SPIDACalc

Location: 1, 686704E

Project: TD1801073
Lead: 1, TD1801073

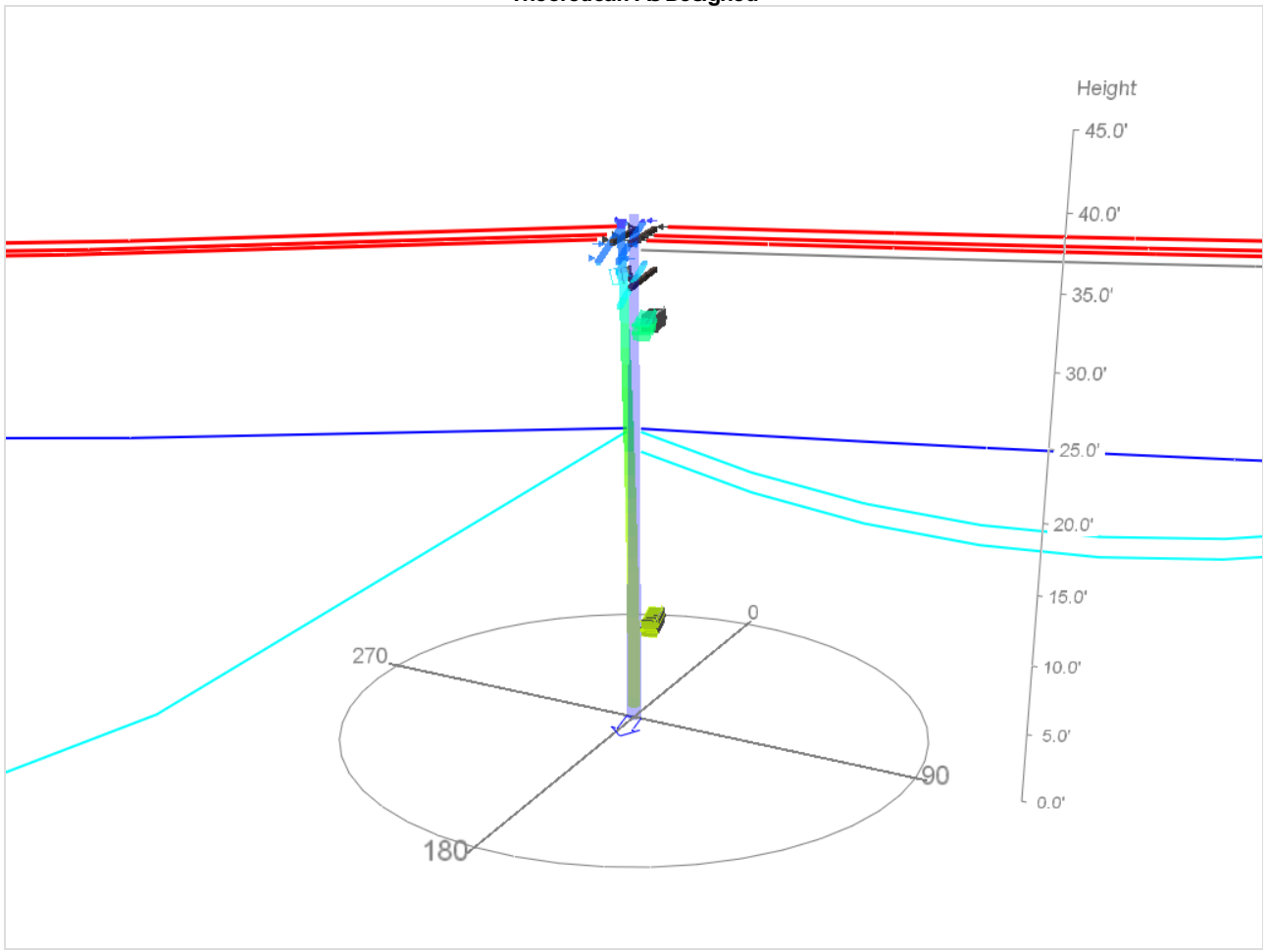
Location Properties

Technician:	**Map Number:**
Address:	**Pole Tags:**
City:	**State:**
County:	**Zip Code:**
Cross Street 1:	**Cross Street 2:**
Remedy:	**Summary Notes:**
Comments:	

Location Analysis Summary

Layer	Pole Length/Class	Minimum Safety Factor						Pole Strength Remaining	Loading Adjusted by Strength?	Clearance Violations Present?
		Pole	Guy	Anchor	Cross Arm	Insulator	Sidewalk Brace			
As Designed	45'/2	3.81 from stress at 3' 3"	No Data	No Data	No Data	No Data	No Data	100%	Y	Y

Theoretical: As Designed



Analysis Results

Loading

Component	In Service, Heavy, 6 lb, Grade A (Governing Case)			Client File Maximum Rating
	Safety Factor	Load (Applied / Allowable)	Wind Direction	
Pole	3.81 from stress at 3' 3"	2098 / 8000 lb/in²	170 °	8000 lb/in²

Wire End Points and Wires

WEP#1

Type	Environment	Distance	Direction	GPS Point	Inclination	Measured Between	Measured to Ground
Next Pole	None	66'	74 °	Undefined.	0 °	N/A	N/A

ID	Size	Owner	Group	Tension Group	Height	Midspan	TAF	Initial Tension	Tension Method	In Service, Heavy, 6 lb, Grade A	
										Tension	Sag
Wire#2	**1/0 ACSR Tree Wire XLPE**	**SCE**	**Primary**	**Light Full**	**37' 4"**	**0' 0"**	**1**	**976 lbf***	**Dynamic**	**1830.17 lbf****	**0' 5"*****
Wire#4	**1/0 ACSR Tree Wire XLPE**	**SCE**	**Primary**	**Light Full**	**37' 4"**	**0' 0"**	**1**	**976 lbf***	**Dynamic**	**2181.19 lbf****	**0' 4"*****
Wire#5	**1/0 ACSR Tree Wire XLPE**	**SCE**	**Primary**	**Light Full**	**37' 4"**	**0' 0"**	**1**	**976 lbf***	**Dynamic**	**2004.49 lbf****	**0' 4"*****
Wire#13	**9/32" EHS**	**SCE**	**Guy**	**Light Full**	**36' 2"**	**0' 0"**	**1**	**600 lbf***	**Dynamic**	**1383.94 lbf****	**0' 4"*****
Wire#8	1" TELCO 5/16" Messenger	Unknown	Communication	Light Full	23' 1"	0' 0"	1	1439 lbf*	Dynamic	2476.75 lbf**	0' 5"***
Wire#10	.25" TELCO Service	Unknown	Communication Service	Service	22' 10"	0' 0"	1	6 lbf*	Dynamic	155.04 lbf**	2' 11"***
Wire#9	.25" TELCO Service	Unknown	Communication Service	Service	22' 10"	0' 0"	1	6 lbf*	Dynamic	155.04 lbf**	2' 11"***
Wire#11	.25" TELCO Service	Unknown	Communication Service	Service	21' 4"	0' 0"	1	6 lbf*	Dynamic	155.04 lbf**	2' 11"***

WEP#2

Type	Environment	Distance	Direction	GPS Point	Inclination	Measured Between	Measured to Ground
Previous Pole	None	318'	253 °	Undefined.	0 °	N/A	N/A

ID	Size	Owner	Group	Tension Group	Height	Midspan	TAF	Initial Tension	Tension Method	In Service, Heavy, 6 lb, Grade A	
										Tension	Sag
Wire#1	**1/0 ACSR Tree Wire XLPE**	**SCE**	**Primary**	**Light Full**	**37' 4"**	**0' 0"**	**1**	**818 lbf***	**Dynamic**	**2450.08 lbf****	**6' 11"*****
Wire#3	**1/0 ACSR Tree Wire XLPE**	**SCE**	**Primary**	**Light Full**	**37' 4"**	**0' 0"**	**1**	**818 lbf***	**Dynamic**	**2432 lbf****	**7' 0"*****
Wire#6	**1/0 ACSR Tree Wire XLPE**	**SCE**	**Primary**	**Light Full**	**37' 4"**	**0' 0"**	**1**	**818 lbf***	**Dynamic**	**2468.37 lbf****	**6' 11"*****
Wire#7	1" TELCO 5/16" Messenger	Unknown	Communication	Light Full	23' 1"	0' 0"	1	1449 lbf*	Dynamic	3021.1 lbf**	7' 10"***
Wire#12	.25" TELCO Service	Unknown	Communication Service	Service	22' 10"	0' 0"	1	15 lbf*	Dynamic	182.9 lbf**	58' 9"***

*Tension value used in an analysis may vary dependent on 'Average Length on Main Span' setting in the Load Case.
** Tension value is inclusive of environmental and load factors associated with the Load Case.
*** Sag value is inclusive of environmental and load factors associated with the Load Case.

Equipment

ID	Size	Owner	Type	Height	Bottom Height	Direction
Equip#2	**Fuse Arm with 3 Cutouts**	**SCE**	**Cutout Arrestor**	**34' 2"**	**34' 2"**	**343 °**
Equip#1	**150 kVAR Capacitor Bank - Old**	**SCE**	**Capacitor**	**31' 2"**	**31' 2"**	**74 °**
Equip#3	**Automatic Capacitor Control Box**	**SCE**	**Capacitor**	**8' 0"**	**8' 0"**	**74 °**

Cross Arms

ID	Size	Height	Association	Direction	Offset	Insulators
CrossArm#1	10 Foot Double Cross Arm	37' 2"	Bisector	163 °	5' 0"	Insulator#1, Insulator#2, Insulator#3, Insulator#4, Insulator#5, Insulator#6
CrossArm#2	10 Foot Cross Arm	34' 2"	Bisector	163 °	5' 0"	

Insulators

ID	Size	Direction	Offset	Wires
Insulator#1	12 kV Deadend	74 °	0' 4"	Wire#4
Insulator#2	12 kV Deadend	253 °	0' 4"	Wire#3
Insulator#3	12 kV Deadend	74 °	9' 8"	Wire#5
Insulator#4	12 kV Deadend	253 °	9' 8"	Wire#1
Insulator#5	12 kV Deadend	74 °	3' 7"	Wire#2
Insulator#6	12 kV Deadend	253 °	3' 7"	Wire#6

Location 686704E Location Forms

SAP

- **Field Inspection Date:** 05/04/2020
- **High Fire:** Extreme
- **Special Project:** No
- **Associated Poles:**
- **Visible Damage:** No
- **Pole Type:** ED
- **District:** --
- **Region:** --
- **Above 3000 Ft Elevation:** --
- **As Designed Work Type:** Existing
- **Access Notes:**

Pole Info Form

- **Pole Equipment #:**
- **Previous Inspection Date:**
- **Year Installed:**
- **As Is POA Height:**
- **As Is POA Diameter:**
- **As Designed POA Height:**
- **As Designed POA Diameter:**
- **Thomas Guide/Quadrant:**
- **Circuit :**
- **Substation:**
- **FIM:**
- **Location:**
- **City:**
- **Brand Height:**
- **Date Pole Load Performed:**
- **Comments:**
- **GPS Location:** N/A

QC Comments

- **QC Comments:**