Lateral Load Test Result for PLT-24B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

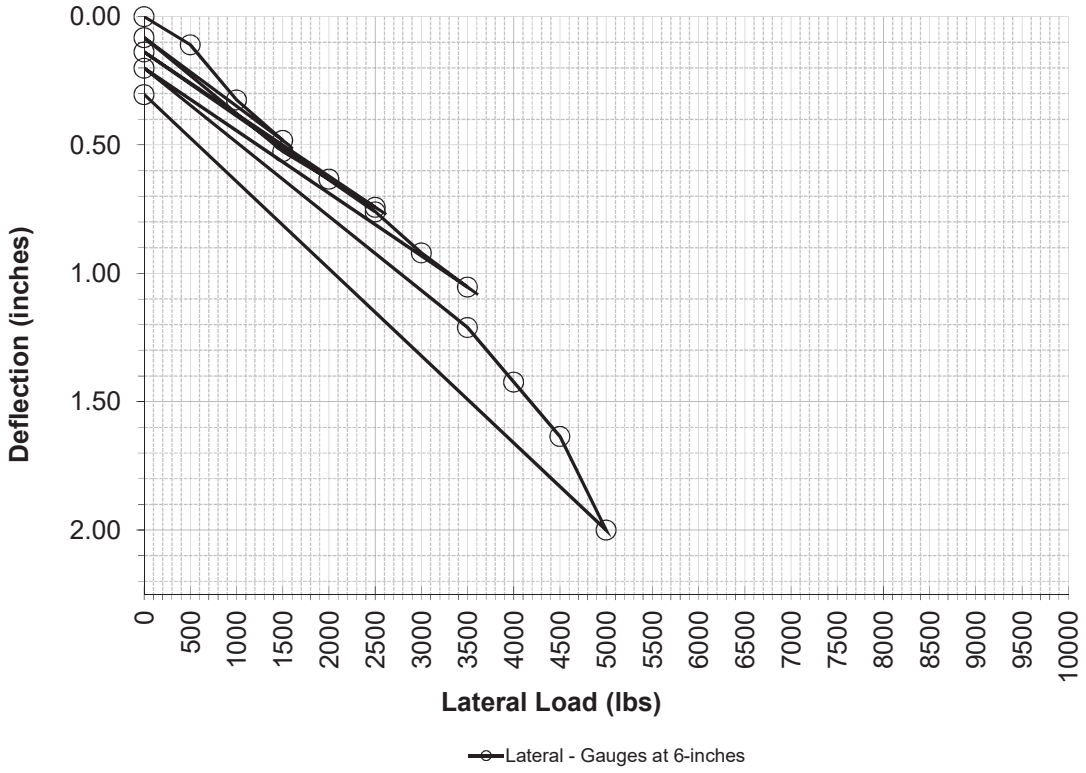
Test Date and Representative

Tested By Terracon Rep:	MC
Date Tested:	6/24/2022

Pile Information

Pile ID:	PLT-24B
Latitude:	39.26950
Longitude:	-83.81880
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	94

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.110	
14%	1000	0.325	
21%	1500	0.482	
0%	0	0.082	
21%	1500	0.525	
29%	2000	0.633	
36%	2500	0.743	
0%	0	0.138	
36%	2500	0.761	
43%	3000	0.921	
50%	3500	1.053	
0%	0	0.201	
50%	3500	1.211	
57%	4000	1.423	
64%	4500	1.635	
71%	5000	2.000	
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.304	



Lateral Load Test Result for PLT-25A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

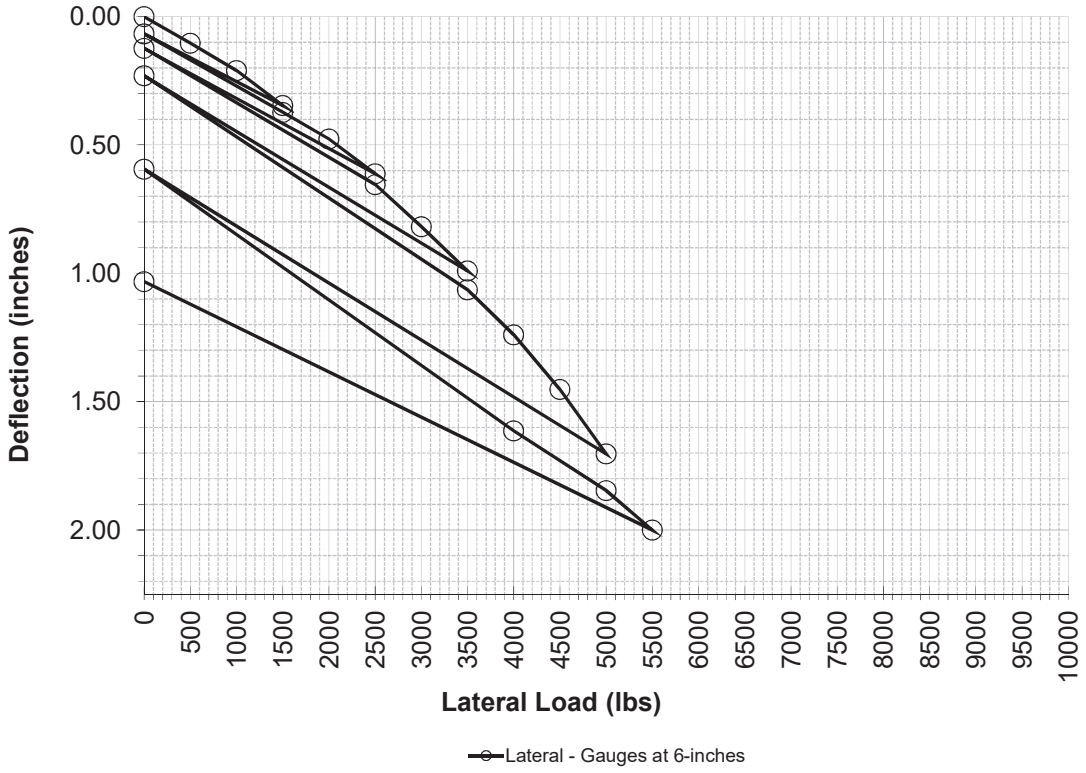
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/16/2022

Pile Information

Pile ID:	PLT-25A
Latitude:	39.27160
Longitude:	-83.81080
Pile Type:	W6X9
Pile Embedment Depth [in]:	84
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	65

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.104	
14%	1000	0.210	
21%	1500	0.346	
0%	0	0.067	
21%	1500	0.373	
29%	2000	0.477	
36%	2500	0.612	
0%	0	0.123	
36%	2500	0.655	
43%	3000	0.818	
50%	3500	0.991	
0%	0	0.230	
50%	3500	1.064	
57%	4000	1.240	
64%	4500	1.452	
71%	5000	1.703	
0%	0	0.594	
57%	4000	1.613	
71%	5000	1.846	
79%	5500	2.000	
86%	6000		
93%	6500		
100%	7000		
0%	0	1.032	



Lateral Load Test Result for PLT-25B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

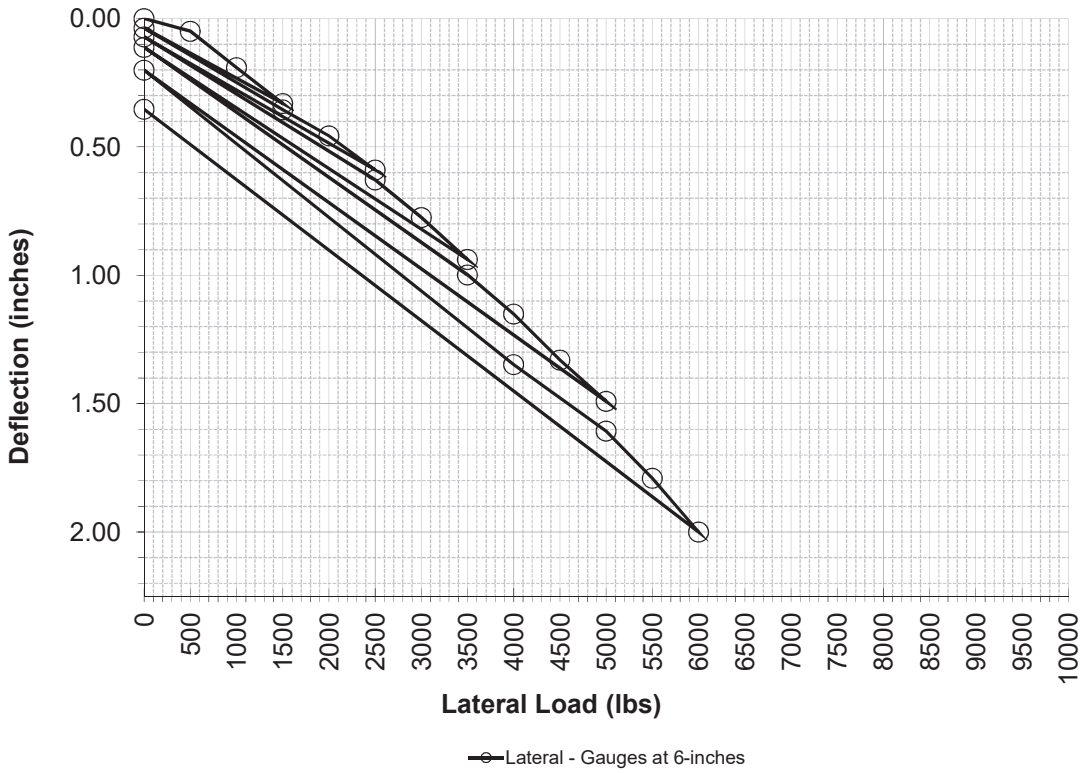
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/16/2022

Pile Information

Pile ID:	PLT-25B
Latitude:	39.27160
Longitude:	-83.81080
Pile Type:	W6X9
Pile Embedment Depth [in]:	120
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	155

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.049	
14%	1000	0.191	
21%	1500	0.331	
0%	0	0.037	
21%	1500	0.355	
29%	2000	0.457	
36%	2500	0.590	
0%	0	0.071	
36%	2500	0.628	
43%	3000	0.775	
50%	3500	0.938	
0%	0	0.112	
50%	3500	0.998	
57%	4000	1.150	
64%	4500	1.330	
71%	5000	1.490	
0%	0	0.201	
57%	4000	1.348	
71%	5000	1.607	
79%	5500	1.790	
86%	6000	2.000	
93%	6500		
100%	7000		
0%	0	0.353	



Lateral Load Test Result for PLT-26A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

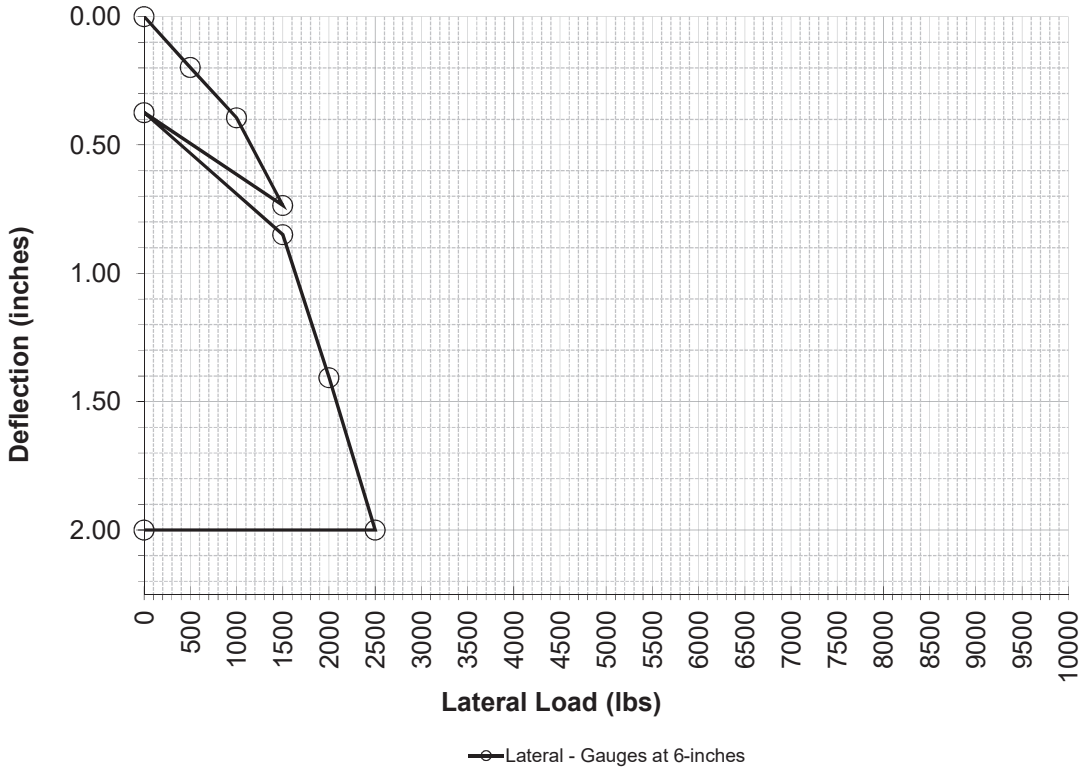
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/14/2022

Pile Information

Pile ID:	PLT-26A
Latitude:	39.27300
Longitude:	-83.80570
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	31

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.198	
14%	1000	0.394	
21%	1500	0.735	
0%	0	0.374	
21%	1500	0.849	
29%	2000	1.407	
36%	2500	2.000	
0%	0		
36%	2500		
43%	3000		
50%	3500		
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	2.000	



Lateral Load Test Result for PLT-26B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

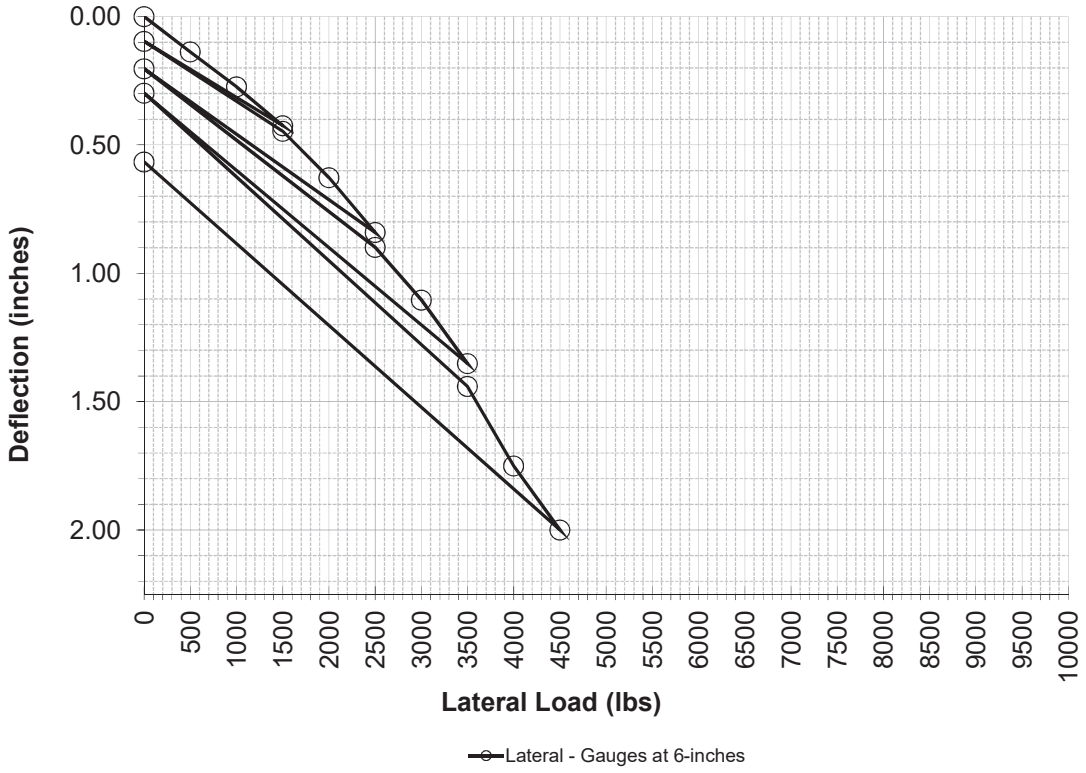
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/14/2022

Pile Information

Pile ID:	PLT-26B
Latitude:	39.27300
Longitude:	-83.80570
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	97

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.138	
14%	1000	0.274	
21%	1500	0.425	
0%	0	0.097	
21%	1500	0.447	
29%	2000	0.627	
36%	2500	0.841	
0%	0	0.203	
36%	2500	0.899	
43%	3000	1.105	
50%	3500	1.352	
0%	0	0.298	
50%	3500	1.441	
57%	4000	1.751	
64%	4500	2.000	
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.566	



Lateral Load Test Result for PLT-27A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

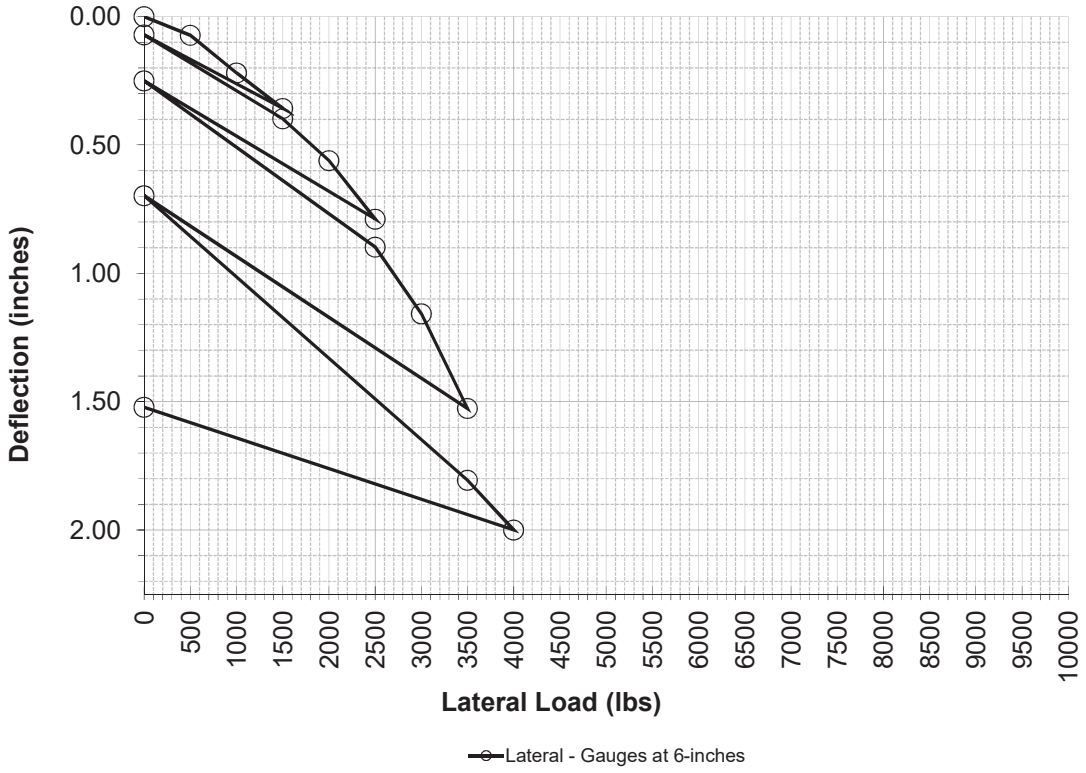
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/14/2022

Pile Information

Pile ID:	PLT-27A
Latitude:	39.27030
Longitude:	-83.80210
Pile Type:	W6X9
Pile Embedment Depth [in]:	84
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	47

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.072	
14%	1000	0.219	
21%	1500	0.358	
0%	0	0.071	
21%	1500	0.398	
29%	2000	0.561	
36%	2500	0.789	
0%	0	0.251	
36%	2500	0.898	
43%	3000	1.158	
50%	3500	1.526	
0%	0	0.698	
50%	3500	1.806	
57%	4000	2.000	
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	1.522	



Lateral Load Test Result for PLT-27B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

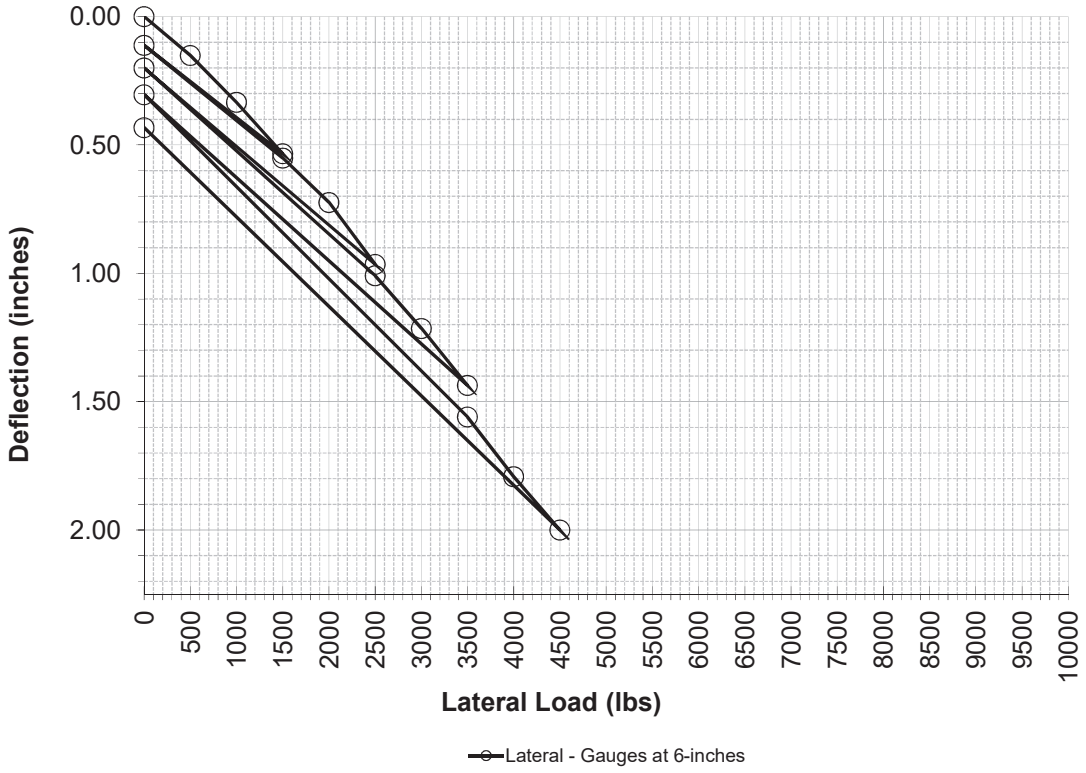
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/14/2022

Pile Information

Pile ID:	PLT-27B
Latitude:	39.27030
Longitude:	-83.80210
Pile Type:	W6X9
Pile Embedment Depth [in]:	120
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	178

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.152	
14%	1000	0.334	
21%	1500	0.534	
0%	0	0.112	
21%	1500	0.551	
29%	2000	0.724	
36%	2500	0.965	
0%	0	0.200	
36%	2500	1.009	
43%	3000	1.215	
50%	3500	1.437	
0%	0	0.304	
50%	3500	1.559	
57%	4000	1.792	
64%	4500	2.000	
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.433	



Lateral Load Test Result for PLT-28A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

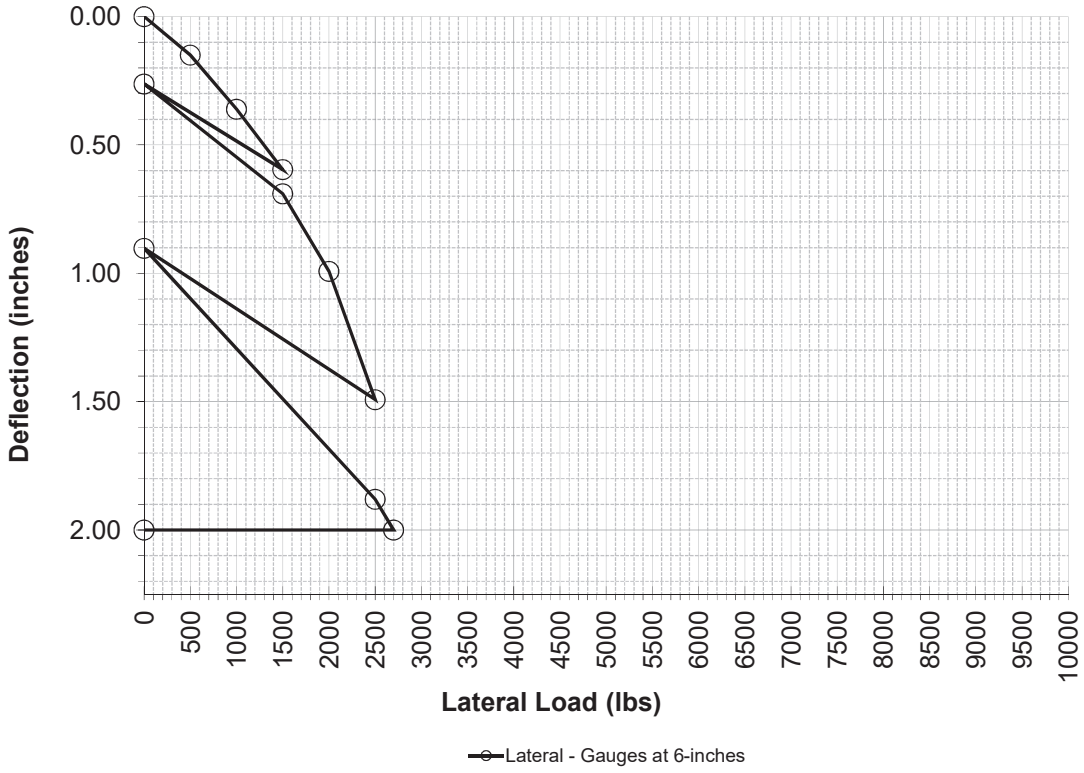
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/14/2022

Pile Information

Pile ID:	PLT-28A
Latitude:	39.27250
Longitude:	-83.79880
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	33

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.150	
14%	1000	0.361	
21%	1500	0.596	
0%	0	0.263	
21%	1500	0.690	
29%	2000	0.992	
36%	2500	1.492	
0%	0	0.903	
36%	2500	1.880	
39%	2700	2.000	
50%	3500		
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	2.000	



Lateral Load Test Result for PLT-28B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

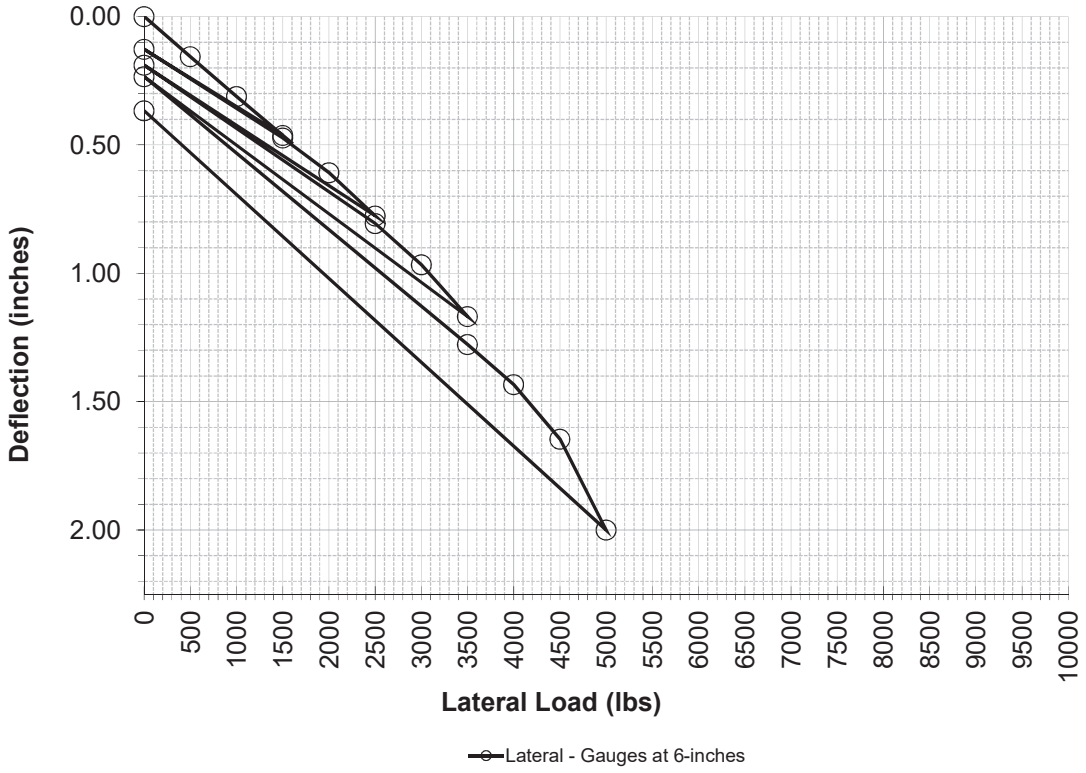
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/14/2022

Pile Information

Pile ID:	PLT-28B
Latitude:	39.27250
Longitude:	-83.79880
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	95

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.156	
14%	1000	0.311	
21%	1500	0.463	
0%	0	0.128	
21%	1500	0.473	
29%	2000	0.608	
36%	2500	0.776	
0%	0	0.190	
36%	2500	0.806	
43%	3000	0.967	
50%	3500	1.168	
0%	0	0.234	
50%	3500	1.278	
57%	4000	1.434	
64%	4500	1.646	
71%	5000	2.000	
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.367	



Lateral Load Test Result for PLT-29A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

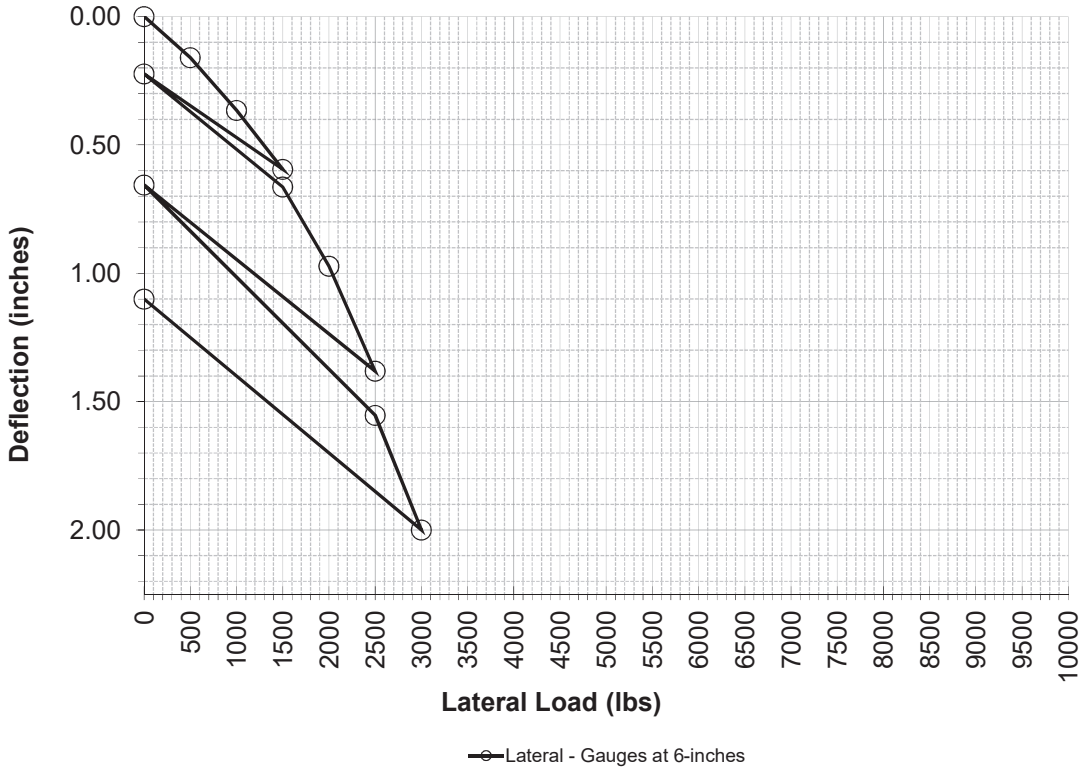
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/14/2022

Pile Information

Pile ID:	PLT-29A
Latitude:	39.27020
Longitude:	-83.79570
Pile Type:	W6X9
Pile Embedment Depth [in]:	84
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	37

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.160	
14%	1000	0.366	
21%	1500	0.595	
0%	0	0.224	
21%	1500	0.664	
29%	2000	0.972	
36%	2500	1.381	
0%	0	0.656	
36%	2500	1.553	
43%	3000	2.000	
50%	3500		
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	1.100	



Lateral Load Test Result for PLT-29B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

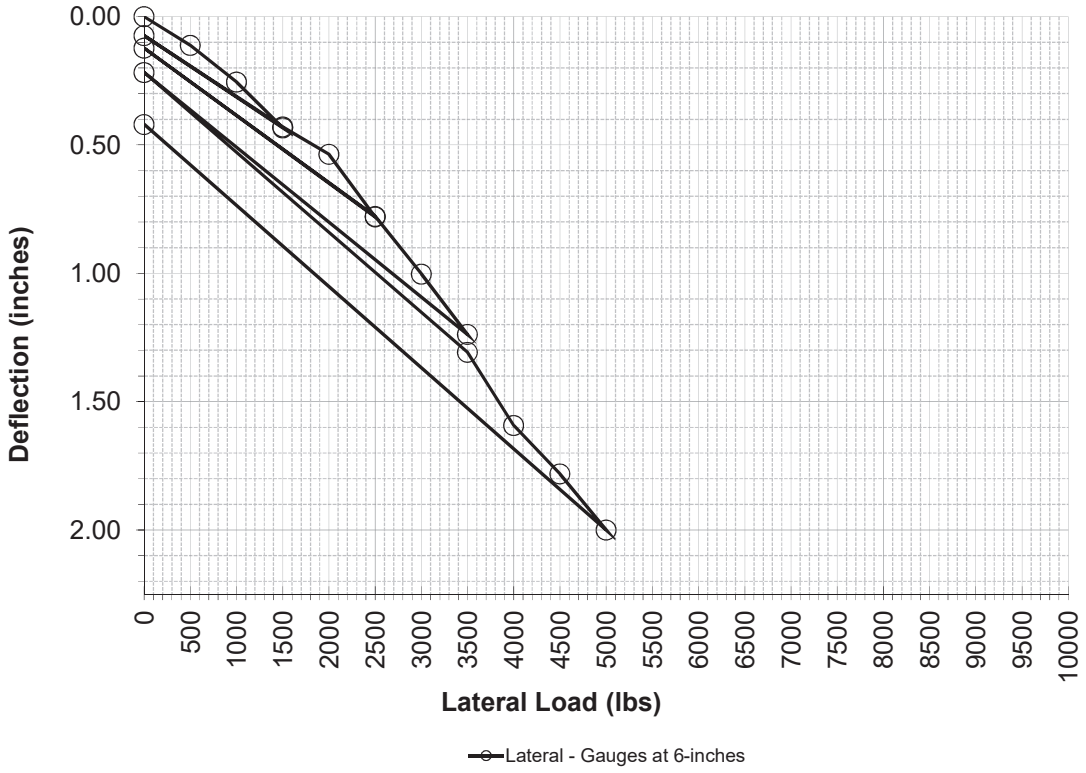
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/14/2022

Pile Information

Pile ID:	PLT-29B
Latitude:	39.27020
Longitude:	-83.79570
Pile Type:	W6X9
Pile Embedment Depth [in]:	120
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	148

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.112	
14%	1000	0.255	
21%	1500	0.433	
0%	0	0.074	
21%	1500	0.429	
29%	2000	0.536	
36%	2500	0.780	
0%	0	0.123	
36%	2500	0.778	
43%	3000	1.003	
50%	3500	1.238	
0%	0	0.218	
50%	3500	1.308	
57%	4000	1.593	
64%	4500	1.782	
71%	5000	2.000	
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.420	



Lateral Load Test Result for PLT-30A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

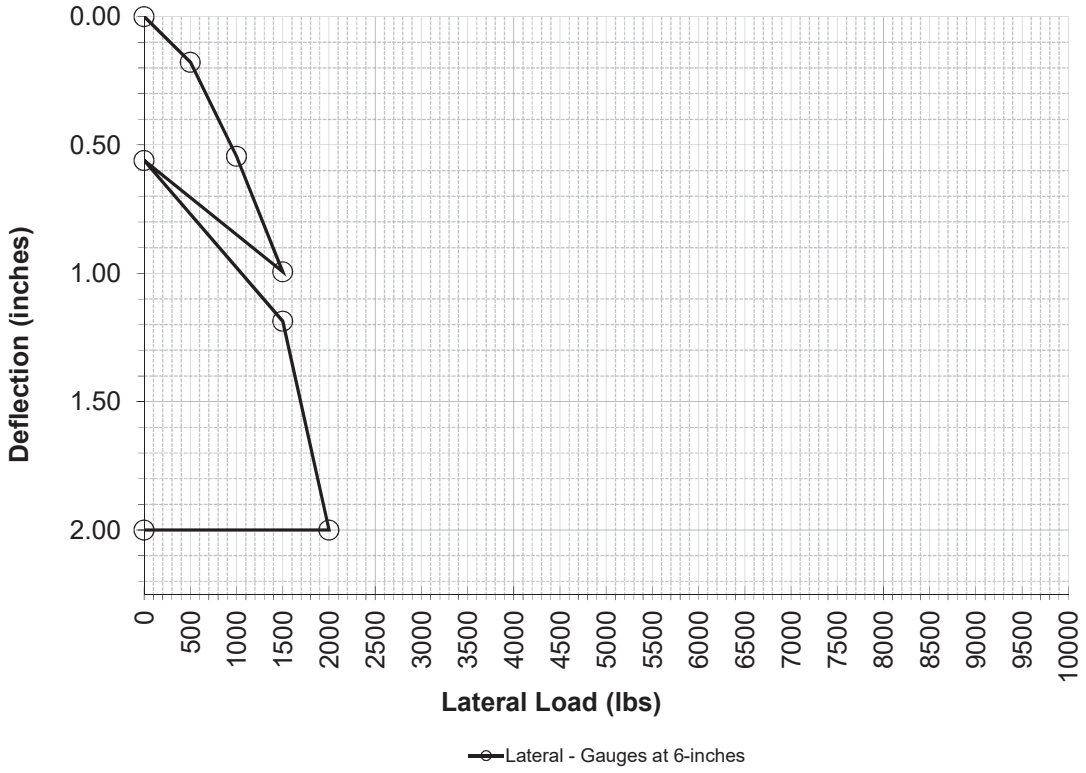
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/21/2022

Pile Information

Pile ID:	PLT-30A
Latitude:	39.26200
Longitude:	-83.85880
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	25

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.178	
14%	1000	0.544	
21%	1500	0.994	
0%	0	0.560	
21%	1500	1.186	
29%	2000	2.000	
36%	2500		
0%	0		
36%	2500		
43%	3000		
50%	3500		
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	2.000	



Lateral Load Test Result for PLT-30B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

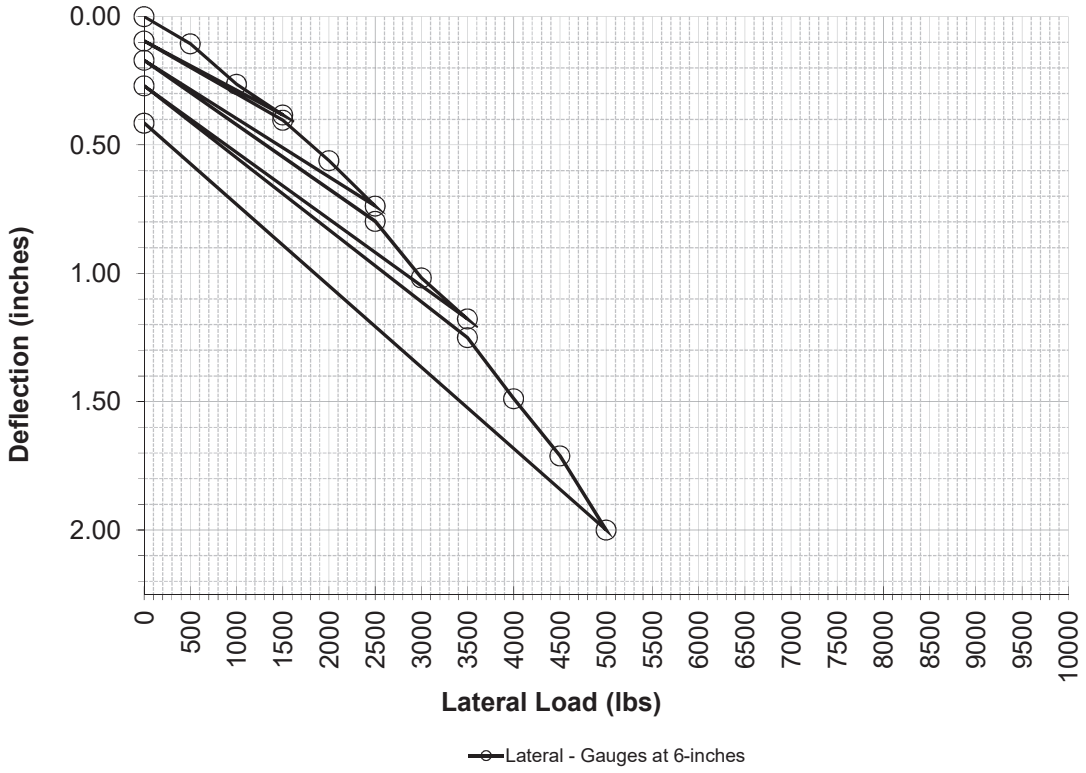
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/21/2022

Pile Information

Pile ID:	PLT-30B
Latitude:	39.26200
Longitude:	-83.85880
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	104

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.106	
14%	1000	0.263	
21%	1500	0.384	
0%	0	0.095	
21%	1500	0.404	
29%	2000	0.561	
36%	2500	0.738	
0%	0	0.170	
36%	2500	0.798	
43%	3000	1.018	
50%	3500	1.177	
0%	0	0.270	
50%	3500	1.250	
57%	4000	1.488	
64%	4500	1.711	
71%	5000	2.000	
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.415	



Lateral Load Test Result for PLT-31A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

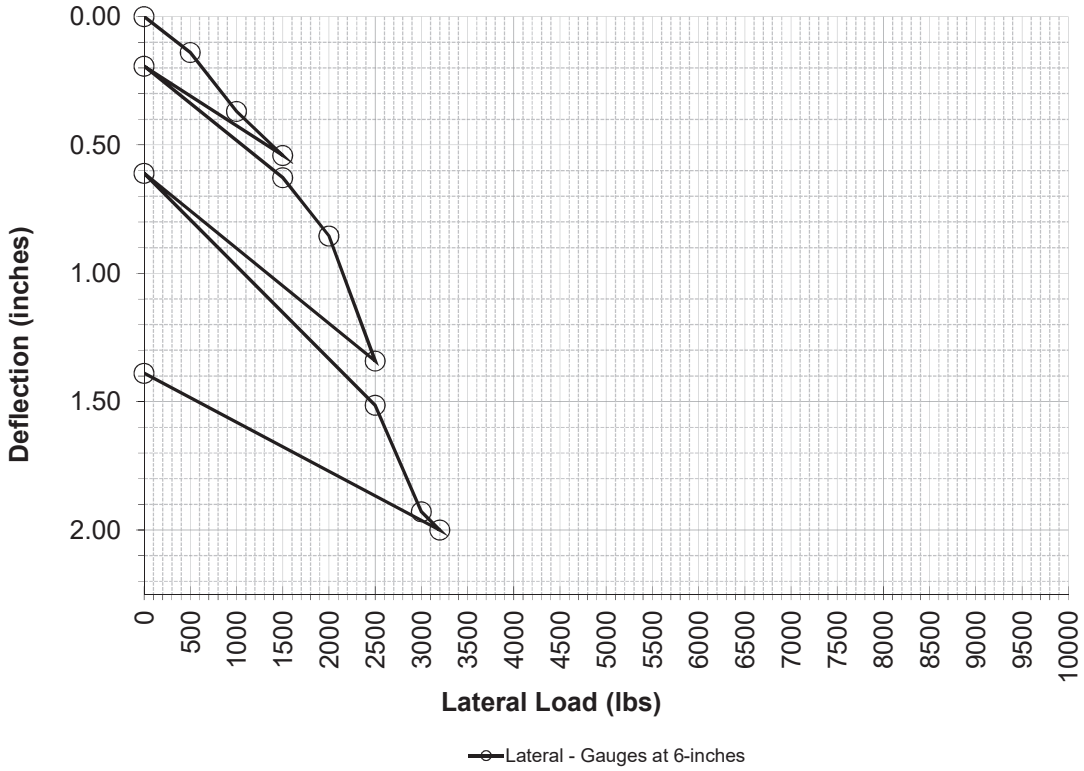
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/21/2022

Pile Information

Pile ID:	PLT-31A
Latitude:	39.25830
Longitude:	-83.84780
Pile Type:	W6X9
Pile Embedment Depth [in]:	84
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	50

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.140	
14%	1000	0.370	
21%	1500	0.541	
0%	0	0.193	
21%	1500	0.628	
29%	2000	0.855	
36%	2500	1.342	
0%	0	0.611	
36%	2500	1.514	
43%	3000	1.929	
46%	3200	2.000	
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	1.389	



Lateral Load Test Result for PLT-31B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

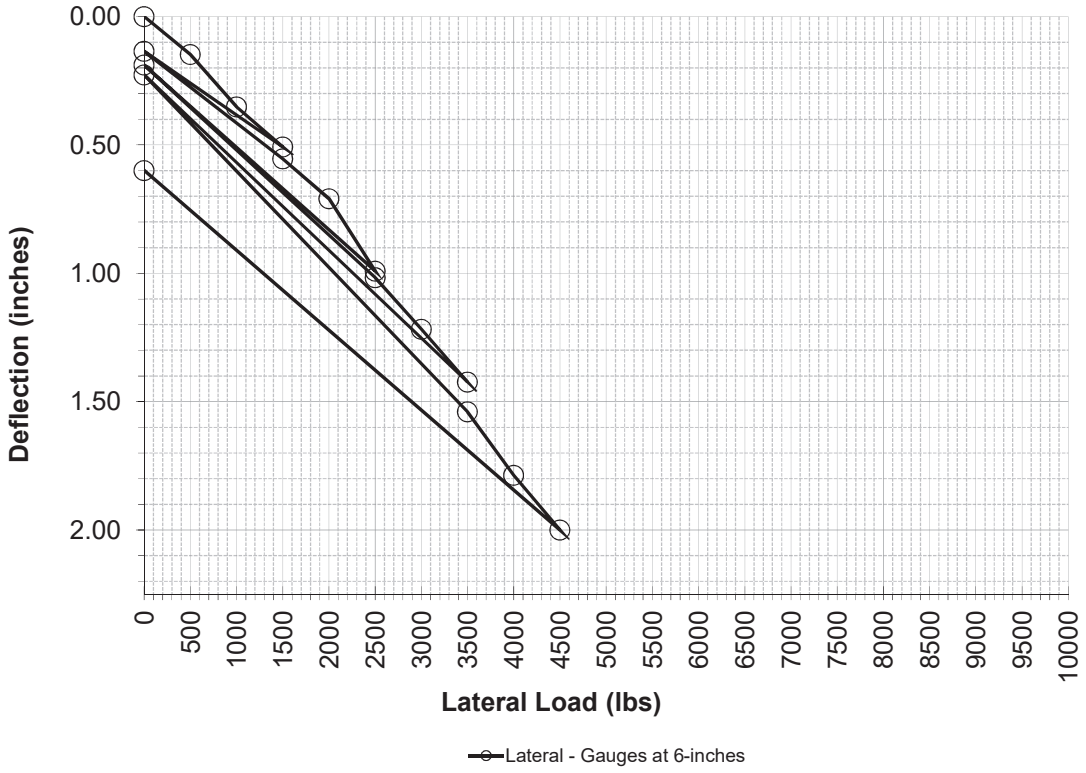
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/21/2022

Pile Information

Pile ID:	PLT-31B
Latitude:	39.25830
Longitude:	-83.84780
Pile Type:	W6X9
Pile Embedment Depth [in]:	120
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	332

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.148	
14%	1000	0.351	
21%	1500	0.508	
0%	0	0.135	
21%	1500	0.554	
29%	2000	0.709	
36%	2500	0.991	
0%	0	0.188	
36%	2500	1.017	
43%	3000	1.218	
50%	3500	1.423	
0%	0	0.227	
50%	3500	1.539	
57%	4000	1.787	
64%	4500	2.000	
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.600	



Lateral Load Test Result for PLT-32A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

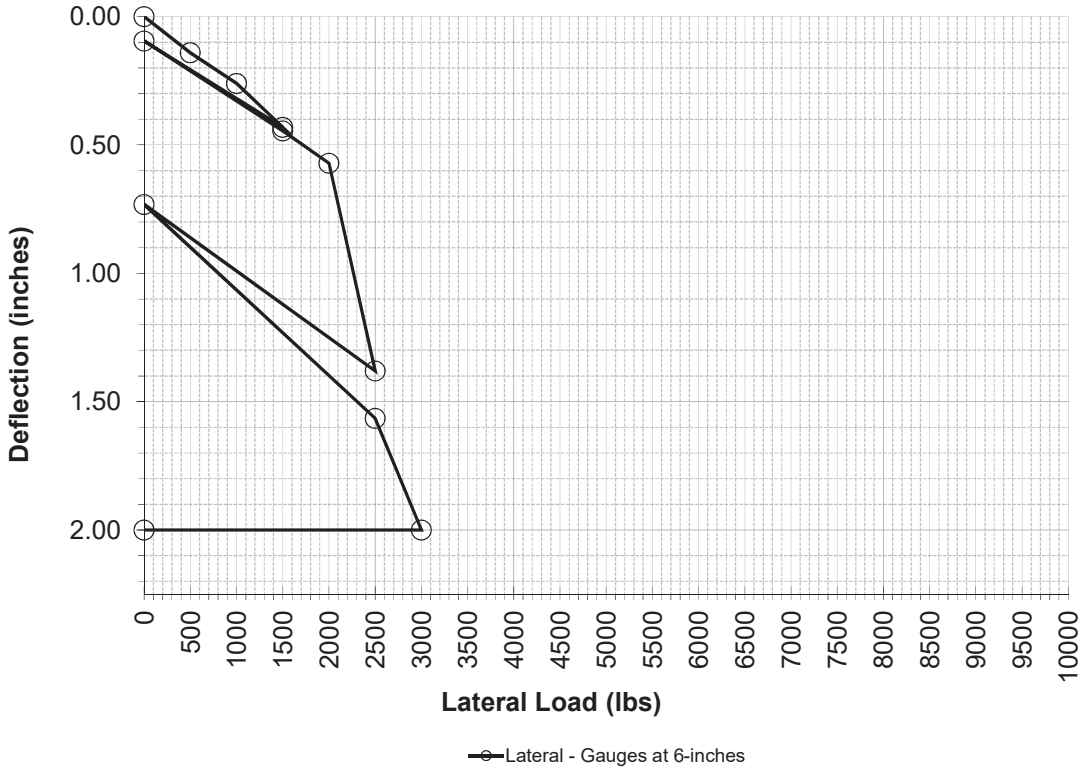
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/22/2022

Pile Information

Pile ID:	PLT-32A
Latitude:	39.25440
Longitude:	-83.84730
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	31

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.141	
14%	1000	0.261	
21%	1500	0.431	
0%	0	0.095	
21%	1500	0.445	
29%	2000	0.571	
36%	2500	1.380	
0%	0	0.732	
36%	2500	1.565	
43%	3000	2.000	
50%	3500		
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	2.000	



Lateral Load Test Result for PLT-32B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

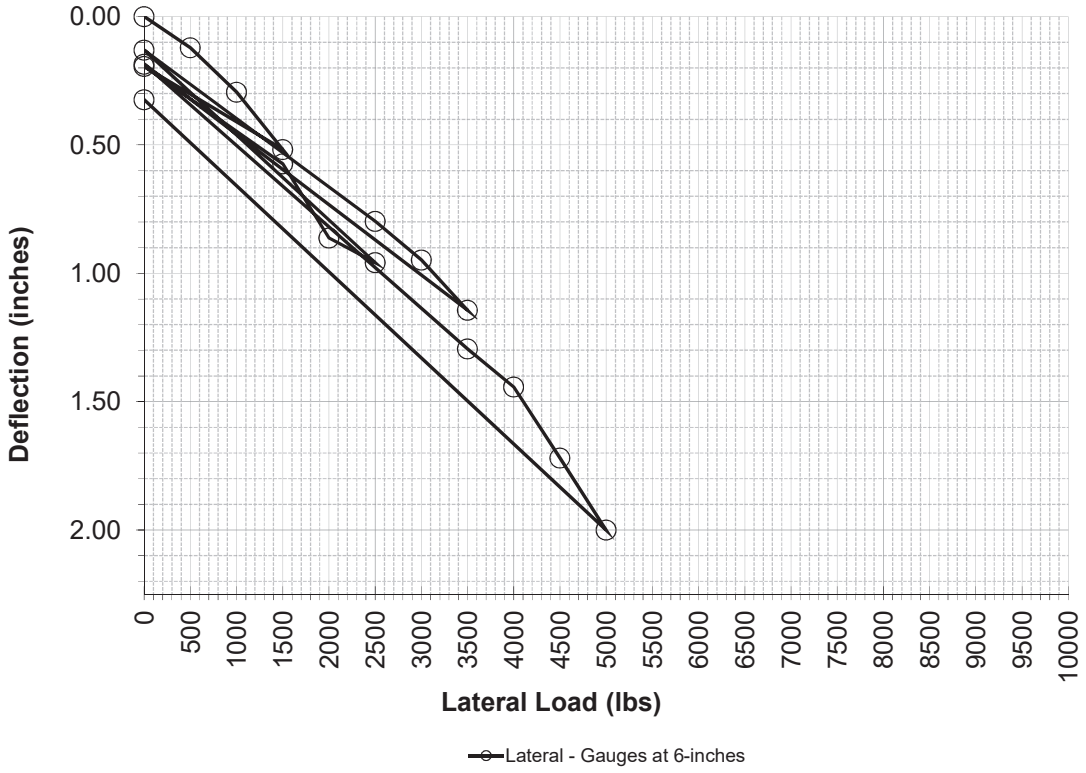
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/22/2022

Pile Information

Pile ID:	PLT-32B
Latitude:	39.25440
Longitude:	-83.84730
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	129

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.121	
14%	1000	0.294	
21%	1500	0.518	
0%	0	0.194	
21%	1500	0.573	
29%	2000	0.862	
36%	2500	0.958	
0%	0	0.131	
36%	2500	0.797	
43%	3000	0.948	
50%	3500	1.143	
0%	0	0.186	
50%	3500	1.295	
57%	4000	1.443	
64%	4500	1.720	
71%	5000	2.000	
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.323	



Lateral Load Test Result for PLT-33A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

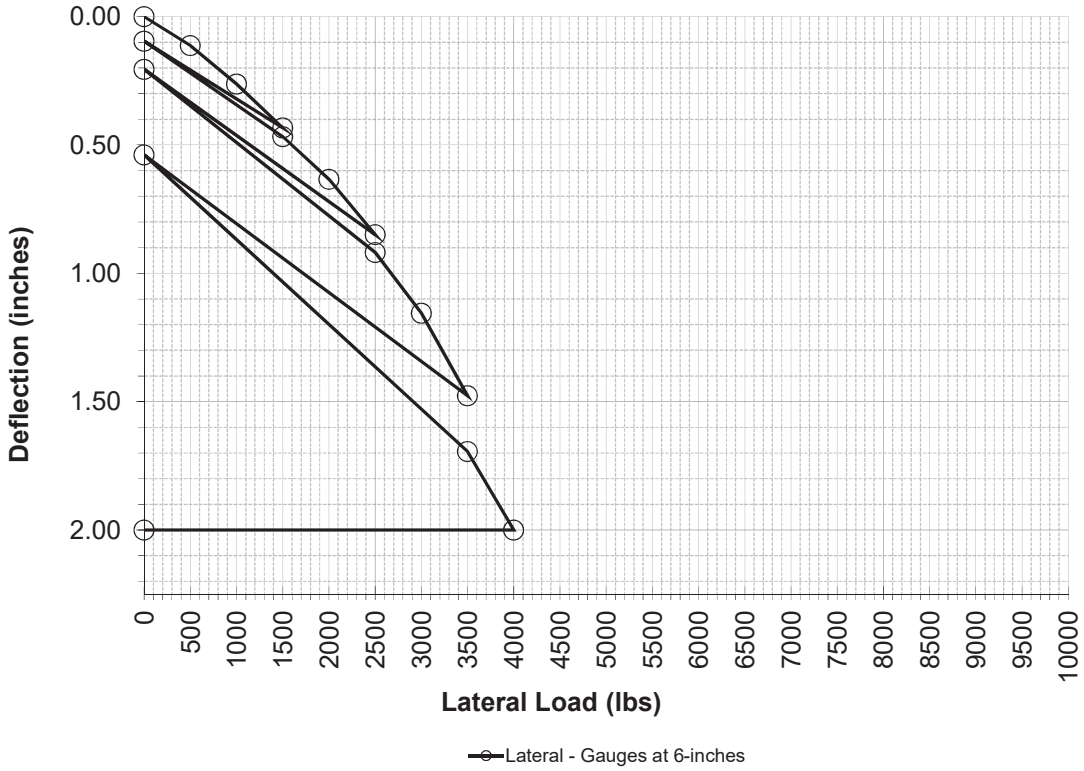
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/21/2022

Pile Information

Pile ID:	PLT-33A
Latitude:	39.25610
Longitude:	-83.84040
Pile Type:	W6X9
Pile Embedment Depth [in]:	84
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	52

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.112	
14%	1000	0.263	
21%	1500	0.433	
0%	0	0.095	
21%	1500	0.467	
29%	2000	0.634	
36%	2500	0.849	
0%	0	0.206	
36%	2500	0.919	
43%	3000	1.156	
50%	3500	1.477	
0%	0	0.538	
50%	3500	1.694	
57%	4000	2.000	
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	2.000	



Lateral Load Test Result for PLT-33B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

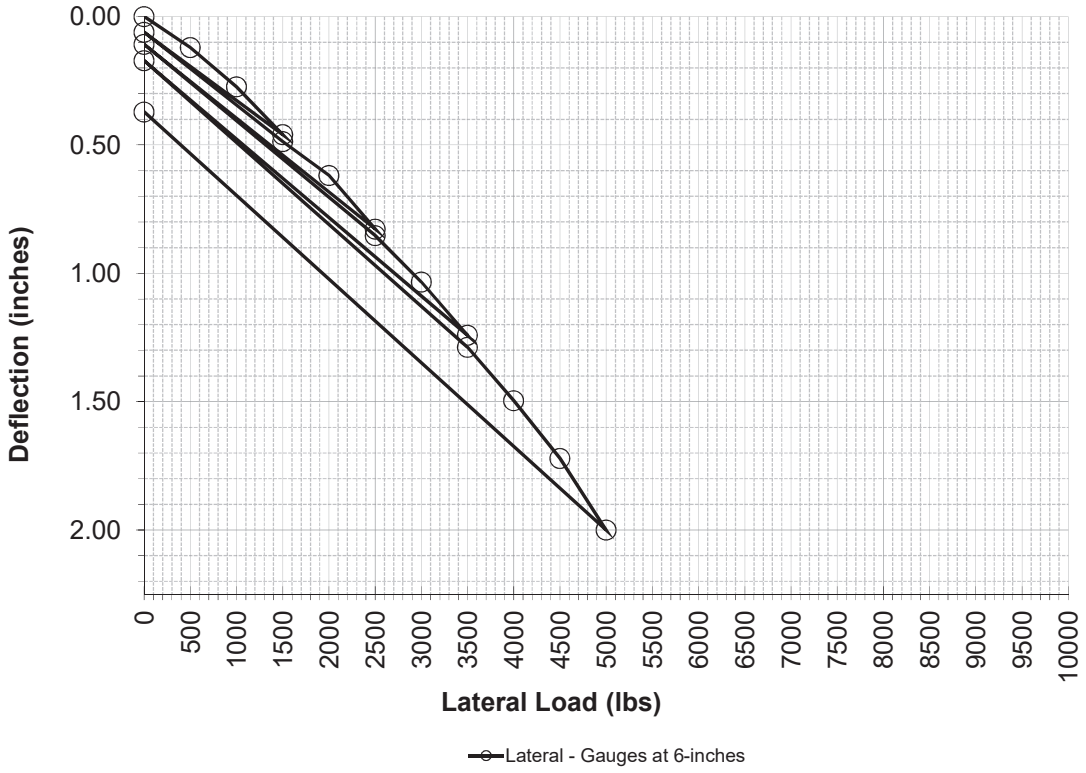
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/21/2022

Pile Information

Pile ID:	PLT-33B
Latitude:	39.25610
Longitude:	-83.84040
Pile Type:	W6X9
Pile Embedment Depth [in]:	120
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	229

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.120	
14%	1000	0.273	
21%	1500	0.459	
0%	0	0.061	
21%	1500	0.487	
29%	2000	0.619	
36%	2500	0.827	
0%	0	0.108	
36%	2500	0.853	
43%	3000	1.034	
50%	3500	1.241	
0%	0	0.172	
50%	3500	1.288	
57%	4000	1.496	
64%	4500	1.721	
71%	5000	2.000	
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.372	



Lateral Load Test Result for PLT-34A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

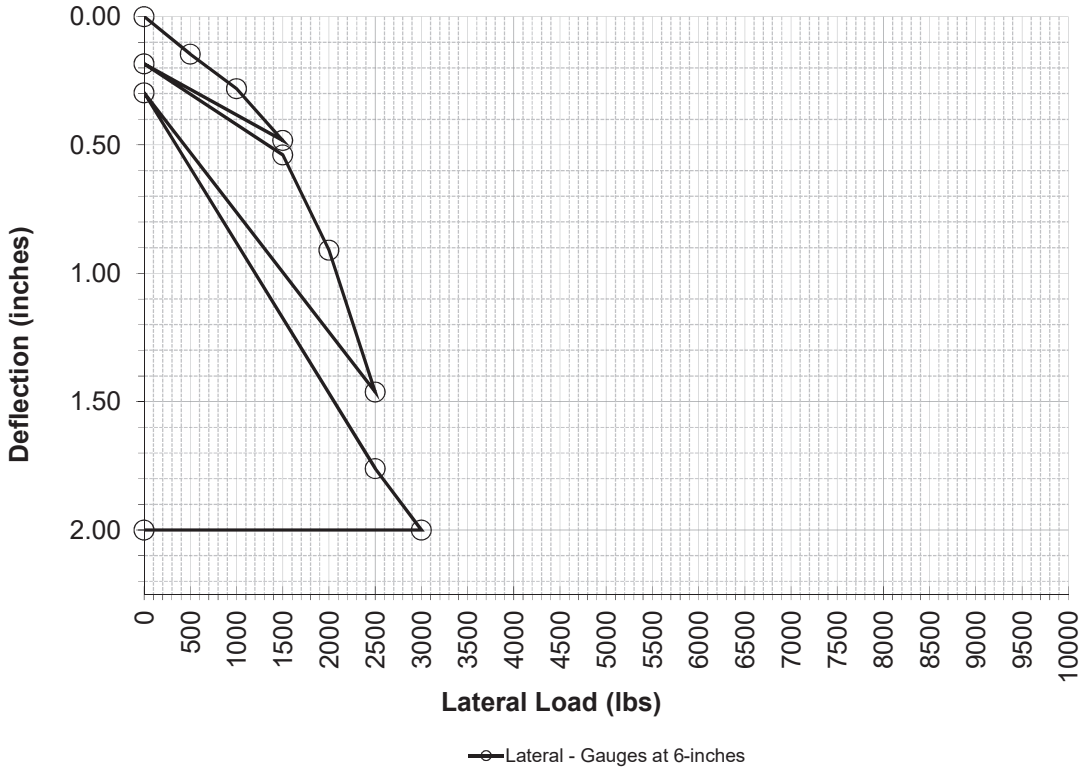
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/22/2022

Pile Information

Pile ID:	PLT-34A
Latitude:	39.26130
Longitude:	-83.83370
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	26

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.146	
14%	1000	0.280	
21%	1500	0.482	
0%	0	0.184	
21%	1500	0.538	
29%	2000	0.910	
36%	2500	1.462	
0%	0	0.297	
36%	2500	1.761	
43%	3000	2.000	
50%	3500		
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	2.000	



Lateral Load Test Result for PLT-34B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

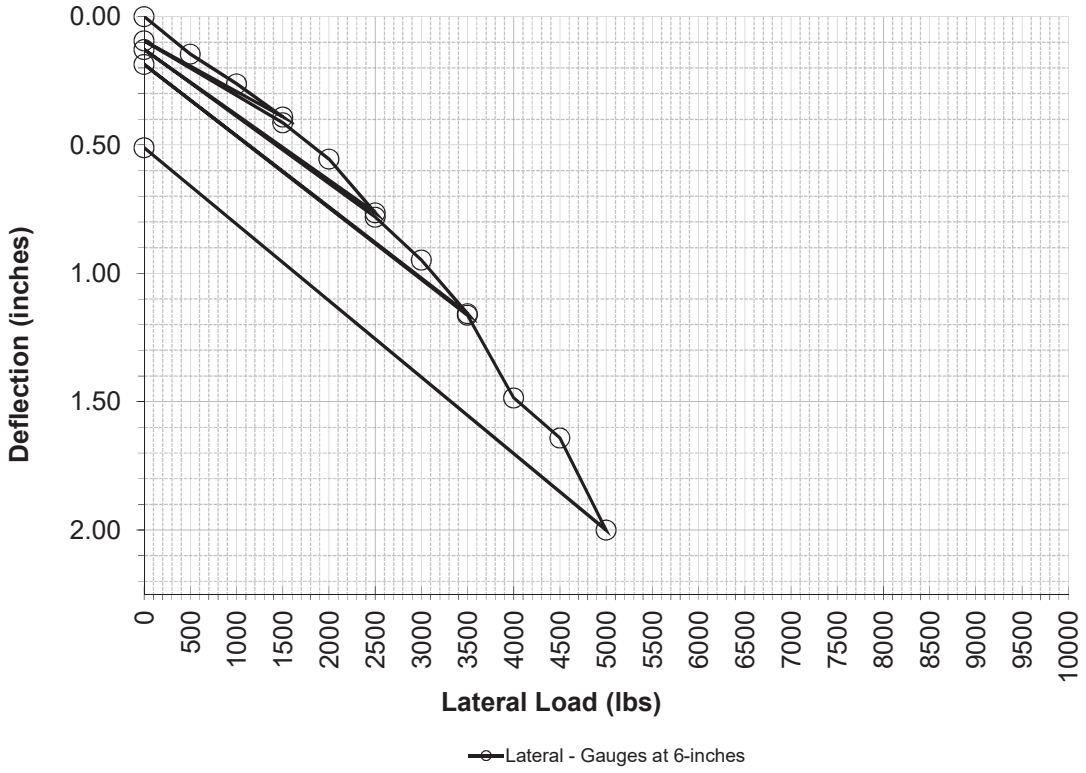
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/22/2022

Pile Information

Pile ID:	PLT-34B
Latitude:	39.26130
Longitude:	-83.83370
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	77

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.146	
14%	1000	0.262	
21%	1500	0.391	
0%	0	0.094	
21%	1500	0.413	
29%	2000	0.555	
36%	2500	0.765	
0%	0	0.128	
36%	2500	0.782	
43%	3000	0.948	
50%	3500	1.157	
0%	0	0.186	
50%	3500	1.163	
57%	4000	1.485	
64%	4500	1.642	
71%	5000	2.000	
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.511	



Lateral Load Test Result for PLT-35A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

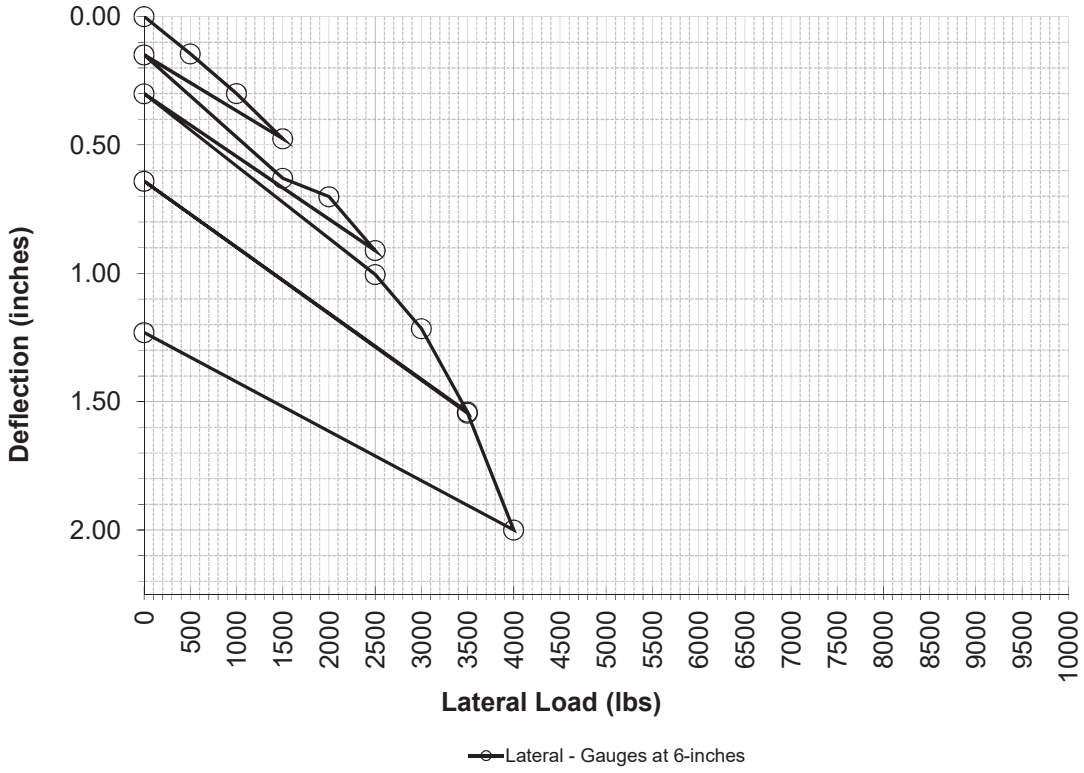
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/22/2022

Pile Information

Pile ID:	PLT-35A
Latitude:	39.25820
Longitude:	-83.82670
Pile Type:	W6X9
Pile Embedment Depth [in]:	84
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	57

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.145	
14%	1000	0.300	
21%	1500	0.476	
0%	0	0.149	
21%	1500	0.630	
29%	2000	0.702	
36%	2500	0.911	
0%	0	0.301	
36%	2500	1.005	
43%	3000	1.215	
50%	3500	1.540	
0%	0	0.642	
50%	3500	1.545	
57%	4000	2.000	
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	1.231	



Lateral Load Test Result for PLT-35B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

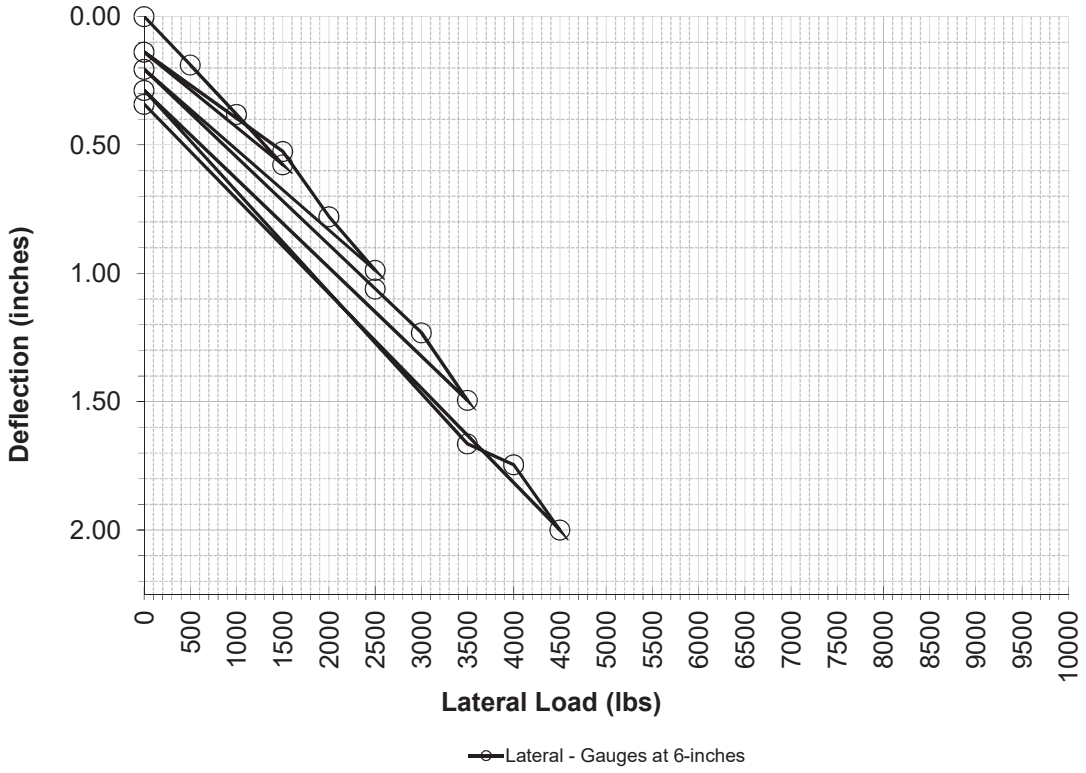
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/22/2022

Pile Information

Pile ID:	PLT-35B
Latitude:	39.25820
Longitude:	-83.82670
Pile Type:	W6X9
Pile Embedment Depth [in]:	120
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	126

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.188	
14%	1000	0.381	
21%	1500	0.577	
0%	0	0.139	
21%	1500	0.526	
29%	2000	0.780	
36%	2500	0.988	
0%	0	0.205	
36%	2500	1.061	
43%	3000	1.232	
50%	3500	1.495	
0%	0	0.288	
50%	3500	1.664	
57%	4000	1.746	
64%	4500	2.000	
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.341	



Lateral Load Test Result for PLT-36A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

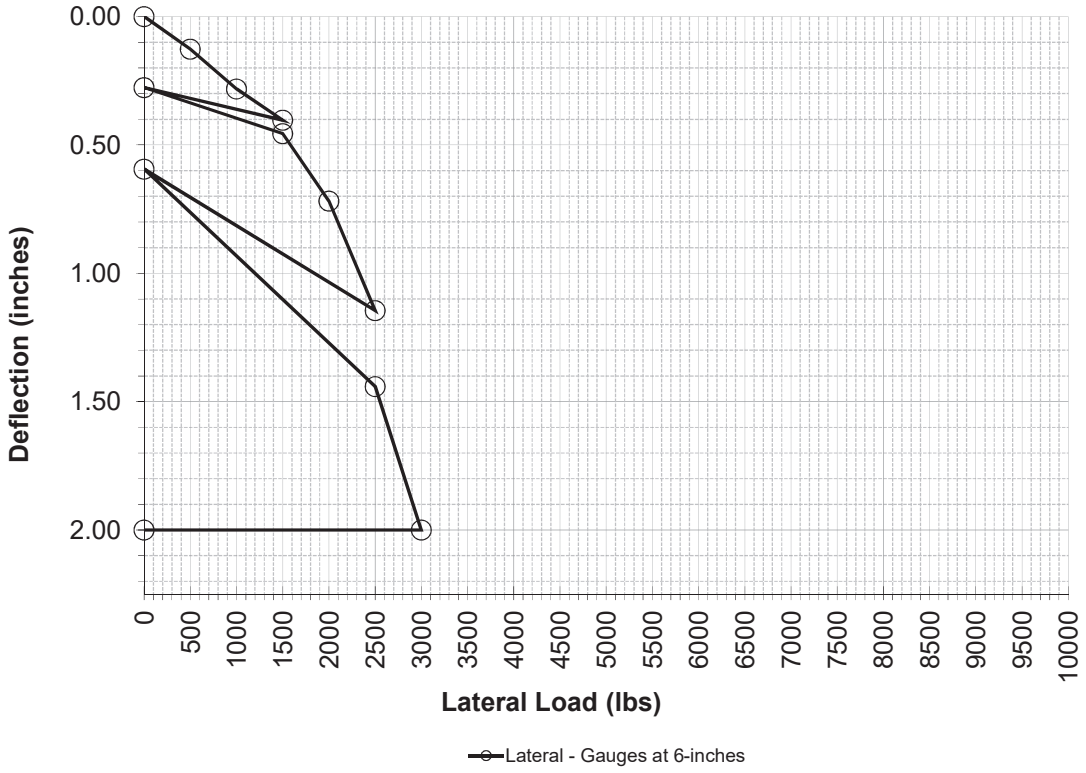
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/22/2022

Pile Information

Pile ID:	PLT-36A
Latitude:	39.26000
Longitude:	-83.82010
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	29

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.127	
14%	1000	0.282	
21%	1500	0.403	
0%	0	0.277	
21%	1500	0.456	
29%	2000	0.719	
36%	2500	1.146	
0%	0	0.594	
36%	2500	1.441	
43%	3000	2.000	
50%	3500		
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	2.000	



Lateral Load Test Result for PLT-36B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

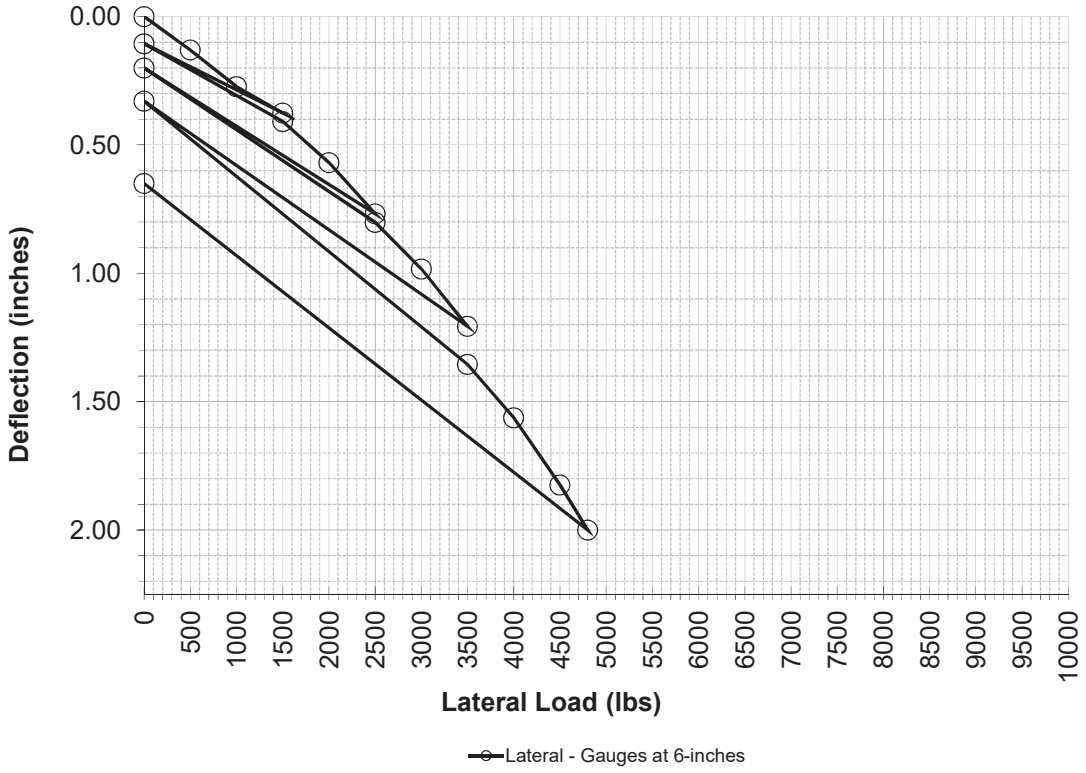
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/22/2022

Pile Information

Pile ID:	PLT-36B
Latitude:	39.26000
Longitude:	-83.82010
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	97

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.130	
14%	1000	0.273	
21%	1500	0.376	
0%	0	0.106	
21%	1500	0.409	
29%	2000	0.569	
36%	2500	0.768	
0%	0	0.200	
36%	2500	0.801	
43%	3000	0.983	
50%	3500	1.207	
0%	0	0.329	
50%	3500	1.355	
57%	4000	1.562	
64%	4500	1.824	
69%	4800	2.000	
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.650	



Lateral Load Test Result for PLT-37A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

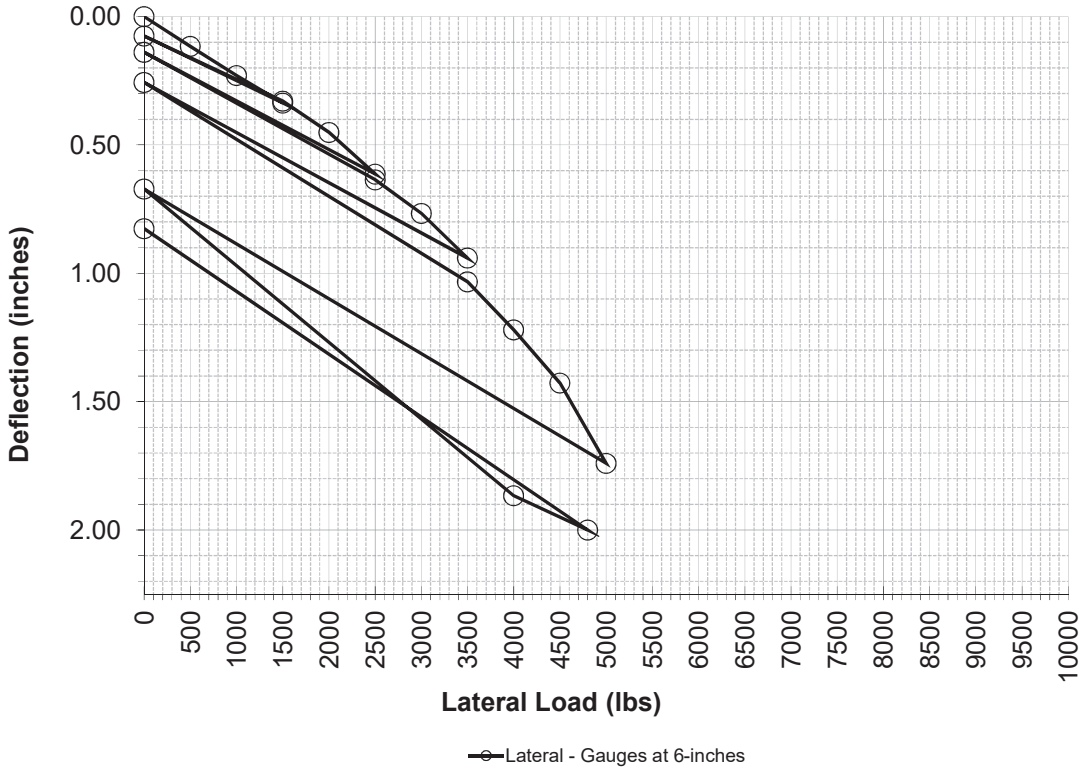
Test Date and Representative

Tested By Terracon Rep:	MC
Date Tested:	6/24/2022

Pile Information

Pile ID:	PLT-37A
Latitude:	39.25650
Longitude:	-83.81340
Pile Type:	W6X9
Pile Embedment Depth [in]:	84
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	61

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.116	
14%	1000	0.230	
21%	1500	0.337	
0%	0	0.076	
21%	1500	0.329	
29%	2000	0.451	
36%	2500	0.614	
0%	0	0.139	
36%	2500	0.636	
43%	3000	0.766	
50%	3500	0.941	
0%	0	0.256	
50%	3500	1.033	
57%	4000	1.221	
64%	4500	1.428	
71%	5000	1.740	
0%	0	0.672	
57%	4000	1.867	
69%	4800	2.000	
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.826	



Lateral Load Test Result for PLT-37B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

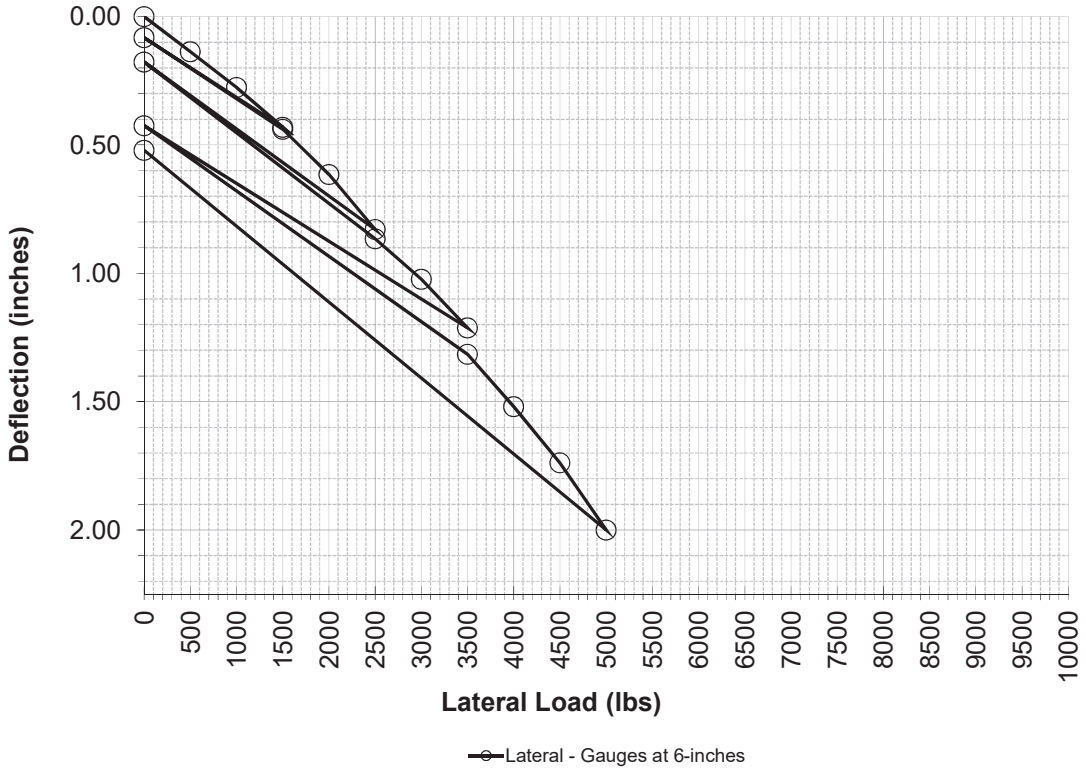
Test Date and Representative

Tested By Terracon Rep:	MC
Date Tested:	6/24/2022

Pile Information

Pile ID:	PLT-37B
Latitude:	39.25650
Longitude:	-83.81340
Pile Type:	W6X9
Pile Embedment Depth [in]:	120
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	169

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.137	
14%	1000	0.276	
21%	1500	0.431	
0%	0	0.082	
21%	1500	0.439	
29%	2000	0.615	
36%	2500	0.829	
0%	0	0.177	
36%	2500	0.865	
43%	3000	1.023	
50%	3500	1.213	
0%	0	0.425	
50%	3500	1.316	
57%	4000	1.519	
64%	4500	1.738	
71%	5000	2.000	
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.521	



Lateral Load Test Result for PLT-38A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

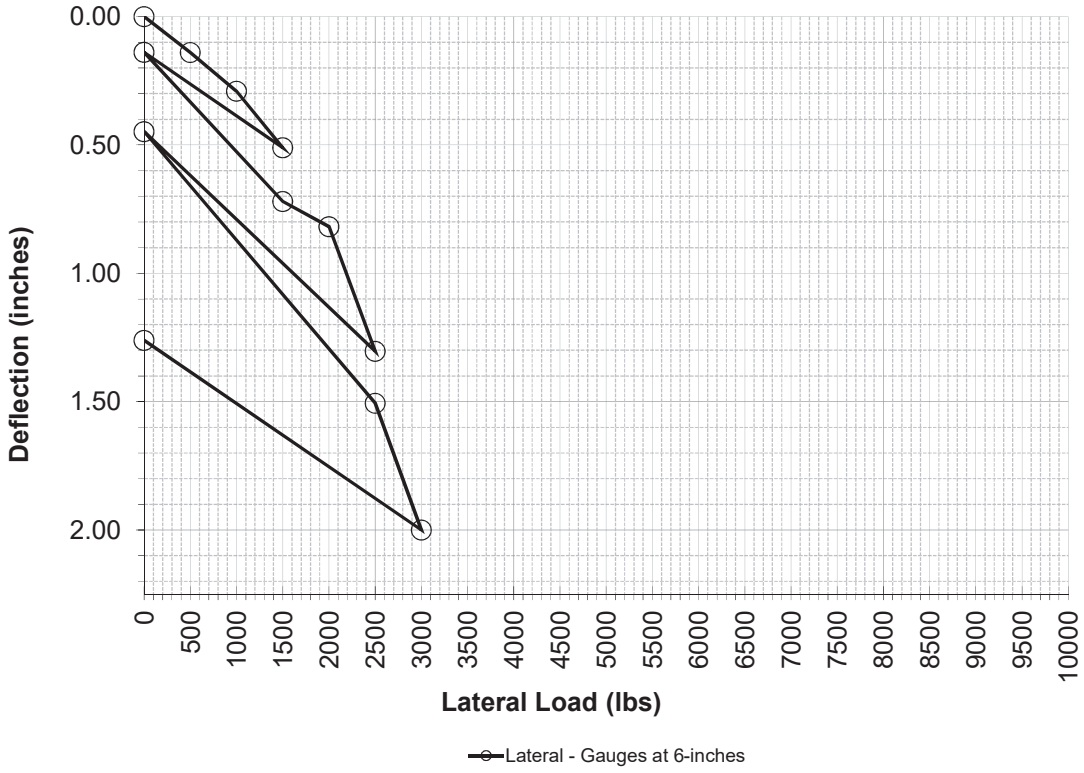
Test Date and Representative

Tested By Terracon Rep:	MC
Date Tested:	6/24/2022

Pile Information

Pile ID:	PLT-38A
Latitude:	39.26370
Longitude:	-83.80780
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	36

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.140	
14%	1000	0.290	
21%	1500	0.511	
0%	0	0.139	
21%	1500	0.720	
29%	2000	0.819	
36%	2500	1.303	
0%	0	0.448	
36%	2500	1.506	
43%	3000	2.000	
50%	3500		
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	1.261	



Lateral Load Test Result for PLT-38B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

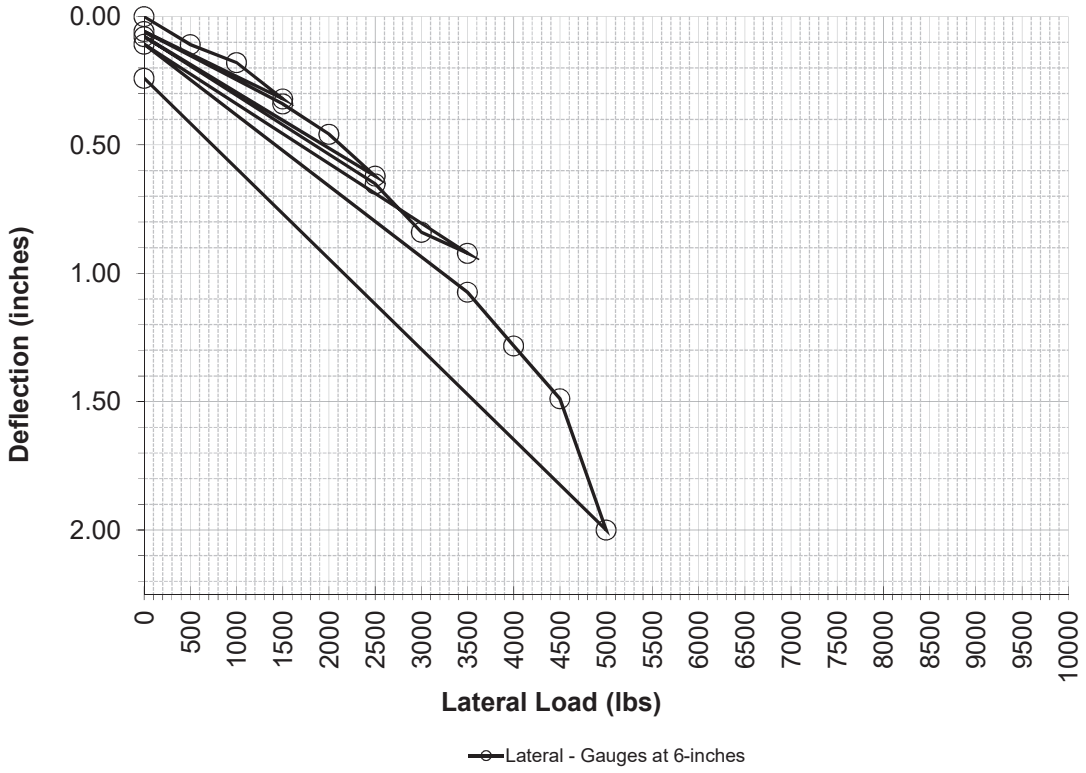
Test Date and Representative

Tested By Terracon Rep:	MC
Date Tested:	6/24/2022

Pile Information

Pile ID:	PLT-38B
Latitude:	39.26370
Longitude:	-83.80780
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	133

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.109	
14%	1000	0.179	
21%	1500	0.321	
0%	0	0.058	
21%	1500	0.340	
29%	2000	0.458	
36%	2500	0.622	
0%	0	0.078	
36%	2500	0.651	
43%	3000	0.840	
50%	3500	0.922	
0%	0	0.108	
50%	3500	1.073	
57%	4000	1.283	
64%	4500	1.488	
71%	5000	2.000	
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.240	



Lateral Load Test Result for PLT-39A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

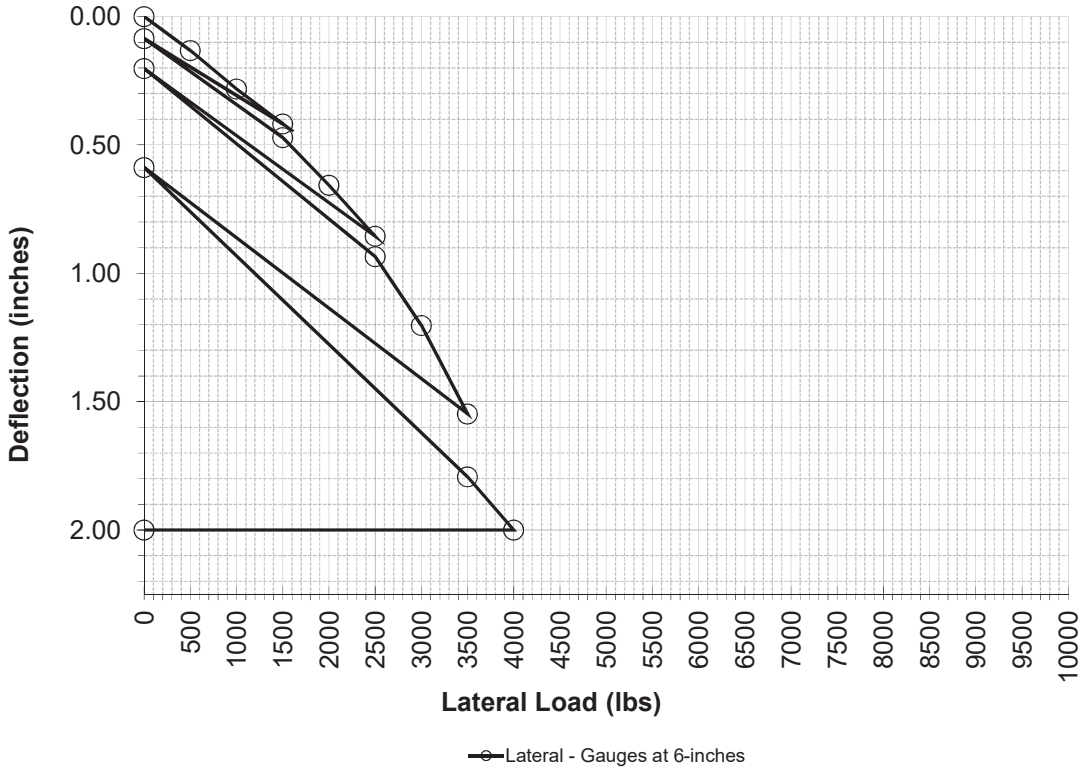
Test Date and Representative

Tested By Terracon Rep:	MC
Date Tested:	6/24/2022

Pile Information

Pile ID:	PLT-39A
Latitude:	39.26030
Longitude:	-83.80220
Pile Type:	W6X9
Pile Embedment Depth [in]:	84
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	44

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.132	
14%	1000	0.282	
21%	1500	0.418	
0%	0	0.086	
21%	1500	0.471	
29%	2000	0.657	
36%	2500	0.855	
0%	0	0.203	
36%	2500	0.935	
43%	3000	1.203	
50%	3500	1.548	
0%	0	0.588	
50%	3500	1.793	
57%	4000	2.000	
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	2.000	



Lateral Load Test Result for PLT-39B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

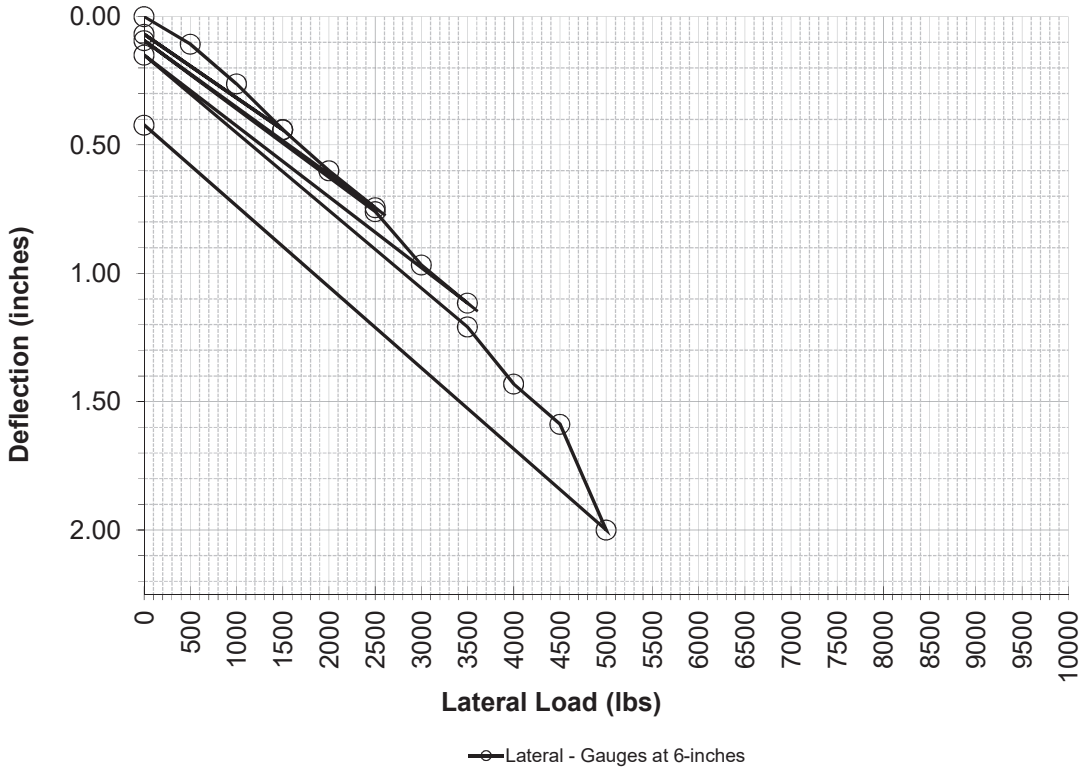
Test Date and Representative

Tested By Terracon Rep:	MC
Date Tested:	6/24/2022

Pile Information

Pile ID:	PLT-39B
Latitude:	39.26030
Longitude:	-83.80220
Pile Type:	W6X9
Pile Embedment Depth [in]:	120
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	141

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.108	
14%	1000	0.262	
21%	1500	0.440	
0%	0	0.069	
21%	1500	0.441	
29%	2000	0.600	
36%	2500	0.744	
0%	0	0.094	
36%	2500	0.760	
43%	3000	0.967	
50%	3500	1.116	
0%	0	0.150	
50%	3500	1.209	
57%	4000	1.431	
64%	4500	1.588	
71%	5000	2.000	
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.423	



Lateral Load Test Result for PLT-40A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

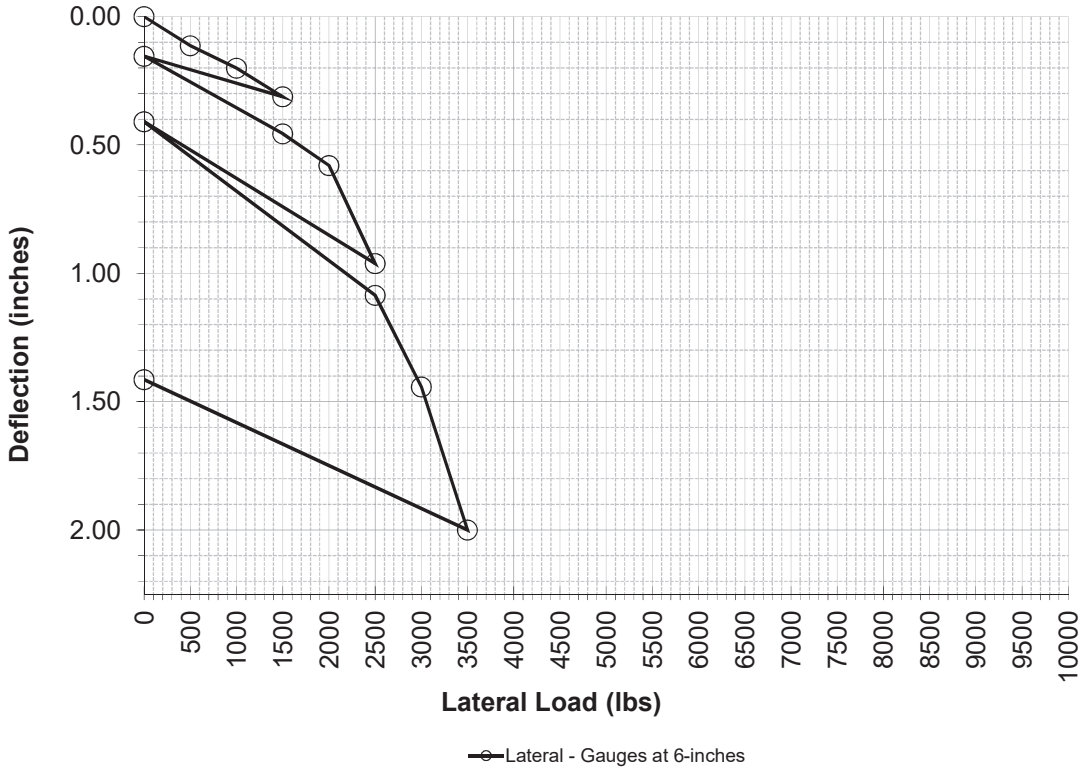
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/22/2022

Pile Information

Pile ID:	PLT-40A
Latitude:	39.25170
Longitude:	-83.84030
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	34

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.114	
14%	1000	0.201	
21%	1500	0.312	
0%	0	0.155	
21%	1500	0.457	
29%	2000	0.581	
36%	2500	0.962	
0%	0	0.410	
36%	2500	1.086	
43%	3000	1.443	
50%	3500	2.000	
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	1.414	



Lateral Load Test Result for PLT-40B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

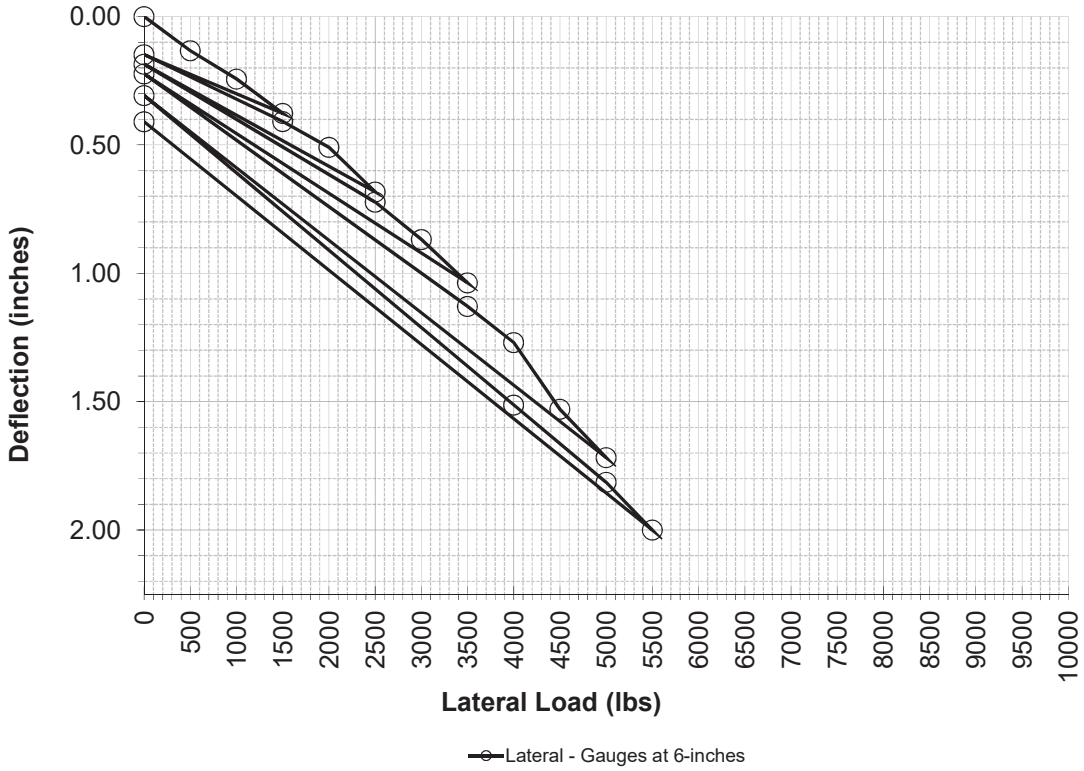
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/22/2022

Pile Information

Pile ID:	PLT-40B
Latitude:	39.25170
Longitude:	-83.84030
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	115

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.133	
14%	1000	0.243	
21%	1500	0.377	
0%	0	0.149	
21%	1500	0.409	
29%	2000	0.509	
36%	2500	0.683	
0%	0	0.185	
36%	2500	0.722	
43%	3000	0.869	
50%	3500	1.037	
0%	0	0.223	
50%	3500	1.129	
57%	4000	1.269	
64%	4500	1.529	
71%	5000	1.718	
0%	0	0.308	
57%	4000	1.513	
71%	5000	1.814	
79%	5500	2.000	
86%	6000		
93%	6500		
100%	7000		
0%	0	0.410	



Lateral Load Test Result for PLT-41A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

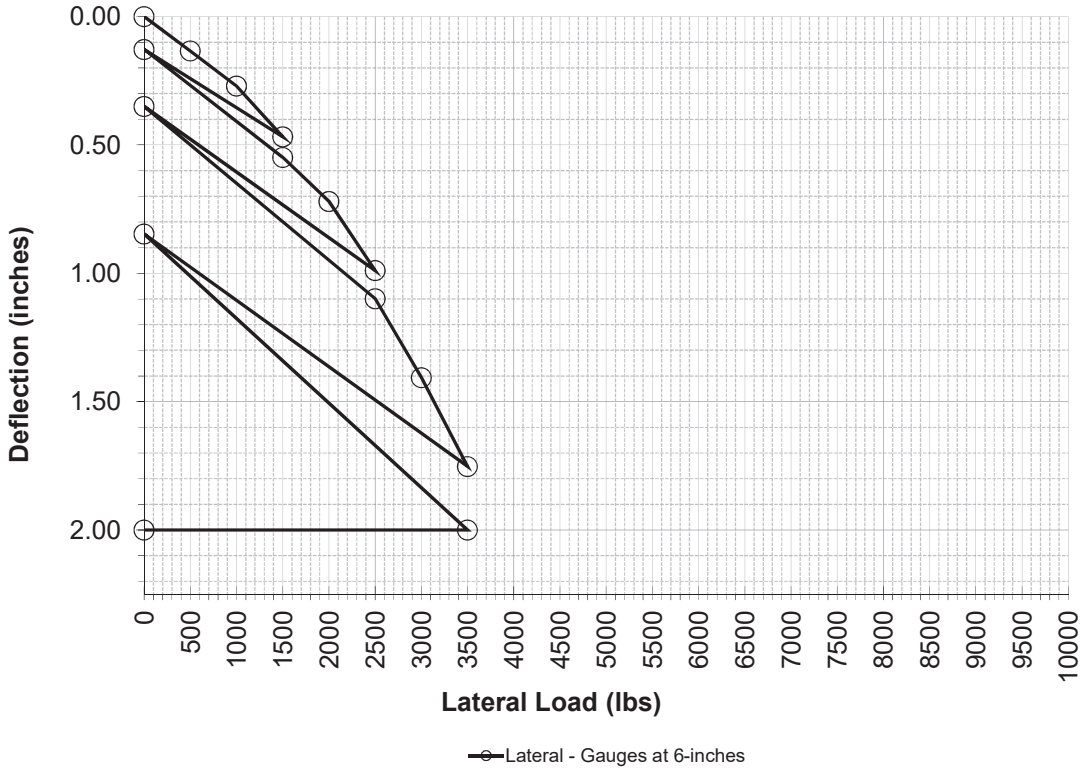
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/21/2022

Pile Information

Pile ID:	PLT-41A
Latitude:	39.25470
Longitude:	-83.83550
Pile Type:	W6X9
Pile Embedment Depth [in]:	84
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	49

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.134	
14%	1000	0.270	
21%	1500	0.468	
0%	0	0.128	
21%	1500	0.548	
29%	2000	0.720	
36%	2500	0.989	
0%	0	0.350	
36%	2500	1.099	
43%	3000	1.407	
50%	3500	1.753	
0%	0	0.847	
50%	3500	2.000	
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	2.000	



Lateral Load Test Result for PLT-41B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

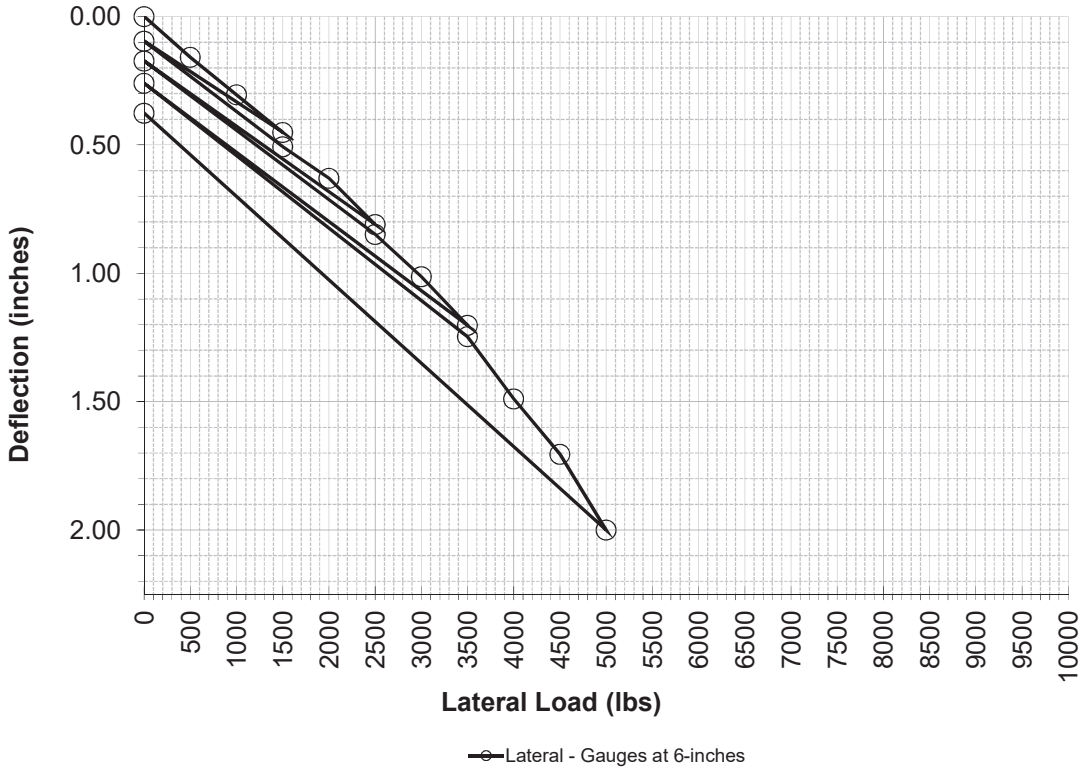
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/21/2022

Pile Information

Pile ID:	PLT-41B
Latitude:	39.25470
Longitude:	-83.83550
Pile Type:	W6X9
Pile Embedment Depth [in]:	120
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	159

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.158	
14%	1000	0.305	
21%	1500	0.451	
0%	0	0.096	
21%	1500	0.507	
29%	2000	0.630	
36%	2500	0.810	
0%	0	0.173	
36%	2500	0.848	
43%	3000	1.013	
50%	3500	1.202	
0%	0	0.260	
50%	3500	1.247	
57%	4000	1.489	
64%	4500	1.705	
71%	5000	2.000	
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.377	



Lateral Load Test Result for PLT-42A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

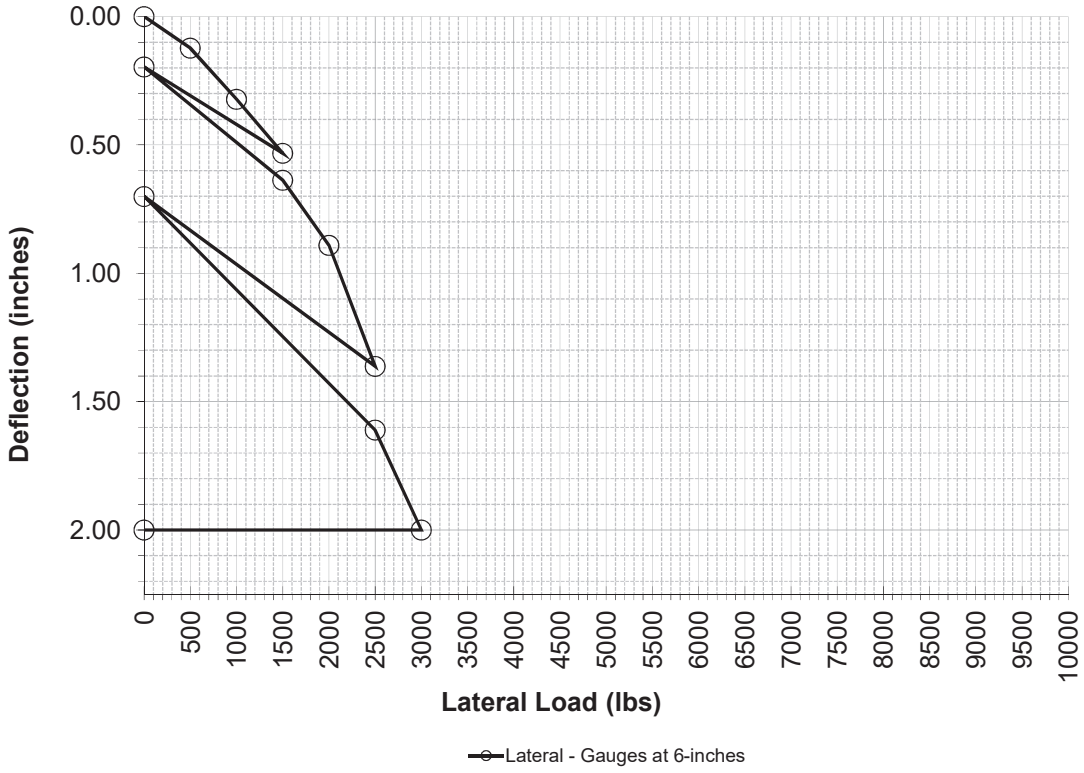
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/21/2022

Pile Information

Pile ID:	PLT-42A
Latitude:	39.25020
Longitude:	-83.83420
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	29

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.123	
14%	1000	0.322	
21%	1500	0.532	
0%	0	0.196	
21%	1500	0.637	
29%	2000	0.891	
36%	2500	1.363	
0%	0	0.701	
36%	2500	1.611	
43%	3000	2.000	
50%	3500		
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	2.000	



Lateral Load Test Result for PLT-42B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

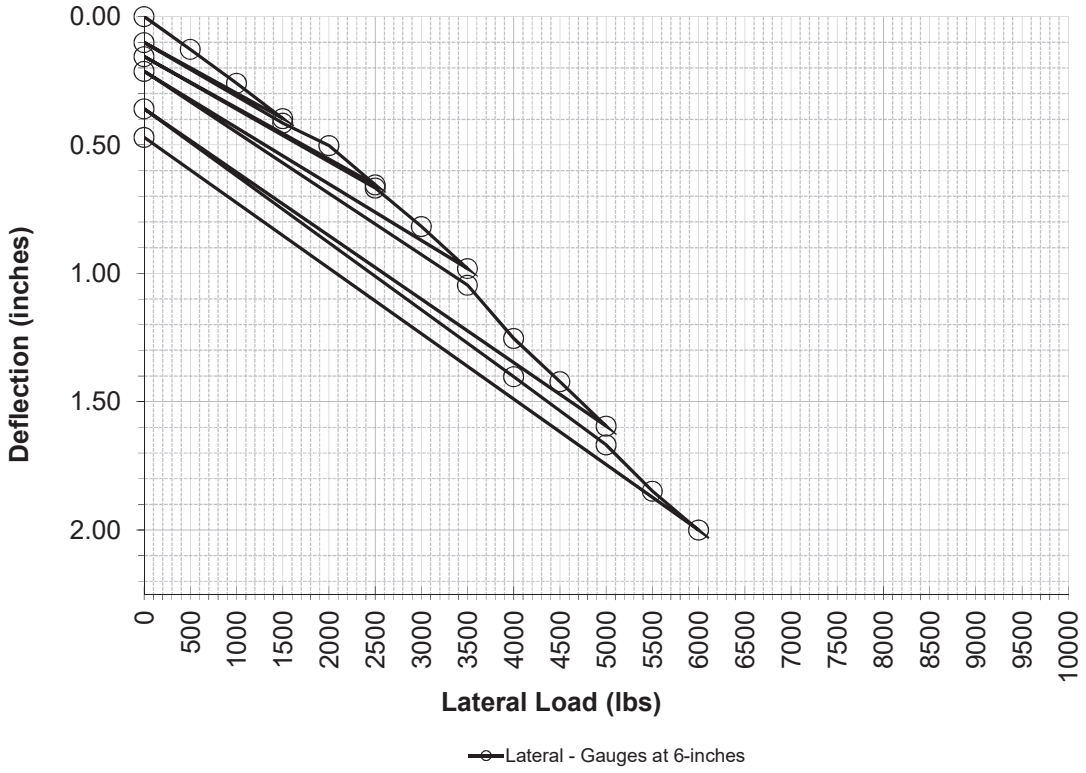
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/21/2022

Pile Information

Pile ID:	PLT-42B
Latitude:	39.25020
Longitude:	-83.83420
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	114

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.127	
14%	1000	0.260	
21%	1500	0.397	
0%	0	0.101	
21%	1500	0.415	
29%	2000	0.503	
36%	2500	0.655	
0%	0	0.156	
36%	2500	0.668	
43%	3000	0.818	
50%	3500	0.982	
0%	0	0.213	
50%	3500	1.047	
57%	4000	1.253	
64%	4500	1.422	
71%	5000	1.595	
0%	0	0.359	
57%	4000	1.403	
71%	5000	1.668	
79%	5500	1.849	
86%	6000	2.000	
93%	6500		
100%	7000		
0%	0	0.471	



Lateral Load Test Result for PLT-43A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

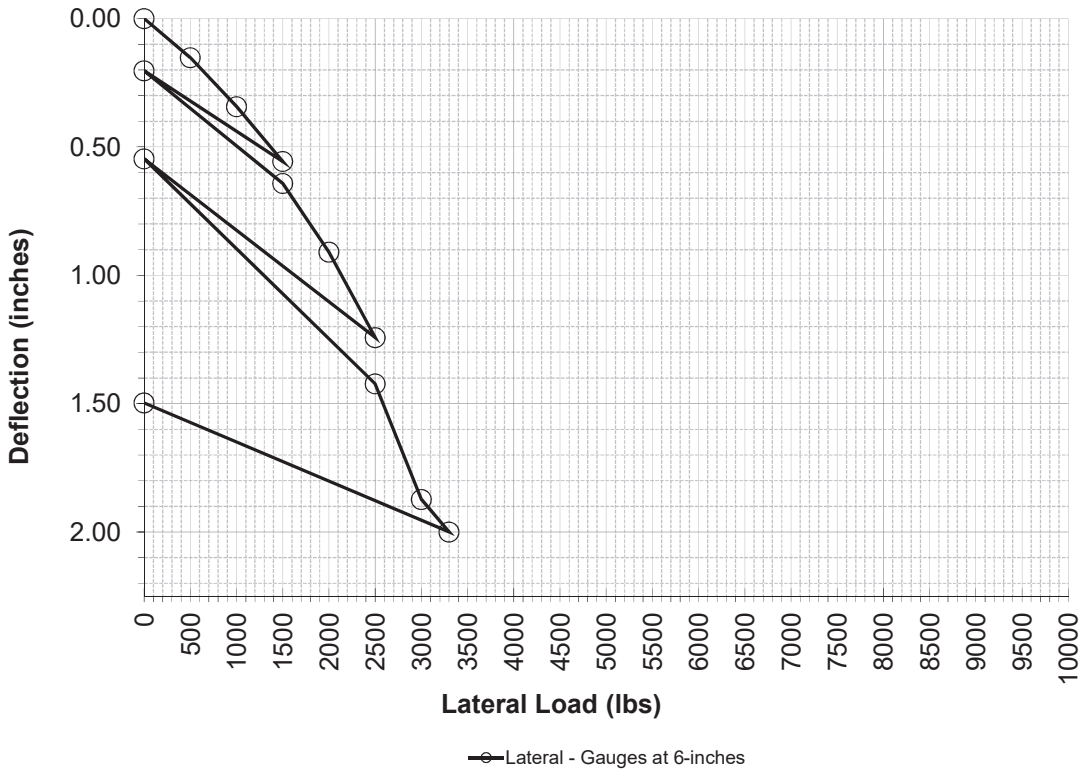
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/23/2022

Pile Information

Pile ID:	PLT-43A
Latitude:	39.25160
Longitude:	-83.82920
Pile Type:	W6X9
Pile Embedment Depth [in]:	84
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	40

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.152	
14%	1000	0.343	
21%	1500	0.557	
0%	0	0.203	
21%	1500	0.642	
29%	2000	0.910	
36%	2500	1.243	
0%	0	0.547	
36%	2500	1.422	
43%	3000	1.874	
47%	3300	2.000	
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	1.497	



Lateral Load Test Result for PLT-43B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

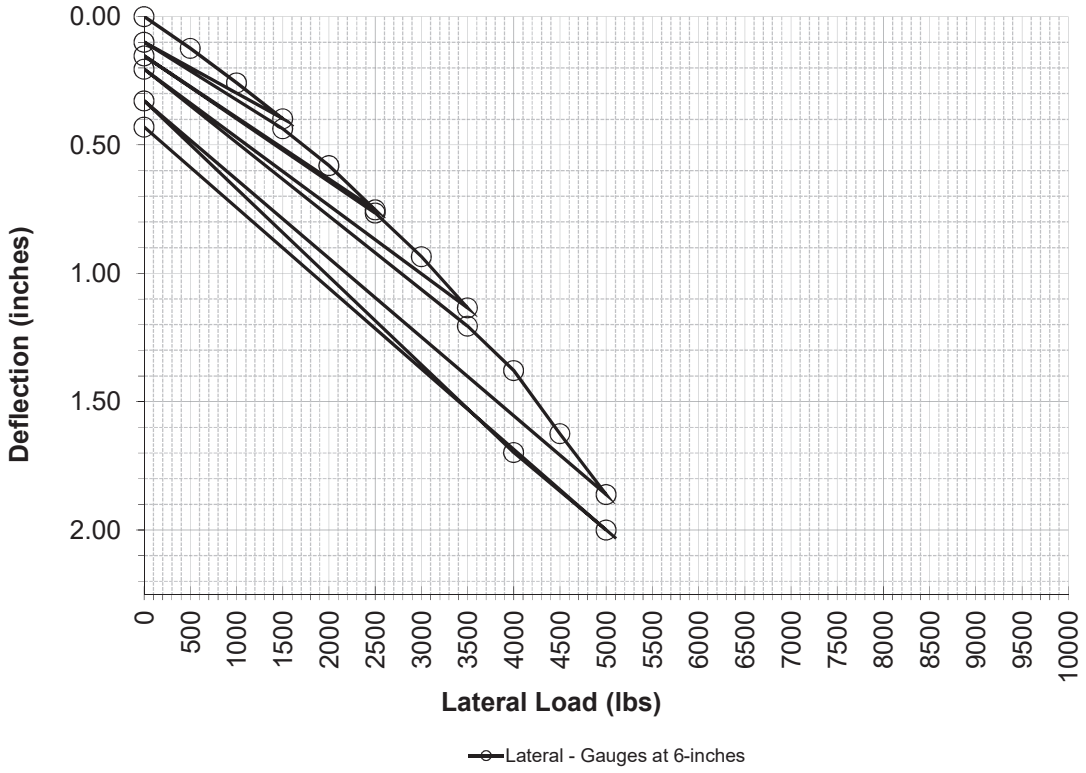
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/23/2022

Pile Information

Pile ID:	PLT-43B
Latitude:	39.25160
Longitude:	-83.82920
Pile Type:	W6X9
Pile Embedment Depth [in]:	120
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	115

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.123	
14%	1000	0.258	
21%	1500	0.398	
0%	0	0.100	
21%	1500	0.437	
29%	2000	0.580	
36%	2500	0.753	
0%	0	0.153	
36%	2500	0.765	
43%	3000	0.935	
50%	3500	1.134	
0%	0	0.204	
50%	3500	1.206	
57%	4000	1.378	
64%	4500	1.625	
71%	5000	1.862	
0%	0	0.328	
57%	4000	1.698	
71%	5000	2.000	
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.430	



Lateral Load Test Result for PLT-44A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

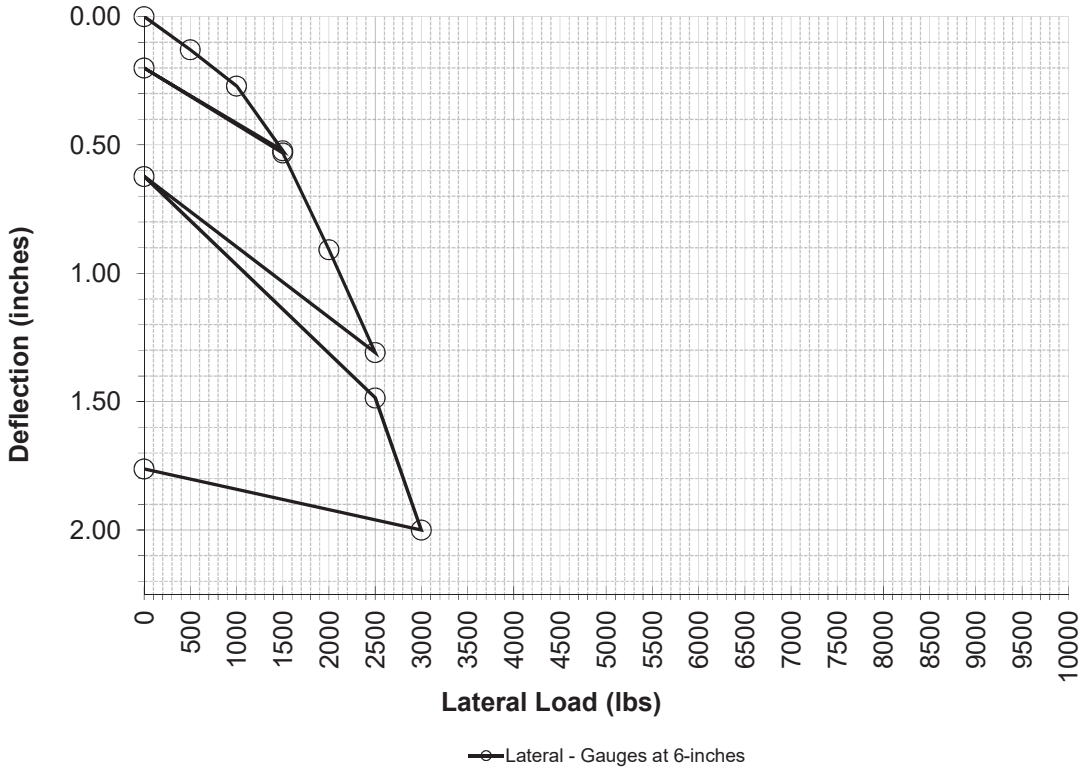
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/23/2022

Pile Information

Pile ID:	PLT-44A
Latitude:	39.24670
Longitude:	-83.83330
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	27

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.129	
14%	1000	0.270	
21%	1500	0.522	
0%	0	0.200	
21%	1500	0.531	
29%	2000	0.908	
36%	2500	1.308	
0%	0	0.623	
36%	2500	1.485	
43%	3000	2.000	
50%	3500		
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	1.762	



Lateral Load Test Result for PLT-44B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

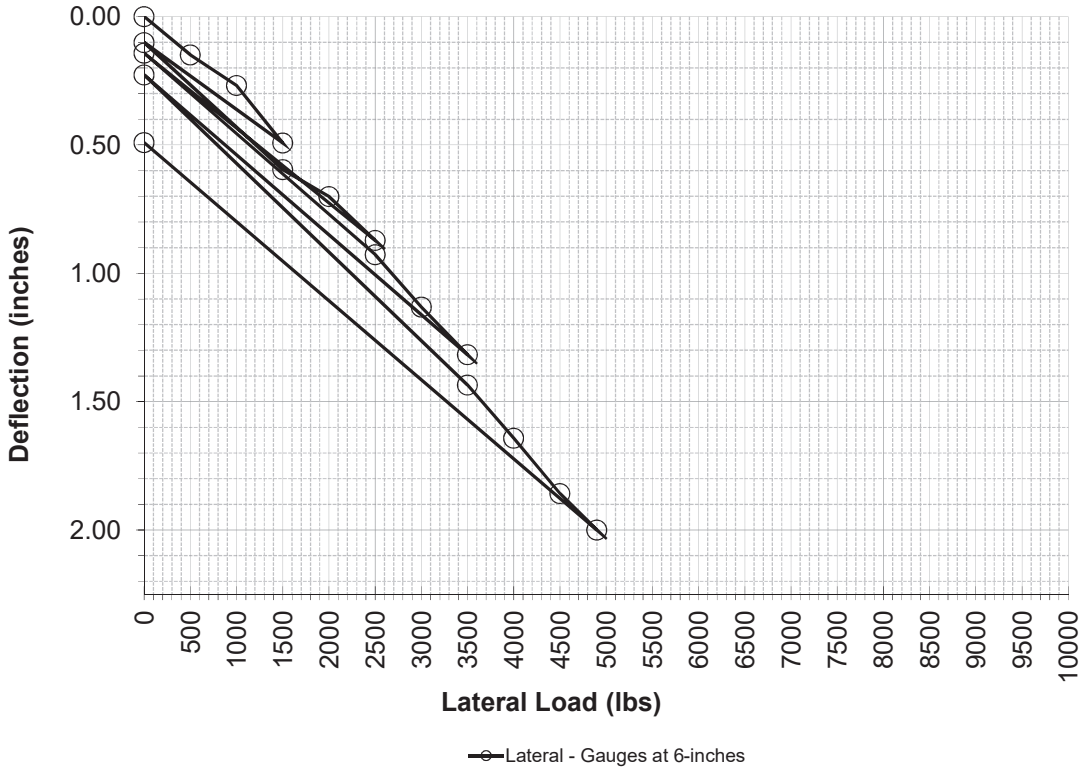
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/23/2022

Pile Information

Pile ID:	PLT-44B
Latitude:	39.24670
Longitude:	-83.83330
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	106

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.149	
14%	1000	0.268	
21%	1500	0.492	
0%	0	0.101	
21%	1500	0.596	
29%	2000	0.701	
36%	2500	0.872	
0%	0	0.142	
36%	2500	0.927	
43%	3000	1.131	
50%	3500	1.317	
0%	0	0.227	
50%	3500	1.435	
57%	4000	1.642	
64%	4500	1.858	
70%	4900	2.000	
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.490	



Lateral Load Test Result for PLT-45A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

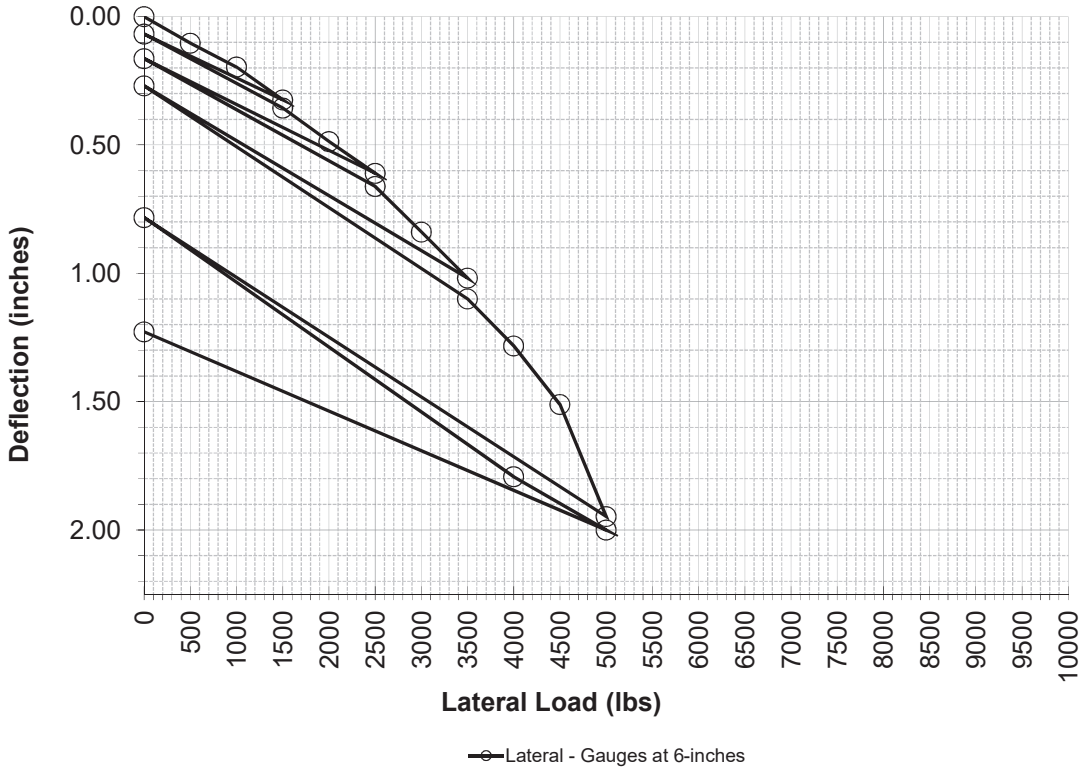
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/23/2022

Pile Information

Pile ID:	PLT-45A
Latitude:	39.24810
Longitude:	-83.82600
Pile Type:	W6X9
Pile Embedment Depth [in]:	84
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	161

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.103	
14%	1000	0.196	
21%	1500	0.325	
0%	0	0.068	
21%	1500	0.356	
29%	2000	0.487	
36%	2500	0.610	
0%	0	0.164	
36%	2500	0.661	
43%	3000	0.839	
50%	3500	1.018	
0%	0	0.269	
50%	3500	1.099	
57%	4000	1.283	
64%	4500	1.511	
71%	5000	1.948	
0%	0	0.783	
57%	4000	1.792	
71%	5000	2.000	
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	1.228	



Lateral Load Test Result for PLT-45B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

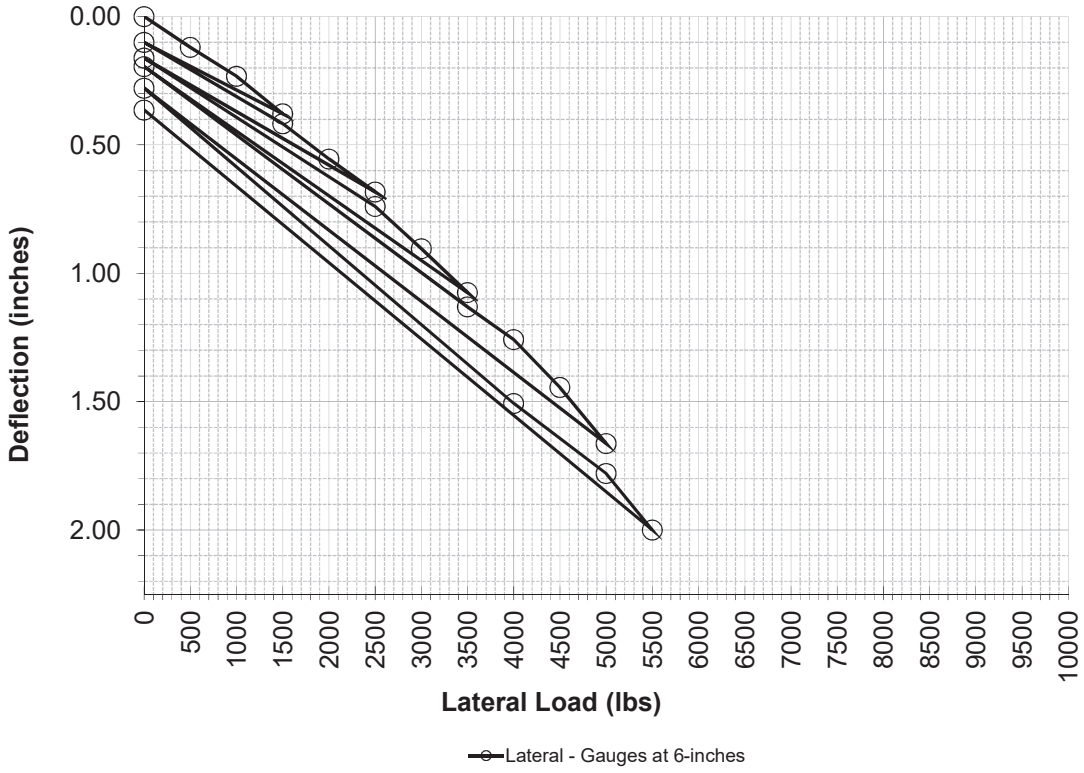
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/23/2022

Pile Information

Pile ID:	PLT-45B
Latitude:	39.24810
Longitude:	-83.82600
Pile Type:	W6X9
Pile Embedment Depth [in]:	120
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	117

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.120	
14%	1000	0.233	
21%	1500	0.378	
0%	0	0.100	
21%	1500	0.417	
29%	2000	0.555	
36%	2500	0.683	
0%	0	0.162	
36%	2500	0.740	
43%	3000	0.904	
50%	3500	1.075	
0%	0	0.195	
50%	3500	1.130	
57%	4000	1.258	
64%	4500	1.444	
71%	5000	1.663	
0%	0	0.279	
57%	4000	1.507	
71%	5000	1.780	
79%	5500	2.000	
86%	6000		
93%	6500		
100%	7000		
0%	0	0.364	



Lateral Load Test Result for PLT-46A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

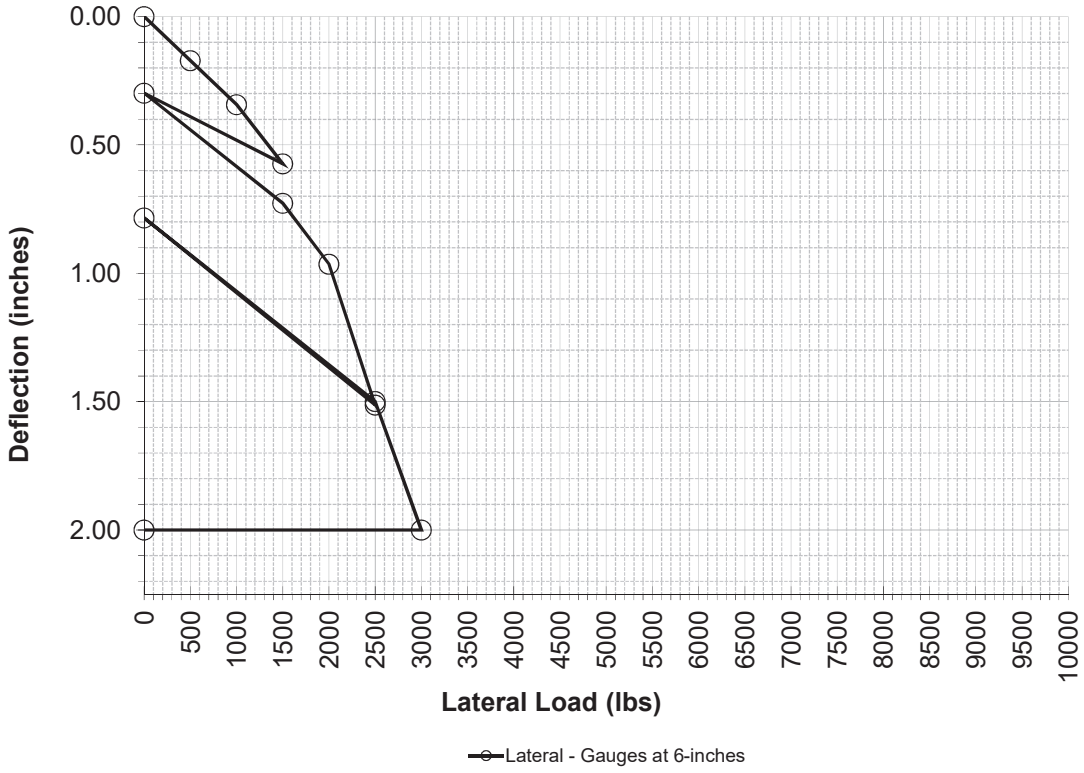
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/23/2022

Pile Information

Pile ID:	PLT-46A
Latitude:	39.25330
Longitude:	-83.82040
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	31

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.171	
14%	1000	0.343	
21%	1500	0.574	
0%	0	0.298	
21%	1500	0.727	
29%	2000	0.965	
36%	2500	1.513	
0%	0	0.784	
36%	2500	1.499	
43%	3000	2.000	
50%	3500		
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	2.000	



Lateral Load Test Result for PLT-46B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

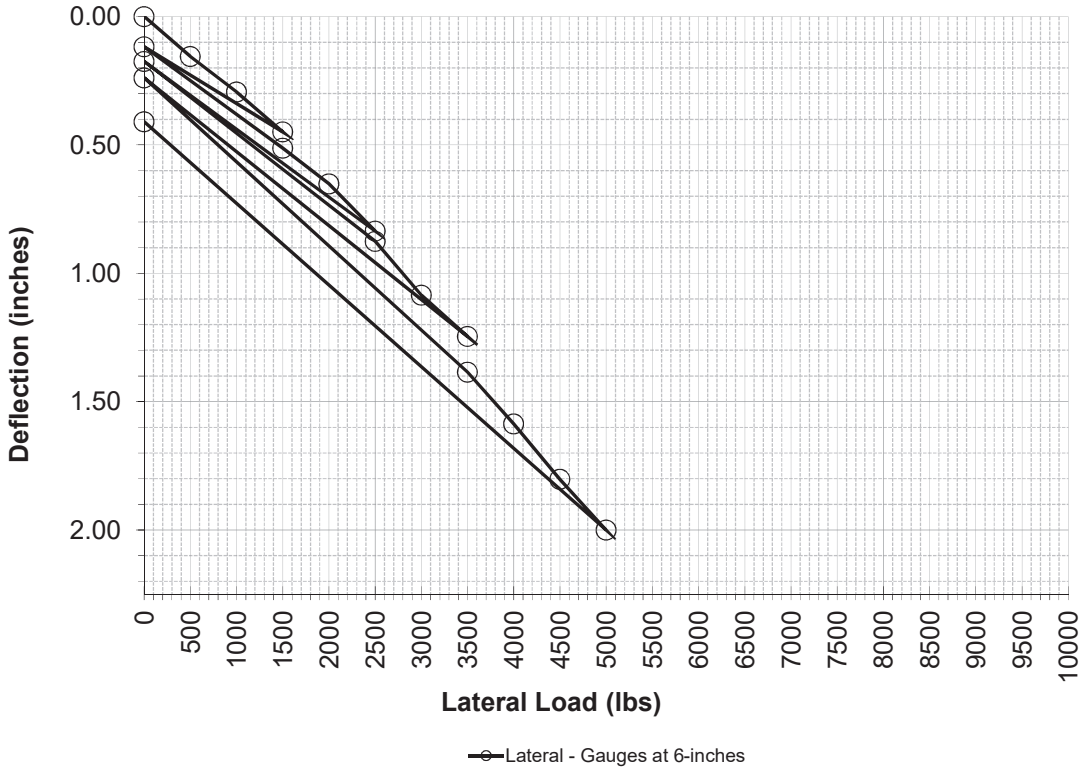
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/23/2022

Pile Information

Pile ID:	PLT-46B
Latitude:	39.25330
Longitude:	-83.82040
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	90

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.155	
14%	1000	0.293	
21%	1500	0.449	
0%	0	0.117	
21%	1500	0.512	
29%	2000	0.652	
36%	2500	0.835	
0%	0	0.175	
36%	2500	0.876	
43%	3000	1.085	
50%	3500	1.246	
0%	0	0.239	
50%	3500	1.385	
57%	4000	1.587	
64%	4500	1.802	
71%	5000	2.000	
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.410	



Lateral Load Test Result for PLT-47A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

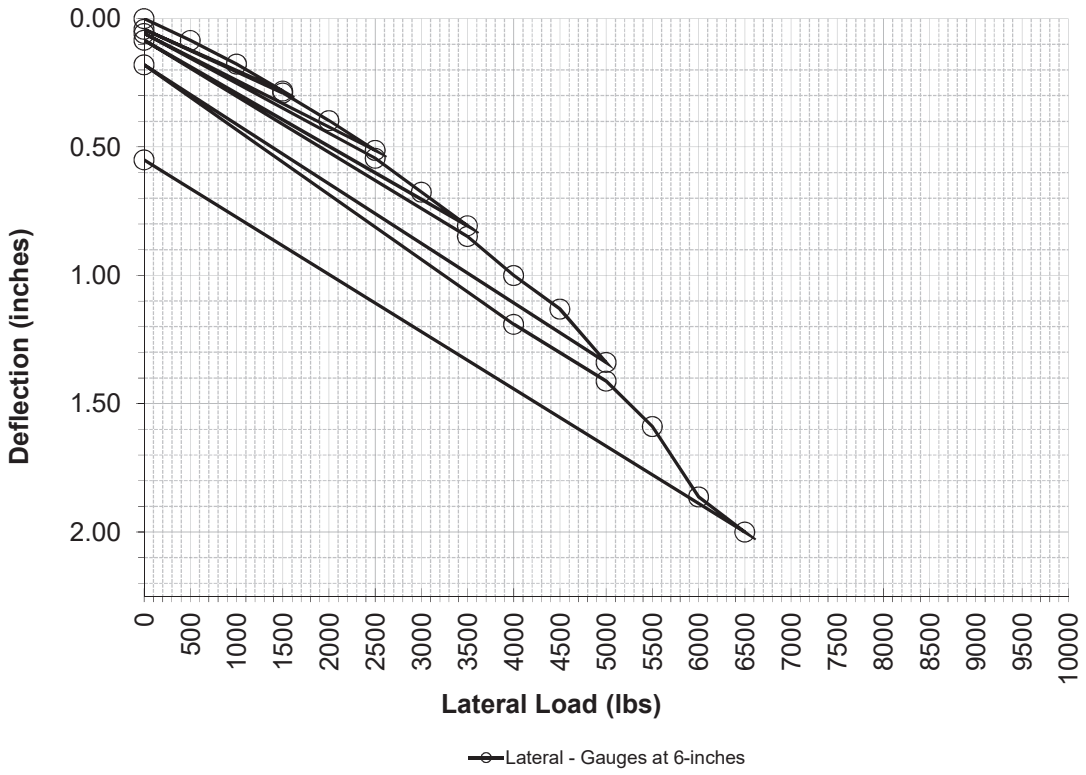
Test Date and Representative

Tested By Terracon Rep:	MC
Date Tested:	6/24/2022

Pile Information

Pile ID:	PLT-47A
Latitude:	39.25370
Longitude:	-83.81070
Pile Type:	W6X9
Pile Embedment Depth [in]:	84
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	104

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.085	
14%	1000	0.177	
21%	1500	0.282	
0%	0	0.041	
21%	1500	0.290	
29%	2000	0.397	
36%	2500	0.513	
0%	0	0.058	
36%	2500	0.544	
43%	3000	0.676	
50%	3500	0.807	
0%	0	0.084	
50%	3500	0.848	
57%	4000	1.001	
64%	4500	1.131	
71%	5000	1.339	
0%	0	0.180	
57%	4000	1.191	
71%	5000	1.412	
79%	5500	1.589	
86%	6000	1.863	
93%	6500	2.000	
100%	7000		
0%	0	0.550	



Lateral Load Test Result for PLT-47B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

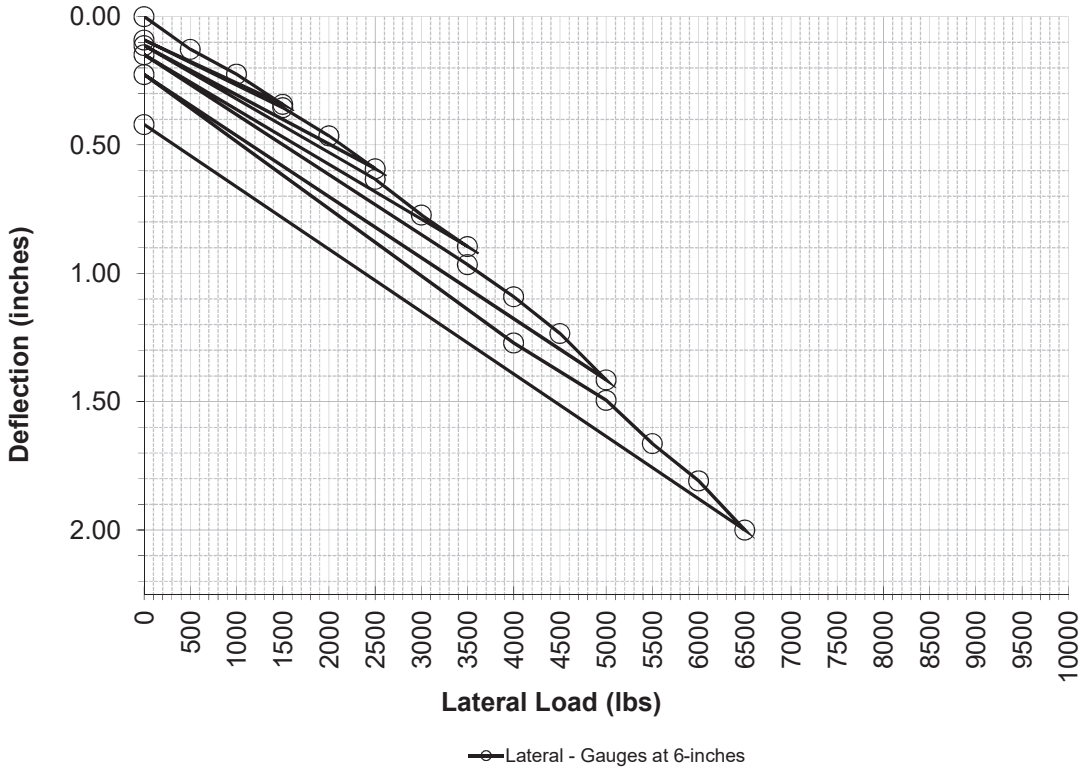
Test Date and Representative

Tested By Terracon Rep:	MC
Date Tested:	6/24/2022

Pile Information

Pile ID:	PLT-47B
Latitude:	39.25370
Longitude:	-83.81070
Pile Type:	W6X9
Pile Embedment Depth [in]:	120
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	225

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.127	
14%	1000	0.224	
21%	1500	0.342	
0%	0	0.091	
21%	1500	0.354	
29%	2000	0.464	
36%	2500	0.593	
0%	0	0.113	
36%	2500	0.634	
43%	3000	0.773	
50%	3500	0.896	
0%	0	0.148	
50%	3500	0.966	
57%	4000	1.091	
64%	4500	1.234	
71%	5000	1.415	
0%	0	0.226	
57%	4000	1.272	
71%	5000	1.495	
79%	5500	1.663	
86%	6000	1.809	
93%	6500	2.000	
100%	7000		
0%	0	0.421	



Lateral Load Test Result for PLT-48A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

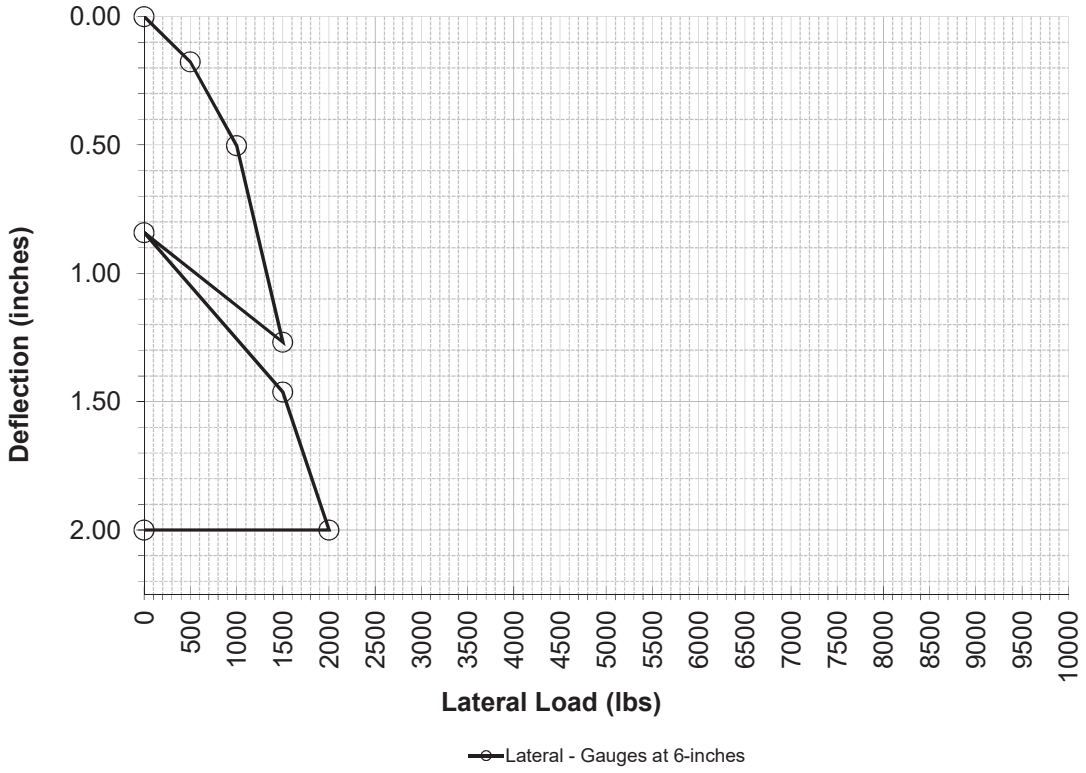
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/16/2022

Pile Information

Pile ID:	PLT-48A
Latitude:	39.29030
Longitude:	-83.81860
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	23

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.176	
14%	1000	0.503	
21%	1500	1.268	
0%	0	0.842	
21%	1500	1.462	
29%	2000	2.000	
36%	2500		
0%	0		
36%	2500		
43%	3000		
50%	3500		
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	2.000	



Lateral Load Test Result for PLT-48B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

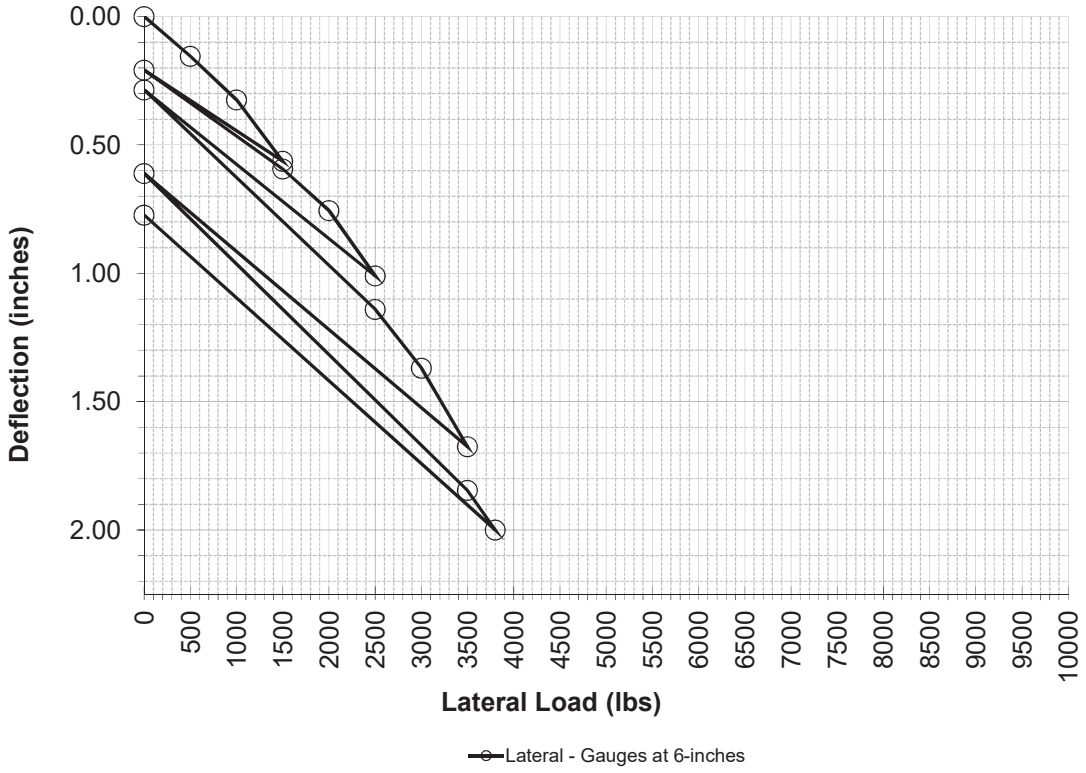
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/16/2022

Pile Information

Pile ID:	PLT-48B
Latitude:	39.29030
Longitude:	-83.81860
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	54

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.154	
14%	1000	0.325	
21%	1500	0.564	
0%	0	0.208	
21%	1500	0.593	
29%	2000	0.756	
36%	2500	1.010	
0%	0	0.286	
36%	2500	1.141	
43%	3000	1.370	
50%	3500	1.676	
0%	0	0.611	
50%	3500	1.845	
54%	3800	2.000	
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.774	



Lateral Load Test Result for PLT-49A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

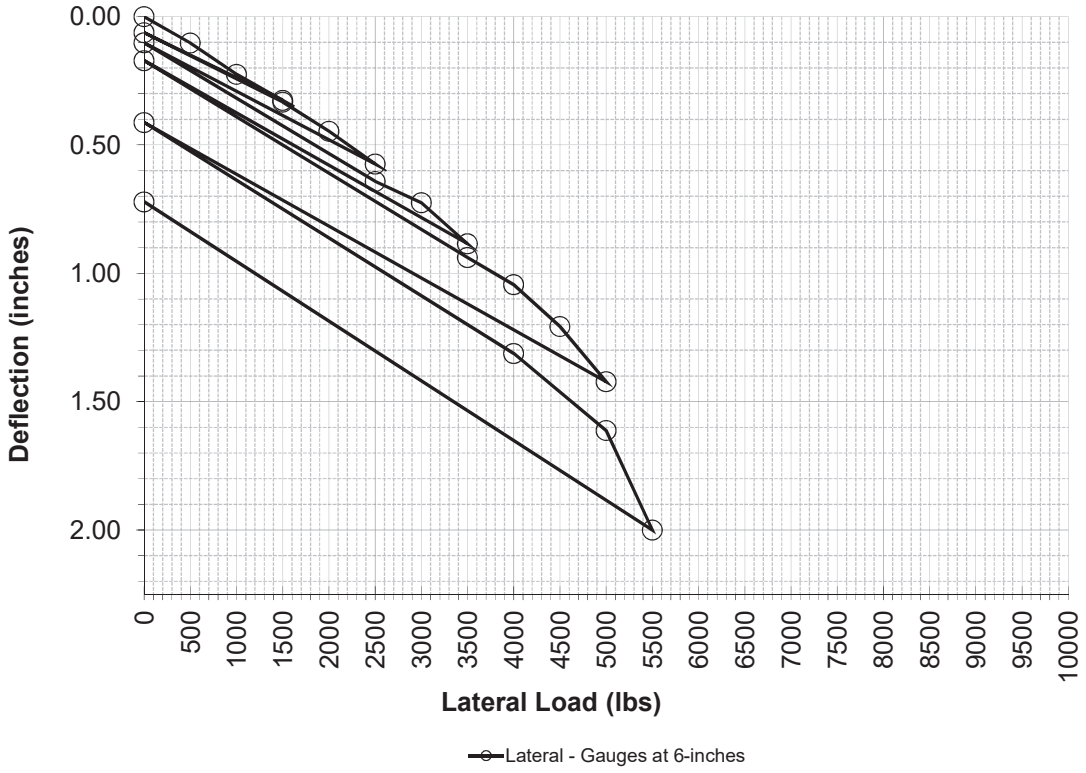
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/16/2022

Pile Information

Pile ID:	PLT-49A
Latitude:	39.28560
Longitude:	-83.82270
Pile Type:	W6X9
Pile Embedment Depth [in]:	84
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	75

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.102	
14%	1000	0.225	
21%	1500	0.326	
0%	0	0.063	
21%	1500	0.333	
29%	2000	0.447	
36%	2500	0.574	
0%	0	0.102	
36%	2500	0.642	
43%	3000	0.725	
50%	3500	0.885	
0%	0	0.172	
50%	3500	0.938	
57%	4000	1.044	
64%	4500	1.207	
71%	5000	1.422	
0%	0	0.413	
57%	4000	1.312	
71%	5000	1.612	
79%	5500	2.000	
86%	6000		
93%	6500		
100%	7000		
0%	0	0.722	



Lateral Load Test Result for PLT-49B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

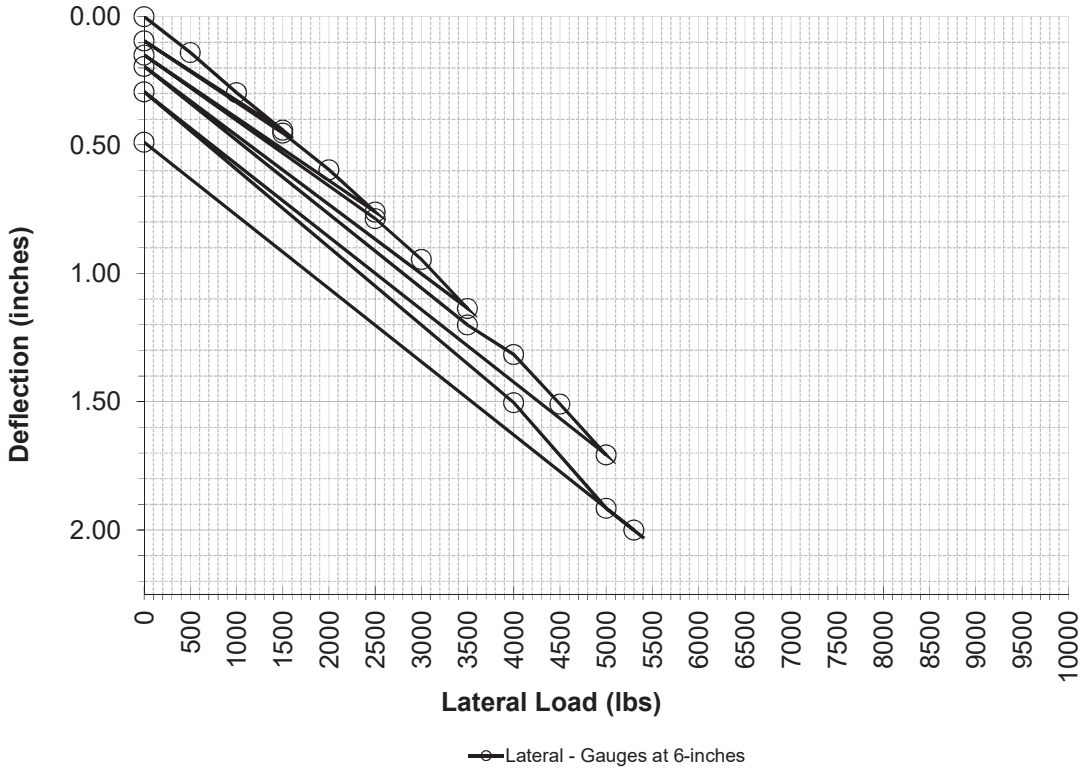
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/16/2022

Pile Information

Pile ID:	PLT-49B
Latitude:	39.28560
Longitude:	-83.82270
Pile Type:	W6X9
Pile Embedment Depth [in]:	120
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	173

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.140	
14%	1000	0.296	
21%	1500	0.442	
0%	0	0.094	
21%	1500	0.454	
29%	2000	0.597	
36%	2500	0.761	
0%	0	0.150	
36%	2500	0.787	
43%	3000	0.946	
50%	3500	1.137	
0%	0	0.194	
50%	3500	1.201	
57%	4000	1.316	
64%	4500	1.510	
71%	5000	1.707	
0%	0	0.293	
57%	4000	1.504	
71%	5000	1.915	
76%	5300	2.000	
86%	6000		
93%	6500		
100%	7000		
0%	0	0.489	



Lateral Load Test Result for PLT-50A

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

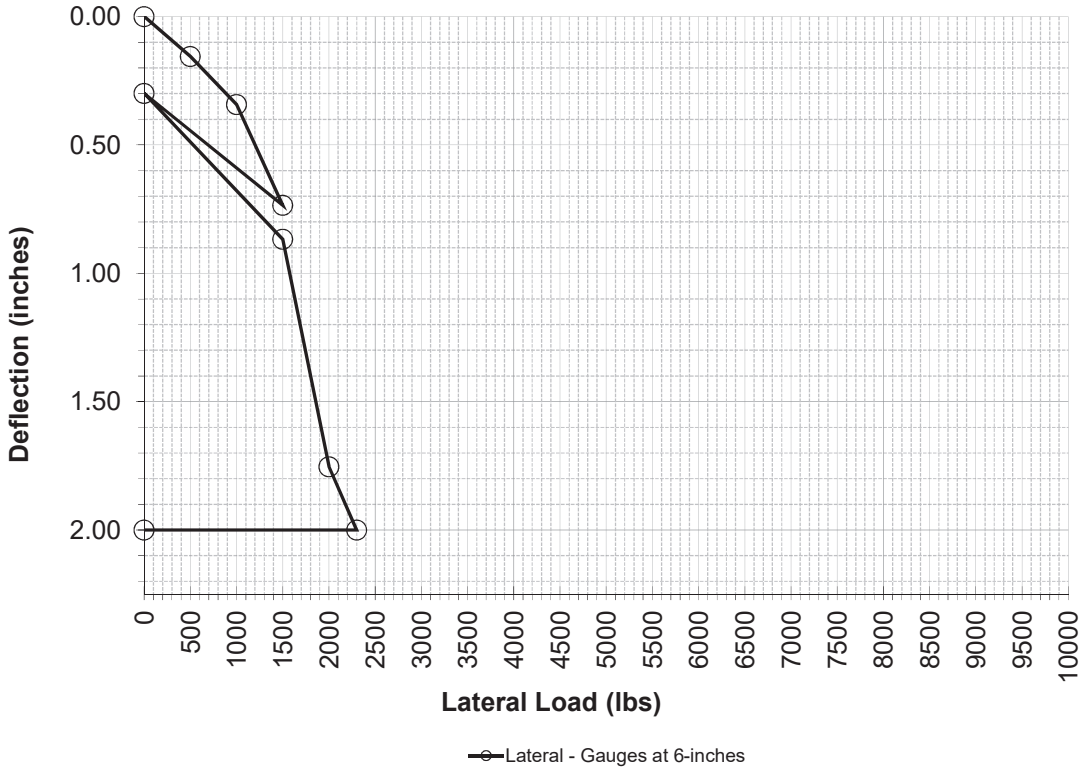
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/16/2022

Pile Information

Pile ID:	PLT-50A
Latitude:	39.29050
Longitude:	-83.82260
Pile Type:	W6X9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	20

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.155	
14%	1000	0.342	
21%	1500	0.735	
0%	0	0.299	
21%	1500	0.867	
29%	2000	1.753	
33%	2300	2.000	
0%	0		
36%	2500		
43%	3000		
50%	3500		
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	2.000	



Lateral Load Test Result for PLT-50B

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Clinton County, Ohio
Project Number:	N4225038

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

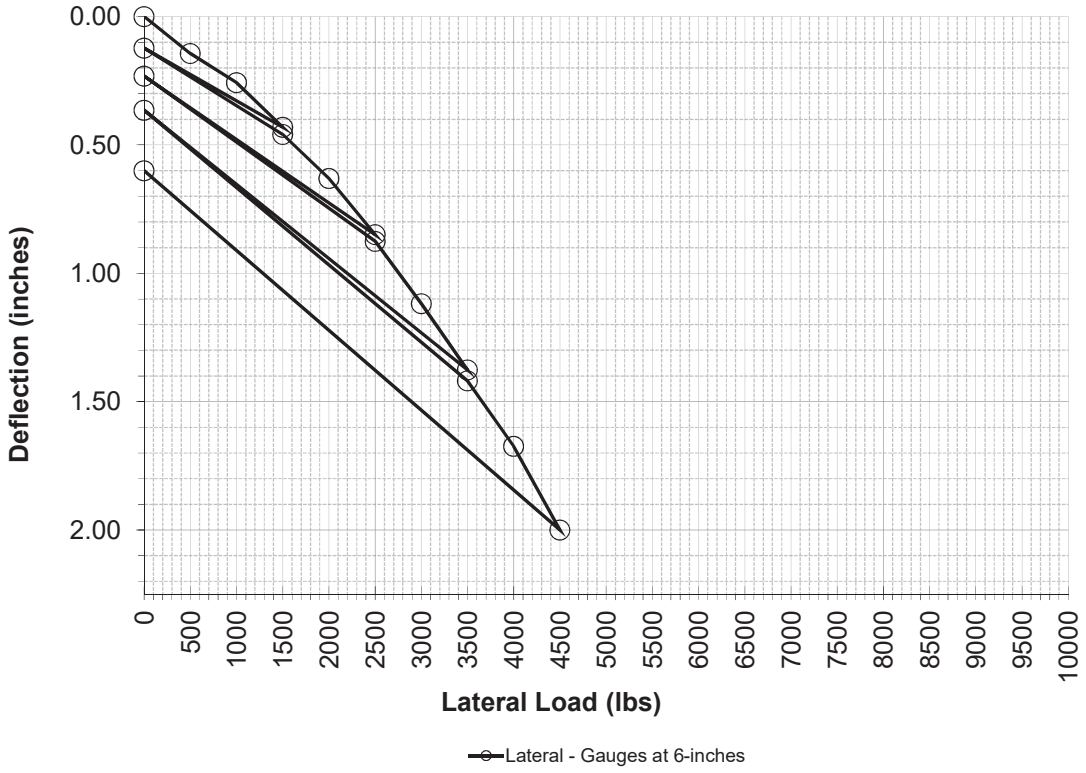
Test Date and Representative

Tested By Terracon Rep:	IM
Date Tested:	6/16/2022

Pile Information

Pile ID:	PLT-50B
Latitude:	39.29050
Longitude:	-83.82260
Pile Type:	W6X9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	63

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.144	
14%	1000	0.258	
21%	1500	0.431	
0%	0	0.123	
21%	1500	0.459	
29%	2000	0.630	
36%	2500	0.849	
0%	0	0.232	
36%	2500	0.876	
43%	3000	1.118	
50%	3500	1.376	
0%	0	0.365	
50%	3500	1.419	
57%	4000	1.674	
64%	4500	2.000	
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.601	



Lateral Load Test Result for PLT-1A

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

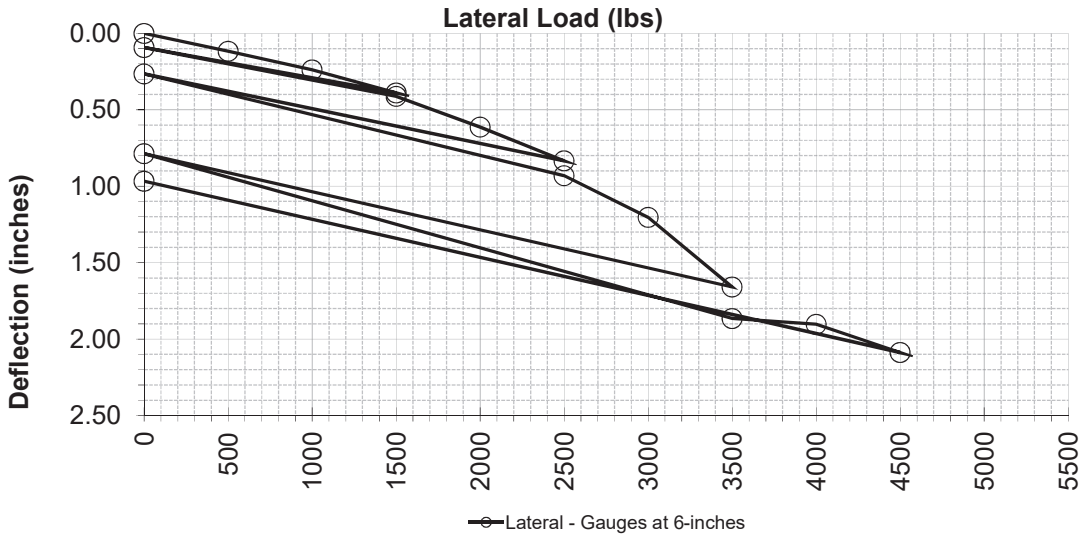
Test Date and Representative

Tested By Terracon Rep:	J. Lombardi
Date Tested:	8/13/2020

Pile Information

Pile ID:	PLT-1A
Latitude:	39.27433
Longitude:	-83.79880
Pile Type:	W6x9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	93.15

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.117	
14%	1000	0.239	
21%	1500	0.389	
0%	0	0.092	
21%	1500	0.411	
29%	2000	0.613	
36%	2500	0.834	
0%	0	0.264	
36%	2500	0.930	
43%	3000	1.203	
50%	3500	1.660	
0%	0	0.786	
50%	3500	1.865	
57%	4000	1.903	
64%	4500	2.088	
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.968	



Lateral Load Test Result for PLT-1B

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

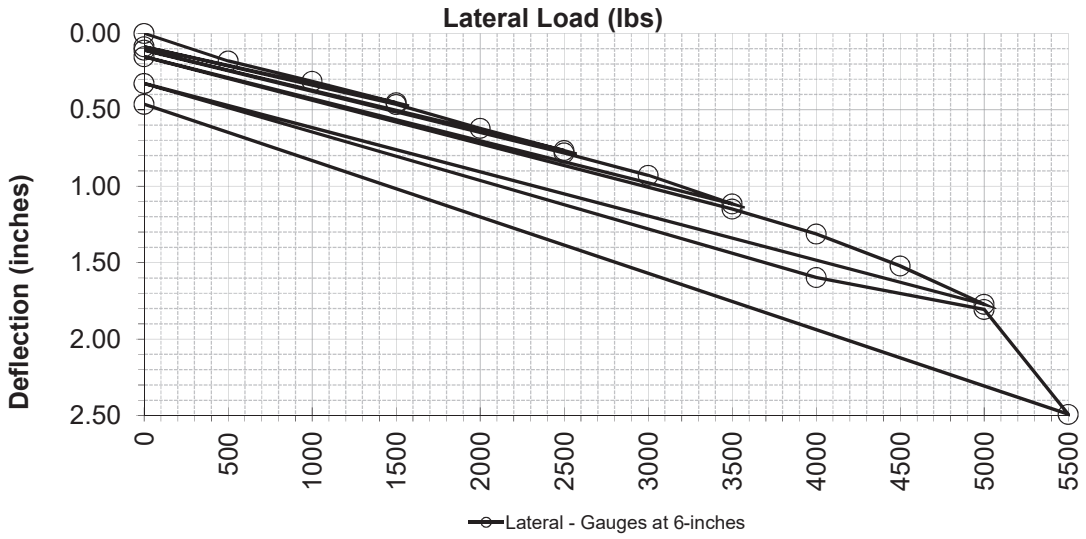
Test Date and Representative

Tested By Terracon Rep:	J. Lombardi
Date Tested:	8/13/2020

Pile Information

Pile ID:	PLT-1B
Latitude:	39.27433
Longitude:	-83.79880
Pile Type:	W6x9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	368.99

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.181	
14%	1000	0.313	
21%	1500	0.453	
0%	0	0.088	
21%	1500	0.464	
29%	2000	0.620	
36%	2500	0.767	
0%	0	0.109	
36%	2500	0.781	
43%	3000	0.929	
50%	3500	1.115	
0%	0	0.152	
50%	3500	1.149	
57%	4000	1.313	
64%	4500	1.522	
71%	5000	1.772	
0%	0	0.328	
57%	4000	1.597	
71%	5000	1.806	
79%	5500	2.492	
86%	6000		
93%	6500		
100%	7000		
0%	0	0.464	



Lateral Load Test Result for PLT-2A

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

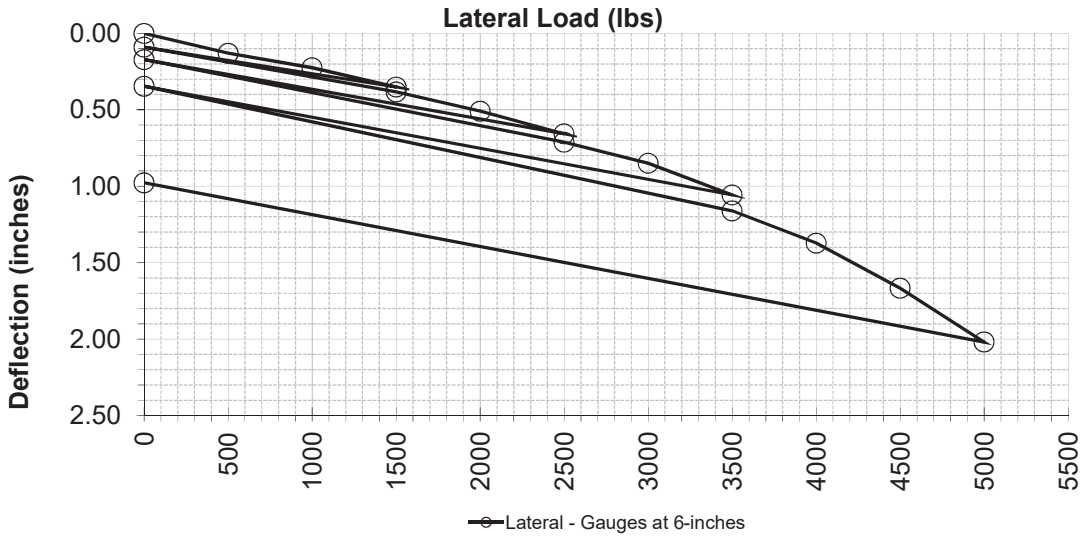
Test Date and Representative

Tested By Terracon Rep:	J. Lombardi
Date Tested:	8/13/2020

Pile Information

Pile ID:	PLT-2A
Latitude:	39.26245
Longitude:	-83.82550
Pile Type:	W6x9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	71.11

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.130	
14%	1000	0.225	
21%	1500	0.351	
0%	0	0.090	
21%	1500	0.383	
29%	2000	0.509	
36%	2500	0.657	
0%	0	0.172	
36%	2500	0.712	
43%	3000	0.849	
50%	3500	1.057	
0%	0	0.345	
50%	3500	1.161	
57%	4000	1.373	
64%	4500	1.666	
71%	5000	2.019	
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.977	



Lateral Load Test Result for PLT-2B

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

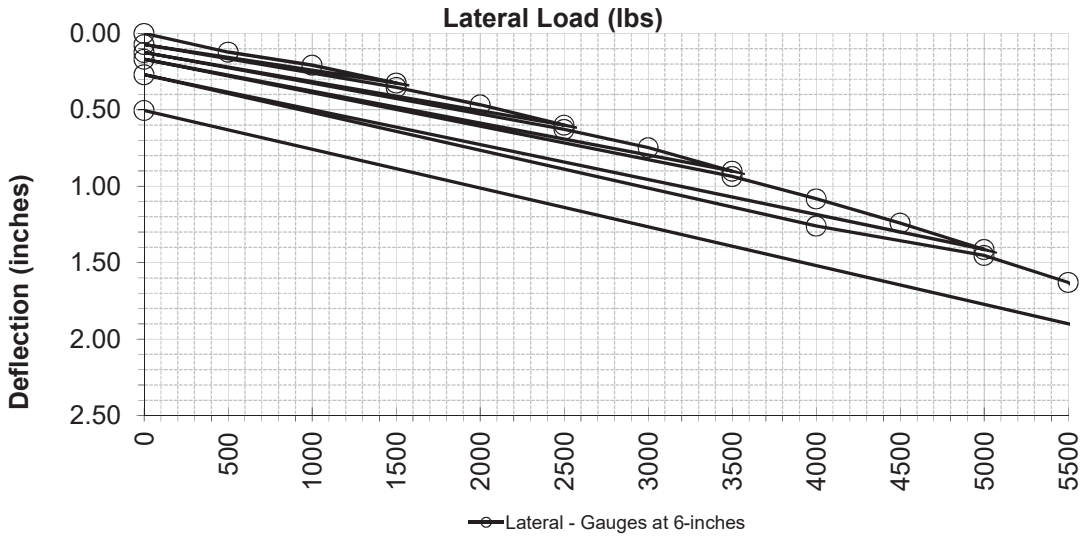
Test Date and Representative

Tested By Terracon Rep:	J. Lombardi
Date Tested:	8/13/2020

Pile Information

Pile ID:	PLT-2B
Latitude:	39.26245
Longitude:	-83.82550
Pile Type:	W6x9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	215.8

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.122	
14%	1000	0.207	
21%	1500	0.325	
0%	0	0.073	
21%	1500	0.353	
29%	2000	0.468	
36%	2500	0.600	
0%	0	0.124	
36%	2500	0.628	
43%	3000	0.747	
50%	3500	0.901	
0%	0	0.169	
50%	3500	0.937	
57%	4000	1.082	
64%	4500	1.241	
71%	5000	1.413	
0%	0	0.271	
57%	4000	1.260	
71%	5000	1.452	
79%	5500	1.629	
86%	6000	2.027	
93%	6500		
100%	7000		
0%	0	0.504	



Lateral Load Test Result for PLT-3A

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

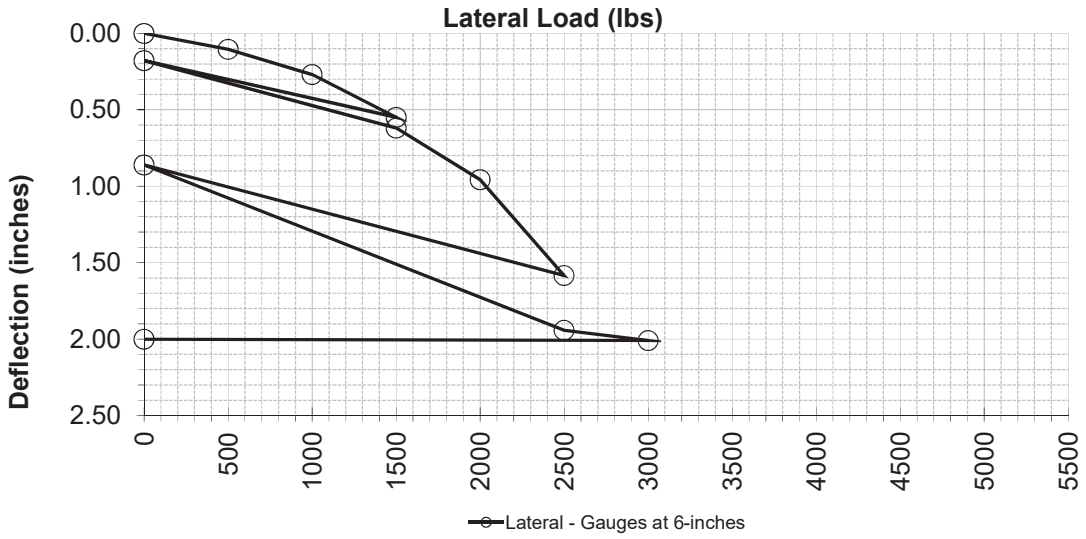
Test Date and Representative

Tested By Terracon Rep:	J. Lombardi
Date Tested:	8/13/2020

Pile Information

Pile ID:	PLT-3A
Latitude:	39.25659
Longitude:	-83.82340
Pile Type:	W6x9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	66.24

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.104	
14%	1000	0.269	
21%	1500	0.549	
0%	0	0.178	
21%	1500	0.620	
29%	2000	0.957	
36%	2500	1.584	
0%	0	0.861	
36%	2500	1.942	
43%	3000	2.010	
50%	3500		
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	2.000	



Lateral Load Test Result for PLT-3B

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

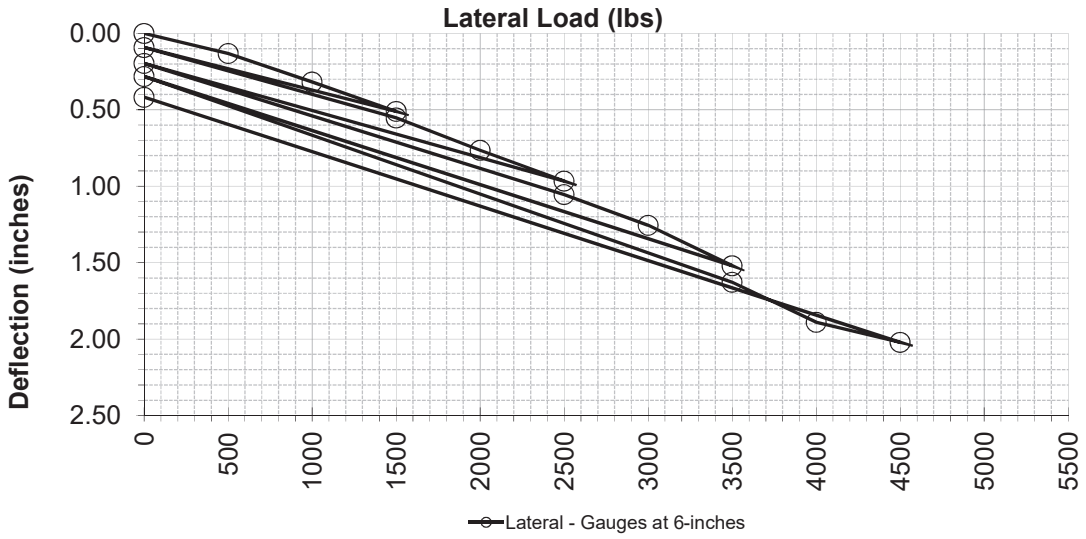
Test Date and Representative

Tested By Terracon Rep:	J. Lombardi
Date Tested:	8/13/2020

Pile Information

Pile ID:	PLT-3B
Latitude:	39.25659
Longitude:	-83.82340
Pile Type:	W6x9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	140.43

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.131	
14%	1000	0.318	
21%	1500	0.510	
0%	0	0.092	
21%	1500	0.554	
29%	2000	0.765	
36%	2500	0.966	
0%	0	0.196	
36%	2500	1.054	
43%	3000	1.256	
50%	3500	1.520	
0%	0	0.282	
50%	3500	1.628	
57%	4000	1.890	
64%	4500	2.022	
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.419	



Lateral Load Test Result for PLT-4A

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

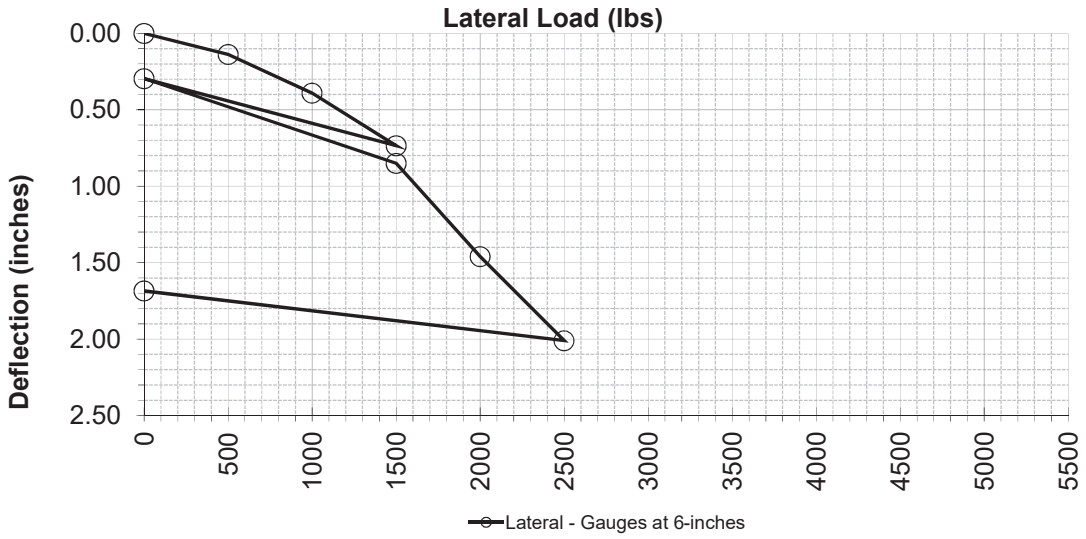
Test Date and Representative

Tested By Terracon Rep:	J. Lombardi
Date Tested:	8/13/2020

Pile Information

Pile ID:	PLT-4A
Latitude:	39.25756
Longitude:	-83.84240
Pile Type:	W6x9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	51.66

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.138	
14%	1000	0.390	
21%	1500	0.736	
0%	0	0.297	
21%	1500	0.850	
29%	2000	1.460	
36%	2500	2.010	
0%	0	1.685	
36%	2500		
43%	3000		
50%	3500		
0%	0		
50%	3500		
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0		



Lateral Load Test Result for PLT-4B

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

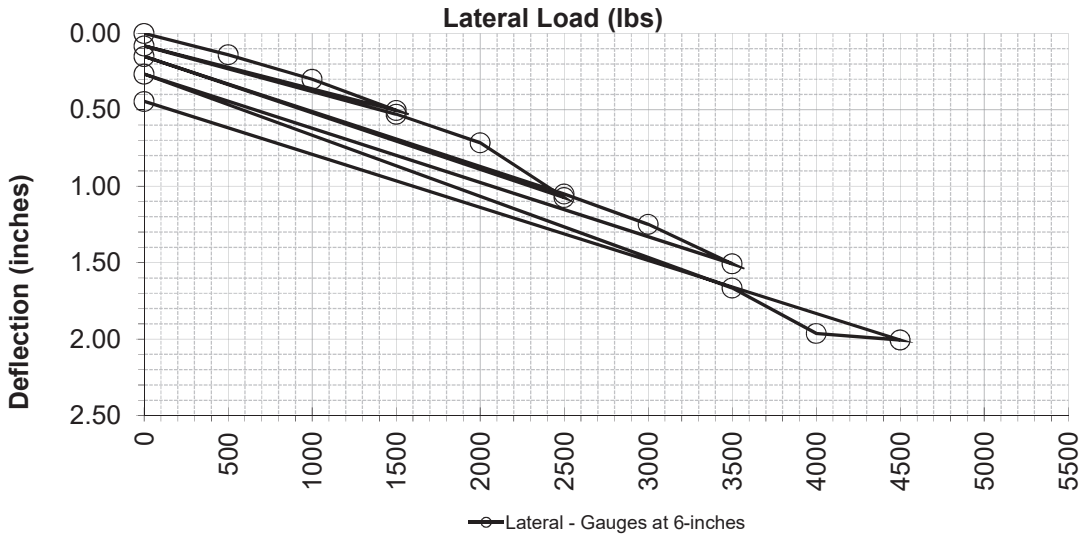
Test Date and Representative

Tested By Terracon Rep:	J. Lombardi
Date Tested:	8/13/2020

Pile Information

Pile ID:	PLT-4B
Latitude:	39.25756
Longitude:	-83.84240
Pile Type:	W6x9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	177.23

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.140	
14%	1000	0.300	
21%	1500	0.504	
0%	0	0.082	
21%	1500	0.528	
29%	2000	0.715	
36%	2500	1.074	
0%	0	0.151	
36%	2500	1.051	
43%	3000	1.249	
50%	3500	1.507	
0%	0	0.266	
50%	3500	1.666	
57%	4000	1.963	
64%	4500	2.006	
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.446	



Lateral Load Test Result for PLT-5A

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

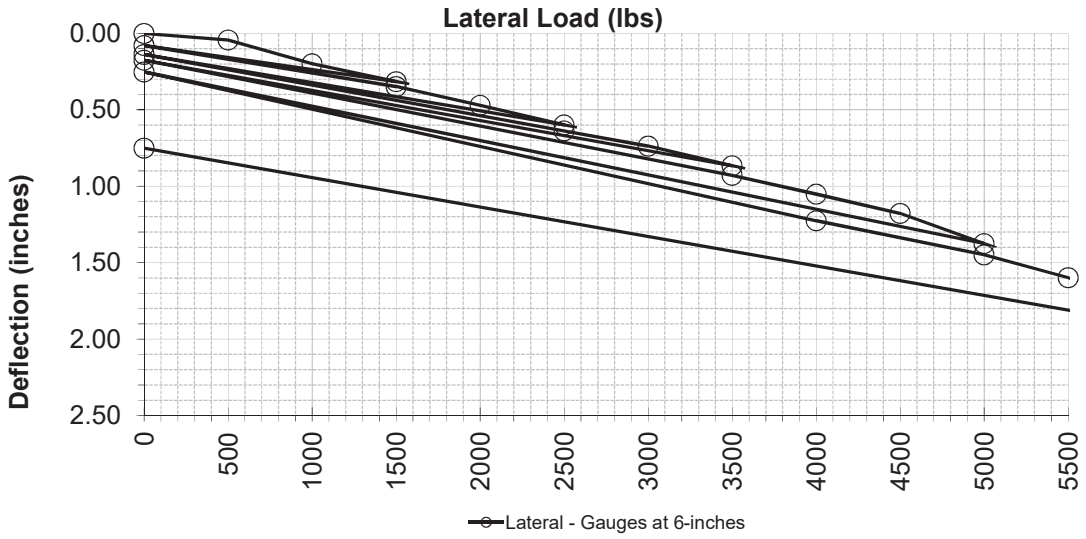
Test Date and Representative

Tested By Terracon Rep:	J. Lombardi
Date Tested:	8/13/2020

Pile Information

Pile ID:	PLT-5A
Latitude:	39.26657
Longitude:	-83.85300
Pile Type:	W6x9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	107.03

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.044	
14%	1000	0.199	
21%	1500	0.316	
0%	0	0.079	
21%	1500	0.348	
29%	2000	0.470	
36%	2500	0.599	
0%	0	0.138	
36%	2500	0.637	
43%	3000	0.737	
50%	3500	0.866	
0%	0	0.175	
50%	3500	0.928	
57%	4000	1.051	
64%	4500	1.177	
71%	5000	1.374	
0%	0	0.252	
57%	4000	1.226	
71%	5000	1.449	
79%	5500	1.598	
86%	6000	1.829	
93%	6500	2.004	
100%	7000		
0%	0	0.751	



Lateral Load Test Result for PLT-5B

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

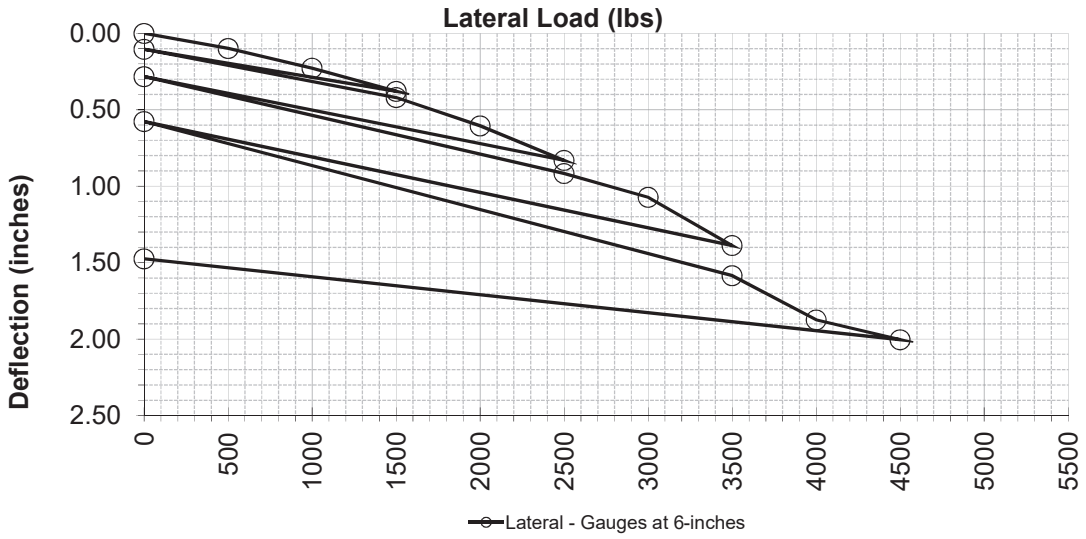
Test Date and Representative

Tested By Terracon Rep:	J. Lombardi
Date Tested:	8/13/2020

Pile Information

Pile ID:	PLT-5B
Latitude:	39.26657
Longitude:	-83.85300
Pile Type:	W6x9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	280.06

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.099	
14%	1000	0.227	
21%	1500	0.380	
0%	0	0.104	
21%	1500	0.420	
29%	2000	0.605	
36%	2500	0.831	
0%	0	0.283	
36%	2500	0.916	
43%	3000	1.072	
50%	3500	1.388	
0%	0	0.576	
50%	3500	1.585	
57%	4000	1.875	
64%	4500	2.004	
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	1.474	



Lateral Load Test Result for PLT-6A

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

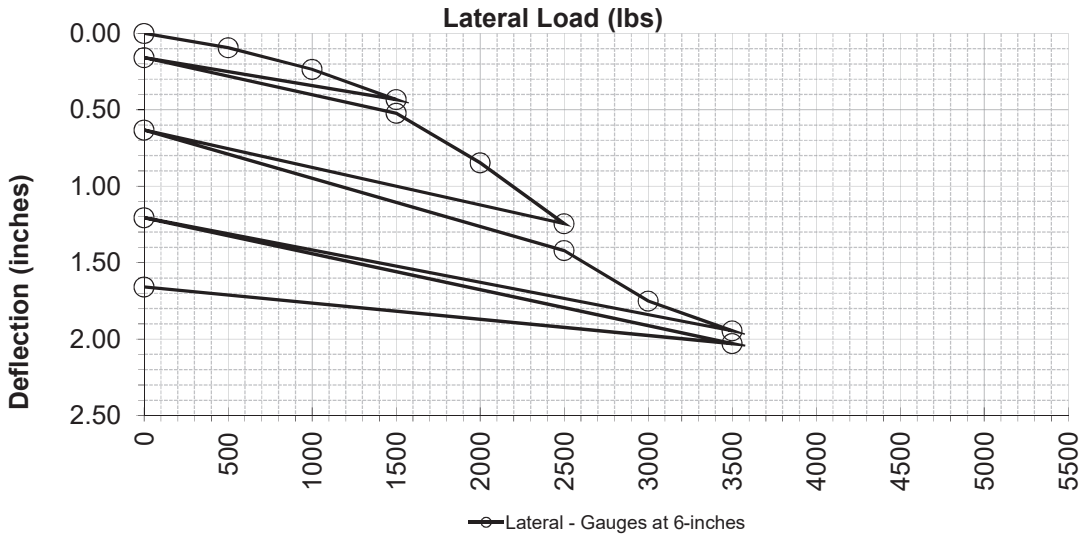
Test Date and Representative

Tested By Terracon Rep:	J. Lombardi
Date Tested:	8/14/2020

Pile Information

Pile ID:	PLT-6A
Latitude:	39.27376
Longitude:	-83.86500
Pile Type:	W6x9
Pile Embedment Depth [in]:	72
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	65.22

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.093	
14%	1000	0.235	
21%	1500	0.432	
0%	0	0.158	
21%	1500	0.522	
29%	2000	0.847	
36%	2500	1.245	
0%	0	0.632	
36%	2500	1.420	
43%	3000	1.751	
50%	3500	1.946	
0%	0	1.206	
50%	3500	2.029	
57%	4000		
64%	4500		
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	1.659	



Lateral Load Test Result for PLT-6B

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Lateral Load Test Set Up

Number of Top Gauges:	0
Number of Bottom Gauges:	2
Height of Top Gauges [in]:	0
Height of Bottom Gauges [in]:	6
Height of Applied Load [in]:	24
Load Cell:	ED JR

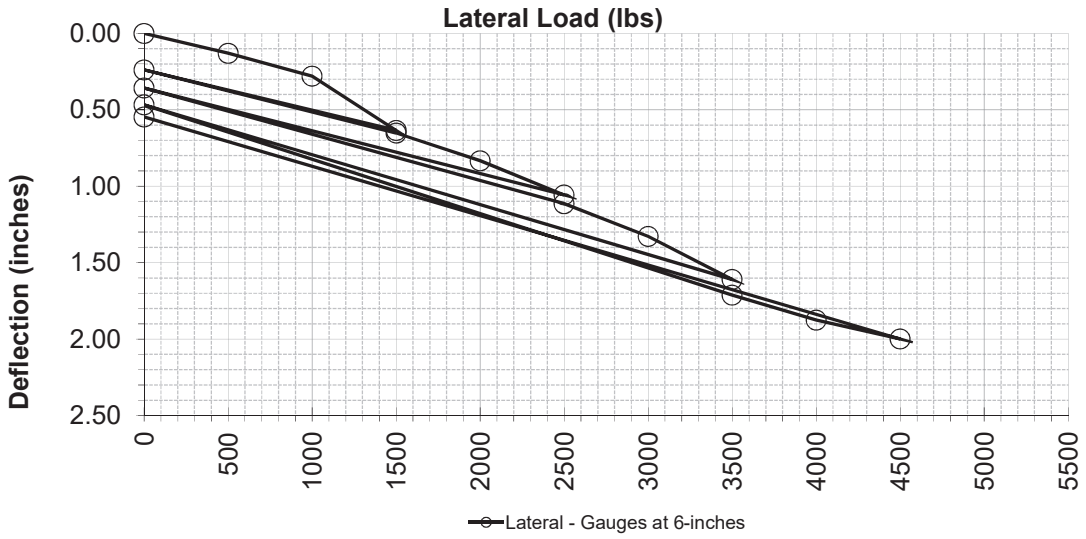
Test Date and Representative

Tested By Terracon Rep:	J. Lombardi
Date Tested:	8/14/2020

Pile Information

Pile ID:	PLT-6B
Latitude:	39.27376
Longitude:	-83.86500
Pile Type:	W6x9
Pile Embedment Depth [in]:	108
Pile Stick-Up [in]:	24
Lateral Design Load [lbs]:	7000
Drive Time [sec]:	243.46

% of Design Load	Lateral Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
7%	500	0.131	
14%	1000	0.279	
21%	1500	0.635	
0%	0	0.239	
21%	1500	0.651	
29%	2000	0.833	
36%	2500	1.057	
0%	0	0.357	
36%	2500	1.114	
43%	3000	1.329	
50%	3500	1.610	
0%	0	0.468	
50%	3500	1.713	
57%	4000	1.875	
64%	4500	1.999	
71%	5000		
0%	0		
57%	4000		
71%	5000		
79%	5500		
86%	6000		
93%	6500		
100%	7000		
0%	0	0.547	



AXIAL COMPRESSION LOAD TEST RESULT

Compression Load Test Result for PLT-7C

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

Test Date and Representative

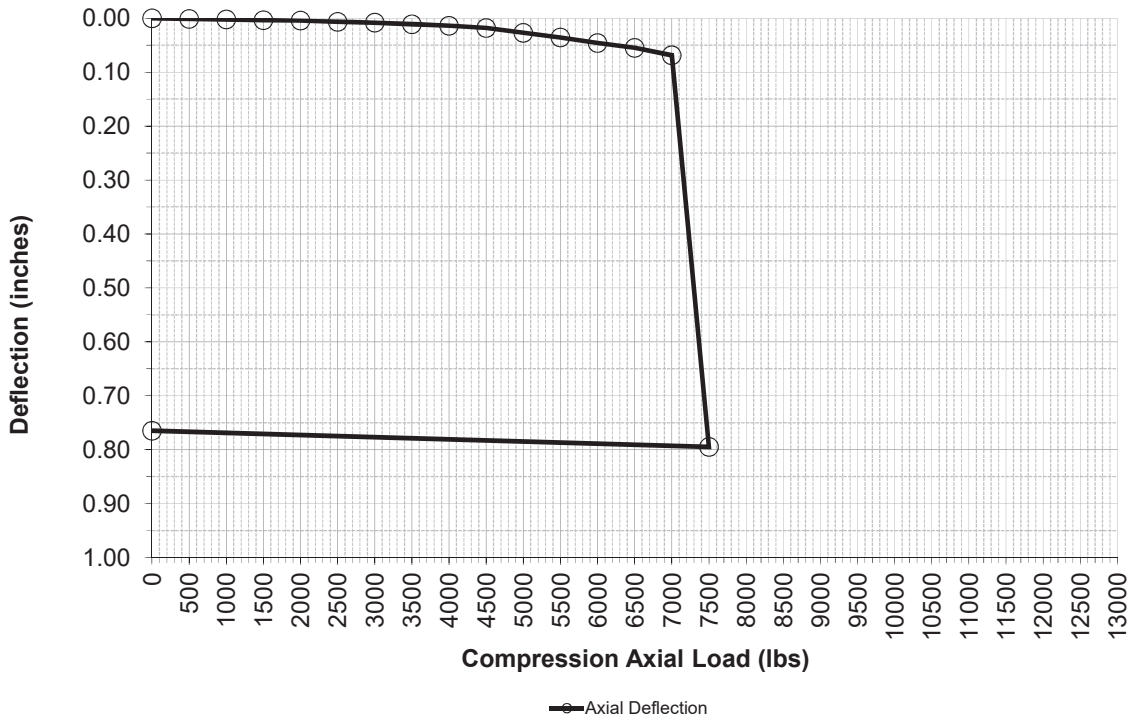
Tested By Terracon Rep:	IM
Date Tested:	6/20/2022

Pile Information

Pile ID:	PLT-7C
Latitude:	39.28510
Longitude:	-83.83920
Pile Type:	W6x9
Pile Embedment Depth [in]:	84
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	30
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	55

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	0.001	
8%	1000	0.002	
12%	1500	0.004	
15%	2000	0.004	
19%	2500	0.007	
23%	3000	0.008	
27%	3500	0.011	
31%	4000	0.014	
35%	4500	0.018	
38%	5000	0.027	
42%	5500	0.036	
46%	6000	0.046	
50%	6500	0.055	
54%	7000	0.069	
58%	7500	0.795	
62%	8000		
65%	8500		
69%	9000		
73%	9500		
77%	10000		
81%	10500		
85%	11000		
88%	11500		
92%	12000		



Compression Load Test Result for PLT-8C

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

Test Date and Representative

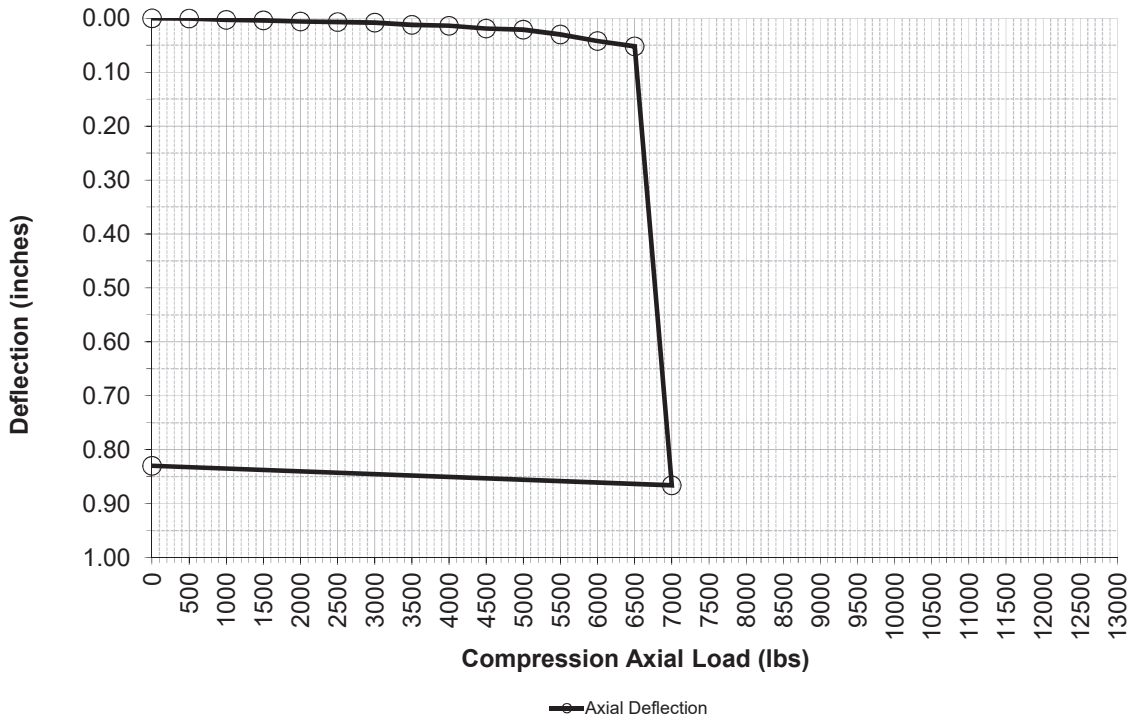
Tested By Terracon Rep:	IM
Date Tested:	6/20/2022

Pile Information

Pile ID:	PLT-8C
Latitude:	39.27970
Longitude:	-83.84120
Pile Type:	W6x9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	30
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	38

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	0.001	
8%	1000	0.003	
12%	1500	0.004	
15%	2000	0.006	
19%	2500	0.007	
23%	3000	0.008	
27%	3500	0.012	
31%	4000	0.014	
35%	4500	0.019	
38%	5000	0.021	
42%	5500	0.030	
46%	6000	0.042	
50%	6500	0.052	
54%	7000	0.866	
58%	7500		
62%	8000		
65%	8500		
69%	9000		
73%	9500		
77%	10000		
81%	10500		
85%	11000		
88%	11500		
92%	12000		



Compression Load Test Result for PLT-11C

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

Test Date and Representative

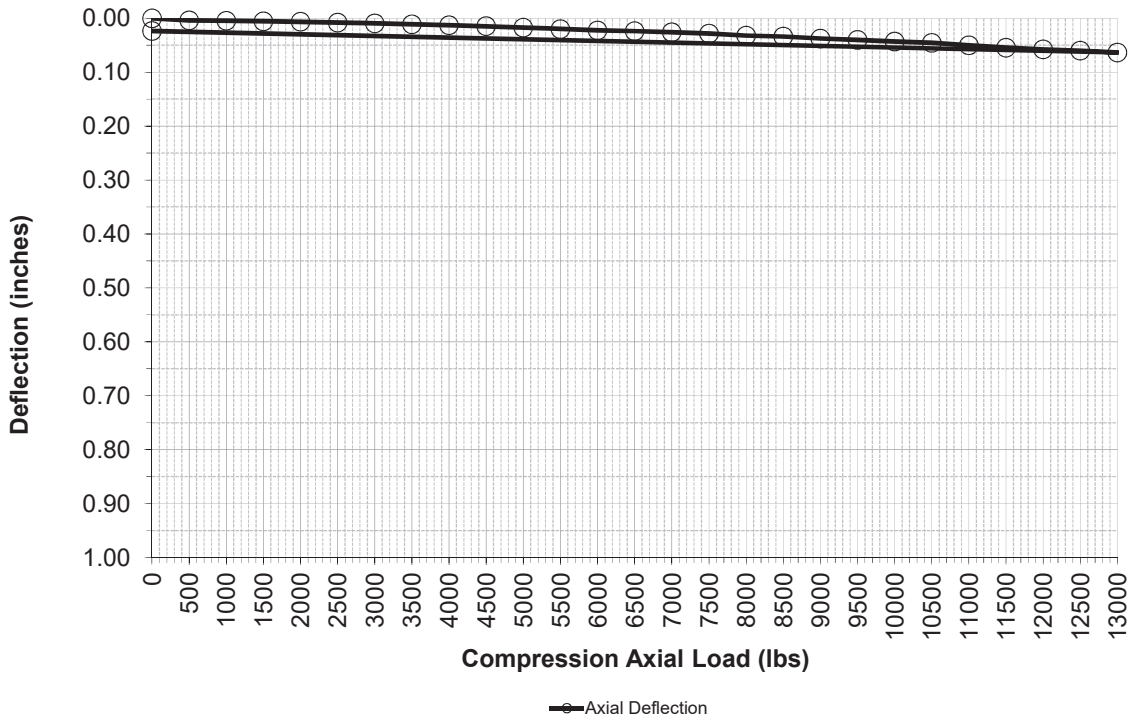
Tested By Terracon Rep:	IM
Date Tested:	6/14/2022

Pile Information

Pile ID:	PLT-11C
Latitude:	39.27580
Longitude:	-83.81280
Pile Type:	W6x9
Pile Embedment Depth [in]:	84
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	30
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	46

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	0.004	
8%	1000	0.005	
12%	1500	0.006	
15%	2000	0.006	
19%	2500	0.008	
23%	3000	0.010	
27%	3500	0.011	
31%	4000	0.013	
35%	4500	0.015	
38%	5000	0.018	
42%	5500	0.020	
46%	6000	0.023	
50%	6500	0.024	
54%	7000	0.026	
58%	7500	0.029	
62%	8000	0.032	
65%	8500	0.034	
69%	9000	0.038	
73%	9500	0.040	
77%	10000	0.043	
81%	10500	0.046	
85%	11000	0.050	
88%	11500	0.055	
92%	12000	0.058	



Compression Load Test Result for PLT-12C

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

Test Date and Representative

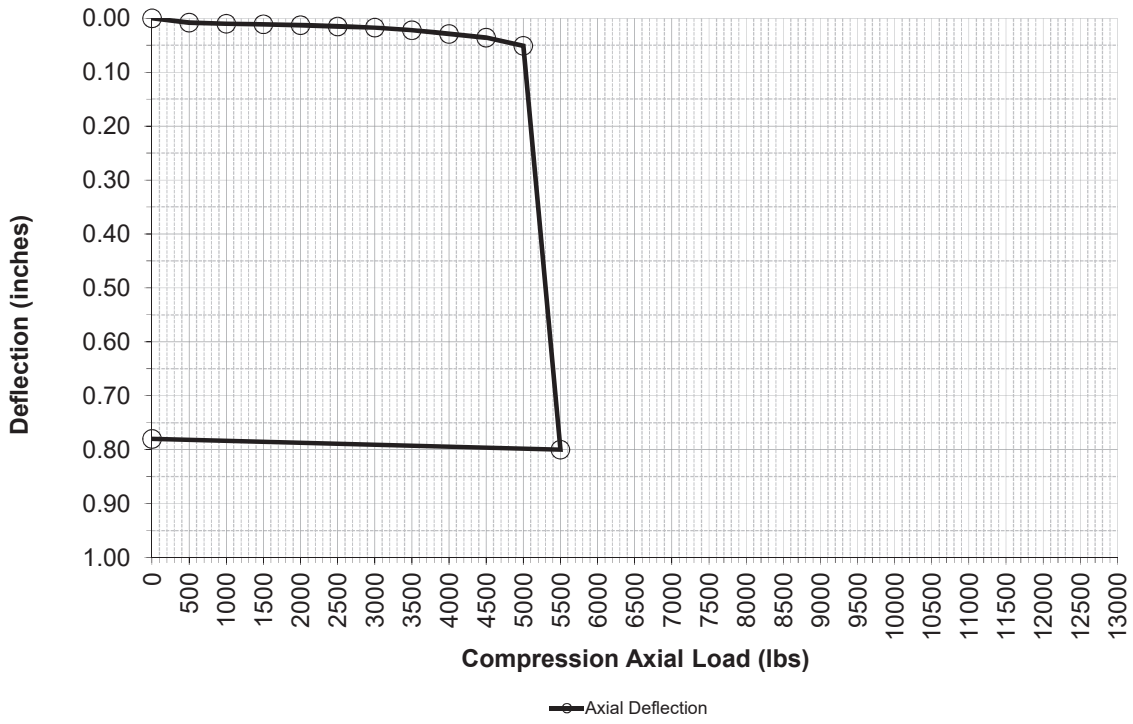
Tested By Terracon Rep:	IM
Date Tested:	6/15/2022

Pile Information

Pile ID:	PLT-12C
Latitude:	39.27890
Longitude:	-83.80520
Pile Type:	W6x9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	30
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	31

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	0.008	
8%	1000	0.010	
12%	1500	0.011	
15%	2000	0.013	
19%	2500	0.015	
23%	3000	0.017	
27%	3500	0.022	
31%	4000	0.029	
35%	4500	0.036	
38%	5000	0.051	
42%	5500	0.800	
46%	6000		
50%	6500		
54%	7000		
58%	7500		
62%	8000		
65%	8500		
69%	9000		
73%	9500		
77%	10000		
81%	10500		
85%	11000		
88%	11500		
92%	12000		



Compression Load Test Result for PLT-15C

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

Test Date and Representative

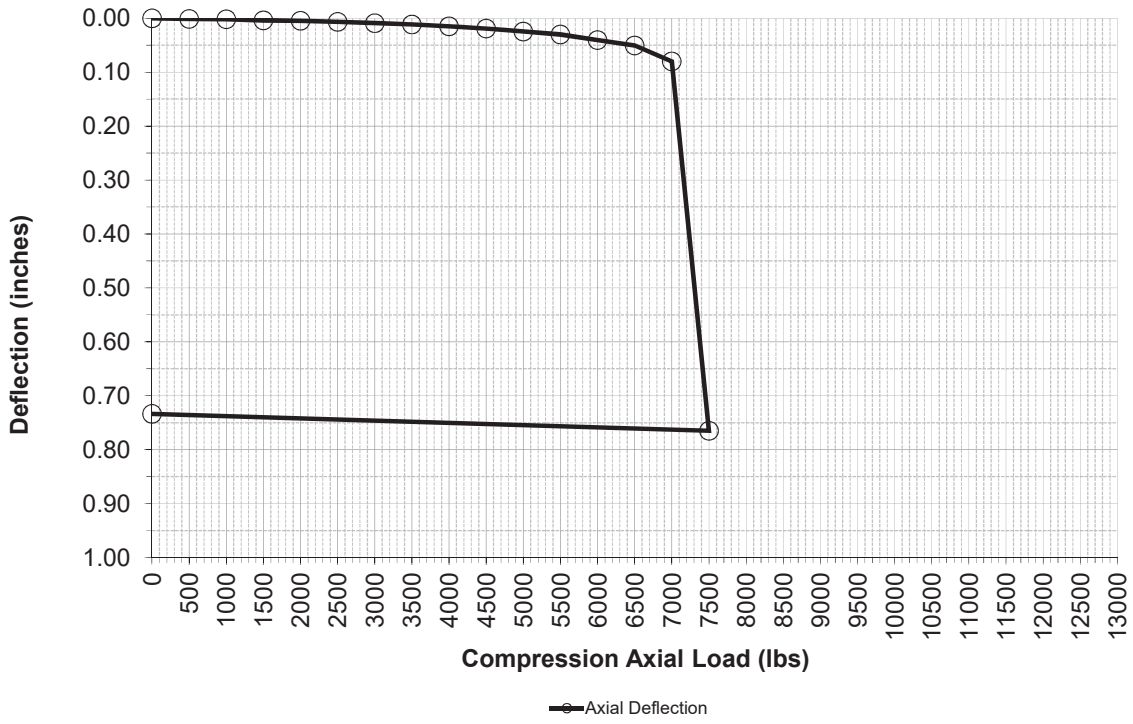
Tested By Terracon Rep:	0
Date Tested:	6/15/2022

Pile Information

Pile ID:	PLT-15C
Latitude:	39.27500
Longitude:	-83.80100
Pile Type:	W6x9
Pile Embedment Depth [in]:	84
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	0
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	59

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	0.001	
8%	1000	0.002	
12%	1500	0.004	
15%	2000	0.005	
19%	2500	0.007	
23%	3000	0.009	
27%	3500	0.012	
31%	4000	0.015	
35%	4500	0.019	
38%	5000	0.025	
42%	5500	0.030	
46%	6000	0.041	
50%	6500	0.051	
54%	7000	0.080	
58%	7500	0.765	
62%	8000		
65%	8500		
69%	9000		
73%	9500		
77%	10000		
81%	10500		
85%	11000		
88%	11500		
92%	12000		



Compression Load Test Result for PLT-16C

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

Test Date and Representative

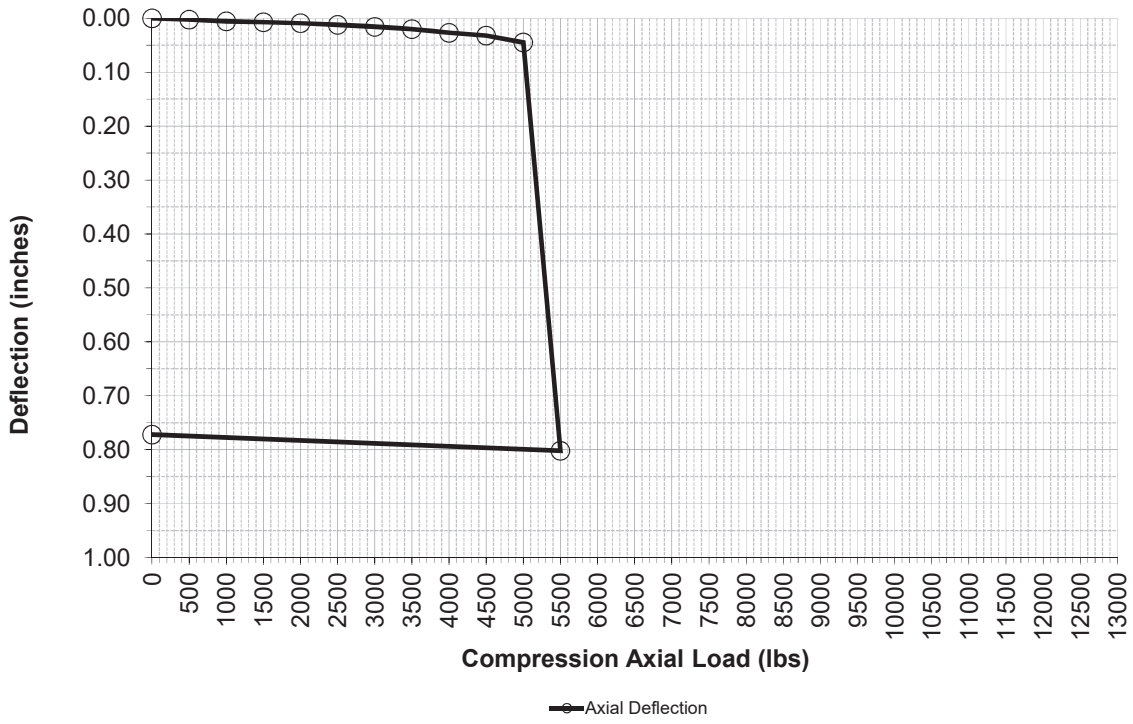
Tested By Terracon Rep:	IM
Date Tested:	6/15/2022

Pile Information

Pile ID:	PLT-16C
Latitude:	39.27560
Longitude:	-83.79370
Pile Type:	W6x9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	30
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	22

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	0.003	
8%	1000	0.006	
12%	1500	0.008	
15%	2000	0.009	
19%	2500	0.012	
23%	3000	0.016	
27%	3500	0.020	
31%	4000	0.027	
35%	4500	0.032	
38%	5000	0.045	
42%	5500	0.802	
46%	6000		
50%	6500		
54%	7000		
58%	7500		
62%	8000		
65%	8500		
69%	9000		
73%	9500		
77%	10000		
81%	10500		
85%	11000		
88%	11500		
92%	12000		



Compression Load Test Result for PLT-19C

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

Test Date and Representative

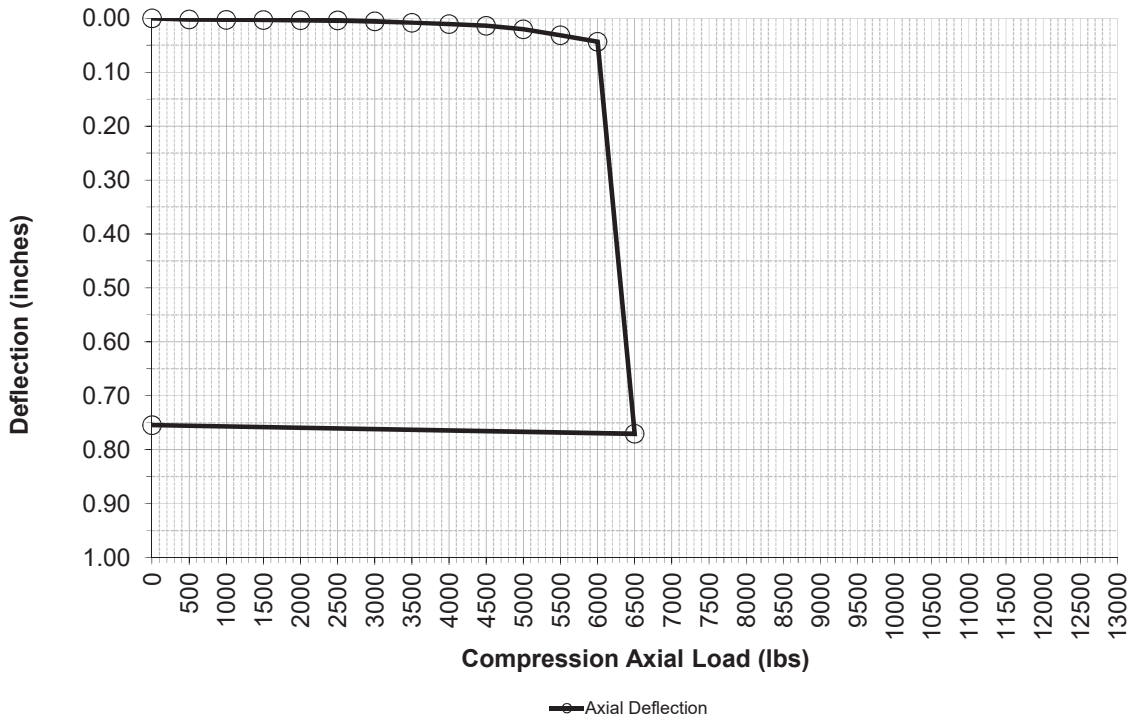
Tested By Terracon Rep:	IM
Date Tested:	6/17/2022

Pile Information

Pile ID:	PLT-19C
Latitude:	39.27110
Longitude:	-83.86490
Pile Type:	W6x9
Pile Embedment Depth [in]:	84
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	30
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	44

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	0.002	
8%	1000	0.003	
12%	1500	0.003	
15%	2000	0.004	
19%	2500	0.004	
23%	3000	0.006	
27%	3500	0.008	
31%	4000	0.011	
35%	4500	0.014	
38%	5000	0.021	
42%	5500	0.032	
46%	6000	0.044	
50%	6500	0.771	
54%	7000		
58%	7500		
62%	8000		
65%	8500		
69%	9000		
73%	9500		
77%	10000		
81%	10500		
85%	11000		
88%	11500		
92%	12000		



Compression Load Test Result for PLT-20C

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

Test Date and Representative

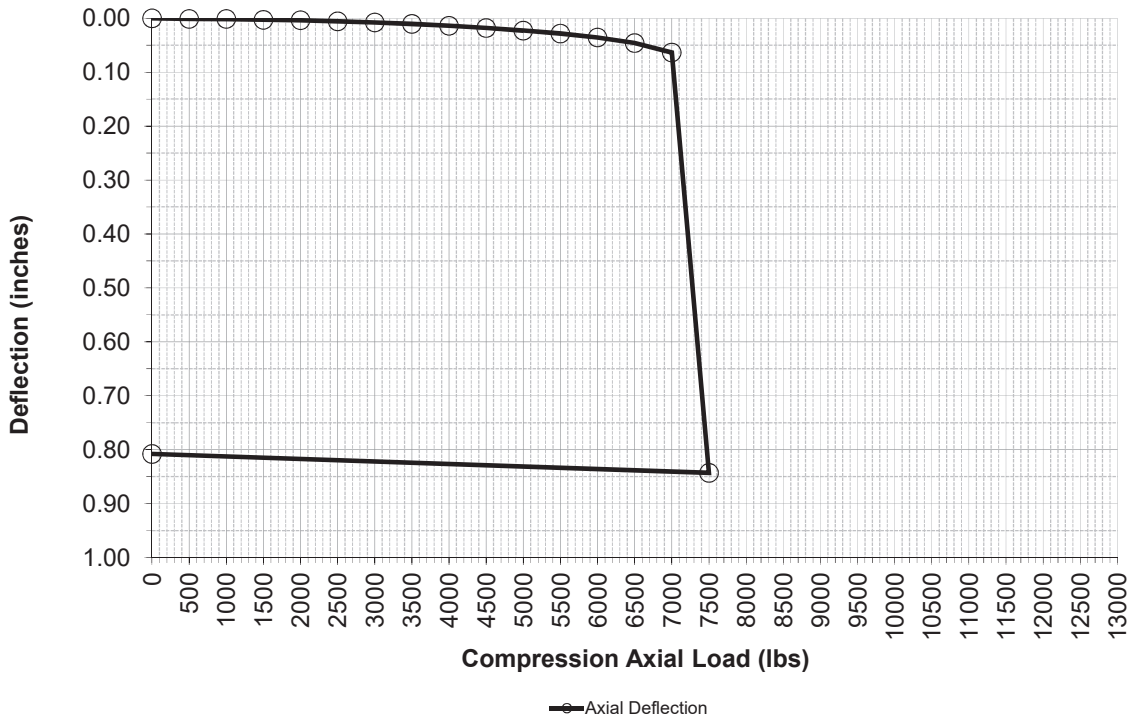
Tested By Terracon Rep:	IM
Date Tested:	6/20/2022

Pile Information

Pile ID:	PLT-20C
Latitude:	39.27070
Longitude:	-83.85160
Pile Type:	W6x9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	30
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	33

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	0.001	
8%	1000	0.001	
12%	1500	0.003	
15%	2000	0.003	
19%	2500	0.006	
23%	3000	0.008	
27%	3500	0.011	
31%	4000	0.014	
35%	4500	0.018	
38%	5000	0.023	
42%	5500	0.029	
46%	6000	0.036	
50%	6500	0.046	
54%	7000	0.064	
58%	7500	0.843	
62%	8000		
65%	8500		
69%	9000		
73%	9500		
77%	10000		
81%	10500		
85%	11000		
88%	11500		
92%	12000		



Compression Load Test Result for PLT-23C

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

Test Date and Representative

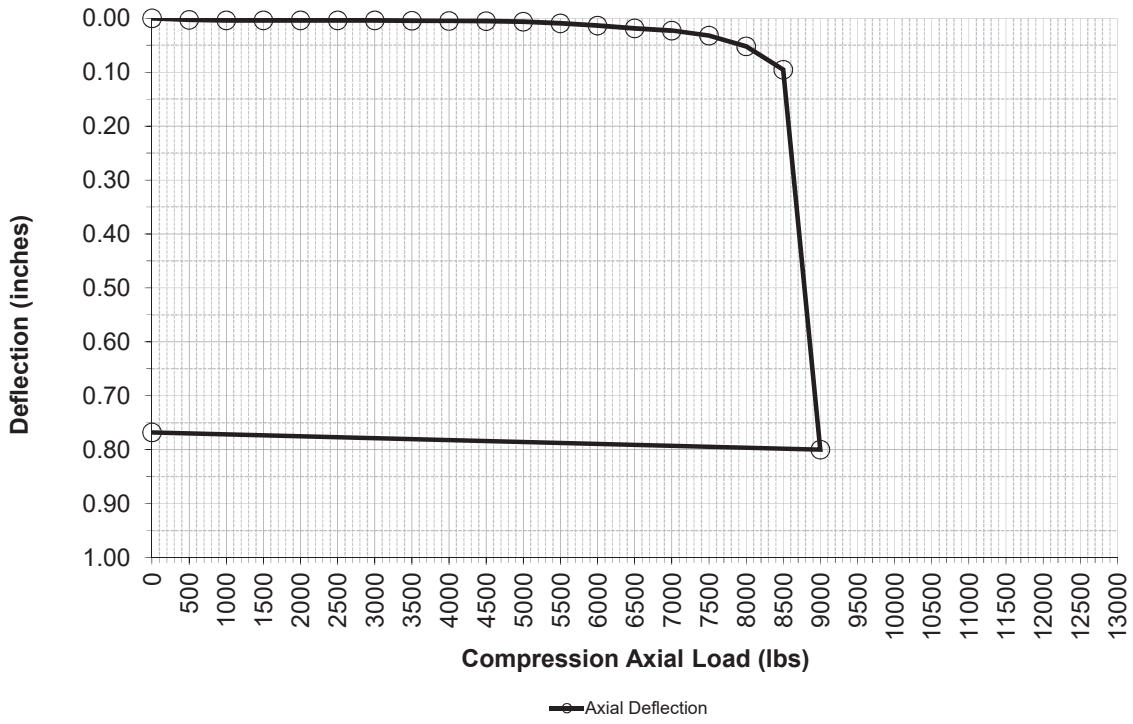
Tested By Terracon Rep:	IM
Date Tested:	6/17/2022

Pile Information

Pile ID:	PLT-23C
Latitude:	39.26520
Longitude:	-83.84870
Pile Type:	W6x9
Pile Embedment Depth [in]:	84
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	30
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	47

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	0.003	
8%	1000	0.004	
12%	1500	0.004	
15%	2000	0.004	
19%	2500	0.004	
23%	3000	0.004	
27%	3500	0.005	
31%	4000	0.005	
35%	4500	0.005	
38%	5000	0.006	
42%	5500	0.010	
46%	6000	0.014	
50%	6500	0.019	
54%	7000	0.023	
58%	7500	0.032	
62%	8000	0.052	
65%	8500	0.096	
69%	9000	0.800	
73%	9500		
77%	10000		
81%	10500		
85%	11000		
88%	11500		
92%	12000		



Compression Load Test Result for PLT-24C

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

Test Date and Representative

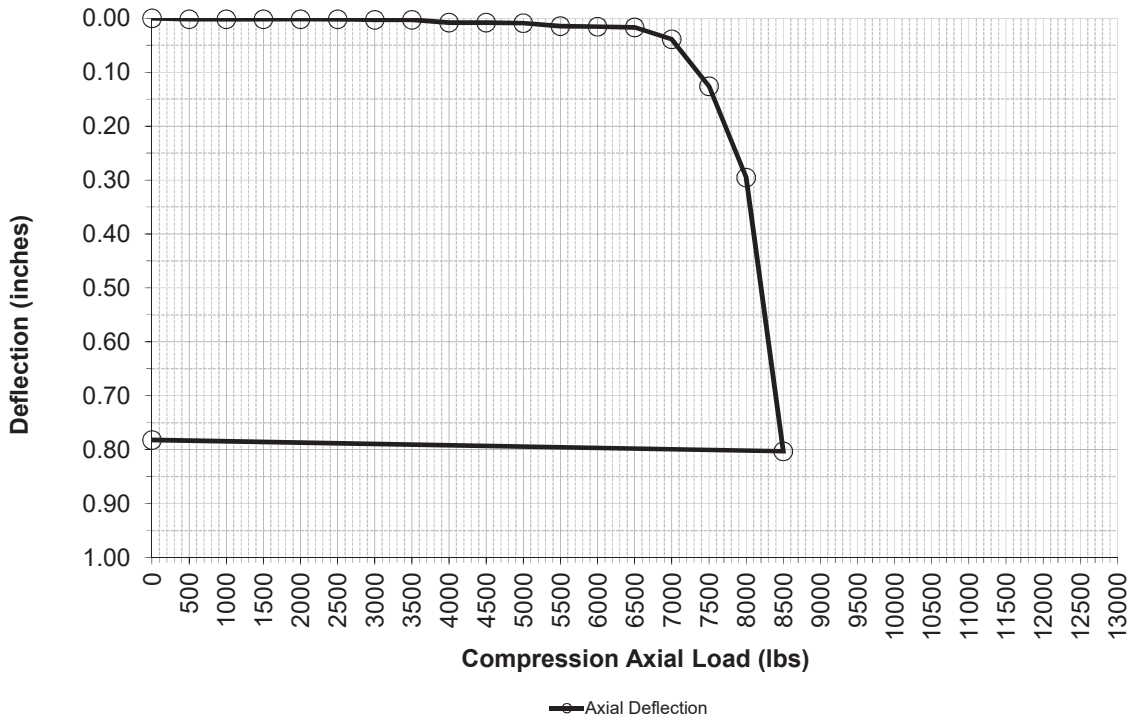
Tested By Terracon Rep:	MC
Date Tested:	6/22/2022

Pile Information

Pile ID:	PLT-24C
Latitude:	39.26950
Longitude:	-83.81880
Pile Type:	W6x9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	30
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	19

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	0.002	
8%	1000	0.002	
12%	1500	0.002	
15%	2000	0.002	
19%	2500	0.002	
23%	3000	0.003	
27%	3500	0.003	
31%	4000	0.008	
35%	4500	0.008	
38%	5000	0.009	
42%	5500	0.015	
46%	6000	0.016	
50%	6500	0.017	
54%	7000	0.039	
58%	7500	0.126	
62%	8000	0.296	
65%	8500	0.803	
69%	9000		
73%	9500		
77%	10000		
81%	10500		
85%	11000		
88%	11500		
92%	12000		



Compression Load Test Result for PLT-30C

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

Test Date and Representative

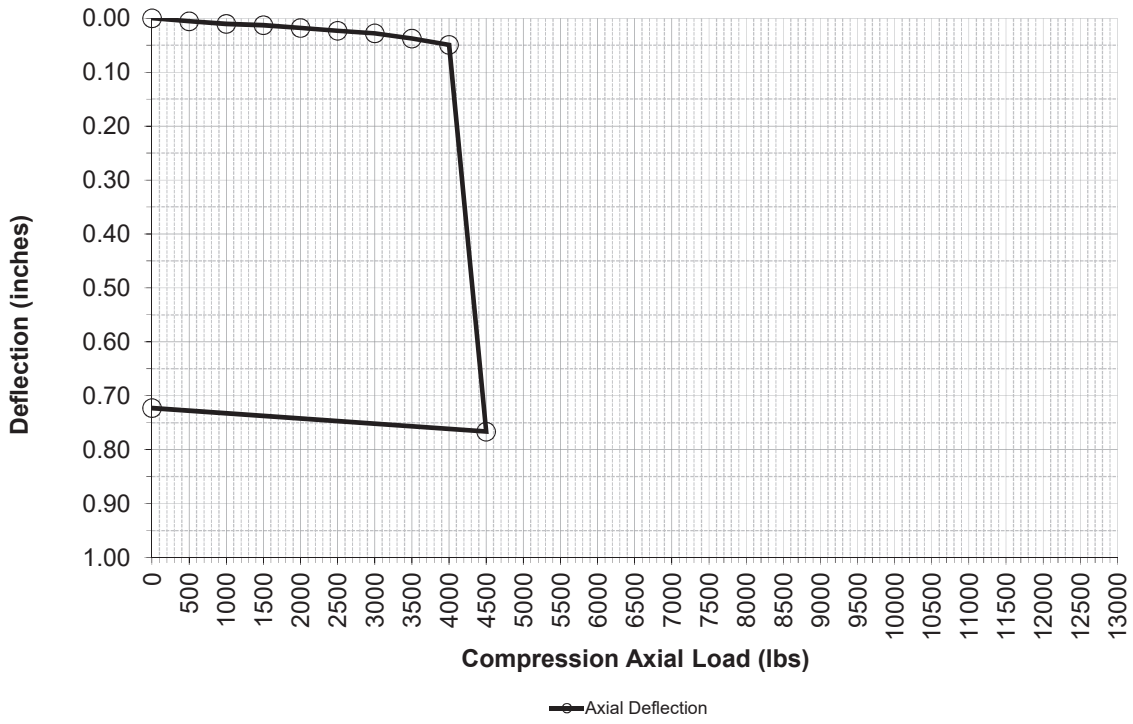
Tested By Terracon Rep:	IM
Date Tested:	6/21/2022

Pile Information

Pile ID:	PLT-30C
Latitude:	39.26200
Longitude:	-83.85880
Pile Type:	W6x9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	30
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	26

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	0.006	
8%	1000	0.011	
12%	1500	0.013	
15%	2000	0.018	
19%	2500	0.023	
23%	3000	0.028	
27%	3500	0.038	
31%	4000	0.050	
35%	4500	0.767	
38%	5000		
42%	5500		
46%	6000		
50%	6500		
54%	7000		
58%	7500		
62%	8000		
65%	8500		
69%	9000		
73%	9500		
77%	10000		
81%	10500		
85%	11000		
88%	11500		
92%	12000		



Compression Load Test Result for PLT-31C

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

Test Date and Representative

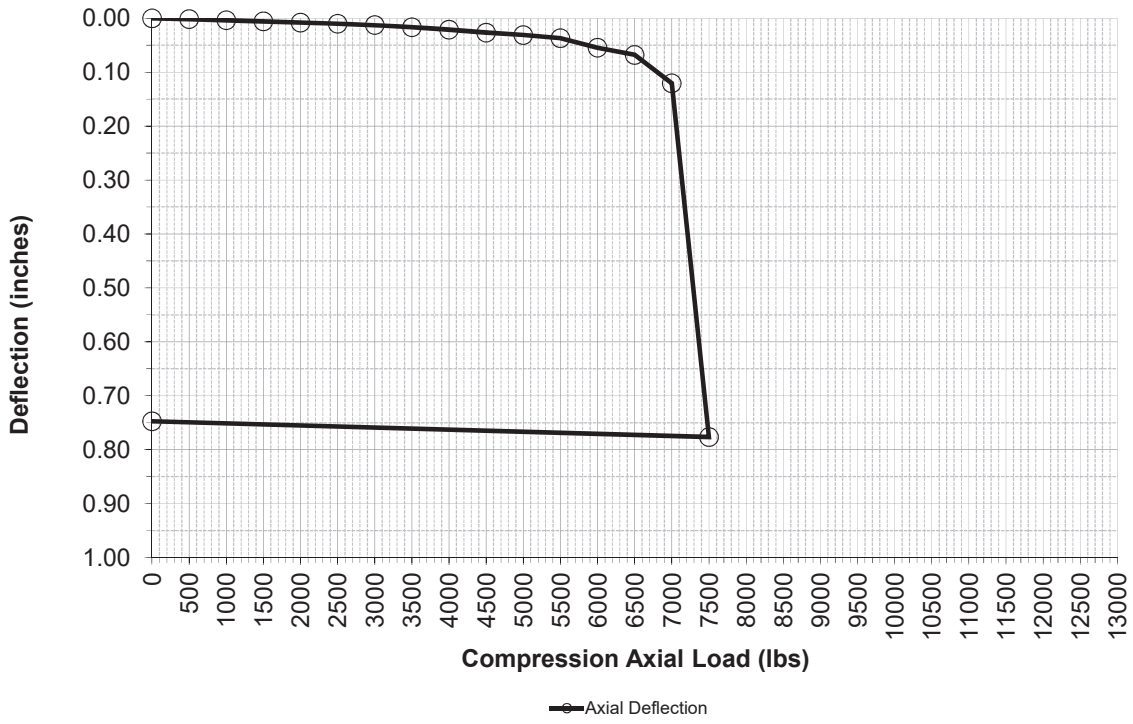
Tested By Terracon Rep:	IM
Date Tested:	6/21/2022

Pile Information

Pile ID:	PLT-31C
Latitude:	39.25830
Longitude:	-83.84780
Pile Type:	W6x9
Pile Embedment Depth [in]:	84
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	30
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	52

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	0.002	
8%	1000	0.004	
12%	1500	0.006	
15%	2000	0.008	
19%	2500	0.010	
23%	3000	0.013	
27%	3500	0.017	
31%	4000	0.021	
35%	4500	0.027	
38%	5000	0.031	
42%	5500	0.037	
46%	6000	0.055	
50%	6500	0.068	
54%	7000	0.121	
58%	7500	0.777	
62%	8000		
65%	8500		
69%	9000		
73%	9500		
77%	10000		
81%	10500		
85%	11000		
88%	11500		
92%	12000		



Compression Load Test Result for PLT-34C

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

Test Date and Representative

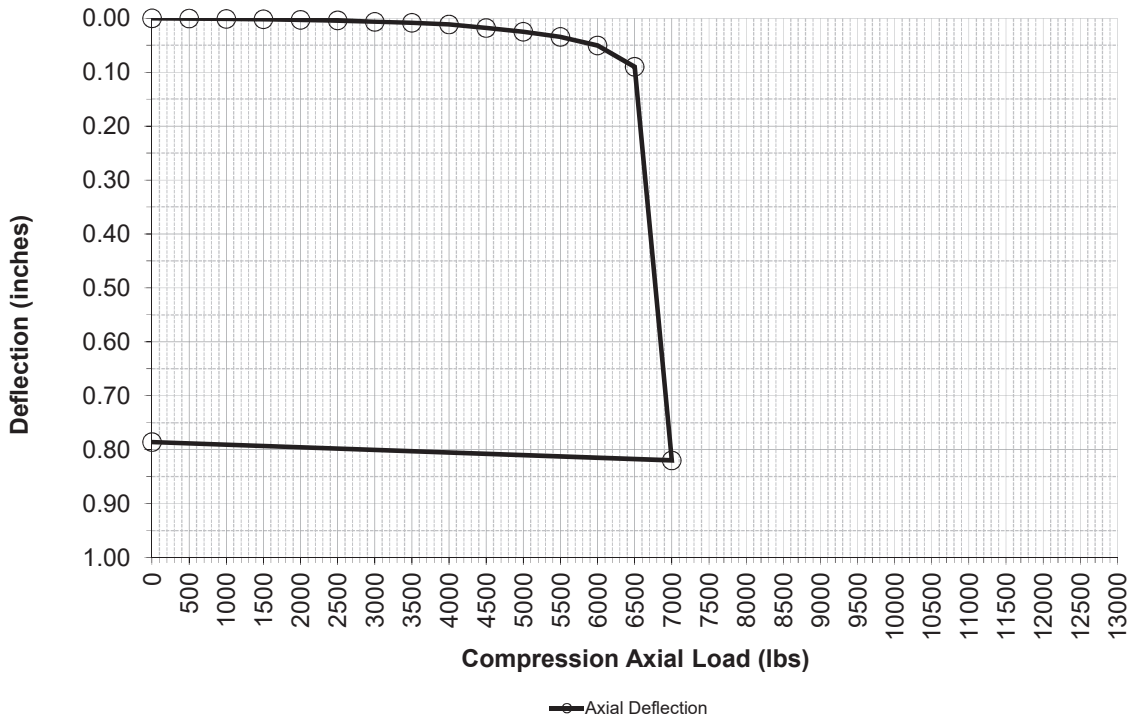
Tested By Terracon Rep:	IM
Date Tested:	6/22/2022

Pile Information

Pile ID:	PLT-34C
Latitude:	39.26130
Longitude:	-83.83370
Pile Type:	W6x9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	30
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	34

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	0.001	
8%	1000	0.001	
12%	1500	0.002	
15%	2000	0.003	
19%	2500	0.004	
23%	3000	0.007	
27%	3500	0.009	
31%	4000	0.012	
35%	4500	0.018	
38%	5000	0.025	
42%	5500	0.035	
46%	6000	0.051	
50%	6500	0.090	
54%	7000	0.820	
58%	7500		
62%	8000		
65%	8500		
69%	9000		
73%	9500		
77%	10000		
81%	10500		
85%	11000		
88%	11500		
92%	12000		



Compression Load Test Result for PLT-35C

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

Test Date and Representative

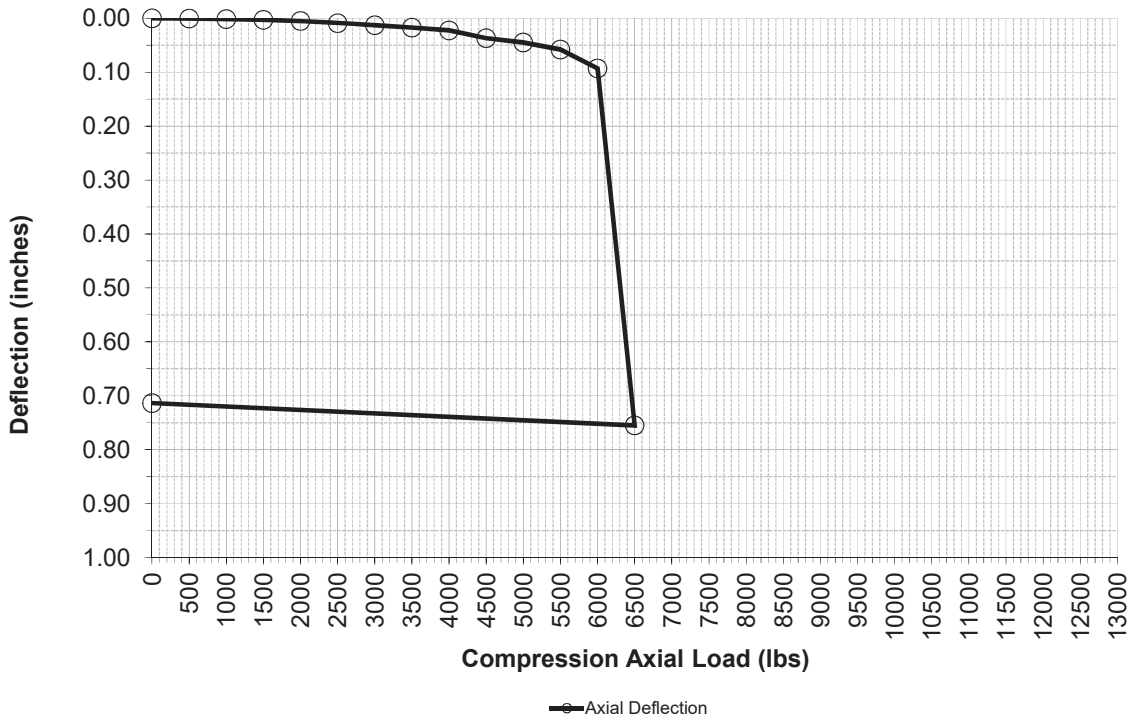
Tested By Terracon Rep:	IM
Date Tested:	6/22/2022

Pile Information

Pile ID:	PLT-35C
Latitude:	39.25820
Longitude:	-83.82670
Pile Type:	W6x9
Pile Embedment Depth [in]:	84
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	30
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	29

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	0.001	
8%	1000	0.002	
12%	1500	0.003	
15%	2000	0.005	
19%	2500	0.009	
23%	3000	0.013	
27%	3500	0.018	
31%	4000	0.023	
35%	4500	0.037	
38%	5000	0.045	
42%	5500	0.058	
46%	6000	0.093	
50%	6500	0.755	
54%	7000		
58%	7500		
62%	8000		
65%	8500		
69%	9000		
73%	9500		
77%	10000		
81%	10500		
85%	11000		
88%	11500		
92%	12000		



Compression Load Test Result for PLT-38C

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

Test Date and Representative

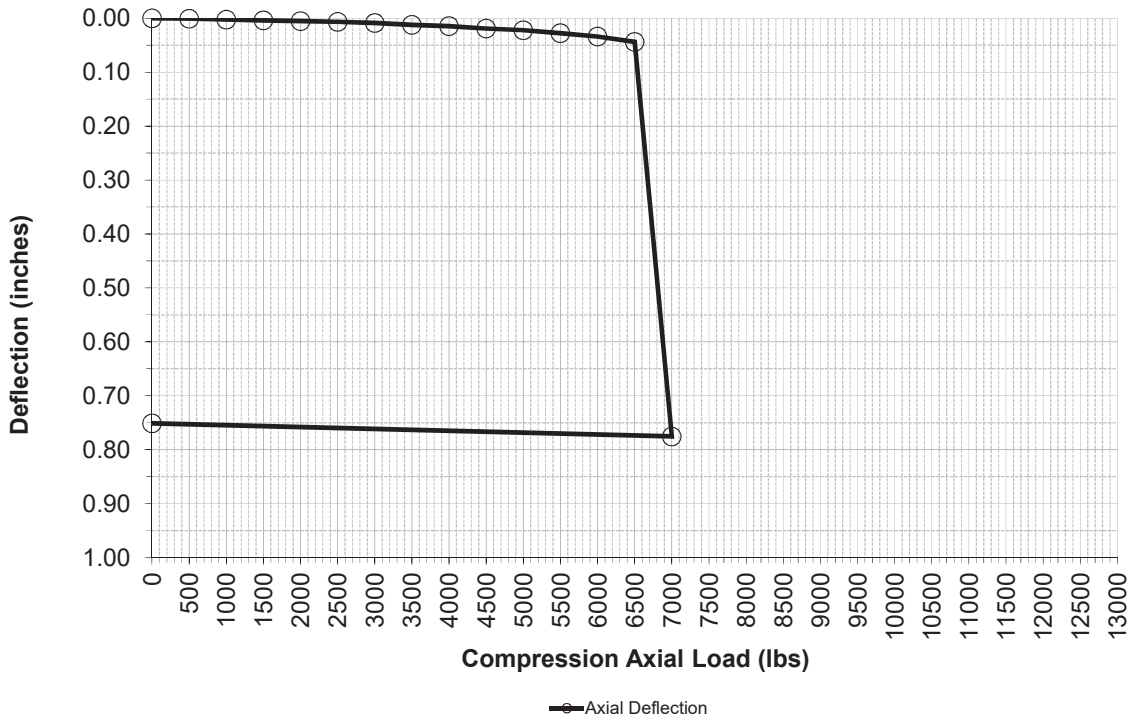
Tested By Terracon Rep:	MC
Date Tested:	6/24/2022

Pile Information

Pile ID:	PLT-38C
Latitude:	39.26370
Longitude:	-83.80780
Pile Type:	W6x9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	30
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	32

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	0.001	
8%	1000	0.003	
12%	1500	0.004	
15%	2000	0.005	
19%	2500	0.007	
23%	3000	0.009	
27%	3500	0.012	
31%	4000	0.015	
35%	4500	0.019	
38%	5000	0.022	
42%	5500	0.028	
46%	6000	0.034	
50%	6500	0.044	
54%	7000	0.776	
58%	7500		
62%	8000		
65%	8500		
69%	9000		
73%	9500		
77%	10000		
81%	10500		
85%	11000		
88%	11500		
92%	12000		



Compression Load Test Result for PLT-39C

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

Test Date and Representative

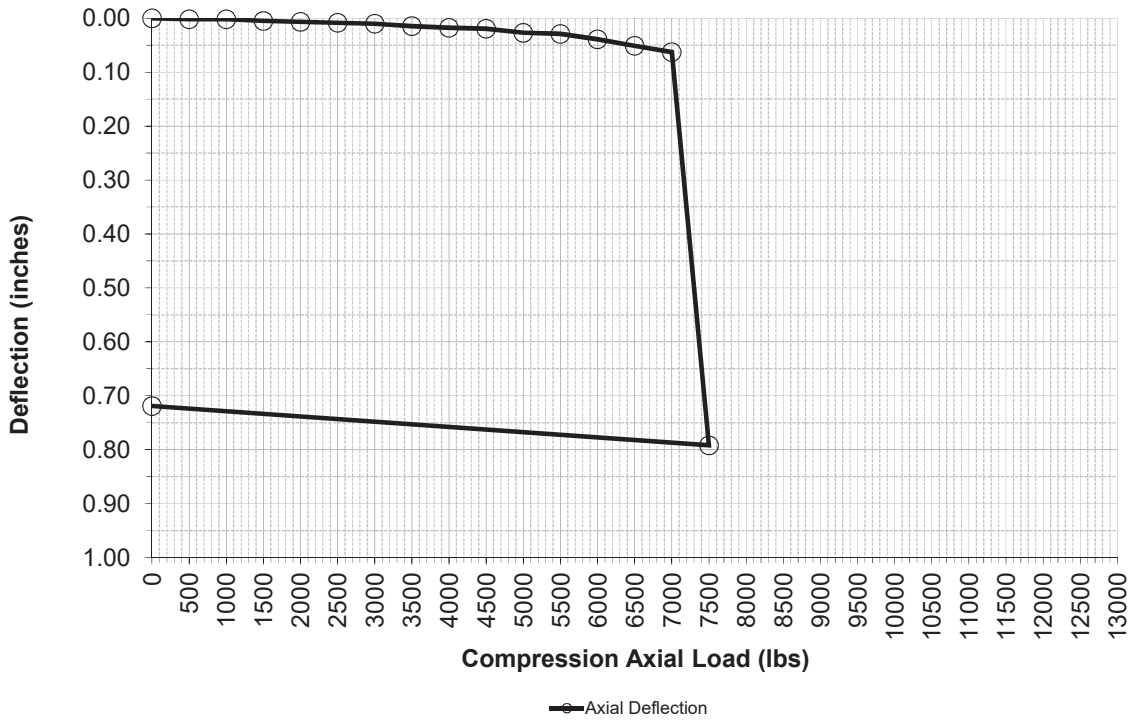
Tested By Terracon Rep:	MC
Date Tested:	6/24/2022

Pile Information

Pile ID:	PLT-39C
Latitude:	39.26030
Longitude:	-83.80220
Pile Type:	W6x9
Pile Embedment Depth [in]:	84
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	30
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	44

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	0.002	
8%	1000	0.002	
12%	1500	0.005	
15%	2000	0.007	
19%	2500	0.009	
23%	3000	0.010	
27%	3500	0.015	
31%	4000	0.018	
35%	4500	0.019	
38%	5000	0.027	
42%	5500	0.029	
46%	6000	0.039	
50%	6500	0.051	
54%	7000	0.063	
58%	7500	0.792	
62%	8000		
65%	8500		
69%	9000		
73%	9500		
77%	10000		
81%	10500		
85%	11000		
88%	11500		
92%	12000		



Compression Load Test Result for PLT-42C

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

Test Date and Representative

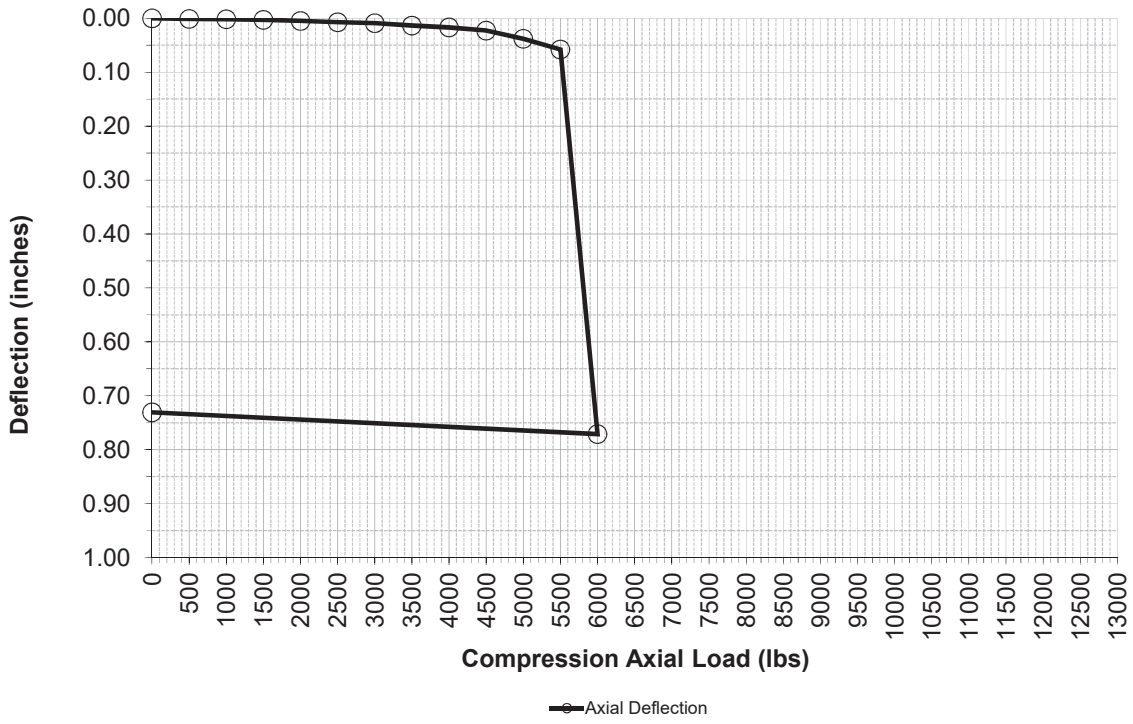
Tested By Terracon Rep:	IM
Date Tested:	6/21/2022

Pile Information

Pile ID:	PLT-42C
Latitude:	39.25020
Longitude:	-83.83420
Pile Type:	W6x9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	30
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	30

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	0.001	
8%	1000	0.002	
12%	1500	0.003	
15%	2000	0.005	
19%	2500	0.008	
23%	3000	0.009	
27%	3500	0.014	
31%	4000	0.017	
35%	4500	0.023	
38%	5000	0.038	
42%	5500	0.058	
46%	6000	0.771	
50%	6500		
54%	7000		
58%	7500		
62%	8000		
65%	8500		
69%	9000		
73%	9500		
77%	10000		
81%	10500		
85%	11000		
88%	11500		
92%	12000		



Compression Load Test Result for PLT-43C

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

Test Date and Representative

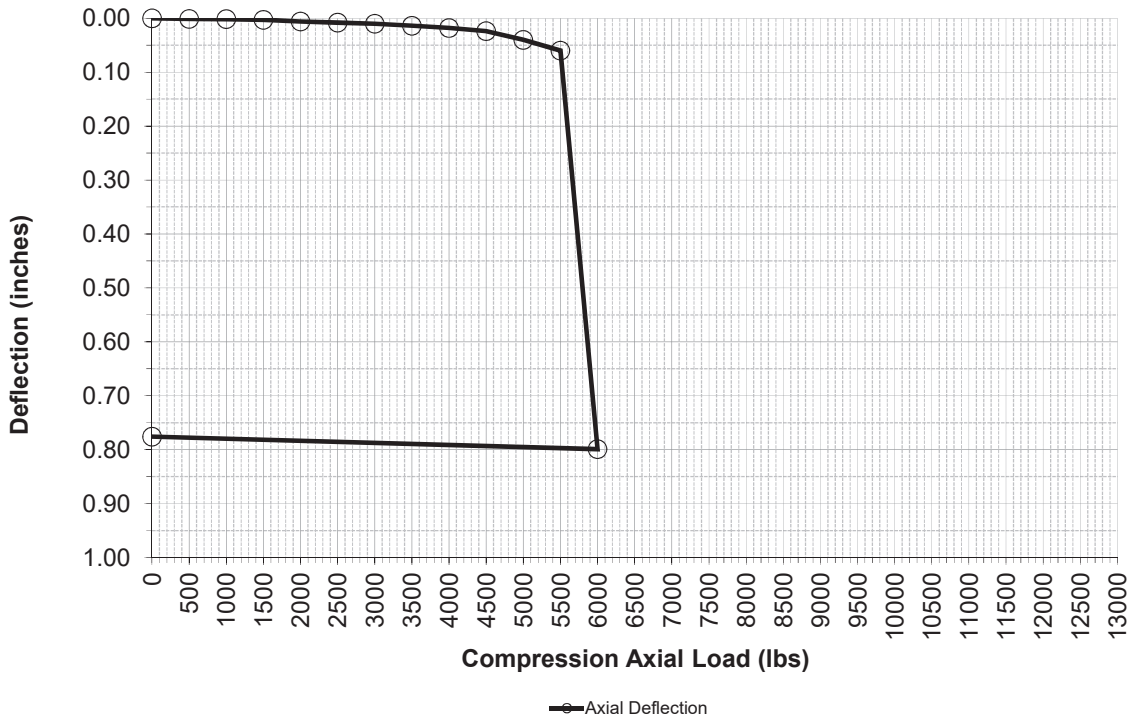
Tested By Terracon Rep:	IM
Date Tested:	6/23/2022

Pile Information

Pile ID:	PLT-43C
Latitude:	39.25160
Longitude:	-83.82920
Pile Type:	W6x9
Pile Embedment Depth [in]:	84
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	30
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	34

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	0.001	
8%	1000	0.002	
12%	1500	0.003	
15%	2000	0.006	
19%	2500	0.008	
23%	3000	0.010	
27%	3500	0.014	
31%	4000	0.018	
35%	4500	0.024	
38%	5000	0.040	
42%	5500	0.060	
46%	6000	0.799	
50%	6500		
54%	7000		
58%	7500		
62%	8000		
65%	8500		
69%	9000		
73%	9500		
77%	10000		
81%	10500		
85%	11000		
88%	11500		
92%	12000		



Compression Load Test Result for PLT-46C

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

Test Date and Representative

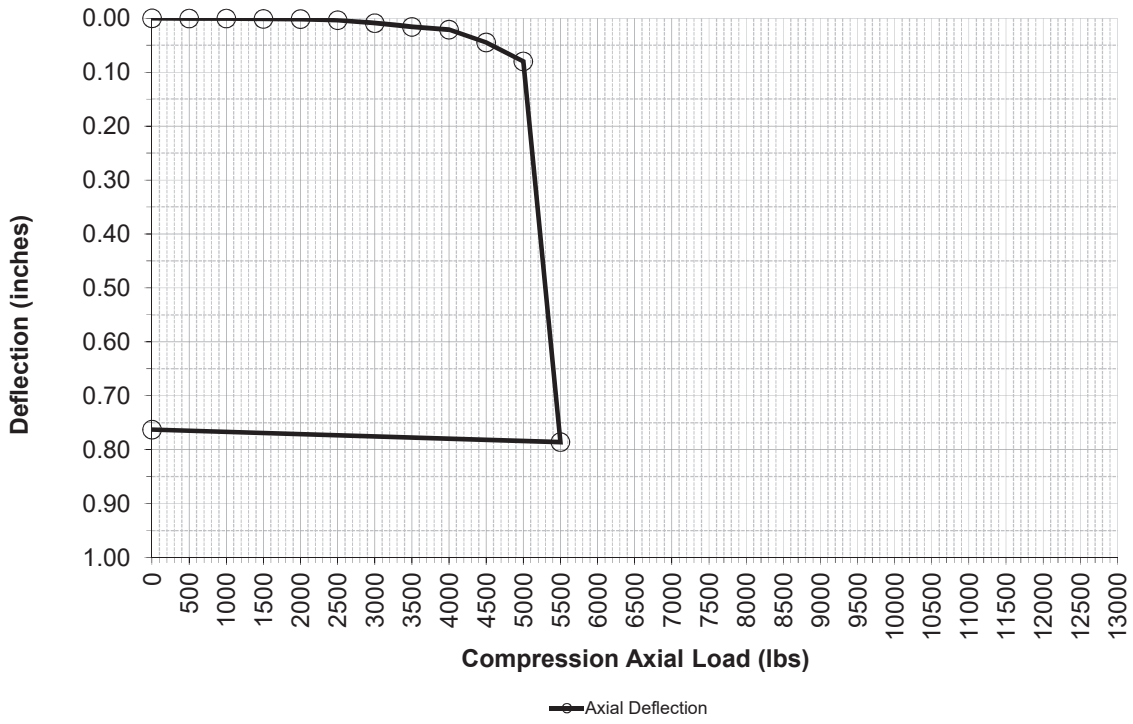
Tested By Terracon Rep:	IM
Date Tested:	6/23/2022

Pile Information

Pile ID:	PLT-46C
Latitude:	39.25330
Longitude:	-83.82040
Pile Type:	W6x9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	30
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	32

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	0.001	
8%	1000	0.001	
12%	1500	0.001	
15%	2000	0.002	
19%	2500	0.004	
23%	3000	0.009	
27%	3500	0.016	
31%	4000	0.021	
35%	4500	0.045	
38%	5000	0.080	
42%	5500	0.786	
46%	6000		
50%	6500		
54%	7000		
58%	7500		
62%	8000		
65%	8500		
69%	9000		
73%	9500		
77%	10000		
81%	10500		
85%	11000		
88%	11500		
92%	12000		



Compression Load Test Result for PLT-47C

Project Information

Project Name:	Yellow Wood Solar
Project Location:	Lynchburg, Ohio
Project Number:	N4225038

Axial Load Test Set Up

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

Test Date and Representative

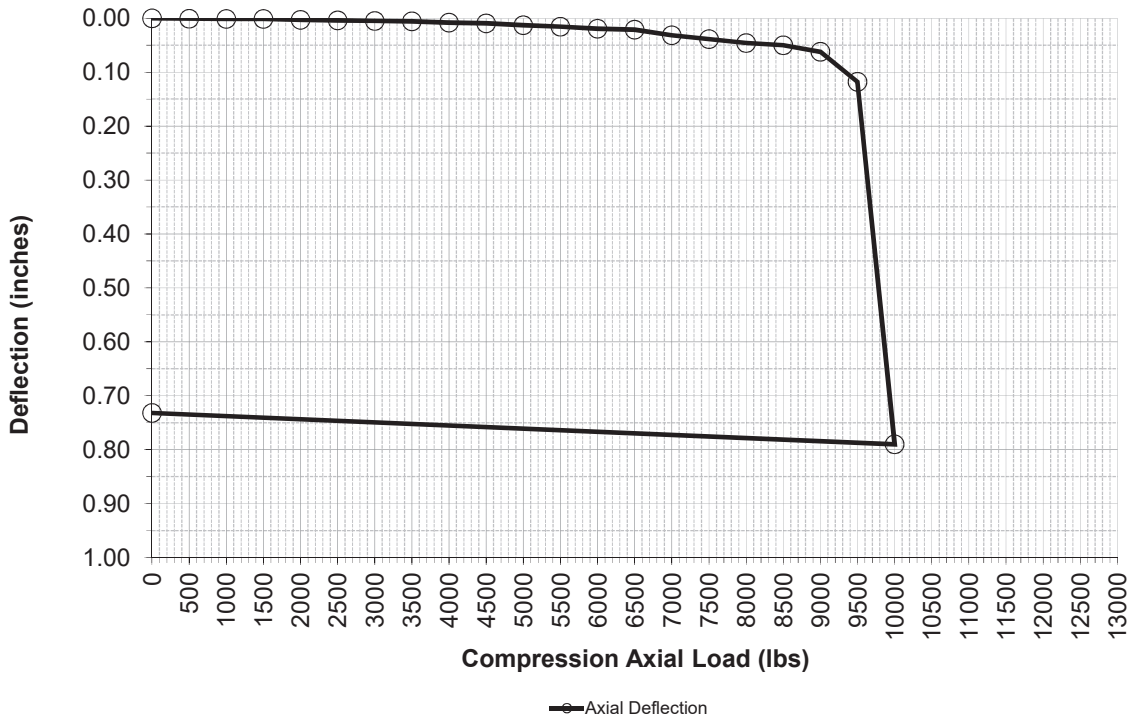
Tested By Terracon Rep:	MC
Date Tested:	6/24/2022

Pile Information

Pile ID:	PLT-47C
Latitude:	39.25370
Longitude:	-83.81070
Pile Type:	W6x9
Pile Embedment Depth [in]:	84
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	30
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	82

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	0.001	
8%	1000	0.001	
12%	1500	0.001	
15%	2000	0.003	
19%	2500	0.004	
23%	3000	0.005	
27%	3500	0.006	
31%	4000	0.008	
35%	4500	0.010	
38%	5000	0.013	
42%	5500	0.016	
46%	6000	0.020	
50%	6500	0.021	
54%	7000	0.032	
58%	7500	0.039	
62%	8000	0.046	
65%	8500	0.050	
69%	9000	0.062	
73%	9500	0.118	
77%	10000	0.790	
81%	10500		
85%	11000		
88%	11500		
92%	12000		



Compression Load Test Result for 1-C

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Axial Load Test Set Up

Number of Gauges:	2
Height of Gauges [in]:	6
Load Cell:	IQ+390-DC

Test Date and Representative

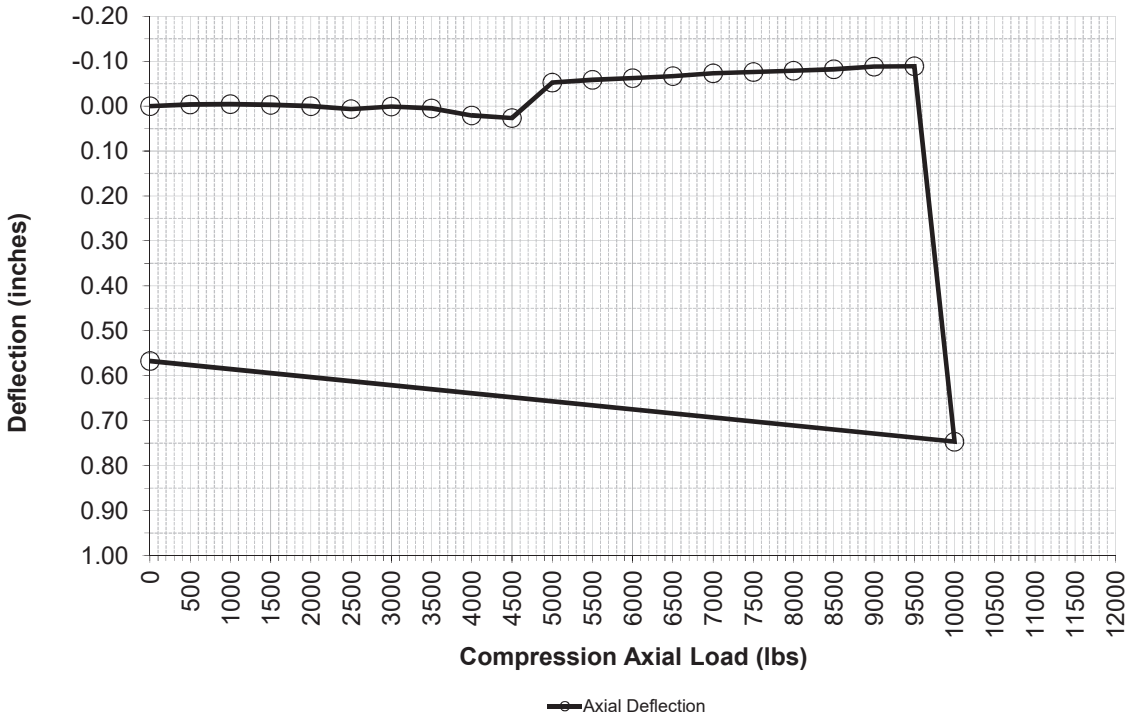
Tested By Terracon Rep:	J. Lombardi
Date Tested:	8/13/2020

Pile Information

Pile ID:	1-C
Latitude:	39.27433
Longitude:	-83.79885
Pile Type:	W6x9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	24
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	78.64

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	-0.004	
8%	1000	-0.004	
12%	1500	-0.003	
15%	2000	0.000	
19%	2500	0.007	
23%	3000	0.001	
27%	3500	0.005	
31%	4000	0.021	
35%	4500	0.027	
38%	5000	-0.052	
42%	5500	-0.059	
46%	6000	-0.062	
50%	6500	-0.067	
54%	7000	-0.073	
58%	7500	-0.076	
62%	8000	-0.079	
65%	8500	-0.082	
69%	9000	-0.088	
73%	9500	-0.089	
77%	10000	0.747	
81%	10500		
85%	11000		
88%	11500		
92%	12000		



Compression Load Test Result for 2-C

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Axial Load Test Set Up

Number of Gauges:	2
Height of Gauges [in]:	6
Load Cell:	IQ+390-DC

Test Date and Representative

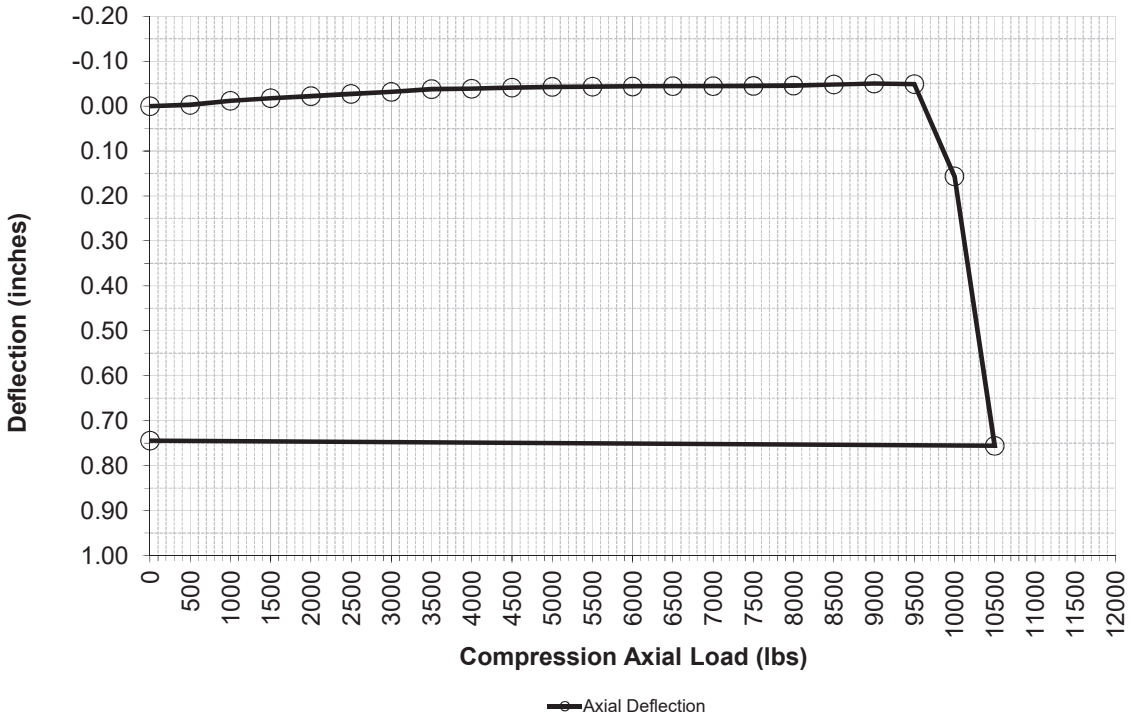
Tested By Terracon Rep:	J. Lombardi
Date Tested:	8/13/2020

Pile Information

Pile ID:	2-C
Latitude:	39.26245
Longitude:	-83.82553
Pile Type:	W6x9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	24
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	70.36

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	-0.003	
8%	1000	-0.012	
12%	1500	-0.018	
15%	2000	-0.022	
19%	2500	-0.027	
23%	3000	-0.032	
27%	3500	-0.038	
31%	4000	-0.039	
35%	4500	-0.041	
38%	5000	-0.043	
42%	5500	-0.043	
46%	6000	-0.044	
50%	6500	-0.044	
54%	7000	-0.045	
58%	7500	-0.045	
62%	8000	-0.046	
65%	8500	-0.048	
69%	9000	-0.050	
73%	9500	-0.049	
77%	10000	0.156	
81%	10500	0.756	
85%	11000		
88%	11500		
92%	12000		



Compression Load Test Result for 3-C

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Axial Load Test Set Up

Number of Gauges:	2
Height of Gauges [in]:	6
Load Cell:	IQ+390-DC

Test Date and Representative

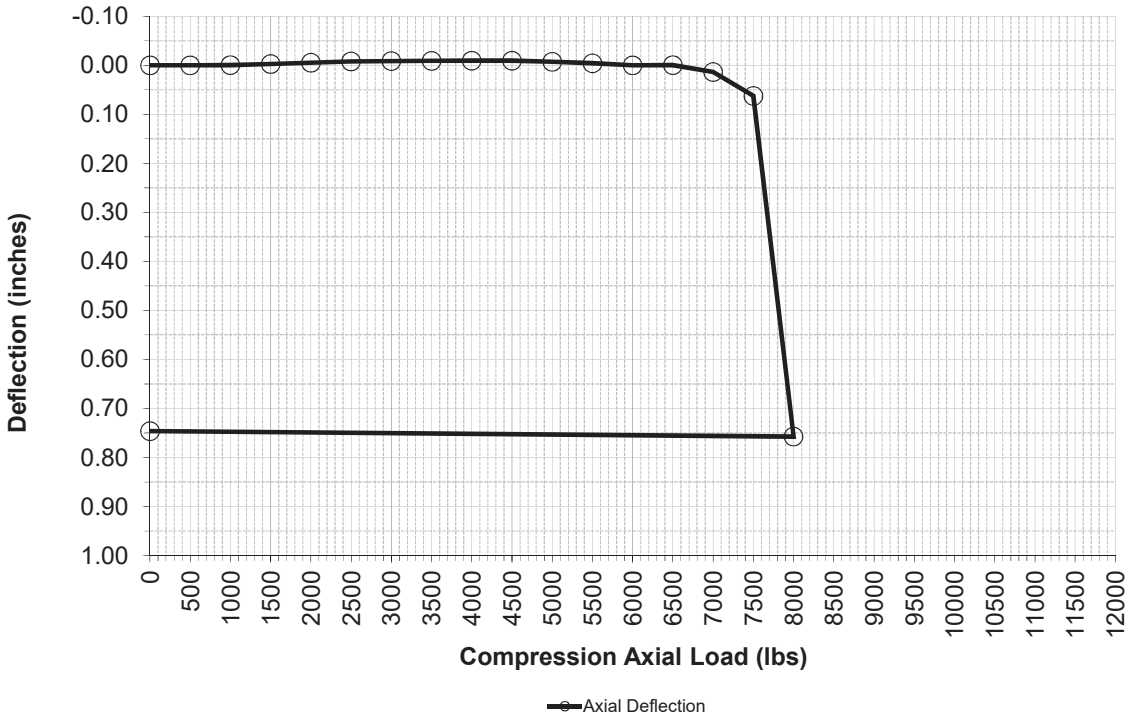
Tested By Terracon Rep:	J. Lombardi
Date Tested:	8/13/2020

Pile Information

Pile ID:	3-C
Latitude:	39.25659
Longitude:	-83.82340
Pile Type:	W6x9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	24
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	51.98

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	0.000	
8%	1000	0.000	
12%	1500	-0.003	
15%	2000	-0.005	
19%	2500	-0.008	
23%	3000	-0.009	
27%	3500	-0.009	
31%	4000	-0.010	
35%	4500	-0.009	
38%	5000	-0.007	
42%	5500	-0.004	
46%	6000	0.000	
50%	6500	0.000	
54%	7000	0.014	
58%	7500	0.063	
62%	8000	0.757	
65%	8500		
69%	9000		
73%	9500		
77%	10000		
81%	10500		
85%	11000		
88%	11500		
92%	12000		



Compression Load Test Result for 4-C

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Axial Load Test Set Up

Number of Gauges:	2
Height of Gauges [in]:	6
Load Cell:	IQ+390-DC

Test Date and Representative

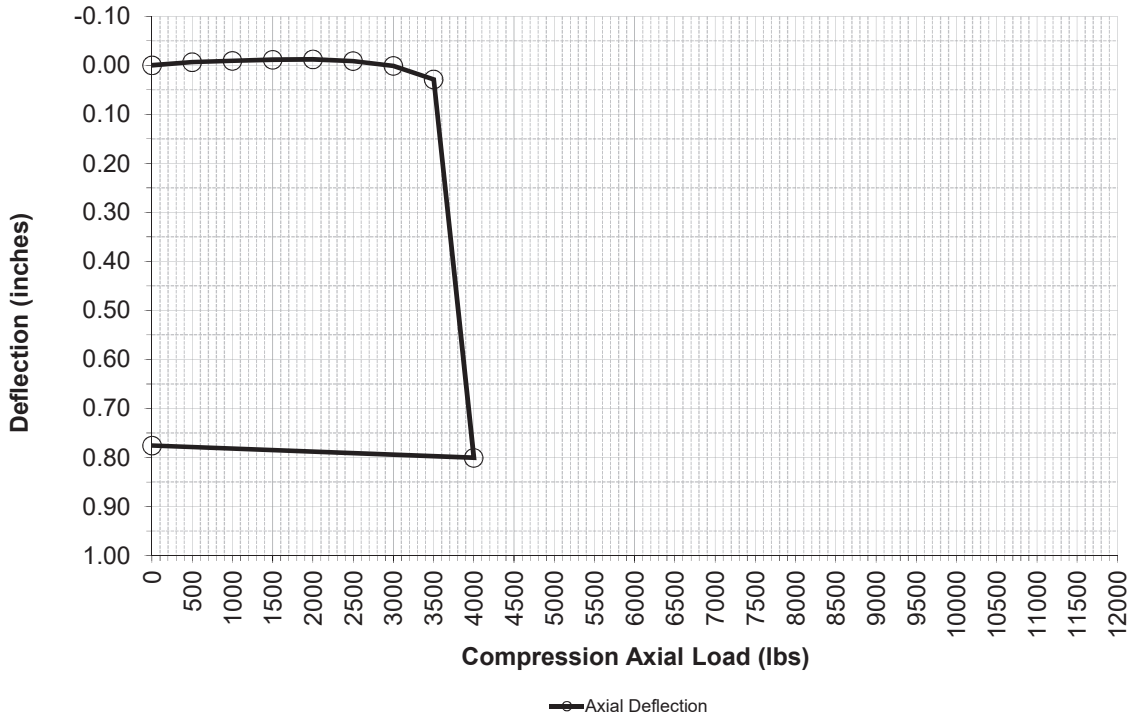
Tested By Terracon Rep:	J. Lombardi
Date Tested:	8/14/2020

Pile Information

Pile ID:	4-C
Latitude:	39.25756
Longitude:	-83.84239
Pile Type:	W6x9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	24
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	40.35

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	-0.007	
8%	1000	-0.009	
12%	1500	-0.011	
15%	2000	-0.012	
19%	2500	-0.008	
23%	3000	0.001	
27%	3500	0.029	
31%	4000	0.801	
35%	4500		
38%	5000		
42%	5500		
46%	6000		
50%	6500		
54%	7000		
58%	7500		
62%	8000		
65%	8500		
69%	9000		
73%	9500		
77%	10000		
81%	10500		
85%	11000		
88%	11500		
92%	12000		



Compression Load Test Result for 5-C

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Axial Load Test Set Up

Number of Gauges:	2
Height of Gauges [in]:	6
Load Cell:	IQ+390-DC

Test Date and Representative

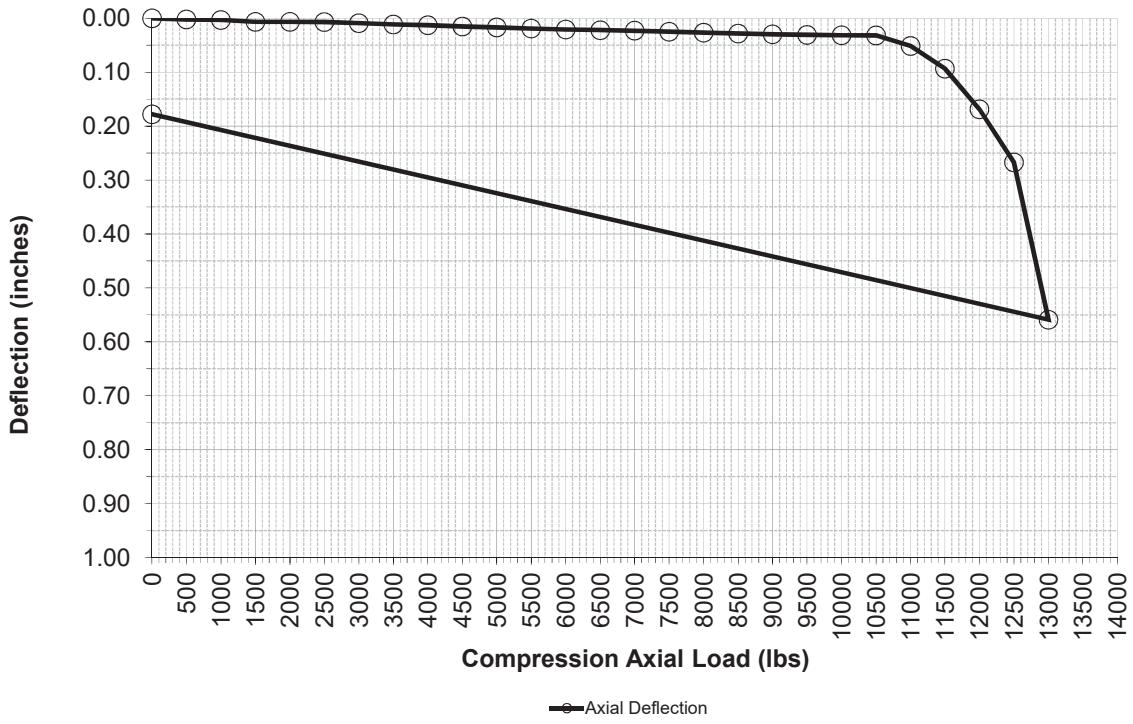
Tested By Terracon Rep:	J. Lombardi
Date Tested:	8/14/2020

Pile Information

Pile ID:	5-C
Latitude:	39.26657
Longitude:	-83.85300
Pile Type:	W6x9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	24
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	91.28

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	0.002	
8%	1000	0.003	
12%	1500	0.007	
15%	2000	0.007	
19%	2500	0.007	
23%	3000	0.009	
27%	3500	0.012	
31%	4000	0.013	
35%	4500	0.015	
38%	5000	0.017	
42%	5500	0.019	
46%	6000	0.021	
50%	6500	0.022	
54%	7000	0.023	
58%	7500	0.025	
62%	8000	0.027	
65%	8500	0.028	
69%	9000	0.030	
73%	9500	0.031	
77%	10000	0.032	
81%	10500	0.032	
85%	11000	0.051	
88%	11500	0.093	
92%	12000	0.169	



Compression Load Test Result for 6-C

Project Information

Project Name:	Yellowood Solar
Project Location:	Clinton, Ohio
Project Number:	N4205103

Axial Load Test Set Up

Number of Gauges:	2
Height of Gauges [in]:	6
Load Cell:	IQ+390-DC

Test Date and Representative

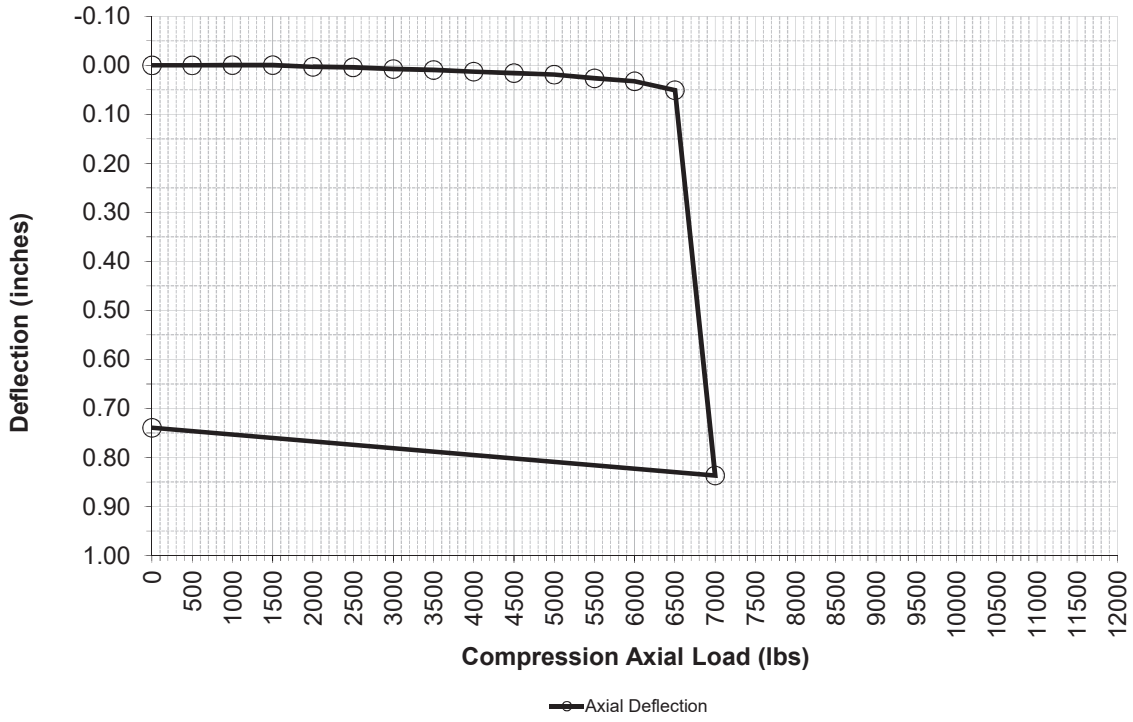
Tested By Terracon Rep:	J. Lombardi
Date Tested:	8/14/2020

Pile Information

Pile ID:	6-C
Latitude:	39.27376
Longitude:	-83.86502
Pile Type:	W6x9
Pile Embedment Depth [in]:	72
Pile Diameter [in]:	5.9
Pile Stick-Up [in]:	24
Axial Design Load [lbs]:	13000
Pile Area [sq. in]:	2.96
Elastic Modulus [ksi]:	29,000
Drive Time [sec]:	95.28

Compression Test Results

% of Design Load	Axial Load [lbs]	Deflection Δ (in.) Gauges #1 & #2	Comments
0%	0	0.000	
4%	500	0.000	
8%	1000	0.000	
12%	1500	0.000	
15%	2000	0.003	
19%	2500	0.004	
23%	3000	0.008	
27%	3500	0.010	
31%	4000	0.013	
35%	4500	0.016	
38%	5000	0.019	
42%	5500	0.027	
46%	6000	0.033	
50%	6500	0.051	
54%	7000	0.837	
58%	7500		
62%	8000		
65%	8500		
69%	9000		
73%	9500		
77%	10000		
81%	10500		
85%	11000		
88%	11500		
92%	12000		



Yellow Wood Solar Energy LLC
Supplemental Testimony
Case No. 20-1680-EL-BGN

Supp. Attachment RS-1

Karst Survey and Assessment Report
September 23, 2022

DICKINSON WRIGHT PLLC

Karst Survey and Assessment Report

Yellow Wood Solar
Clinton County, Ohio
September 23, 2022
Terracon Project No. N4225038R

Prepared for:
Invenergy Energy
Chicago, IL

Prepared by:
Terracon Consultants, Inc.

September 23, 2022

Invenergy Renewables LLC
One South Wacker Drive, Suite 1800
Chicago, IL 60606

Attn: Ms. Sonia Chandra
P: (608) 512-7807
E: schandrasekharan@invenergyllc.com

Re: Karst Survey and Assessment Report
Yellow Wood Solar
Clinton County, Ohio
Terracon Project No. N4225038R

Dear Ms. Chandra:

We have completed the Karst Survey and Assessment services for the above referenced project. This study was performed in general accordance with Terracon Proposal No. PN4225038R dated March 31, 2022. This report presents the findings of the karst survey and assessment at the proposed Yellow Wood Solar site in Clinton County, Ohio.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report or if we may be of further service, please contact us.

Sincerely,
Terracon Consultants, Inc.

Joshua Valentino, PhD, PG
Project Geologist

Rohit Singh
Senior Staff Engineer

Yogesh S Rege, P.E.
Office Manager, Senior Principal

SME Review by Robert Denton, CPG

STATE OF OHIO
YOGESH SURESH REGE
PROFESSIONAL ENGINEER

Rege, Yogesh S.
Sep 23 2022 12:32 PM

REPORT TOPICS

ATTACHMENTS

Note: Refer to each individual Attachment for a listing of contents.

Karst Survey and Assessment Report

Yellow Wood Solar

Clinton County, Ohio

Terracon Project No. N4225038R

September 23, 2022

INTRODUCTION

The proposed Yellow Wood Solar site in Clinton County, Ohio was assessed for potential karst geohazards underlying the property, which encompasses a total of approximately 2,346 acres. The entire property is mapped as underlain by soluble carbonate bedrock forming a regional karst terrain (i.e.: a landscape characterized by the presence of sinkholes, caves, sinking and losing streams, and a highly irregular "pinnacled" overburden/bedrock interface). Due to the challenges that karst terrain can present to development projects of this kind, the objective of the karst assessment was to identify, locate, and characterize existing karst features with particular emphasis on open throat and/or active sinkhole development.

SCOPE OF SERVICES

Our karst survey and assessment services were performed in two phases: 1) a desktop data review phase, and 2) a field survey phase. Terracon assessed the properties indicated by the KMZ file ***Yellow Wood – OH Parcels.kmz*** file provided to us.

Specifically, Terracon provided the following services:

- Terracon's karst geologists performed a desktop review of readily available resources to identify suspected and/or previously identified and documented karst features (e.g., sinkholes and areas of soil subsidence, cave entrances, closed depressions, and sinking and losing streams) within the AOI, and any features within 0.25 miles of the AOI that were inferred to receive drainage from the AOI.
- Based on the results of the data review, Terracon's karst geologists located and delineated visible surface karst features (e.g., sinkholes and subsidences, closed depressions, and sinking and losing streams) within the field study AOI, with particular emphasis on features that were inferred to have direct communication with the phreatic zone (e.g.: "open-throat" sinkholes, karst windows, cave entrances, abandoned wells, sinking streams) and areas of high karst activity that could indicate development of pinnacled bedrock. Field observations were made by walking the field study AOI. A detailed map showing the field study AOI which was evaluated is included as Exhibit 1, Appendix A.
- Terracon delineated zones of karst terrain based on the surface karst feature assessment.
- The findings and conclusions of the data review and field study have been summarized in this report. The report includes recommendations on the feasibility of the planned construction in karst areas, indicates higher or lower risk areas within the AOI, and

provides recommendations regarding additional studies or investigations for site specific karst features identified during the survey.

2.1 Methods and Procedures

Desktop Data Review

Potential karst features were initially identified remotely. Terracon's karst geologists performed a desktop review of readily available resources to identify suspected or documented karst features (e.g., sinkholes and areas of soil subsidence, cave entrances, closed depressions, and sinking and losing streams) within the site, and any features within 0.25 miles of the site that were inferred to receive drainage from the site, that were available from the following sources:

1. Maps of selected karst features available from the United States Geological Survey (USGS);
2. Digital Elevation Models (DEMs) and LiDAR Data;
3. Two-foot contour interval maps[1] for the site and surrounding areas to within 0.25-miles of the parcel boundaries, to determine the presence of surface features not included in the above listed databases based on the presence of closed, descending contours or other suspect karst "fingerprint" features[2];
4. Aerial photographs (both recent and historical); and
5. USGS Topographic 7.5-minute topographic quadrangles.
6. In addition, we have reviewed the readily available geologic literature for bedrock and structural characteristics. We also have relied upon the closest resolution geological mapping that exists for the site.

Field Survey

Upon completion of the data review, Terracon initiated the field reconnaissance and survey activities for the 11 parcels. Specifically, the field survey entailed:

1. Location and verification of potential surface features previously identified in the desktop review;
2. Location of uncatalogued or previously unidentified surface features, specifically sinkholes, cave entrances, dry runs, and sinking streams.

---

1 Derived primarily from LiDAR and DEM data.

2 A sinkhole is defined as the last closed contour based on 2-foot contours; therefore, we use that interval as a metric for defining closed depressions.

Each survey area was delineated and then examined for features (both catalogued and previously unidentified during the desktop review) in the field. This entailed walking over the survey area in a systematic manner, to observe features that fit the criteria. The locations and outlines of all relevant features were recorded using a recreational grade GPS device. For this study, the outline (parapet) of a closed depression (sinkhole) was defined as either the last closed descending contour at a 2-foot mapping interval or by the presence of a visible parapet. Cave entrances, sinking streams, or springs were not identified within the AOI.

GEOLOGY AND TERRAIN

Physiography – The Yellow Wood Solar Site is located in Clinton County, Ohio, northwest of Lynchburg, Ohio encompassing approximately 2,346 acres. The site is located within the Till Plains Section of the Central Lowlands Province of the Physiographic Map of the United States[3]. The Central Lowlands are predominant in the central and western parts of the state in areas of low relief and are underlain by carbonate bedrock dating to the Silurian and Ordovician geologic periods. However, there are few bedrock outcrops due to sediments being deposited on them during the Pleistocene glaciations. Prior to advance of the glaciers, the area had moderate relief and was highly dissected by streams and rivers. However, the advance of several glaciers across the area gouged and smoothed the bedrock as they destroyed the drainage systems and filled the valleys with sediment. Today, these ancient preglacial valleys, such as the Teays River valley, are more than 400 feet deep, but there is no hint of them on the nearly flat surface.

In Ohio, the Till Plains Section is divided into a series of subsections, and the site is mapped in the Illinoinian Till Plain subsection, consisting of a rolling ground moraine of older till generally lacking ice-constructed features such as moraines, kames and eskers. There are many buried valleys in this section, with modern valleys alternating between broad floodplains and bedrock gorges.

Topography – The majority of the Yellow Wood site is in the Martinsville OH 7.5-minute topographic quadrangle (39083-C7) except for the southernmost parcels, which are in the adjoining Lynchburg Quadrangle (39083-B7; Exhibit 2, Appendix A). The site has an average elevation of EL1009 across its southern section, and EL1017 across its northern section. In general, it comprises a relatively level upland plain with both agricultural (row crop) fields and forested areas.

The greatest relief is located along the valley of the Glady Creek which runs from north to south in the eastern section of the site. The site's low-point occurs along this valley at approximately EL995, and the deeply incised valley of this creek may be one of the few places across the site where bedrock might be exposed. A series of 5 unnamed creeks cross the southern section of

[3]Fenneman, Nevin M. (January 1917). "Physiographic Subdivision of the United States", USGS.

the site from northeast to southwest, all of which are tributaries of the East Fork of the Little Miami River located to the south of the site. A drainage divide is located in the northwestern part of the site, and north of the divide are several unnamed tributaries of the West Fork of the East Fork of the Little Miami River. With the exception of the Glady Creek valley, the others stream valleys have low relief, averaging from 5 to 10 feet below the surrounding upland areas.

Geology – The bedrock geology of the site area was originally described by the Ohio Division of Geological Survey in a series of preliminary maps but was subsequently revised in 2006 at the state level[4] which is the mapping referenced in this report.

The geological units are described as follows.

Waynesville Formation and Arnheim shale and limestone, undivided (Owa) – This unit underlies the majority of the site, with the exception of the westernmost parcels between Chaney Road and CO RD 6, and a group of parcels south of CO RD 6 and west of CO RD 48.

The Owa unit is dated to the Upper Ordovician Geologic Period. The Waynesville component is 90 to 120 feet of gray to bluish gray shale (70 percent) and limestone. Bedding is planar to irregular, varying from thin bedded to thick. The Arnheim component is comprised of 50 to 110 feet of shale (60 percent) and limestone, gray to bluish gray. The bedding is nodular, wavy and planar, also varying from thin to thickly bedded. The entire undivided unit ranges from 140 to 220 feet in thickness.

Drakes, Whitewater, and Liberty Formations, undivided (Odl) – The remainder of the site is mapped as underlain by this unit. It is dated to the Upper Ordovician Geologic Period and overlies the Owa. The Drakes Formation is 20 to 30 feet of shale (90%) interbedded with limestone and dolomite (10%). It is gray and maroon, weathering to yellowish gray. Bedding is planar to irregular, thin to thick bedded. The Whitewater Formation is 20 to 80 feet of interbedded limestone (60%) and shale (40%). The fresh rock is gray, weathering to yellowish gray. Bedding is irregular to wavy, thin to medium thick. The Liberty Formation is gray interbedded limestone (50%) and shale (50%), weathering to yellowish gray. Bedding is planar to irregular, thin to medium thick. The entire undivided unit ranges from 60 to 150 feet in thickness.

A map of the site geology is included as Exhibit 3, Appendix A.

Karst Geology – Referencing the USGS National Karst Map[5], the central portion of the site is mapped as “carbonate rocks buried under >50 feet of glacially derived insoluble sediments in a humid climate”. The remainder of the site is mapped as “carbonate rocks buried under <50 feet

[4]Slucher, E.R., Swinford, E.M., Larsen, G.E., Schumacher, G.A., Shrake, D.L., Rice, C.L., Caudill, M.R., Rea, R.G., and Powers, D.M., 2006, Bedrock geologic map of Oioi, ODGM, Digital Map Series BG-1.

[5]Weary, D.J., and Doctor, D.H., 2014, Karst in the United States: A digital map compilation and database: U.S. Geological Survey Open-File Report 2014–1156, 23 p.

of glacially derived insoluble sediments in a humid climate". It's of note that the Ohio Department of Geological Survey karst database considers the sediments overlying the bedrock as greater or less than 20 feet, in contrast to the 50 feet stated in the USGS National Karst Map classification. The surficial sediments overlying the carbonate bedrock are mapped[6] as the Rainsboro Till Ground Moraine, consisting of loamy, compact diamicton[7] with abundant pebbles, and dated to the Illinoian glacial advance of the Pleistocene Epoch. The deeper stream valleys are mapped as Quaternary age alluvium. Karst depressions regionally form where these overlying sediments have collapsed into sinkholes in the underlying carbonate bedrock.

The Ohio sinkhole database does not indicate any suspect or field verified karst sinkholes or depressions on the site itself. However, there are 12 suspect mapped karst features within 1 mile of the site, primarily along the valley of the East Fork of the Little Miami River to the south, and northeast of the town of Lynchburg to the southeast. There are no areas of closed descending or inward hatched contours mapped on site as shown on the 5 foot contour interval topographic maps.

[6]Nash, T. A., 2019, Quaternary Geology of Clinton County, Ohio, ODGS, OFR-2019-1.

[7]A terrigenous sediment that is comprised of unsorted to poorly sorted particles ranging in size from clay, silt and sand to cobbles and boulders.

SURVEY RESULTS AND DISCUSSION

4.1 Data Review

A review of the LiDAR derived shaded relief map and 2-foot contour layer across the site resulted in the identification of forty-two (42) suspect karst features where forty-one (41) are point features and one (1) is an area feature (Image 1).

Image 1. Site map showing all identified suspect karst features for the northern half of the AOI. The red polygons is the parcel boundaries. The green triangles represent the small point suspect karst features, and the blue polygons represent the larger area suspect karst features.

The high-resolution imagery of the site also provides further evidence to suggest the presence of sinkholes, even when the LiDAR and 2-foot contour data does not suggest a closed depression. For example, the presence of small groups or single trees in an otherwise developed agriculture field, implies that the landowner has avoided the area for a reason (Image 2A). In karst prone areas such as this site, these avoidance areas are more often than not either karst features or shallow bedrock, which are both important to investigate during the field survey. A concentration of shallow closed depressions oriented in a grid is shown in Image 2B. This is either due to natural fracture sets in the bedrock or related to irrigation and farming related ground disturbance.

Nevertheless, these depressions warrant field verification. A spring located along the banks of the tributaries of the West Fork of the East Fork of the Little Miami River clearly has an outfall channel leading away from the feature (Image 2C).

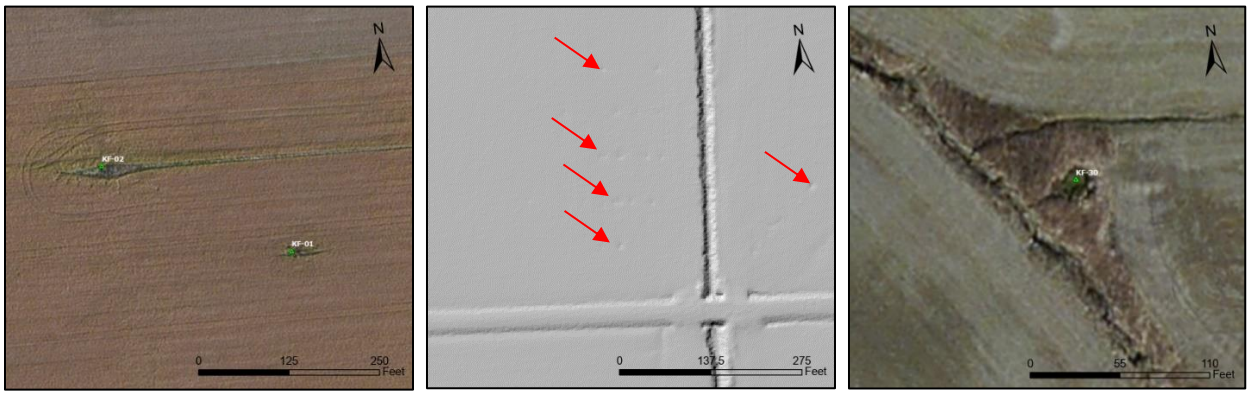


Image 2. (A) Example of lone trees/vegetated areas in an agriculture field which are avoided by the property owner. In areas mapped as underlain by karst, this pattern indicates that there may be karst features near these trees. (B) A concentration of shallow closed depressions oriented in a grid. (C) A spring located along the banks of the tributaries of the West Fork of the East Fork of the Little Miami River.

4.2 Field Survey

The field survey was performed on May 25-26 by Mark Evener (Terracon Project Geologist). The field study AOI was assessed for karst development in the parcels where the geological mapping suggested there was the possibility of the development of karst terrain and/or where the data review indicated the possible presence of existing surface karst features (e.g.: closed depressions). A total of three karst features were verified in the field survey of the AOI. A summary of the karst feature inventory documented during the field survey is included in map format in Appendix B, data format in Appendix C, and photolog format in Appendix D.

Upon completion of the field survey, it was determined that the majority of the suspect karst features identified in the desktop survey were related to collapse of failed drain tiles. The grid like spacing identified in the desktop review (Image 2B), further supports that these depressions are related to failed farming infrastructure and not subsidence related to karst features.

KARST RISK RANKINGS

5.1 Examples of Features Used to Develop Risk Ranking

A total of two (2) different types of karst features with varying characteristics impacting the risk ranking are shown below. The following exemplary karst feature “types” are representative of the various characteristics used to develop the risk ranking. In some cases, the following feature types may have more than one of the characters used in the risk ranking development, nevertheless they are included here as examples.

Type 1 – This type of sinkhole is present as a broad and/or shallow depression, ranging in size from tens to hundreds of feet in diameter and commonly referred to as a "mature" or paleokarst sinkhole. Mature sinkholes often have a roughly circular parapet outline, are bowl shaped, lacking any opening to the subsurface (i.e.: "throat") or showing evidence of active soil raveling or tension cracks around the parapet. Thus, whatever conduit or opening into the underlying karst aquifer that may have functioned to create the structure is likely now clogged with soil, which would act as a filter for water infiltrating from the surface.

Image 3. Two vegetated depressions that do not directly show an open throat but receive surface drainage in the form of sheet flow. Left = KF-1 and Right = KF-2.

Type 2 – This feature type is a karst spring and seep which pose little to no risk due to the fact that the groundwater is moving upwards, yet the presence of subsurface conduits and the fact that these areas may occasionally flood merit documentation. Springs are vulnerable as places for wildlife and plant habitats and may require buffering and additional documentation. The springs observed within the AOI have previously not been documented in state databases.

Image 4. (A) Example of karst spring/seep (KF-3) observed within the AOI, with a subtle drainage channel leading away from the feature.

5.2 Risk Character Analysis and Results

Karst risk was assessed per karst feature through the compilation of a data matrix comprising five karst feature variables or "characters". These variables were assessed per karst feature by analyzing the field notes, observing the photographs, and considering the overall context and resources from the desktop data review. It is of note that this type of data analysis and reduction (i.e.: character analysis) is designed to assist in minimizing subjectivity in assessment of karst features for overall risk. The tabulation of the data analysis is present in Appendix C, Table 2.

For karst feature type 2 as described above, large mature sinkholes exhibited a subsequent collapse or "drop out" feature along the base of the structure. Instead of applying the higher risk rank of the subsequent collapse to the entire broad and shallow mature sinkhole, we delineated the extent of the higher risk section and portrayed those areas in the appendices and GIS data. The goal of this operation was to differentiate high risk areas within the large mature features that are better candidates for avoidance, while still allowing for the usage of the remainder of the broad and shallow sinkhole for development.

The variables (characters) embodied in creating the risk data matrix and resulting risk assessment summary are:

1. Presence of an open throat
2. Parapet characteristics
3. Degree of soil raveling
4. Drainage leading to the karst feature
5. Presence and quality of vegetation

Explanation of the Characters

Character 1 – The presence of an open throat (e.g.: an opening into the subsurface, usually at the base of a sinkhole, an opening within a rock outcrop, or a cave entrance) in a karst feature is important since it may allow the unimpeded flow of surface runoff into the subsurface and eventually the groundwater table. This is a serious environmental concern to the groundwater and proper erosion and sediment control and buffering must be utilized during construction around these types of karst features.

Coding: Absent = 0; Small/Unknown = 1; Large/Open = 2

Character 2 - The shape and conformation of the parapet of each karst feature is important because the smoothness of the edge indicates the degree of erosion, growth, and overall activity of the karst feature. Typically, the rougher the parapet edge the more active the karst feature, and hence higher risk for the surface to continue to change.

Coding: Parapet Stable/Circular = 0; Irregular/Unstable = 1

Character 3 - Coeval with parapet shape changes and erosion, soil raveling of the sinkhole walls, throat, and subsidiary channels is a good indicator for sinkhole activity and risk. We further distinguish soil raveling into "minor raveling" and "raveling" to differentiate between levels of erosion and growth inside the karst feature.

Coding: No raveling = 0; Minor raveling = 1; Major/severe raveling = 2

Character 4 - An important factor that we note when assessing karst features, is evidence for surface drainage focused into the karst feature. This is typically manifested as matted down grass/vegetation in the direction of the sinkhole in the case of surface runoff (sheet flow) or distinct erosion and channel development where water commonly drains into the karst features. If the channel leading to the karst feature exhibits signs of erosion and downcutting, then this further supports the notion that the karst feature base level is decreasing and typically growing. **Coding: No evidence of drainage = 0; Sheet flow = 1; Drainage channel = 2**

Character 5 - The presence, type, and state of vegetative cover surrounding and within the karst feature is an indicator for sinkhole development and the existence of a natural buffer. If little to no vegetative cover is present within the sinkhole then this indicates that it is changing fast enough to inhibit plant growth and that it is vulnerable to surface runoff. If the sinkhole is overgrown, then this signifies that the sinkhole is more stable and that a natural vegetated buffer is present, which functions to filter out suspended soil/contamination in surface runoff.

Coding: Fully vegetated = 0; Partially vegetated = 1; Soil/rock = 2

Based on the character analysis, we have assigned a low, moderate or high-risk category of each of the confirmed karst features present, specifically to this site. If the defined character sum was 0 it is our interpretation that the feature is very low risk to site development. If the sum was 1-2, we believe the feature is a low risk to site development. If the sum was 3-4, we believe the feature is a moderate risk to site development. If the sum was 5-6, we believe the feature is a high risk to site development. A total of 3 features were risk ranked, with 2 features ranked as low risk (1-2) and 1 as very low risk (0).

The degree of risk we identify for these karst features indicates our professional opinion regarding the likelihood of the karst feature becoming unstable or accelerate its growth. The risk rankings should be used as a planning tool to aid in assessing the overall risk of developing the site. However, it should be clearly understood that even karst features designated as low risk can become unstable and negatively impact the proposed development. It is impossible to eliminate the risk of karst features, but measures can be taken to reduce the risk of karst issues.

KARST RISK RECOMMENDATIONS

The karst risk recommendations entail a suite of approaches for each karst risk level. These various solutions for karst features will depend upon the type and scope of the project, the amount of cut and fill planned for the AOI, the presence of karst dependent rare threatened and endangered species, and the hydrologic significance of the karst aquifer (e.g.: municipal drinking

water supply). For the specific development of remediation, alternative foundations, or detailed additional studies, it is recommended that a Terracon karst geologist monitor construction activities to ensure that proper protocol is applied and to be available for consultation in the event that new karst features develop during grading activities onsite. The karst avoidance and/or mitigation measures for each karst feature risk level are presented below. Please note that the recommendations from a higher risk category can always be applied to lower features.

Very High Risk (7-9)

- Avoidance and buffering
- Additional investigations may lower risk ranking
- Significant Remediation

Moderate (3-4) and High Risk (5-6)

- Avoidance and buffering
- Additional Investigations
- Remediation (If necessary)

Low Risk (1-2)

- Span karst features

Very Low Risk (0)

- Grade and monitor

The preferred option is to avoid all karst features if possible since every feature does bring a variable amount of risk to both the project infrastructure and the karst aquifer. In addition, avoidance preserves the vegetated buffer, especially for features which have reached equilibrium naturally. For this avoidance scenario we recommend a minimum buffer of 25 feet which should remain in an undisturbed natural state[8] through all periods of construction and subsequent facility operations. In addition, a 150-foot buffer should be established around each karst feature during construction where vehicles may not be refueled, and stockpiles of equipment or fuel should not be stored. The 150-foot buffer may need to be extended or modified if a significant drainage area has been delineated outside of an open throat feature. This does not mean construction is prohibited within this buffer, only that certain construction related activities, primarily storage of fuel and equipment, should not occur within this area.

In the case where avoidance is not possible then the next steps may include remediation of the karst features (e.g.: reverse graded filter, pillow remediation, cap grouting, etc.) and conducting additional studies (Section 7.0) to shed light on the extent, characteristics, and impact that the

[8] *The term "undisturbed natural state" means that the existing vegetation within the 25-foot buffer, and extending across the entire sinkhole, should not be cut, trimmed, thinned or disturbed in any way.*

karst feature may have on the surface. Remediation will vary for each karst feature based on characterization (e.g.: soil type, the architecture of the bedrock, and the local hydrology among many other factors). The type of remediation is typically determined upon subsurface exploration and excavation of the karst feature and identification and characterization of the bedrock bound throat if present at the soil bedrock interface.

Specifically, for solar field facilities it may be possible to span some of the karst features with the solar arrays, depending upon the length of the arrays and the spacing of the supporting piles. This option is limited to the low and very low risk karst features since their current characteristics do not suggest continued erosion and growth, and instead appear to have reached equilibrium naturally. It is important to note that periodic monitoring of these karst features post-construction is recommended.

It is permissible for the very low risk karst features to be graded per the construction plans, but it is imperative that the locations of these features be marked with survey grade GPS prior to grading activities. These areas should be monitored during construction in case the grading activities cause these features to reactivate.

Please note the risk rankings presented herein are based on the current condition of the site at the time of our study. Changes in the risks and changes in the karst features will occur over time. In addition, changes may occur due to changes in surface grades, surface hydrology, nearby construction activities such as blasting, installation of water supply wells, and other similar changes.

RECOMMENDATIONS REGARDING ADDITIONAL STUDIES

Based on the proposed use of the site for solar development and the analysis herein; Terracon makes the following recommendations:

- We recommend the development of a Karst Monitoring, Mitigation, and Management Plan for construction and operation of the facility (“Karst Plan”). The purpose of this plan is to establish a standard set of monitoring protocols for karst features encompassed by the proposed Yellow Wood solar project. The intent of these protocols is to minimize impact to the subterranean environment, ensure water quality, and protect the integrity of the project infrastructure. The Karst Plan will include inspection protocols regarding the identification and mitigation of karst features that have been previously identified within the project boundaries, or that may be identified during construction. All geologist or engineering staff utilized during construction may receive training regarding these protocols prior to mobilization to the site.

CLOSURE

The information presented herein has been based on the review of both proprietary and publicly available geologic information. However, it should be noted that karst is a dynamic landform and significant changes can occur over time. We understand that a geotechnical investigation will be completed at this site which may reveal additional subsurface karst issues. As indicated herein, karst features may be present below the ground surface that were not identified by this study. These features may not be identified until during construction. Accordingly, Terracon should be engaged during the construction phase of this project to provide oversight of the karst management plan, and to address karst features encountered during construction.

As indicated in this report, the bedrock and overlying soil below the site are susceptible to sinkhole development, and there can be extensive areas of shallow bedrock and shallow groundwater that can pose a risk to the site development process. Risk associated with these factors can be minimized during development with proper planning, design, and the control of site hydrology. Nevertheless, the client must recognize that risk of sinkhole and hydrologic-related damage to foundations, site infrastructure, and pavements does exist

Terracon has conducted these services in accordance with generally accepted geologic practices. No warranties, either expressed or implied, are made as to the professional services and recommendations presented herein.

APPENDIX A – SITE LOCATION PLANS

Contents:

Site Map
Topography
Geology

Note: All attachments are one page unless noted above.

Mud Switch Rd
Jonesboro Rd
Hales Branch Rd
Frazier Rd
Oak Grove Rd
Glady Rd
Townsend Rd
State Route 124
Canada Rd
Chaney Rd
Panhandle Rd
Lynchburg Rd
Mud Rd
Lytle Rd
State Route 134
Stewart Rd
Weisflock Rd
Lynchburg
Pearl St
Quarry Rd
US Highway 68 S
State Route 25
Mineer Rd
Turner Rd
Wise Rd
Glenavy Dr
14
134

N

Blanchester
28
134
124
68
50
6

Legend

Parcels

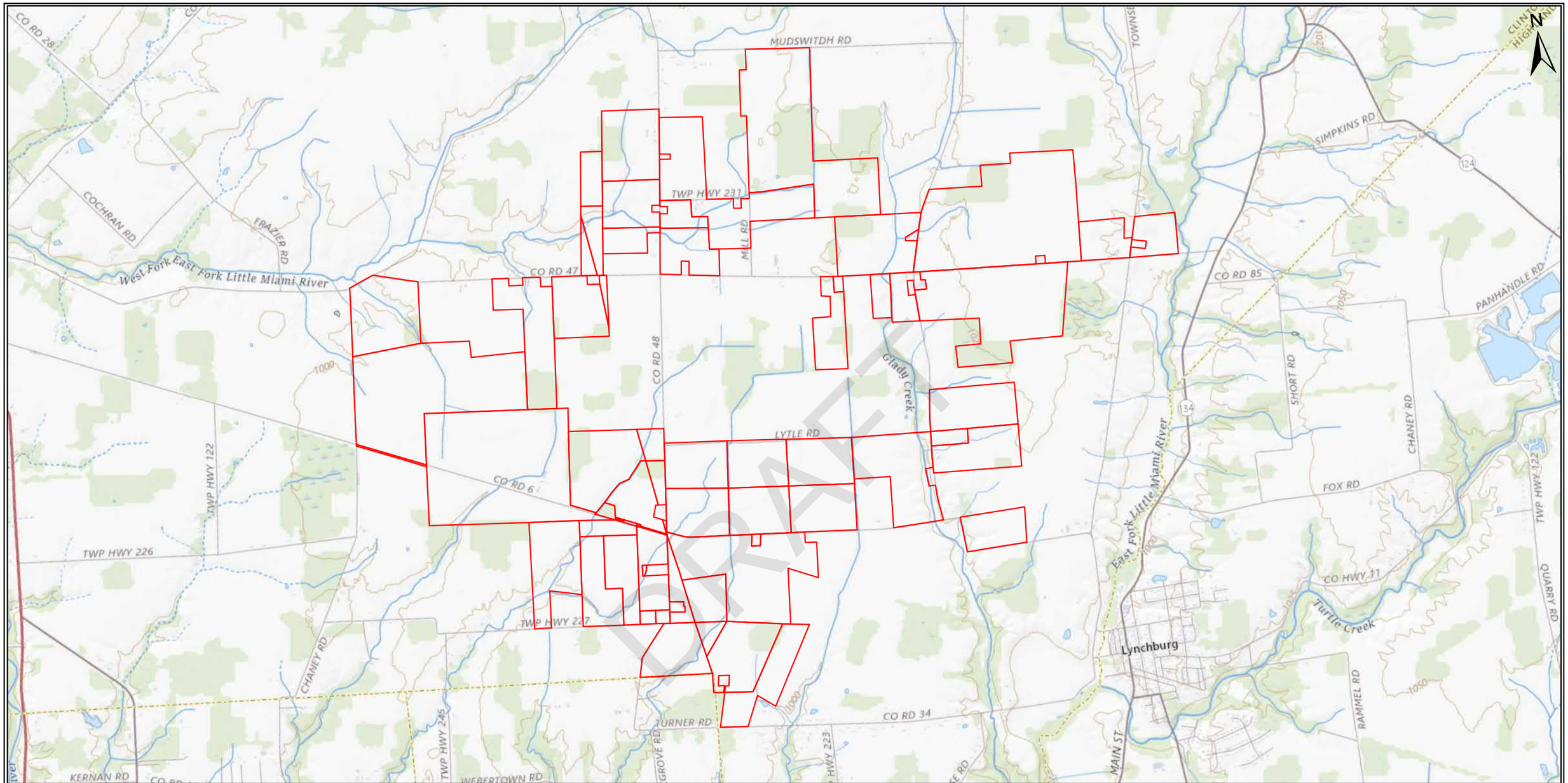
DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

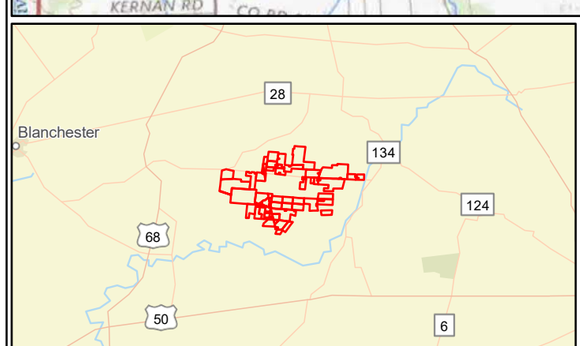
0 0.5 1 2 Miles

Project No.:	N4225038R
Date:	Jun 2022
Drawn By:	JDV
Reviewed By:	RKD

Terracon
770 Morrison Road Columbus, OH 43230
PH. (614) 328-5203 terracon.com

Site Map	Exhibit
Yellow Wood Solar Karst Survey Report Clinton County	1





Legend

Parcels

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

0 0.5 1 2 Miles

Project No.:	N4225038R
Date:	Jun 2022
Drawn By:	JDV
Reviewed By:	RKD

Terracon
770 Morrison Road Columbus, OH 43230
PH. (614) 328-5203 terracon.com

Topography Map

Yellow Wood Solar
Karst Survey Report
Clinton County

Exhibit

2

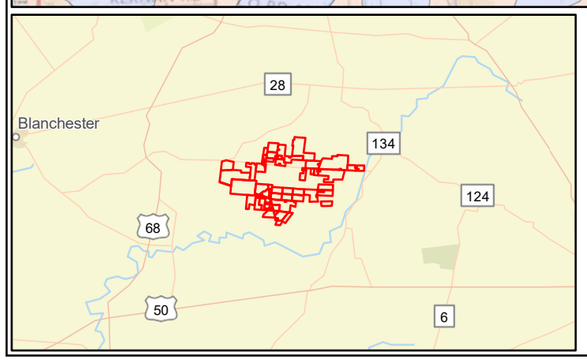
Waynesville and Arnheim Formations, Undivided

Drakes, Whitewater and Liberty Formations, Undivided

Drakes, Whitewater and Liberty Formations, Undivided

Estill Shale

Dayton and Brassfield Limestones



Legend

- Parcels
- (Odl) Drakes, Whitewater and Liberty Formations, Undivided
- (Owa) Waynesville and Arnheim Formations, Undivided

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

0 0.5 1 2 Miles

Project No.:	N4225038R
Date:	Jun 2022
Drawn By:	JDV
Reviewed By:	RKD

Terracon
770 Morrison Road Columbus, OH 43230
PH. (614) 328-5203 terracon.com

Geology Map

Yellow Wood Solar
Karst Survey Report
Clinton County

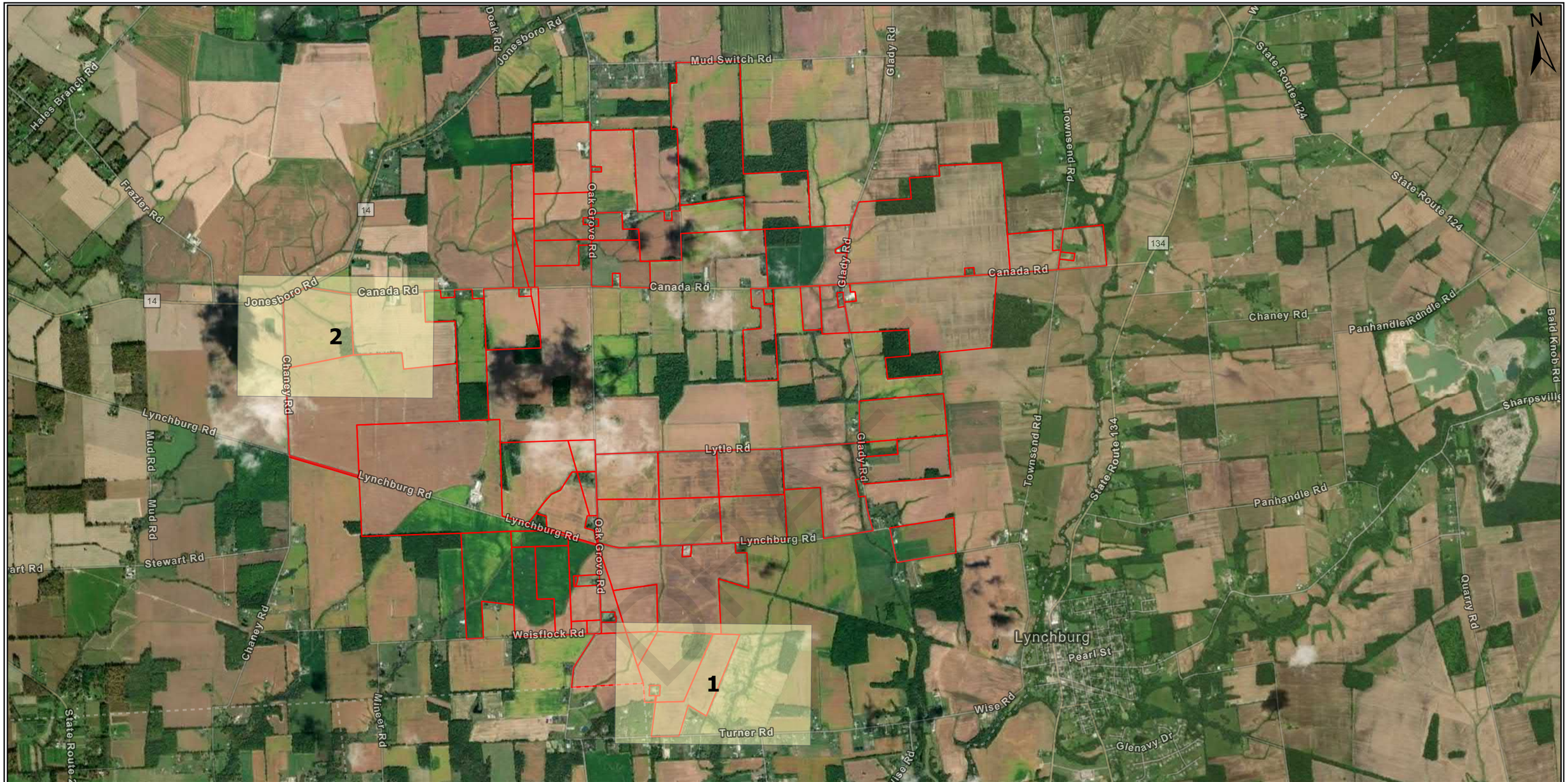
Exhibit

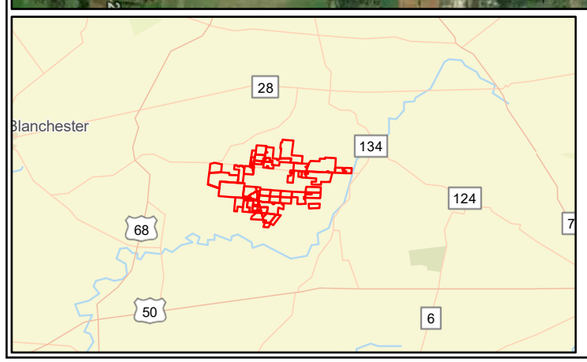
3

APPENDIX B –KARST RISK MAPS

Contents:

Note: All attachments are one page unless noted above.





Legend

- Property Limit
- Index Map

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

0 0.25 0.5 1 Miles

Project No.:	N4225038R
Date:	Jun 2022
Drawn By:	JDV
Reviewed By:	RKD

Terracon
770 Morrison Road Columbus, OH 43230
PH. (614) 328-5203 terracon.com

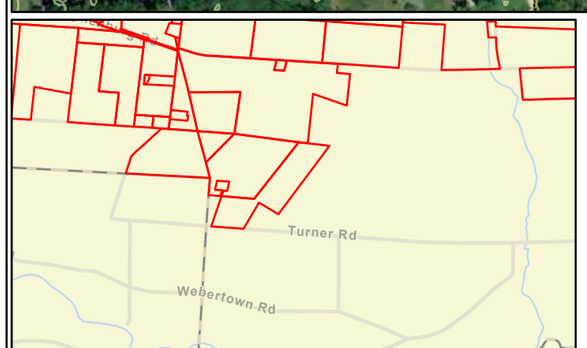
Index Map	Exhibit
Yellow Wood Solar Karst Survey Report Clinton County	A

KF-2

KF-1

Turner Rd

N



Legend

- Property Limit
- 2 Foot Contour

KF - Feature ID

Point Karst Risk

- Very High
- High
- Moderate
- Low
- Very Low

Area Karst Risk

- Very High
- High
- Moderate
- Low
- Very Low

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

0 250 500 1,000 Feet

Project No.:	N4225038R
Date:	Jun 2022
Drawn By:	JDV
Reviewed By:	RKD

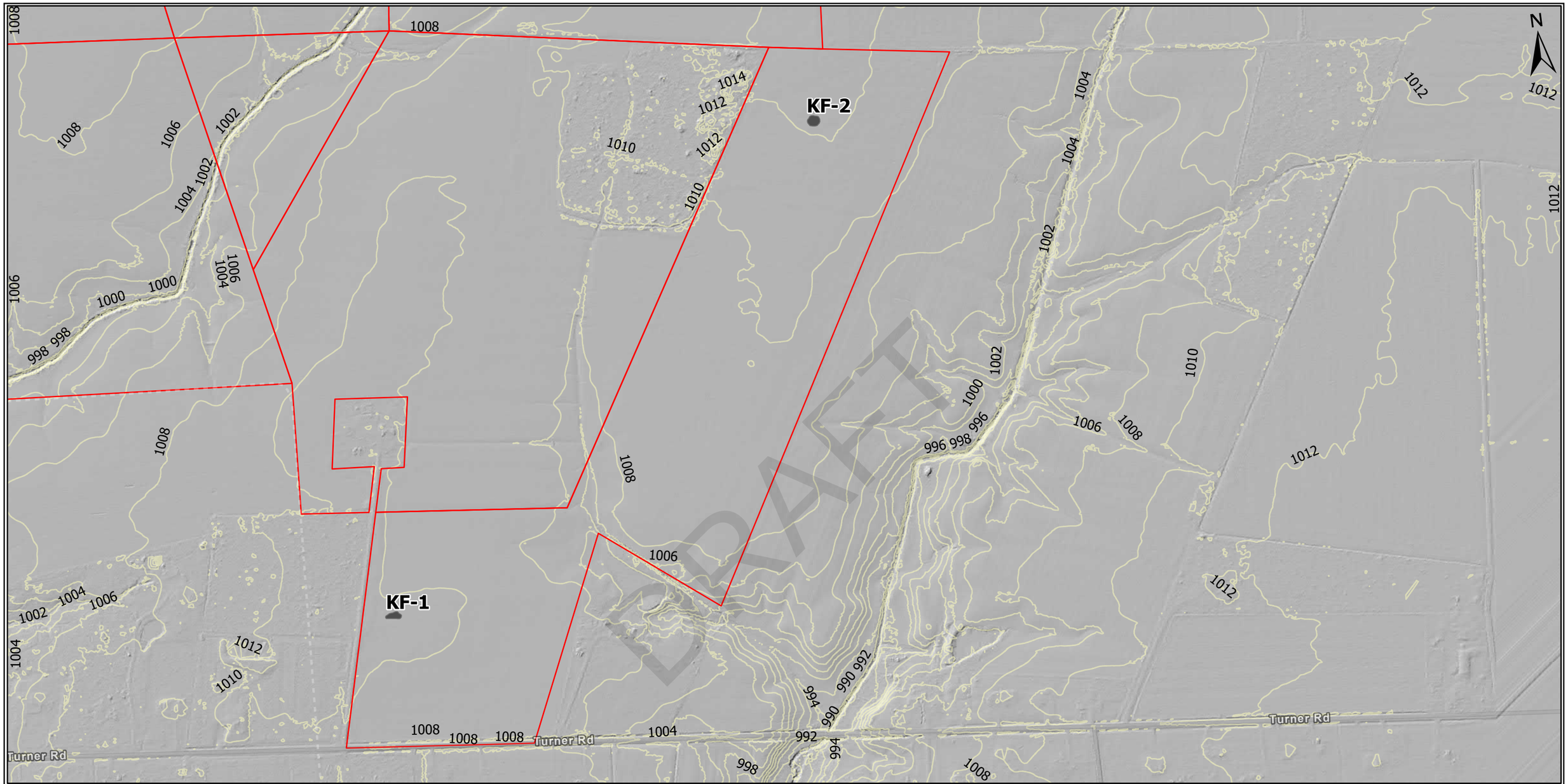
Terracon
770 Morrison Road Columbus, OH 43230
PH. (614) 328-5203 terracon.com

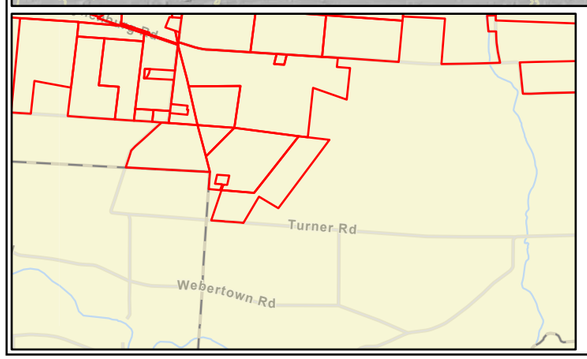
Karst Risk - Imagery

Index Map 1
Yellow Wood Solar
Karst Survey Report
Clinton County

Exhibit

B1





Legend

- Property Limit
- 2 Foot Contour
- KF - Feature ID

Point Karst Risk

- Very High
- High
- Moderate
- Low
- Very Low

Area Karst Risk

- Very High
- High
- Moderate
- Low
- Very Low

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

0 250 500 1,000 Feet

Project No.:	N4225038R
Date:	Jun 2022
Drawn By:	JDV
Reviewed By:	RKD

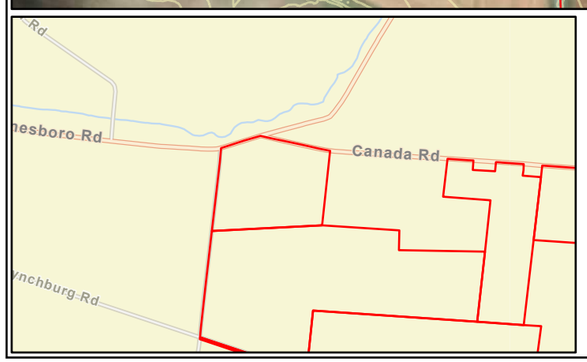
Terracon
770 Morrison Road Columbus, OH 43230
PH. (614) 328-5203 terracon.com

Karst Risk - LiDAR

Index Map 1
Yellow Wood Solar
Karst Survey Report
Clinton County

Exhibit

C1



Legend

- Property Limit
- 2 Foot Contour
- KF - Feature ID

Point Karst Risk

- Very High
- High
- Moderate
- Low
- Very Low

Area Karst Risk

- Very High
- High
- Moderate
- Low
- Very Low

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

0 185 370 740 Feet

Project No.:	N4225038R
Date:	Jun 2022
Drawn By:	JDV
Reviewed By:	RKD

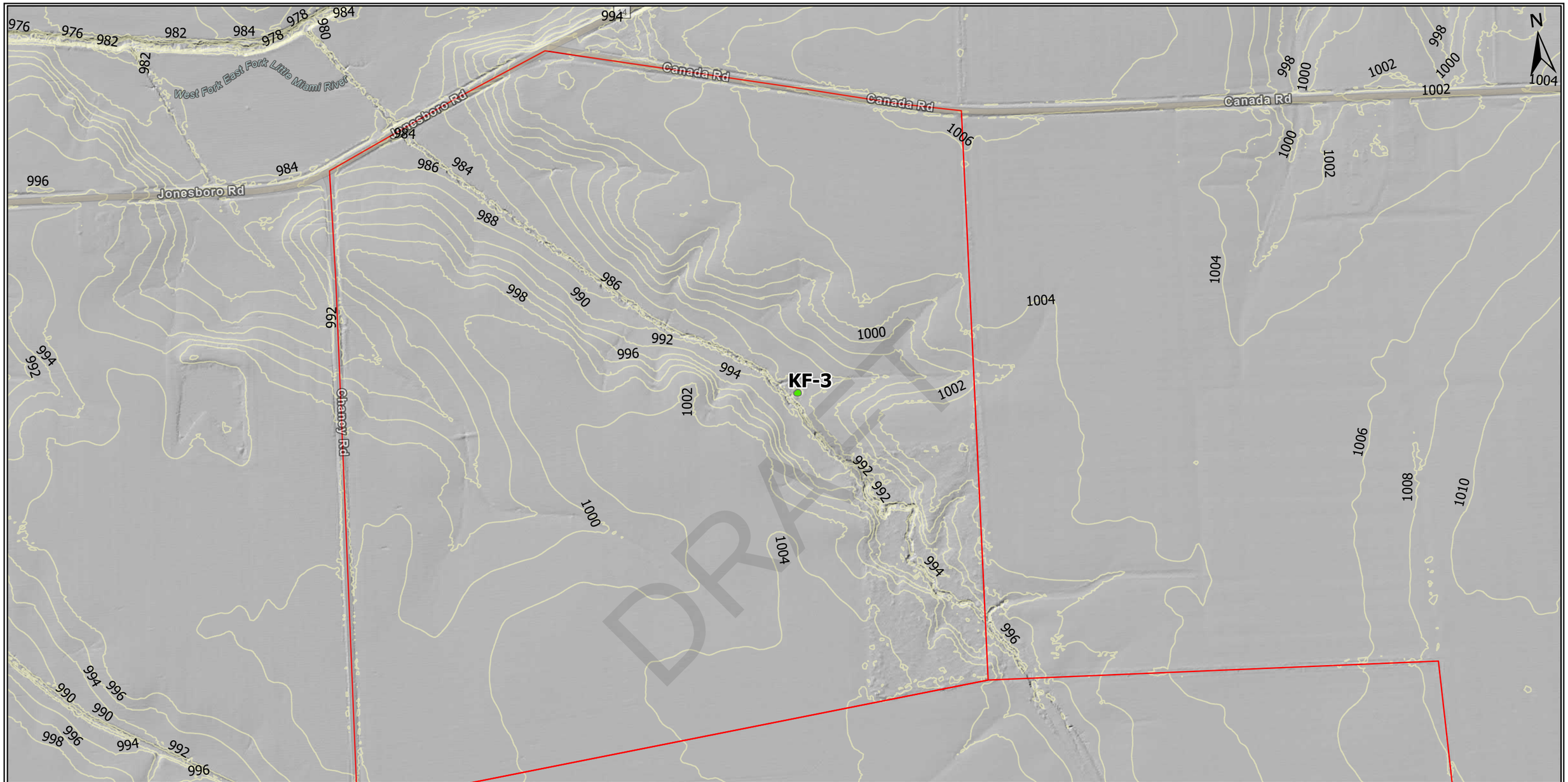
Terracon
770 Morrison Road Columbus, OH 43230
PH. (614) 328-5203 terracon.com

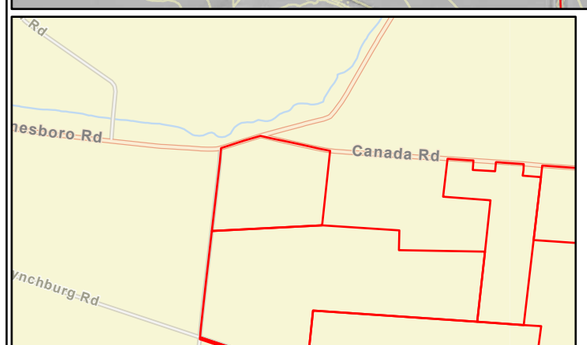
Karst Risk - Imagery

Index Map 2
Yellow Wood Solar
Karst Survey Report
Clinton County

Exhibit

B2





Legend

- Property Limit
- 2 Foot Contour
- KF - Feature ID

Point Karst Risk

- Very High
- High
- Moderate
- Low
- Very Low

Area Karst Risk

- Very High
- High
- Moderate
- Low
- Very Low

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

0 185 370 740 Feet

Project No.:	N4225038R
Date:	Jun 2022
Drawn By:	JDV
Reviewed By:	RKD

Terracon
770 Morrison Road Columbus, OH 43230
PH. (614) 328-5203 terracon.com

Karst Risk - LiDAR

Index Map 2
Yellow Wood Solar
Karst Survey Report
Clinton County

Exhibit

C2

APPENDIX C – KARST FEATURE PHOTOGRAPHY LOG

Karst Feature Name
KF-1

Survey Date
May 25, 2022

Karst Feature Name
KF-2

Survey Date
May 26, 2022

Karst Feature Name
KF-3

Survey Date
May 26, 2022

APPENDIX D – KARST FEATURE CHARACTERISTICS

Contents:

KARST FEATURE CHARACTERISTICS

Feature ID	Latitude	Longitude	Geologic Formation	Observed Throat	Risk Category
KF-1	39.24294	-83.833409	Waynesville and Arnheim Formations, Undivided	No	Very Low
KF-2	39.247935	-83.826315	Waynesville and Arnheim Formations, Undivided	No	Very Low
KF-3	39.276545	-83.861345	Drakes, Whitewater and Liberty Formations, undivided	No	Very Low

FEATURE RISK

TABLE 2						
Feature ID	Characteristic					Risk
	Throat	Parapet	Raveling	Drainage	Vegetated	
KF-1	0	0	0	0	0	0
KF-2	0	0	0	0	0	0
KF-3	0	0	0	1	0	1