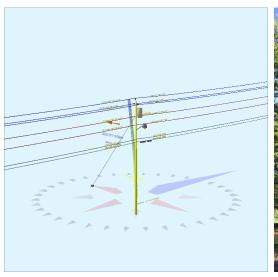
Pole Num:	P.OPP1309_1168	52454	Pole Length /	Class:	40 / 5	Code:	NESC	Structure Type:	Gu	yed Tangent
Aux Data 1		Unset	Species:	SOU	THERN PINE	NESC Rule:	Rule 250B	Status C	ay Wir	es Adequate
Aux Data 2		Unset	Setting Depth	,		Construction Grade:	С	Pole Strength Facto	r:	0.85
Aux Data 3		Unset	G/L Circumfe	rence (in):	31.00	Loading District:	Light	Transverse Wind LF	₹:	1.75
Aux Data 4		Unset	G/L Fiber Str	ess (psi):	8,000	Ice Thickness (in):	0.00	Wire Tension LF:		1.30
Aux Data 5		Unset	Allowable Str	ess (psi):	6,800	Wind Speed (mph):	59.29	Vertical LF:		1.90
Aux Data 6		Unset	Fiber Stress I	Ht. Reduc:	No	Wind Pressure (psf):	9.00			
Latitude:			0.00000	00 Deg Longit	ude:		0.000000 Deg	Elevation:		0 Feet





Pole Capacity Utili	zation (%)	Height (ft)	Wind Angle (deg)
Maximum	52.8	0.0	271.2
Groundline	52.8	0.0	271.2
Vertical	3.8	24.5	90.0

Pole Moments (ft-	b)	Load Angle (deg)	Wind Angle (deg)
Max Cap Util	27,850	272.8	271.2
Groundline	27,850	272.8	271.2
GL Allowable	53,452		

Guy System Component Summary				Load From Angle o		Individual Maximum Load		
Description	Lead Length (ft)	Lead Angle (deg)	Height (ft)	Nominal Capacity (%)	Wind Angle (deg)	Max Load Capacity (%)	Wind Angle (deg)	
Single Helix Anchor	23.0	270.0		0.0	271.2	8.0	90.0	
EHS 3/8 (Down)			29.0	0.0	271.2	12.7	90.0	
	Adeq	_l uate	Adequate					

Groundline Load Summar	y - Reporting A	Angle Mode: L	oad - Reporti	ng Angle: 272	.8°					
	Shear Load* (Ibs)	Applied Load (%)	Bending Moment (ft-lb)	Applied Moment (%)	Pole Capacity (%)	Bending Stress (+/- psi)	Vertical Load (lbs)	Vertical Stress (psi)	Total Stress (psi)	Pole Capacity (%)
Powers	374	30.4	11,573	41.6	21.7	1,472	570	7	1,480	21.8
Comms	260	21.2	5,105	18.3	9.6	649	342	4	654	9.6
GuyBraces	0	0.0	0	0.0	0.0	0	7	0	0	0.0
PowerEquipments	164	13.3	3,886	14.0	7.3	494	1,273	17	511	7.5
Pole	355	28.9	5,552	19.9	10.4	706	1,364	18	724	10.6
Streetlights	45	3.6	835	3.0	1.6	106	86	1	107	1.6
Insulators	32	2.6	898	3.2	1.7	114	46	1	115	1.7
Pole Load	1,229	100.0	27,850	100.0	52.1	3,543	3,687	48	3,591	52.8
Pole Reserve Capacity			25,602		47.9	3,257			3,209	47.2

Load Summary by Owner	Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 272.8°														
	Shear Load* (Ibs)	Applied Load (%)	Bending Moment (ft-lb)	Applied Moment (%)	Pole Capacity (%)	Bending Stress (+/- psi)	Vertical Load (lbs)	Vertical Stress (psi)	Total Stress (psi)	Pole Capacity (%)					
FPL	729	59.3	17,125	61.5	32.0	2,179	1,934	25	2,204	32.4					
CATV	75	6.1	1,512	5.4	2.8	192	114	1	194	2.9					
AT&T	186	15.1	3,593	12.9	6.7	457	228	3	460	6.8					
<undefined></undefined>	241	19.6	5,620	20.2	10.5	715	1,411	18	733	10.8					
Totals:	1,229	100.0	27,850	100.0	52.1	3,543	3,687	48	3,591	52.8					

Detailed Load Components:

Power	·	Owner	Height (ft)	Horiz. Offset (in)	Cable Diameter (in)	Sag at Max Temp (ft)	Cable Weight (lbs/ft)	Lead/Span Length (ft)	Span Angle (deg)	Wire Length (ft)	Tension (lbs)	Tension Moment* (ft-lb)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Primary	FPL	FPL	35.03	3.02	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	2,651	14	1,309	3,974
Primary	FPL	FPL	35.03	3.02	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-2,651	14	1,309	-1,329
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	2,495	-15	1,231	3,712
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-2,495	-15	1,231	-1,278
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	2,495	15	1,231	3,741
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-2,495	15	1,231	-1,249
Secondary	FPL	FPL	28.97	5.30	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	2,193	-25	1,082	3,249
Secondary	FPL	FPL	28.97	5.30	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-2,193	-25	1,082	-1,136
Secondary	FPL	FPL	25.97	5.47	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	1,965	-26	970	2,910

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Secondary	FPL	FPL	25.97	5.47	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-1,965	-26	970	-1,021
											Totals:	0	-74	11,647	11,573

Comm		Owner	Height (ft)	Horiz. Offset (in)	Cable Diameter (in)	Sag at Max Temp (ft)	Cable Weight (lbs/ft)	Lead/Span Length (ft)	Span Angle (deg)	Wire Length (ft)	Tension (lbs)	Tension Moment* (ft-lb)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
CATV	CATV	CATV	20.97	5.75	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	1,587	-27	783	2,343
CATV	CATV	CATV	20.97	5.75	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-1,587	-27	783	-831
Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	1,511	-28	1,138	2,622
Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-1,511	-28	746	-793
Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	1,511	-28	1,073	2,557
Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-1,511	-28	746	-793
											Totals:	0	-165	5,270	5,105

PowerEquipme	nt	Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Height (in)	Unit Depth (in)	Unit Diameter (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Transformer	1PH-15KVA		30.00	20.25	0.0	0.0	335.00	34.00		22.00		52	2,453	2,506
Transformer	1PH-15KVA		30.00	20.25	90.0	90.0	335.00	34.00		22.00		-1,073	2,453	1,381
											Totals:	-1,021	4,907	3,886

Streetlight		Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Height (in)	Unit Depth (in)	Unit Diameter (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
General	Streetlight - 3 ft. Arm		24.00	3.59	90.0	90.0	45.00	24.00	20.00	3.00	36.00	-235	1,071	835
											Totals:	-235	1,071	835

Insulator		Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (Ibs)	Unit Diameter (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Deadend	Deadend 12.75"		34.00	0.00	270.0	270.0	3.00	3.80	12.75	1	180	182
Deadend	Deadend 12.75"		33.00	0.00	90.0	90.0	3.00	3.80	12.75	-8	175	167
Deadend	Deadend 12.75"		33.00	0.00	270.0	270.0	3.00	3.80	12.75	8	175	182
Bolt	Deadend 12.75"		29.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	95	93
Bolt	Deadend 12.75"		26.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	85	83
Bolt	Deadend 12.75"		21.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	69	66
Bolt	Deadend 12.75"		20.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	66	63
Bolt	Deadend 12.75"		20.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	66	63
									Totals:	-12	910	898

Guy Wire and B	race	Owner	Attach Height (ft)	End Height (ft)	Lead/Span Length (ft)	Wire Diameter (in)	Percent Solid (%)	Lead Angle (deg)	Incline Angle (deg)	Wire Weight (lbs/ft)	Rest Length (ft)	Stretch Length (in)
EHS 3/8	Down		29.00	0.00	23.00	0.375	75.00	270.0	51.4	0.273	35.34	0.00

Guy Wire and Bra (Loads and React		Elastic Modulus (psi)	Rated Tensile Strength (lbs)	Guy Strength Factor	Allowable Tension (lbs)	Initial Tension (lbs)	Loaded Tension* ² (lbs)	Maximum Tension ² (lbs)	Applied Tension ³ (lbs)	Vertical Load (lbs)	Shear Load In Guy Dir (Ibs)	Shear Load At Report Angle (lbs)	Moment at GL³ (ft-lb)
EHS 3/8	Down	2.30e+7	15,400	0.90	13,860	700	1,755	1,595	0	0	0	0	0
									Totals:	0	0	0	0

Anchor/Rod Load Summary	Owner	Rod Length AGL (in)	Lead Length (ft)	Lead Angle (deg)	Strength of Assembly (lbs)	Anchor/Rod Strength Factor	Allowable Load (lbs)	Max Load² (lbs)	Load at Pole MCU ³ (lbs)	Max Required Capacity ² (%)
Single Helix Anchor		18.00	23.00	270.0	20,000	1.00	20,000	1,595	0	8.0

Pole Buckli	ing												
Buckling Constant	Buckling Column Height* (ft)	Buckling Section Height (% Buckling Col. Hgt.)	Buckling Section Diameter (in)	Minimum Buckling Diameter at GL (in)	Diameter at Tip (in)	Diameter at GL (in)	Modulus of Elasticity (psi)	Pole Density (pcf)	Ice Density (pcf)	Pole Tip Height (ft)	Buckling Load Capacity at Height (lbs)	Buckling Load Applied at Height (lbs)	Buckling Load Factor of Safety
0.71	24.52	34.19	8.93	9.00	6.05	9.87	1.60e+6	60.00	57.00	34.00	96,615	970.32	26.32

Notes								
Date	Author	Description						
1/27/2021		Power Company Request						
Power company load	Power company load data has been requested. Email sent to Elmer Pole							
1/27/2021	27/2021 General Description							
General Statement:	General Statement: Non-AT&T facilities may not be accurately identified pending attachment information from attaching party.							