



POLE ATTACHMENT QUARTERLY WORKSHOP

PRESENTED BY:

Jesse Lopez

Manager, Pole Attachment Services

September 22nd, 2022

Informational Update

SAFETY



Thousand Oaks Rd & Old Thousand Oaks



Marian St & Cumberland Rd

SAFETY



<https://www.youtube.com/watch?v=2huZlHQ15PE>

AGENDA



1. General Topics

- Pole attachment standards update
- Pole attachment services website
- Pole attachment contractors/GIS training
- Pole attachment applications

2. Work Manager

- Work Manager task structure/updates
- New work manager Update "How to"
- Designer responsibilities
- Application rejections updates

3. Wireline Attachment

- Wireline standards

4. Wireless Attachments

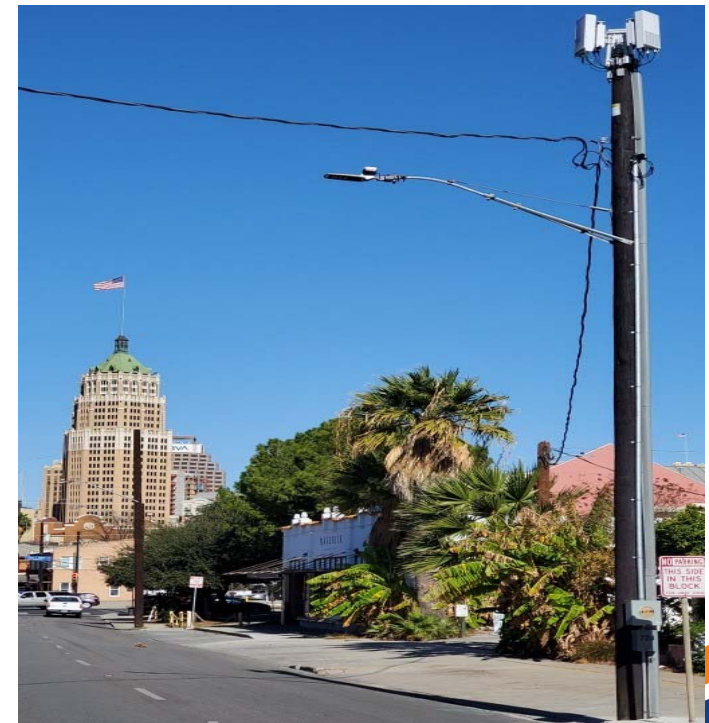
- Mock up
- Wireless Antenna Violations

5. Downtown/Residential Streetlight Project Updates

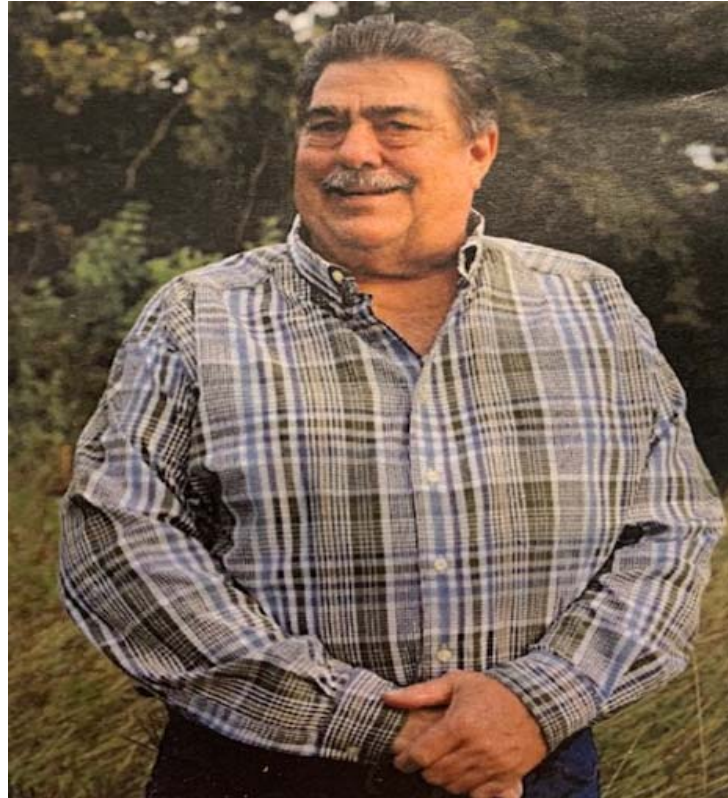
6. CPS Energy Pole Inventory 2023/ LiDAR Data Initiative

7. Customer Engineering Updates

8. Questions



IN MEMORY OF



Allen "WIEDER" Wiederstein

GENERAL TOPICS

POLE ATTACHMENT STANDARDS V6.0 AND JOINT TRENCH AGREEMENT



- Pole Attachment Standards V6.0 and Joint Trench Agreement is published and is available in the Pole Attachment Services website
- Attaching Entities are required to submit Appendix A to notify CPS Energy of confirm the contact information on file is valid by June 1

CPS ENERGY

POLE ATTACHMENT STANDARDS



POLE ATTACHMENT SERVICES WEBSITE



- Register to receive Quarterly Meeting invites
- Updates on the Pole Attachment Standards revisions, Forms, and more
- Future quarterly workshops will be posted

– Q4 2022: December 1

Pole Attachment Services

CPS Energy Pole Attachment Program

CPS Energy's distribution system can facilitate the delivery of the variety of communication services offered today. With a streamlined pole attachment process, we're dedicated to partnering with companies to assist with speed-to-market processes for future technologies.

CPS Energy's Pole Attachment Services Office is the single point of contact for all who wish to attach infrastructure to our distribution poles.

The Pole Attachment Services Office is responsible for:

- Registration
- Attachment agreements
- Applications for new pole attachments or removals
- Surveys of existing attachments
- Billing and collections for all the above services

For questions or more information on the pole attachment process, [SEND US AN EMAIL.](#)

CPS Energy has released the revised Pole Attachment Standards Version 6.0 (the "Standards") and the Joint Trench Agreement Friday, August 12, 2022, which include the integration of more detailed procedures for the underground relocation projects. CPS Energy continues to work with stakeholders to ensure the adoption of best practices in the Standards to further streamline our processes and operations for the benefit of all attaching entities. Thank you for your consideration and patience.

Subscribe to receive email

If you would like to receive emails regarding CPS Energy, please register your contact information.

[Register/Contact Info Here](#)

Upcoming Meetings/Workshops

- Quarterly Pole Attachment Workshop: December 1, 2022

Previous Meetings/Workshops

- Quarterly Pole Attachment Workshop: June 23 2022
- Quarterly Pole Attachment Workshop: November 19 2021
- Quarterly Pole Attachment Workshop: May 27 2021
- Downtown Streetlight Pilot Project Update
- Quarterly Pole Attachment Workshop: Oct 2 2020
- Quarterly Pole Attachment Workshop: Dec 13 2019
- Quarterly Pole Attachment Workshop: Aug 18 2019

Pole Attachment Standards

- Pole Attachment Standards - V6.0 - Effective August 12 2022
- Joint-Trench Agreement - Effective August 12 2022
- Pole Attachment Standards - V5 - Effective January 8 2021
- Pole Attachment Standards - V4 - Effective Apr 1 2019
- CPS Energy FCC Rate Calculation Support Jan 2022
- CPS Energy FCC Rate Calculation Support Jan 2021
- CPS Energy FCC Rate Calculation Support Jan 2020
- CPS Energy FCC Rate Calculation Support Jan 2019 (Revised 1-7-2020)

Helpful Links

- Certificate of Authority (City of San Antonio)
- NJUNS
- Approved Contractors
- Pole Inspection Guidelines
- Exhibit A - Compensation Schedule

Special software is required to open PL4 Client File links.

Forms

- A1 Registration and Annual Reporting Form
- B1 Standard Pole Attachment Application
- B2 Standard Wireless Installation Application
- B3 Banner Attachment Application

NEW! Upcoming mtgs; uploads of all past Quarterly

NEW! V6.0; Joint Trench Agmt

Pole Attachment Services Website as of 9/21/2022

POLE ATTACHMENT STANDARDS – STAKEHOLDER PROCESS

- **Continuous Updates to Pole Attachment Standards**
 - Updates to pole attachment standards with stakeholder input
- **Website**
 - Primary source for communications
 - www.cpsenergy.com/poleattachments
- **Contractor List Updates**
- **Personal Communications**
 - Frequent one-on-one meetings & calls
- **Quarterly Workshops**
 - Information sharing forums
- **Technical Workshops**
 - Topics vary
- **Engineering Contractor Training**
 - CPS Energy University



UTC Latina Workshop



APPROVED POLE ATTACHMENT ENGINEERING CONTRACTORS

- Currently at maximum approved Contractors
- Engineering companies seeking approval as a Contractor will be placed on a waiting list
- CPS Energy will conduct biannual reviews to remove inactive firms or poor participation
 - CPS Energy will contact affected Contractors in October
- Contractors removed will have to re-submit a letter from their Attaching Entity stating they will be doing PAS-related work for them

Engineering	
1. Aeparmia Engineering	★★★
2. Amdocs	★
3. ArchComm, LLC	★
4. C&D Utility Consulting, LLC	★★★
5. Cobb Fendley	★★★
6. Davey Resource Group, Inc.	★★★
7. DeBauche Comm. & Cons. Serv., LLC	★
8. Fullerton	★★★
9. LandDev Consulting, LLC	★★★
10. LJA Engineering	★★★
11. Nexius Solutions, Inc.	★★★
12. PhaseLink Utility Solutions	★★★
13. Precision Design & Drafting Inc.	★★★
14. Quanta Utility Engineering Services	★★★
15. Telecom Staffing, LLC	★★★
16. TDC2, LLC	★
17. Texas Utility Engineering, Inc.	★★★
18. TRC, Inc.	★★★
19. TrueNet Communications	★
20. Teo Engineering Organization LLC	★
21. Jacobs Telecommunications, Inc	★
22. Rocky Mountain West Telecomm	★

★ Option 1: Pole Loading Analysis (PLA) & Application submittal

★★ Option 2: Make ready engineering

★★★ Option 3: Pole Loading Analysis (PLA), Application submittal & Make ready engineering

Approved Contractors
(Engineering) as of 2/5/22

APPROVED POLE ATTACHMENT ENGINEERING CONTRACTORS



- CPS Energy sends each Contractor a "User Access Agreement"
 - Must be signed and executed before firm is added to approved list
- Contractors **"MUST"** notify CPS Energy within 24 hours on employee termination/leave
 - Must also notify when **eligibility as an Option 2/3 firm changes**
 - Ability to change status when new designers are approved
 - Must have experience with EMR

USER ACCESS AGREEMENT

This User Access Agreement (the "Agreement") is entered into as of this [redacted] day of [redacted] 20[redacted] (the "Effective Date") by and between:

"CPS Energy," and "User:"
 The City of San Antonio, acting by and through City Public Service Board
 500 McCullough Avenue
 San Antonio, TX 78215
 Company Name: [redacted]
 Contact Name: [redacted]

Legal Notice to: CPS Energy
 Attn: General Counsel
 P.O. Box 1771
 San Antonio, Texas 78296
 LegalNotices@cpsenergy.com
 Legal Notice to: [redacted]

User and CPS Energy are sometimes "parties."

WHEREAS, CPS Energy has entered into a telecommunication company ("Prime Contract") with [redacted];

WHEREAS, Pursuant to the contract, [redacted] Contractor, or a subcontractor of Prime Contract, which require access to CPS Energy's Work and

WHEREAS, this Agreement defines the access.

NOW THEREFORE, in consideration of the parties mutually agree to the following:

1. GRANT OF TEMPORARY ACCESS

A. Grant of Temporary Access. CPS Energy, identified on Exhibit B, under the terms of the pole attachment related services and under the Underlying Contract.

B. Privilege Only. This Agreement grants Systems. CPS Energy may interfere with time for any reason, without notice.

2. USER COVENANTS.

A. General Security. User shall comply with the Enterprise Cyber Security Policy, the Workplace Security Policy, and the Information Security Policy (collectively, the "Security Policies") and "Addendum B" and "Addendum D"

Exhibit B

Temporary Access Granted

User: [redacted]

Access: [redacted]

Authorized User Personnel

User shall notify CPS Energy pursuant to the Agreement regarding any change set forth below

Personal Name	Relationship to User <i>(employee / independent contractors)</i>	CPS Energy System Access			Type of Access		Start Date	End Date
		Work Manager	Comm	GIS	Read Only	Read and Write		

User Access Agreement; Exhibit B for Authorized User Personnel

ELECTRICAL MAKE READY TRAINING CLASSES



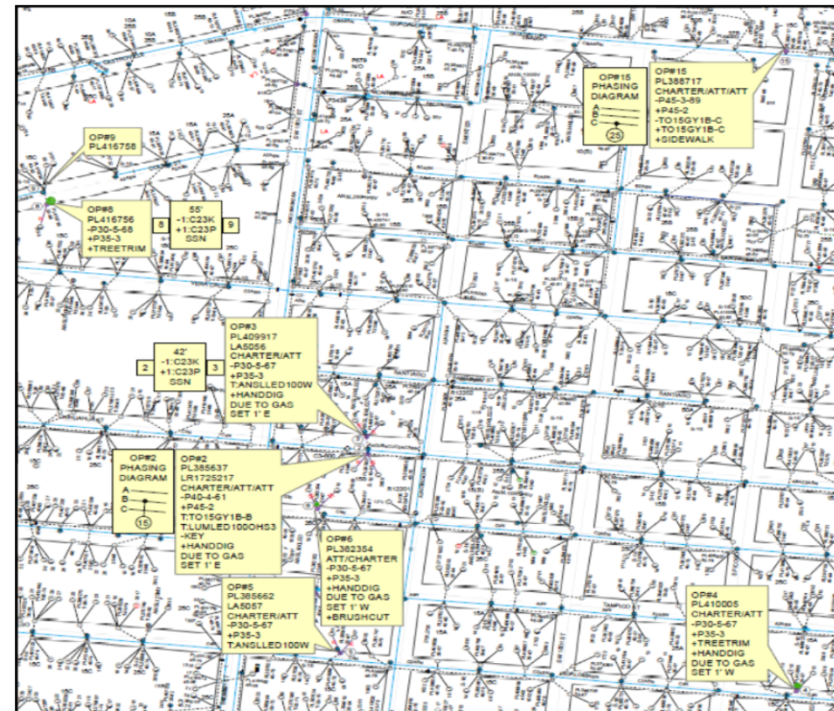
- To date, CPS has held 6 trainings with more than 20 plus companies
- Future Proposed Trainings – Please submit **registration forms** for new participants to be added to class waitlist (6 per class max)
 - Date: TBD (based on registrants)
 - Duration: 5 days – Mon - Fri
 - Location: Virtual
- For more information please email poleattach@cpsenergy.com



ELECTRICAL MAKE READY TRAINING CLASSES



- Create sketches for Electrical Make-Ready (EMR), Upgrade work
 - Pole change outs
 - Slack adjustments
 - Equipment transfers
 - Raising drip loops
- **Learning curve**; Can take 6 months to understand EMR
- **Communication is key**
 - Reach out with questions
 - Firm should be lead on design training



Example of Pole Change Out Design Callouts

The GIS training class is to learn how we create a sketch, not on design or about the Pole Attachment Standards.

GIS DESIGN PAGE EXAMPLES



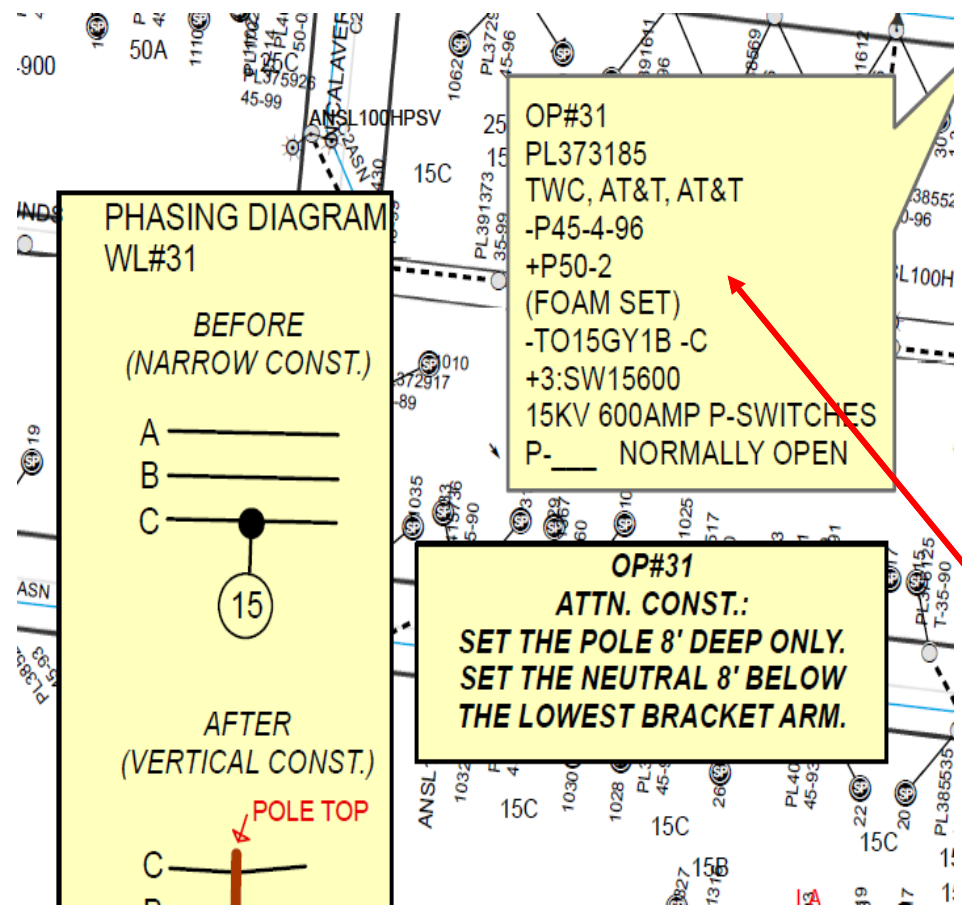
<p>CONSTRUCTION COMPLETED</p> <p>FERG MAP PAGE 583 - B1</p>	OVERHEAD ELECTRIC DESIGN		PROJECT# E-0070	
	WR#	Application Name and Number		
	DESIGNER	Phone #	10/14/2019	
	SUPV	Phone #		
	Job Description:		MAKE READY (1)	
	ADDRESS:		332 W. SUNSET RD SAN ANTONIO, TX	
	1 OF 1			
	ESD			
	X	2136448.000000	Y	13732284.000000
			A023	1" = 100'
ESTIMATED MAN HOURS:		SKETCH SIZE 11 X 17 1" = 100'		

- Project # E-0070 (E-0069 for AT&T)
- Include work order type
 - PALMR OH, PALMR UG, PALMR AT&T PCO, PALUPG
- Attacher name in Work Request Title, Notes (Job Description)

Seal NO SEAL REQUIRED	Outages NO OUTAGES REQUIRED	Locates & Permits CPS APPLICATION AND PROJECT MAP ATTACHED AT TASK 2360 IN WMIS NOTIFY COSA CLERK'S OFFICE PRIOR TO CONSTRUCTION OF PROJECT BY CALLING (210) 207-6949	Environmental Notes ENVIRONMENTAL CHECKLIST & APPROVAL ATTACHED AT TASK 2360	Miscellaneous Notes CONTACT DESIGNER 48 HRS PRIOR TO CONSTRUCTION AT <input type="text"/> PHONE # <input type="text"/> OR <input type="text"/> EMAIL OR SUPERVISOR AT <input type="text"/> PHONE # <input type="text"/> EMAIL **HAND DIG <input type="text"/> OP# GAS IN AREA SET POLE 1' E OF EXISTING	N
	Associated Work Orders WR# <input type="text"/>	SAWS & CPS GAS MAP ATTACHED AT TASK 2360 DIG TESS# <input type="text"/> DIG TESS # <input type="text"/> DATE <input type="text"/> MM/DD/YYYY AT <input type="text"/> OP#	Field Meeting Notes ATT WORK REQUIRED AT <input type="text"/> OP#		

Header Block Examples at Top of GIS Designs

GIS DESIGN PAGE EXAMPLES



Design Callout Example

- Top to bottom for all attachments on the pole:
- OP#
 - Comm Attachments
 - PL#
 - Light# (if appl.)
 - Pole -Remove (if apl.) (HT)-(CIs)-(YY)
 - Pole
 - Primary Equipment
 - Secondary/Streetlight
 - Misc. Notes



APPLICATION SUBMITTALS



		FOR C	
Approved By			
Title			
Telephone number			
Approval Date			CPS WR# (if needed)
Date	9/2/2022		Attaching Company
City/Township	San Antonio		Application Number
State	Texas		tag# - year - unique client app. #
Nearest Street Address	1234 Washington Drive		XX-2022-Walnut Creek PT2_REV1
X-Coordinates	29.123456"N		By
Y-Coordinates	-98.444444"W		Title
			phone number
			John Doe
			Distribution Technician
			123-456-7890

Ensure Date in Header (here) reflects Date of Application Submission

When Attaching Entity proposes Electrical Make-Ready, include Work Request # from CPS Energy Electrical Construction Design here

Nearest Street Address reflects the Numerical and Street Name portions of address

XX: Attaching Entity Tag # App/Email Subject/File Names should all reflect same Application Number

Reminders for Application Header Data

APPLICATION SUBMITTALS



Number of New attachments		0	Total Pole Load Analysis		0	
Number of Overlashes		0	Total Make Ready Simple		0	Total Make Ready Complex
Total Poles		0	Total Upgrade Simple		0	Total Upgrade Complex
Number of Removals		0	Total Simple		0	Total Complex
Attacher Cable Information						
Proposed Cable Count		288 Count	Existing Cable Count		2	
Proposed Cable Diameter		.84 in.	Existing Cable Count		2"	
Proposed Cable Weight		.313 lbs/ft	Existing Cable Count		1.17 lbs/ft	

Only fill Existing if Applicable!

The Application is designed to assist you. Data will populate as you complete the form. Only fill the yellow boxes in the header!

APPLICATION SUBMITTALS



Operation Number	Attachment Action: (I)nstalling (R)emoving (E)xisting	Pole Owner	Pole #	Pole Structure	Proposed Riser (Yes/No) & Qty	Proposed Guy (Yes/No) & Qty	PLA (%) with proposed attachment	Construction Grade of Analysis	Existing Mid-Span Data		Make Ready Data			
									Height Lowest Com	Height Lowest CPS Electrical	Attacher Description	Attachment Height		Mid-Span (same span as existing)
												Existing	Proposed	Proposed
1	<div style="border: 2px solid red; border-radius: 15px; padding: 5px; display: inline-block;"> Must follow this format (Overlash: Use (E)xisting) </div> (I)nstalling	CPS Energy <div style="border: 1px solid red; padding: 2px;">Or AT&T</div>	PL123456	Southern Pine 50CL/2	No	Yes	50%	C	17'-0"	22'-4"	Neutral/Service	26'-8"		
											Drip Loop	26'-10"		
											STLT Top	25'-9"		
											STLT Bottom	24'-0"		
											Attaching Entity (XX)		23'-6"	20'-0"
AT&T (3)	20'-6"	22'-6"	21'-6"											
								From Pole	To Pole					
								123456	234567					

Must follow this format
(Overlash: Use
(E)xisting)

Attaching Entity
(XX)

If proposing Attachment Heights, proposed Mid-Span Heights should be included for all affected spans

Reminders for Application Pole Rows

APPLICATION SUBMITTALS



One Touch Transfer: Make Ready or Upgrade & Simple or Complex	Remedy Description and Explanation/ Additional Comments/Variance Requests	Responsible Party: Attacher or CPS	Existing CPSE Red Tag on Pole	Pole Data Missing in GIS (if yes fill out Missing Pole Data worksheet)	CPSE Application Comments
Make Ready Simple	<p>EXAMPLES:</p> <ul style="list-style-type: none"> - Raise Streetlight - Raise Secondary Drip Loop - Sheath Streetlight 	Attacher	No	No	<p>Include any additional information (non-remedy) here.</p> <p>EXAMPLES:</p> <p>***</p> <ul style="list-style-type: none"> - Pole Tag on Pole fielded as PL123456; GIS shows as PL987654 - Pole found in field as 50/CL2 and GIS reflects 45/CL3 [Fill out Missing Pole Data Worksheet] - Install 1/4" EHS Downguy at 23'-6" and 8" single helix (Class 4) 3/4 anchor rod at 15'-0" - Install 2" PVC Riser at 23'-0"

Any non-remedy comments should be in CPSE Application Comments

Reminders for Application Pole Rows

COMMON APPLICATION REJECTIONS



- **Application missing required information**
 - CPS Energy pole number (PL#) missing on application (New Attachments ONLY)
 - Make-ready not called for on the application
 - Missing required attachments at submittal of application
- **Mistakes on Pole Loading Analysis**
 - All existing violations on pole are not fixed or new creates a new violation
 - Incorrect construction grades
 - Missing cables on pole
 - Incorrect cable tensions
 - Mid-Span clearance issues
- **21 Day application review will reset with every application rejection**
- **Contractors should NOT change the attaching entities application name on rejections, only a REV designation should be added to the end of the Application Name**
 - Example - Tag Number-Year-Application Number_REV1

COMMON POLE LOADING ANALYSIS (PLA) REJECTIONS

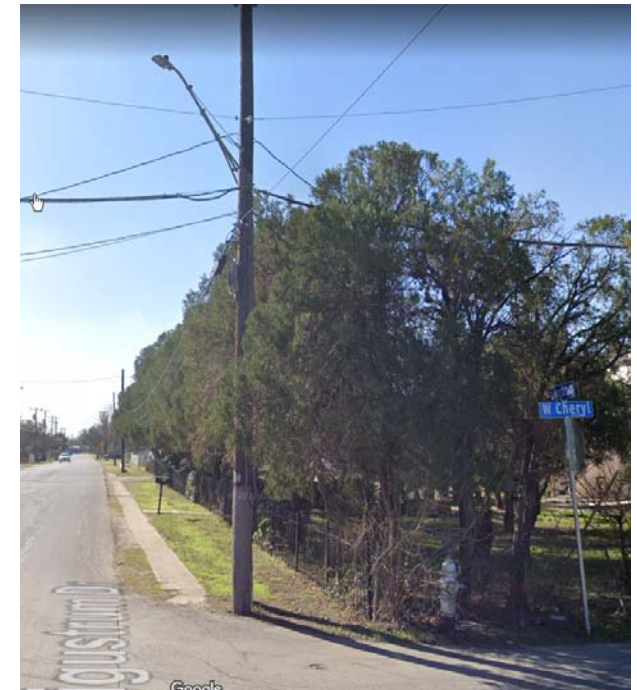
- **PLA must be PE sealed** (or Coversheet for multiple pages)
- **Pole information must match Application**
 - Pole Capacity Utilization Percentage to include:
 - Wire and Equipment Sizes/Types
 - Tensions
 - Ownership
 - Include at appropriate lead lengths and attachment heights:
 - Anchors
 - Down guys
 - Pole number, Class/Height, Species, and Construction Grade
- **PLA only valid for 6 months** from Application Submittal date
 - Pole Attachment Standards, **Appendix G**: CPS Energy Pole Loading Requirements

POLE PHOTOS

- Applications must have **time stamped** photo(s) from within last 6 months
 - May need new photo if field conditions change, e.g.:
 - New attachment
 - Streetlight
- Combine photos into single PDF
- **No Google Photos**



Time Stamped Photo



Google Street View



APPLICATION SUBMITTALS: POST INSPECTIONS

- Submit (NEW) construction completion notice within 90 days
 - Required for post-inspection and permit
 - Courtesy emails sent when Past Due
- 1-30 day timeline for post-inspections (per Standards)
- **Auto-post-fiber inspection will occur if not notified**
 - Occurs 30 days after proposed end date; sent to all parties
- **Wireless post-inspection requires notice**
 - Must occur before meter is installed
 - Subject to outage, higher cost for gig remedy
- If extension needed after NTP issued, inform CPS Energy **ASAP**
- All communications to poleapplications@cpsenergy.com

ANNUAL POLE ATTACHMENT INVOICES

- CPS Energy will be invoicing the annual pole attachments to each attaching entity having permitted Wireline, Wireless and Banner Attachments to date
 - **This includes sites that are not constructed in the field to include any residential and downtown underground fed streetlights**
- The invoice shall set forth the total number of pole feet utilized by attachments as of December 1st of the current rental year multiplied by the attachment rate
- It is the attachers responsibility to submit any cancelled applications to CPS Energy



WORK MANAGER

WORK MANAGER TASK STRUCTURE



- Task 2360
 - Dig Tess (Dig Tess # should also be on the design)
 - Gas Maps
 - SAWS/Water Maps
 - CPS Environmental forms/approvals (notes should be on the design in **RED**)
- Permit attachments expected **before Task 5000 approval**
 - TXDOT Approval (if necessary)
 - City/County Approvals (if necessary)
- Task 2460
 - ENTRUST (formerly TXUE): **Zsofia Cassidy** – Initials **CZ**
 - TRC: **Elizabeth Teran-Delgado** – Initials **TDEL**

Status	Task Stat...	Mand	Task WR Sta...	Tas...	Task Description	Sub-Task Availa...	Comments
Completed		M	DSGN	2550	Submit Design to Distribution Plan...	<input type="checkbox"/>	Completed by Designer
Completed		M	DSGN	2570	Obtain Distribution Planning Appr...	<input type="checkbox"/>	Completed by Designer
Completed		M	DSGN	2650	Obtain Environmental Permit(s)	<input type="checkbox"/>	Environmental review completed on 9/24/19. Note: Kans
Completed		M	DSGN	2670	Obtain ROW	<input type="checkbox"/>	Recd easements from
Completed		M	DSGN	2680	Indicate Official Revision	<input type="checkbox"/>	
Completed		M	APPR	5000	Perform Supervisor Approval	<input type="checkbox"/>	Ready
Completed		M	APPR	5100	Approve Work Request	<input checked="" type="checkbox"/>	
Completed		M	DESFN	6000	Finalize and Lock Down Design	<input type="checkbox"/>	
Working		M	DESFN	6050	Perform Utility Coordination Review	<input type="checkbox"/>	Waiting for confirmation of ATT payment to then hold Ta
Working		M	REL	11060	Submit Notice of Intent (NOI)	<input type="checkbox"/>	
Pending		M	REL	11100	Accept Work Request for Constru...	<input type="checkbox"/>	
Pending		M	SCH	12500	Schedule Work	<input type="checkbox"/>	
Pending		M	CONST	16100	Perform Field Work	<input type="checkbox"/>	
Pending		M	ABRPT	16130	Submit Notice of Termination (NOTT)	<input type="checkbox"/>	

ARM Task Layout Example

TEMPORARY ATTACHMENT FORM (B7) & WAIVER REQUEST

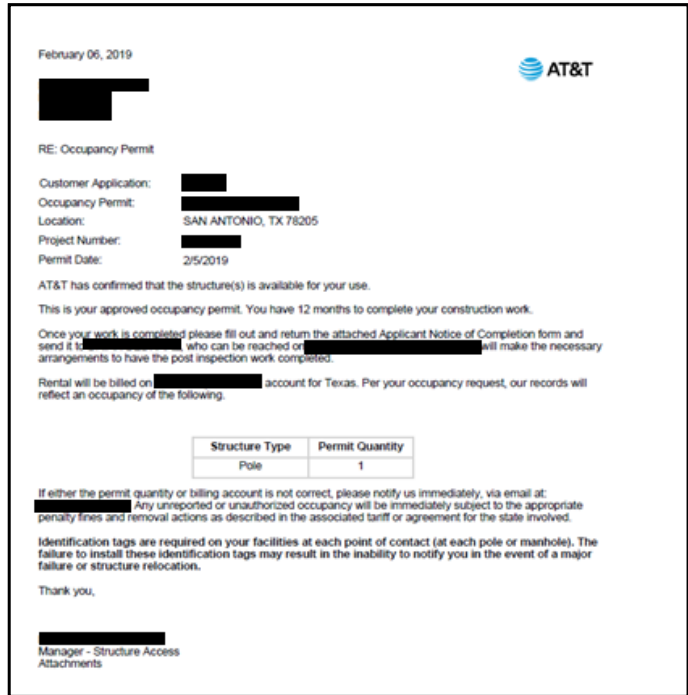


- Approved engineering company must coordinate site meeting with ENTRUST and/or TRC
- Pole application must be submitted with the proposed attachment height for each temporary attachment for CPS Energy to review
- A **signed** temporary attachment request form must be submitted with the pole attachment application
 - Signed form must be uploaded into Work Manager Task 2360
- Waivers must be submitted with the pole attachment application or the application will be deemed incomplete and rejected
- All requests must meet NESC clearances in order to be approved for temporary attachment

AT&T APPROVAL LETTER (WI RELESS)



- AT&T approval letter must also be saved in Work Manager Task 2360
 - Document Title: **“AT&T Pole Replacement Approval”**
- Work Request detail must reflect Project “E-0069” in Work Manager

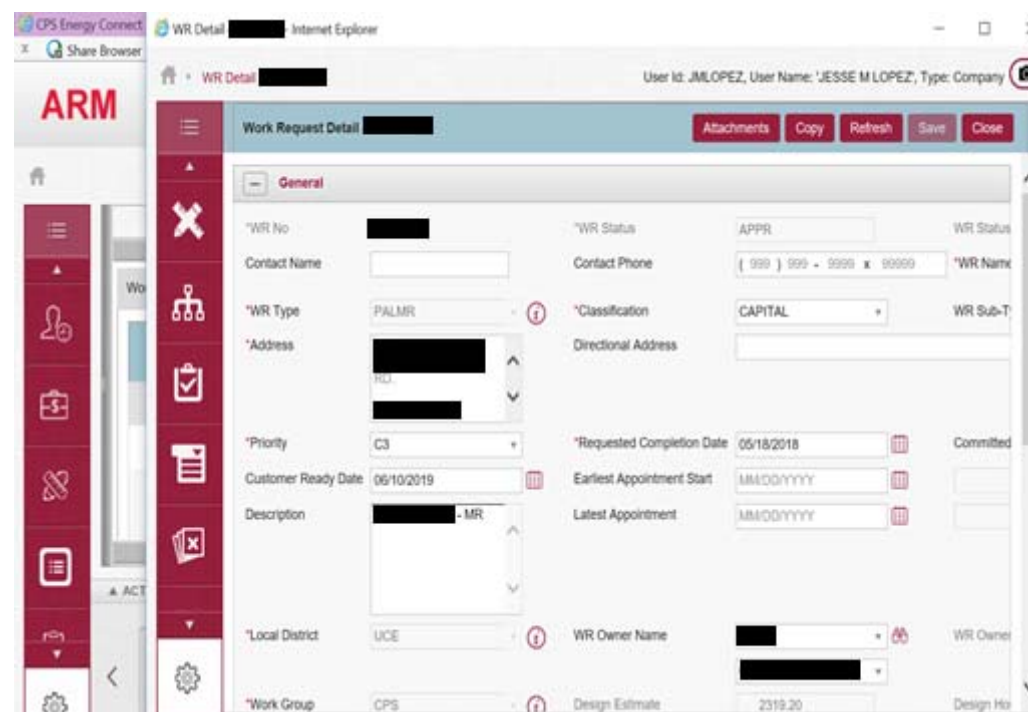


AT&T Approval Letter Example

WORK MANAGER SYSTEM DEMONSTRATIONS



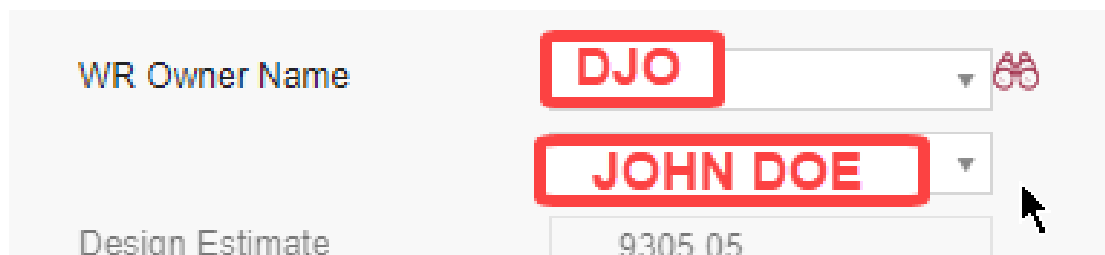
- CSI Team has two demonstrations of some general use & navigational functions within ARM 2.2
- General Navigation Basics → Navigation → Basics WebEx
- General Navigation Views and Tasks → General Navigation → Views and Tasks WebEx



ARM 2.2 (formerly WMIS)
Work Request Detail Window

DESIGNER RESPONSIBILITIES

- **The Designer (Contractor) is the owner of the Work Order and GIS Design from Creation through As-Builts**
 - Make sure designer's initials are indicated under Work Request Owner to ensure delivery of emails as tasks are completed

A screenshot of a software interface showing a "Work Request Detail Window". The window has a light gray background. There are three main fields: "WR Owner Name" with a dropdown menu showing "DJO" (highlighted with a red box), "Design Estimate" with a text input field showing "9305.05", and a second dropdown menu below "WR Owner Name" showing "JOHN DOE" (also highlighted with a red box). A mouse cursor is pointing at the "JOHN DOE" dropdown. To the right of the "WR Owner Name" dropdown is a small red icon of two people. The "WR Owner Name" field is highlighted with a red box.

Example of "WR Owner Name" field within Work Request Detail Window

DESIGNER RESPONSIBILITIES



- Designer (Contractor) also responsible for **field survey and staking for locates** (design & construction)
 - Mark poles to be located
 - Stake location of new pole placement correctly
 - Must be available to meet foreman for any field questions
- Designer must coordinate the **tree trimming around the power space** by contacting Isidro Bonilla at 210-353-5243, ibonilla@cpsenergy.com



Tree trim/
Vegetation
Example



Locates on Sidewalk

DESIGNER RESPONSIBILITIES



- Designer (Contractor) is responsible for coordinating the field meeting for the **recloser antenna adjustment** for the proposed remedies with Antonio Rodriguez at 210-353-5703, ABRodriguez@CPSEnergy.com
- Designer must upload approved email from Antonio into Work Manager Task 2360



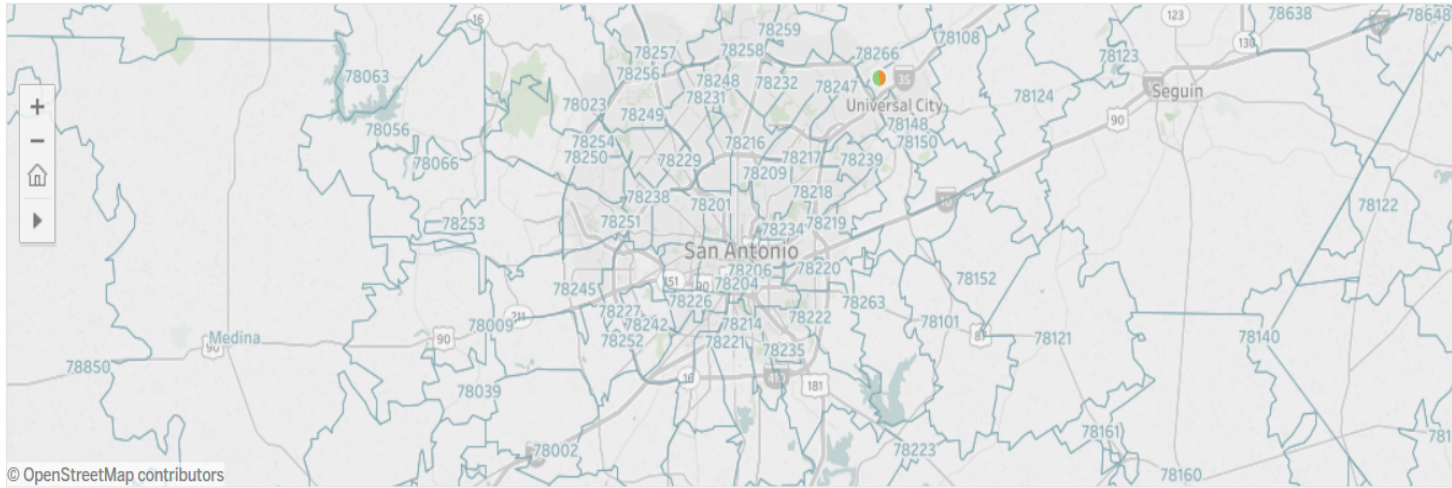
Circuit Reclosers

WIRELINER ATTACHMENTS

Attachment Owner

- AT&T/SBC
- Charter

Pole Attachments



Facility ID
 PL254

Attach Owner
 (All)

Pole Owner
 (All)
 CPS

List

Facility ID	Age	Pole Owner	Inspection Date	Attach Position	Attach Owner	Contact Person	Phone Number	Email Address
PL254	14	CPS	11/2/2016	1	Charter	Frank Cyprian	210-352-4312	frank.cyprian@charter.com
						Joel Gonzales	210-582-9357	Joel.Gonzales@charter.com
						Paul Edelen	210-352-4301	paul.edelen@charter.com
						Ricardo Valadez	210-352-4309	ricardo.valadez@charter.com
						Rick Grosso	210-582-9025	rick.grosso@charter.com
				2	AT&T/SBC	Phillip Austin-CIVIC	210-283-1839	pa1657@att.com

COMMUNICATION FIBER PLACEMENT



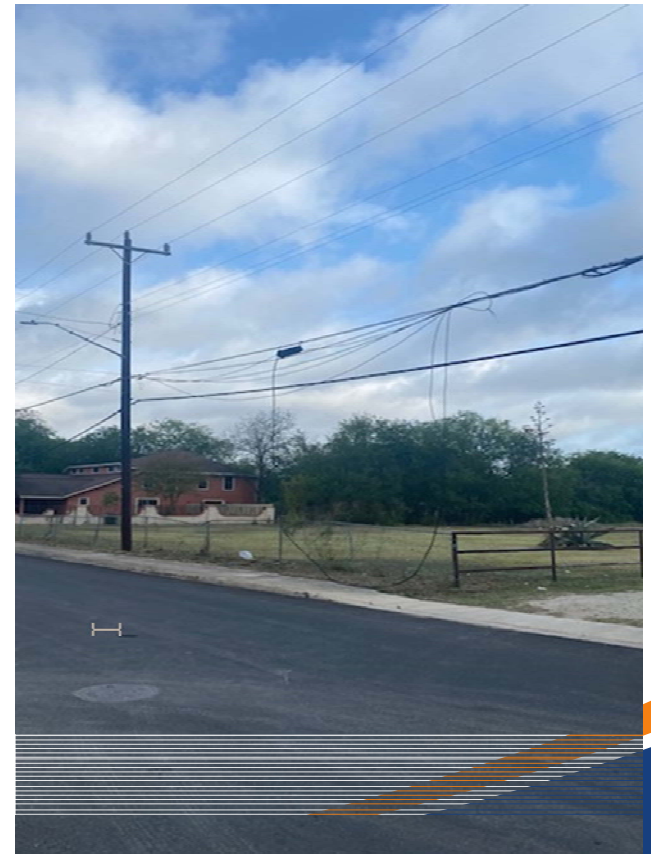
- **Wireline routes should follow existing CPS Energy pole lines**
- **Attachers shall place their fiber on the same side of the pole as CPS Energy Fiber**
 - Safety issue - Failure to do so, causes a safety issue for CPS Energy linemen that have to climb these poles
 - Attaching to the same side of the pole allow for a smoother transition when replacing poles
 - Reliability issue – longer outage time to restore power during storm trouble



COMMUNICATION TRANSFERS AND SAFETY CONCERNS



- CPS Energy continues to stress the importance of communication transfers
- CPS Energy receives numerous complaints per year regarding double wood and braced poles
- These issues pose huge safety concerns for CPS Energy
- **Communication company contact information needs to be updated to coordinate with each attaching entity**



COMMUNICATION TRANSFERS FOR CIVIC IMPROVEMENTS AND TXDOT PROJECTS



- Attaching entities must follow all pole attachment standards and processes for any civic improvement or TXDOT project, transfers must be completed within 30 days of notice per the Pole Attachment Standards
- CPS Energy will not require an Attaching Entity that elects to transfer its existing facilities without Modification to replacement Poles or Streetlight Poles to submit a new permit Application as part of such transfer
- An affected Attaching Entity that elects to transfer its Existing Attachments, Wireless Installations, or Banner Attachments to the CPS Energy replacement Poles and/or Streetlight Poles, shall complete such transfer at no cost to CPS Energy and in accordance with all Applicable Engineering Standards
- Affected Attaching Entities seeking to transfer their existing facilities to CPS Energy replacement Poles or Streetlight Poles in response to a Civic Project shall be solely responsible for coordinating with the Civic Project's manager in order to determine whether any of Attaching Entity's transfer costs are reimbursable from the Civic Authority, and for entering into any necessary agreements with the Civic Authority concerning such cost reimbursements

WIRELESS ATTACHMENTS

WIRELESS ANTENNA STANDARD PROCESS



SITEWALK →

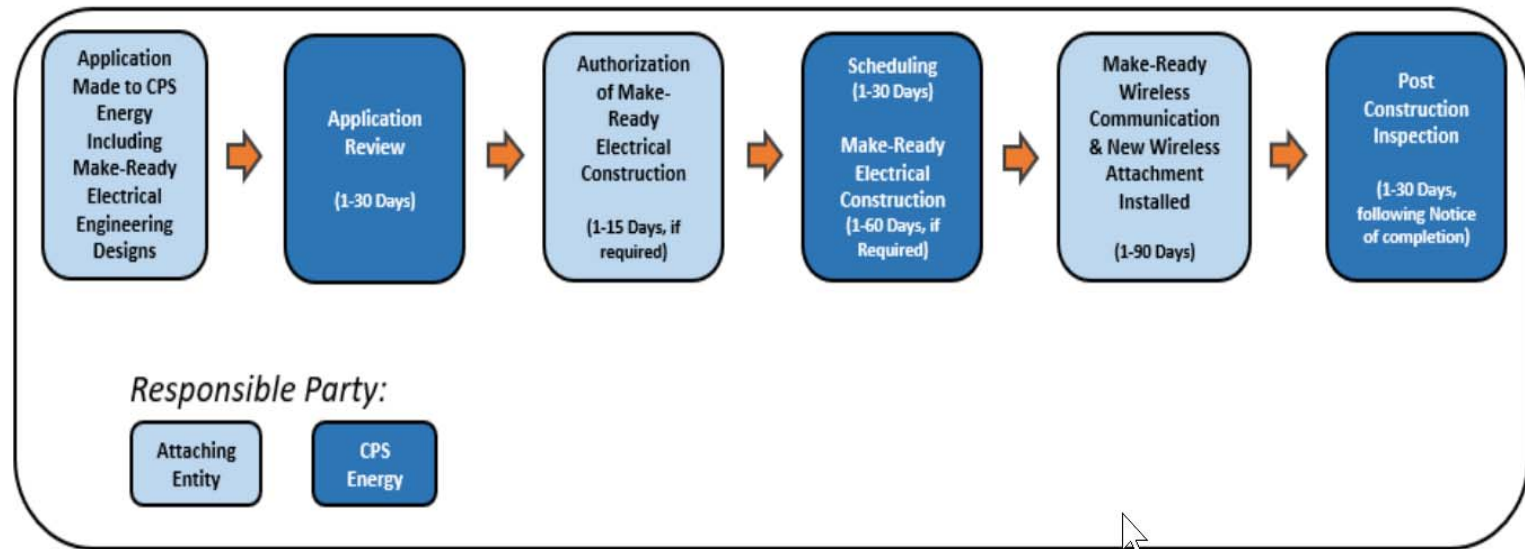
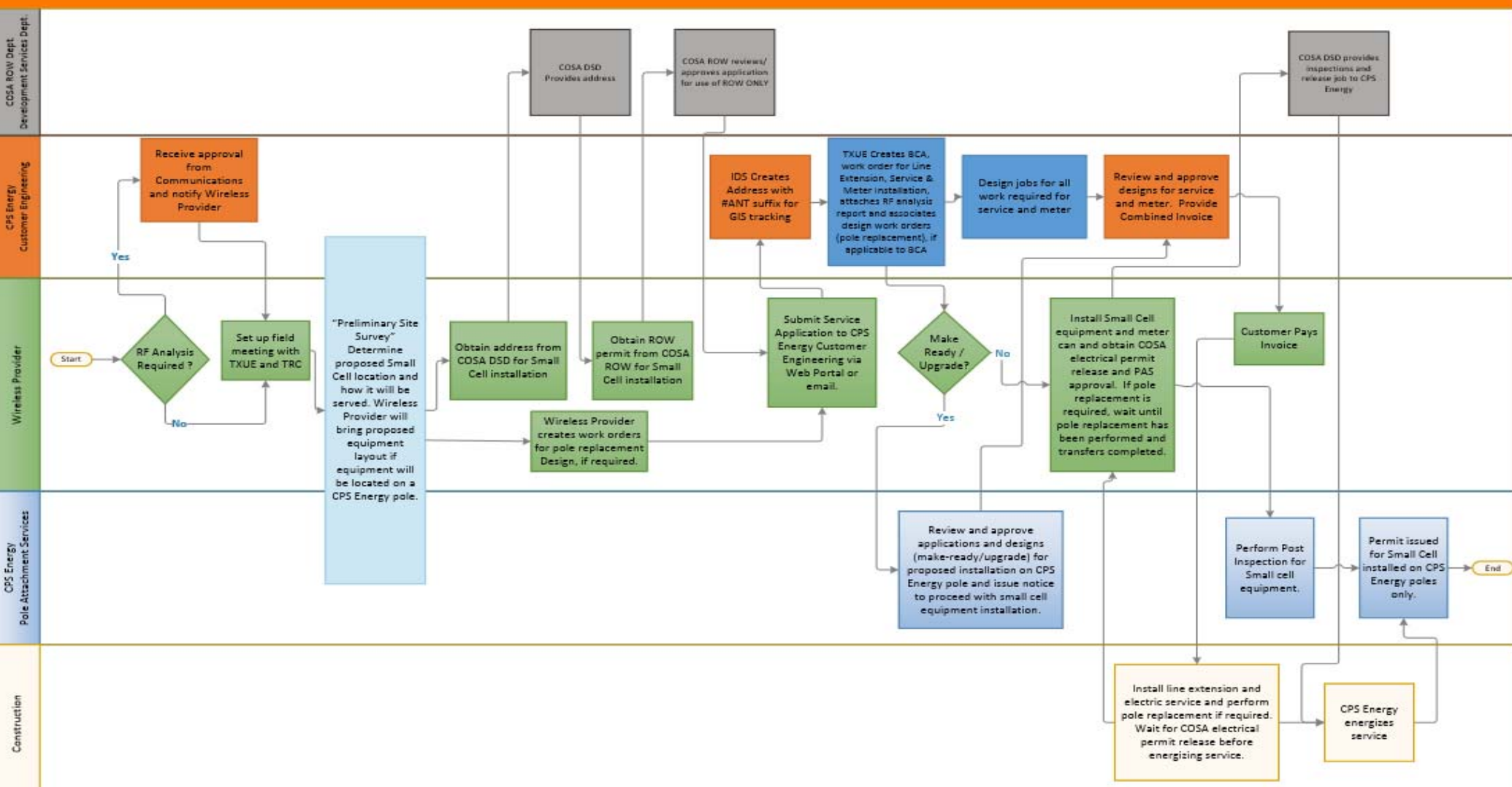


Figure F: Standard Process for Wireless Installations following Pre-Certification

- Site walks must be scheduled with pole attachment services, customer engineering and City of San Antonio ROW representatives

Wireless Installation: CPS Energy Pole



MOCK UP REQUIREMENTS



- Mock ups is a requirement for each type of installation and for any additional equipment being proposed to an existing **"approved"** installation
- Wireless antenna installations in the field must mirror the approved mock up installation or will be rejected



TEAM 1 - MOCK-UP For CMRS RADIOS



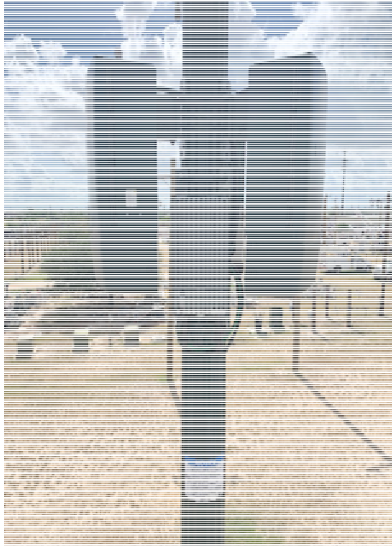
CPS Wood Pole



Valmont Decorative Streetlight BEFORE



Valmont Decorative Streetlight "AFTER"



TEAM 2 - MOCK-UP FOR 5G Radios



Valmont Decorative Streetlight



Valmont Decorative Streetlight

Team 3 - MOCK-UP FOR 4G/5G RADIOS



CPS Wood Pole



CPS Wood Pole "BEFORE"



CPS Wood Pole "AFTER"

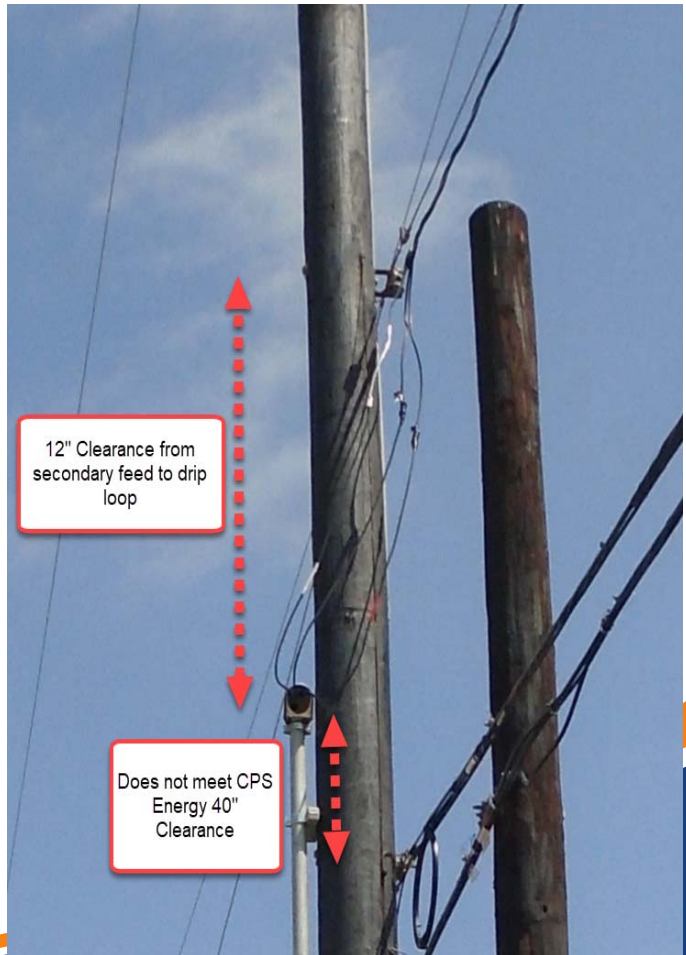
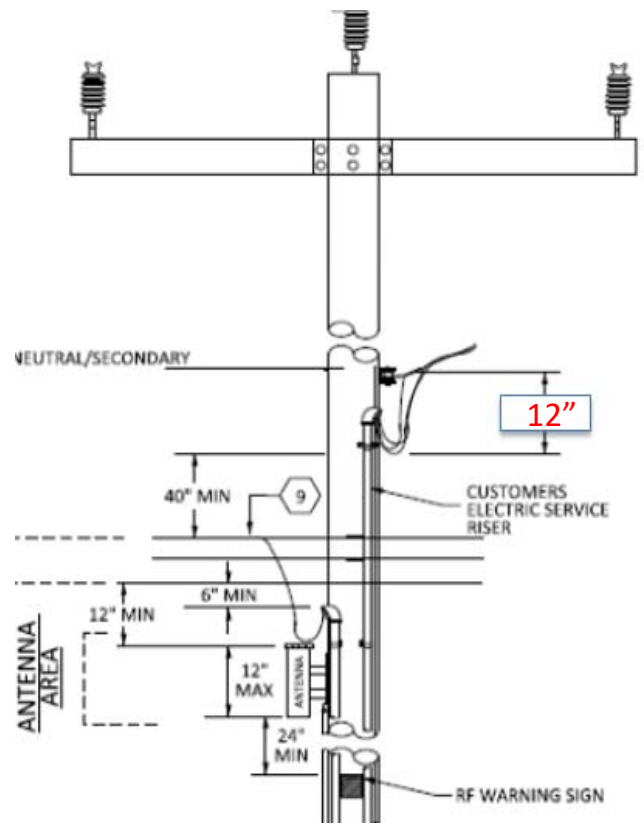
WIRELESS ANTENNA INSTALLATION VIOLATIONS

- EN Engineering and/or TRC are working with the wireless providers and customer engineering to start making the necessary adjustments on the weather head violations
- Clearance violations due to weather head installed too low
 - 40" clearance not met to the communication companies
- Communication companies fiber make ready needs to be done prior to the wireless antenna installation, using the one-touch process for simple transfers



WIRELESS ANTENNA INSTALLATION VIOLATIONS

- Communication companies make ready not done, needs to be done prior to antenna installation
- Clearance violations due to weather head installed to low
 - 40" clearance not met to the communication companies
- **Pole attachment services needs to do the post inspection before getting COSA DSD inspection to help keep cost and outages down**



COMMUNICATION – ONE TOUCH TRANSFERS

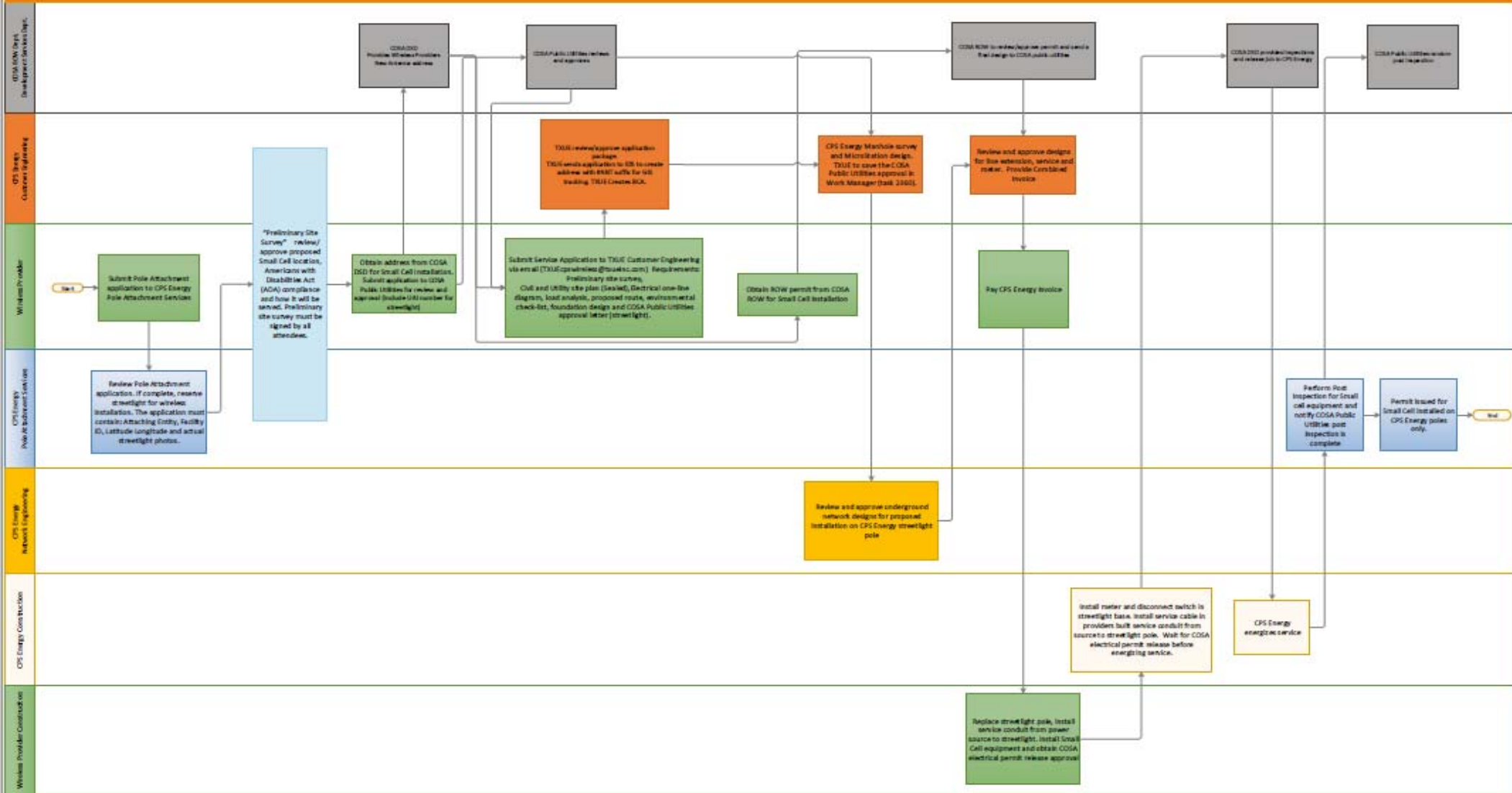


- Communication companies fiber make ready **"MUST"** be done prior to the wireless antenna installation **using the one-touch process for simple transfers**
- **CPS Energy will pull the "IDLE" pole once completed**



DOWNTOWN DECORATIVE AND RESIDENTIAL STREETLIGHT UPDATE

Wireless Installation: CPS Energy Downtown Decorative Streetlight (9/18/2020)



DOWNTOWN DECORATIVE UNDERGROUND STREETLIGHT UPDATE

- Annual pole attachment rental invoices will include "ALL" applications submitted to date
- Annual pole attachment invoices will be sent out in January 2023

Team 1 update

- Applications Submitted – 178

Team 2 update

- Applications Submitted – 124

Team 3 update

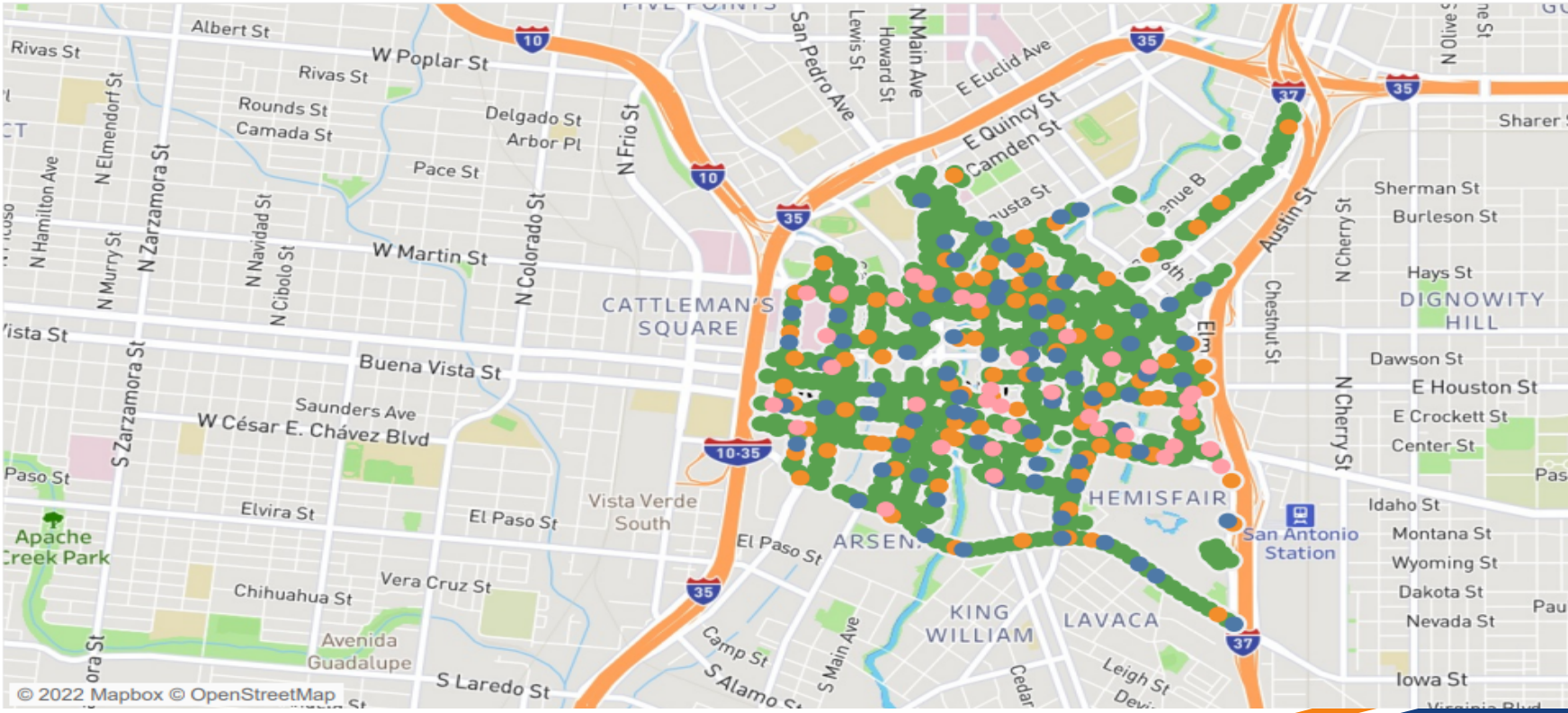
- Applications Submitted – 47



DOWNTOWN STREETLIGHTS WIRELESS ANTENNA SOLUTION



Downtown Underground FED Street Lights Refreshed on September 19, 2022



RESIDENTIAL STREETLIGHTS UPDATE



Application Update – Submit any cancellation applications for residential streetlight sites not needed anymore in order to invoice the correct amount of sites for the annual pole attachment invoices by July 31, 2022

Team 1 update

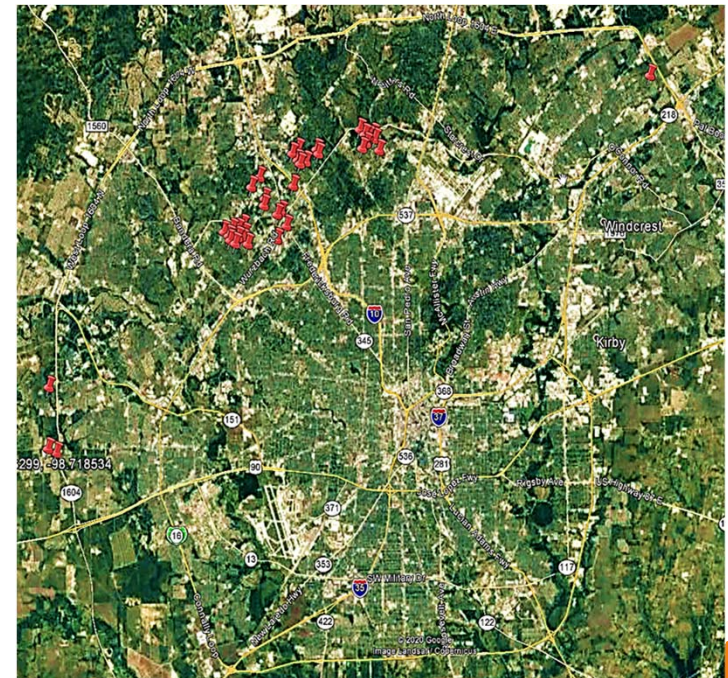
- Applications Submitted – 36

Team 2 update

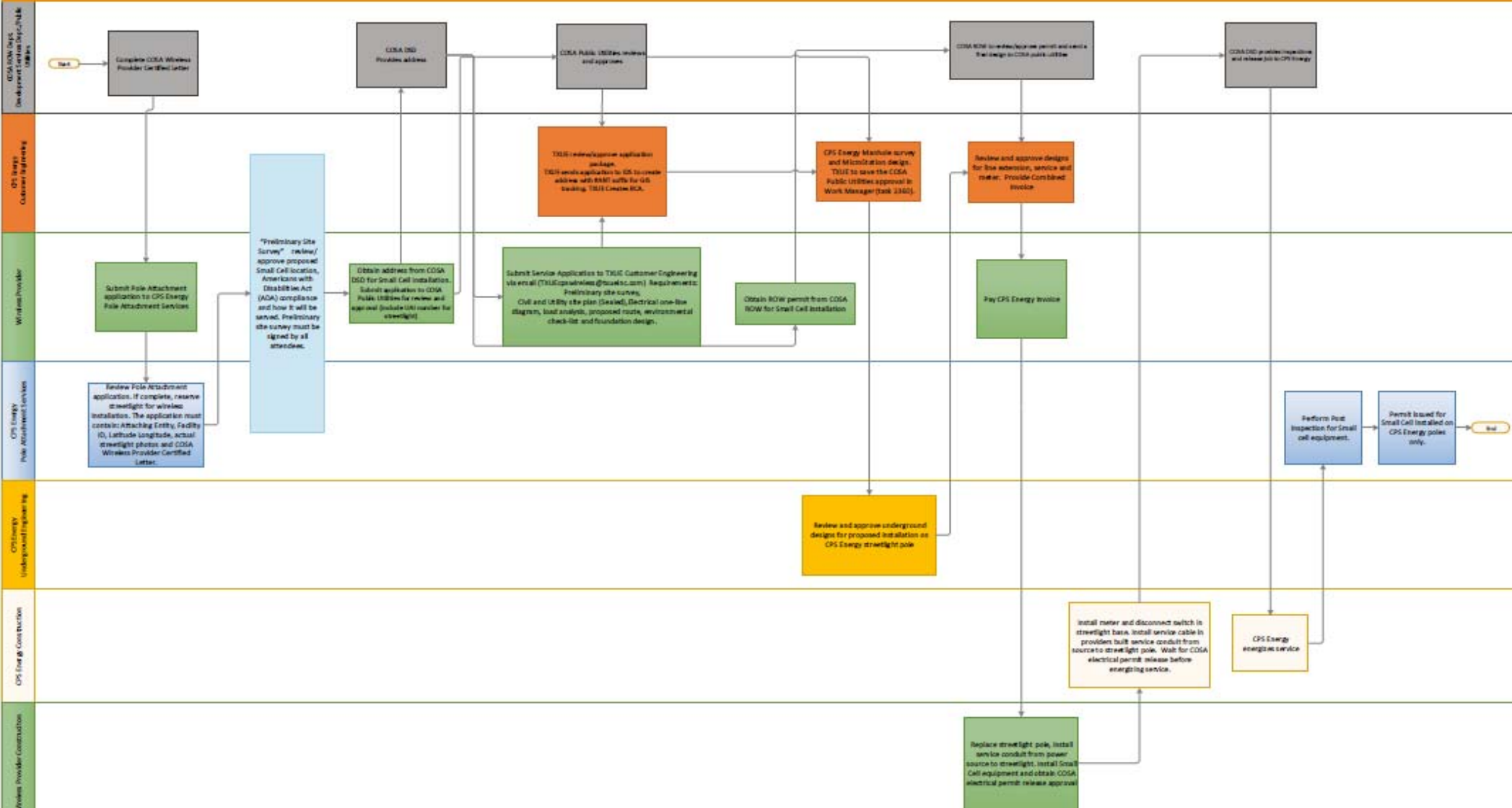
- Applications Submitted - 10

Team 3 update

- Applications Submitted – 0



Wireless Installation: CPS Energy Existing Residential Streetlight (CommScope) (11/19/2020)

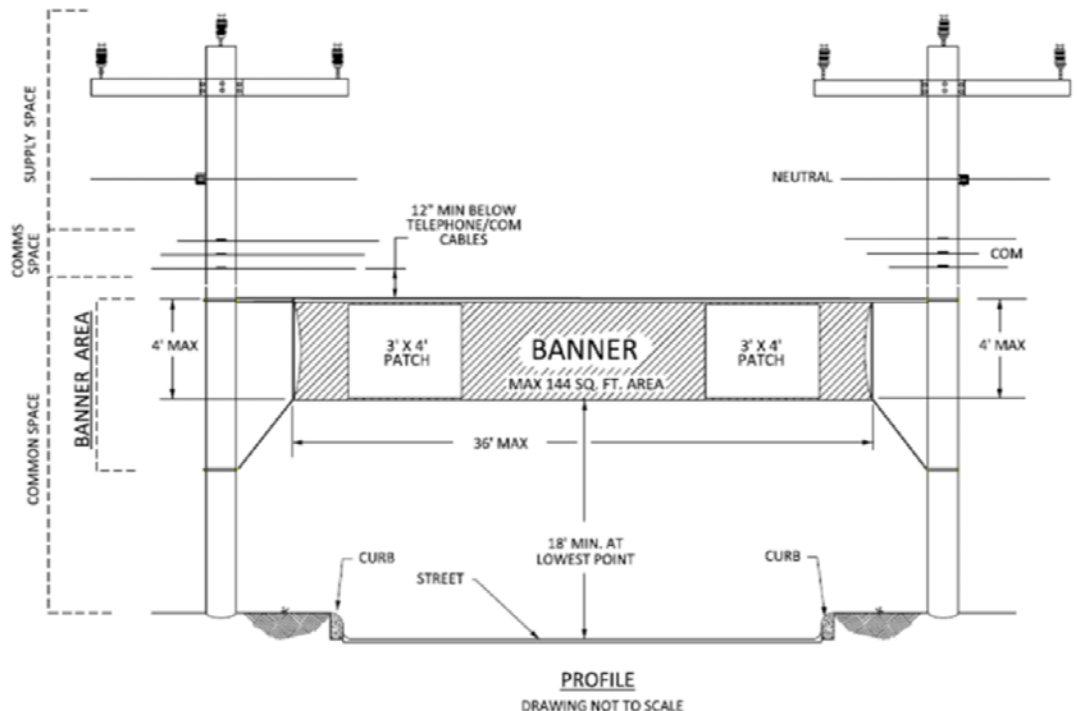


BANNER ATTACHMENTS

BANNER UPDATES



- We continue to work with Dixie Flags, internal and external customers on banner applications throughout the City of San Antonio and Suburban Cities
- Request include both the single and double banner installations



TECHNICAL SPECIFICATIONS

1. BANNERS SHALL BE 36' IN SIZE
2. BASIC FABRIC MUST BE 1/12" TO 4" OPEN-WEAVE NYLON OR POLYESTER NET
3. FRAME CONSTRUCTION WITH REINFORCED ALL-WEATHER NYLON WITH 1/4" HALYARD SEWN INTO TOP AND BOTTOM OF BANNER, BANNER SNAPS SEWN ACROSS TOP EVERY 1.5'
4. LETTER AND TEXT PATCHES MUST BE MADE OF FADE-RESISTANT NYLON OR VINYL SEWN DIRECTLY ONTO NET BASE FABRIC. OPEN SPACE IS NEEDED TO ALLOW AIR TO BLOW THROUGH NET.
5. NAME AND CONTACT INFORMATION MUST BE PROVIDED ON BANNER.

CUSTOMER ENGINEERING UPDATES

CUSTOMER ENGINEERING POINTS OF CONTACT FOR WIRELESS ANTENNAS

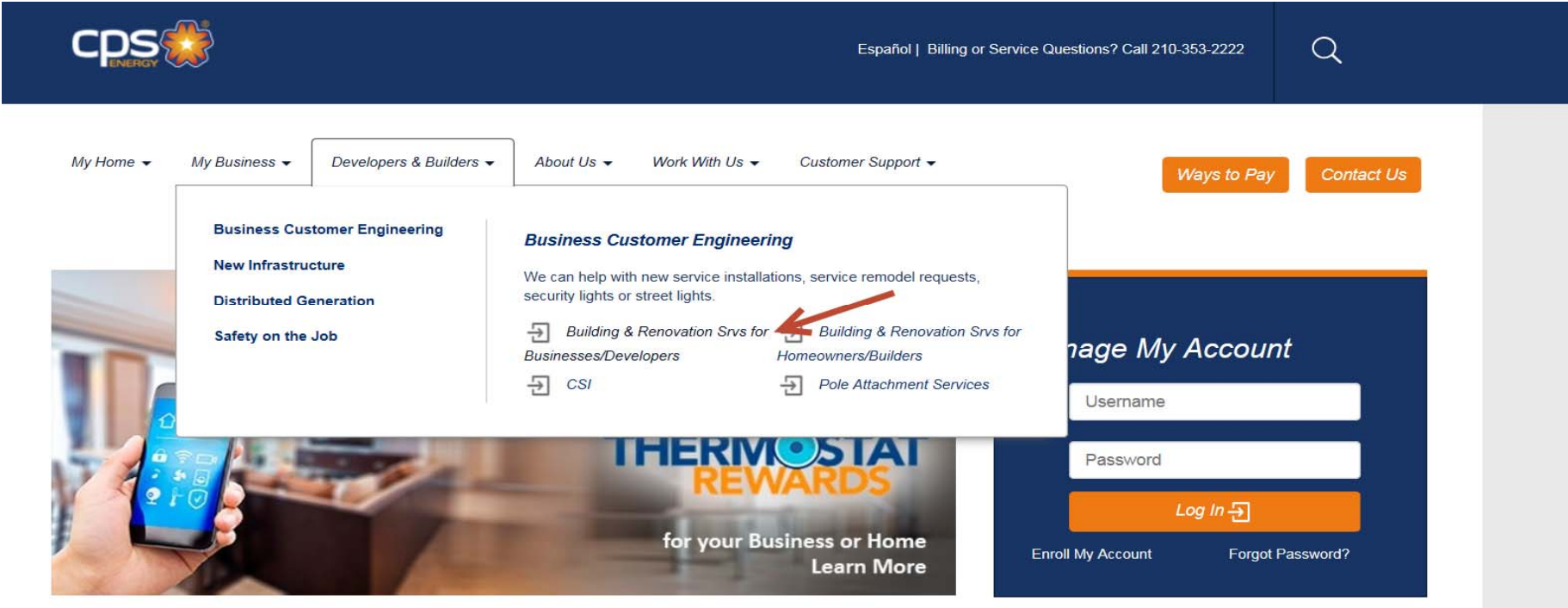


- Deborah Martinez is the new point of contact for CPS Energy customer engineering, she replaced Richard Rodriguez
 - Dgmartinez@cpsenergy.com
- Gerald De La O and Ben Garrett are the points of contact for any service and metering and customer engineering site-walks for both Downtown and Residential streetlights
 - gdelao@txue-inc.com
 - Ben.Garrett@txue-inc.com

CPS ENERGY CUSTOMER ENGINEERING PORTAL WEBSITE



- Go to www.cpsenergy.com
- Click on Building & Renovation Srvs for Businesses/Developers





POLE ATTACHMENTS INVENTORY 2023

POLE ATTACHMENT INVENTORY 2023



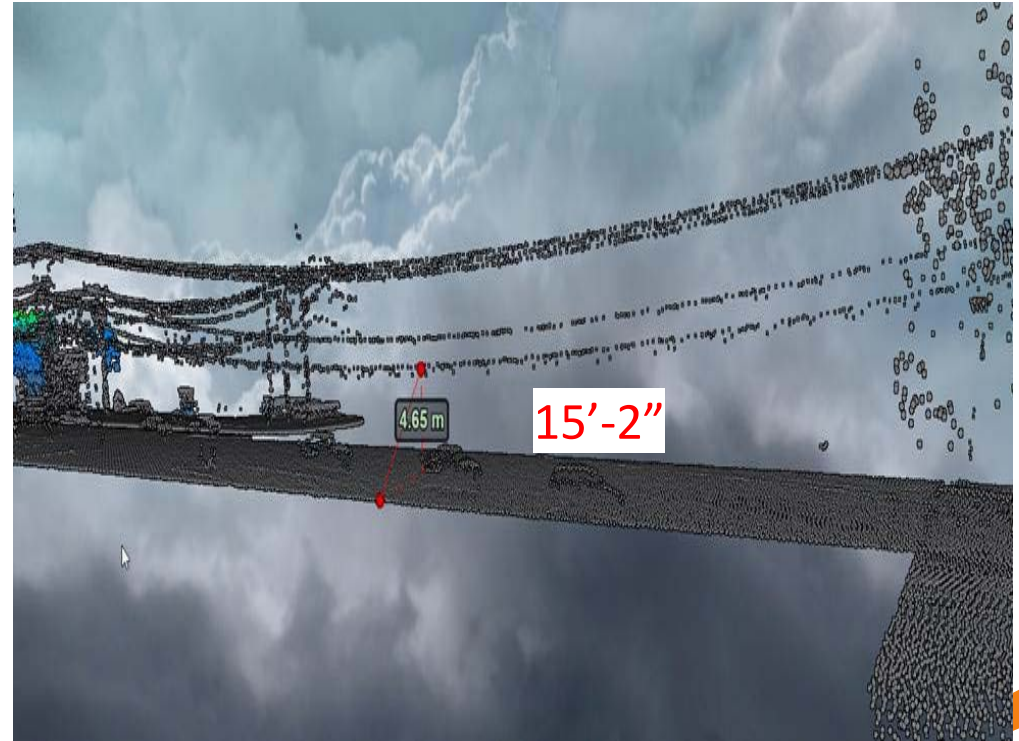
- **CPS Energy will start the pole attachment inventory project in 2023**
- **The pole inventory will take approximately year and a half to complete**
- **CPS Energy will be sending out request for proposals in early 2023**
- **Each attaching entity will be paying their portion of the inventory**
- **Estimated timeline will be presented in the near future along with a meeting request with all attaching entities**

LiDAR DATA AND LOW COMMUNICATION LINE ISSUES

OUTAGES AS A RESULT OF LOW COMMUNICATION LINES



Thousand oaks street

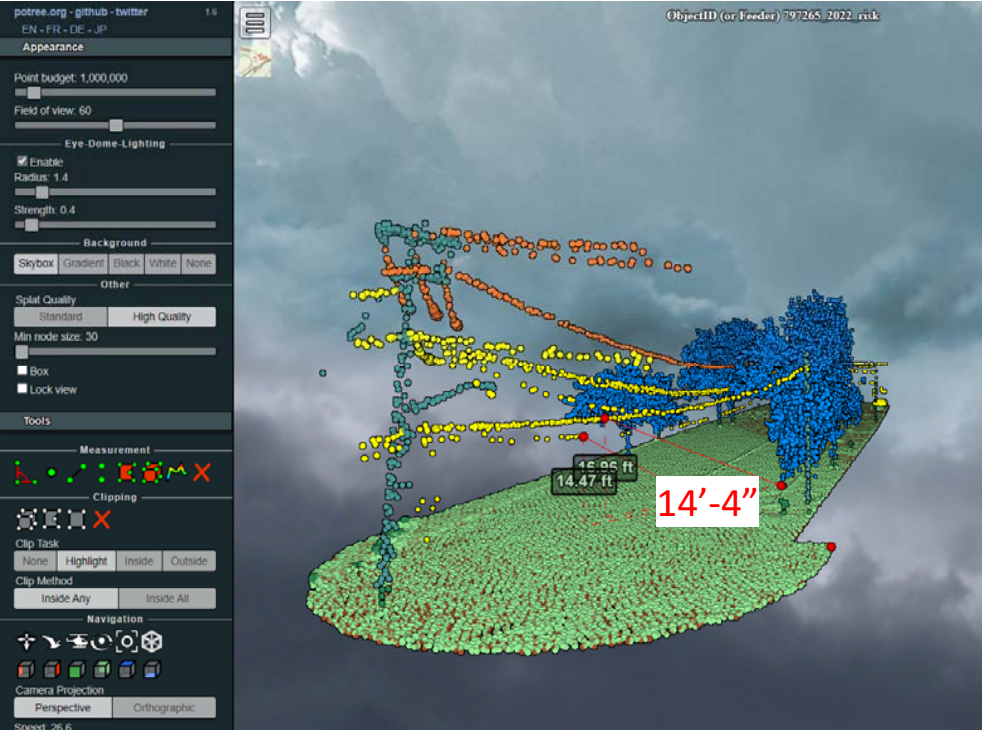


Lidar 3D view

OUTAGES AS A RESULT OF LOW COMMUNICATION LINES



Cumberland Street



Lidar 3D view

LIDAR NEXT STEPS



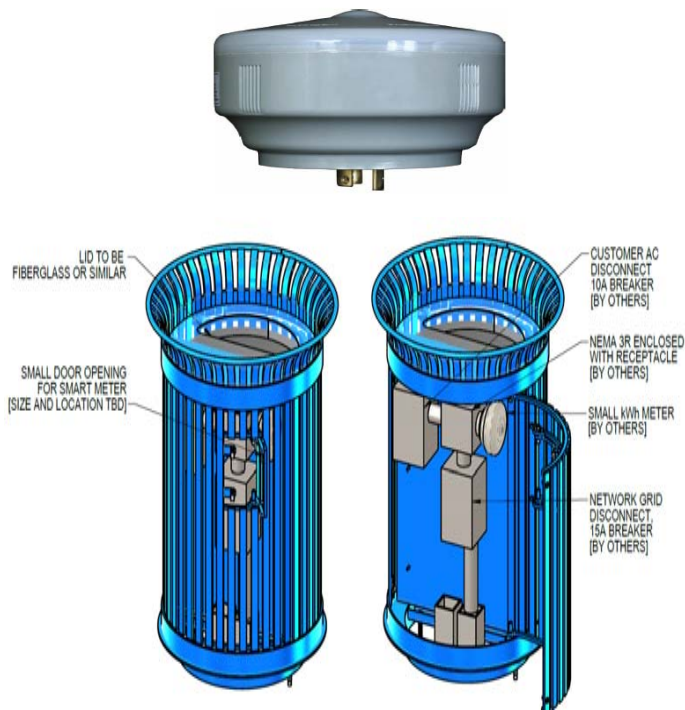
- Continue to refine the LiDAR Data identification process for potential low communication clearance
- Pole attachment services will be coordinating with affected attaching entities on emergency work orders needed to raise any clearance issues
- Pole attachment services will be designing any electrical make ready and communication adjustments needed for any clearance issues



Announcements

- **CPS Energy will be conducting the pole attachment inventory project in 2023**
- **Next quarterly meetings are scheduled for December 1, 2022**
- **Pole attachment services will be posting a position for an Engineer next month**

RECYCLE BIN/HOCKEY PUCK METER PILOT PROJECT





https://www.ksat.com/news/local/2022/09/20/what-is-5g-and-how-does-it-work-ksat-explains/?_vfz=medium%3Dsharebar

Any Questions?





Thank You

