



POLE ATTACHMENT SERVICES QUARTERLY WORKSHOP

PRESENTED BY:
Pole Attachment Services Dept.

05 SEP 2024



AGENDA

- **Safety**
- **General Topics**
- **Applications**
- **Requirements**
- **LiDAR**
- **Announcements**



SAFETY

SAFETY

SEPTEMBER IS NATIONAL PREPAREDNESS MONTH



- “Start a Conversation” & discuss important topics
 - What can happen in emergency
 - Be prepared and have a plan
 - Family members should have contact info written down/memorized
- Important Documents
 - Birth certificates, insurance policies, other important items are protected (safety deposit box/fire-proof safe)
- Supply Kit @ Home
 - Gallon of water per person per day – 3 days worth
 - 3 days worth of food, non-perishable (tuna, PB, granola, etc.)
 - Tool kit
- Emergency Kit in Car
 - Spare tire, jumper cables, tool kit, flashlight, phone charger, drinking water, first aid kit, etc.

National Preparedness Month
Take steps to prepare with your family.

Ready. ✓

A photograph of a smiling family of four (father, mother, and two children) sitting at a table.

The Time to Prepare is Now
Gather supplies for your family, pets and service animals.

- ✓ Food & water
- ✓ Medications
- ✓ Flashlights
- ✓ Chargers
- ✓ IDs & insurance documents

Ready. ✓

The graphic features a green background with white and orange text. It includes a list of items to prepare with, each preceded by a green checkmark. The word "Ready." is written twice, once with a green checkmark above it.



GENERAL TOPICS

POLE ATTACHMENT INVOICES

FOR POLE ATTACHMENT RENTALS



- 2024 invoices for pole attachment were sent out on April 2, 2024
- May 2, 2024 was due date
- Notices will be sent out for outstanding balances from CPSE
- “The Agreement and CPS Energy’s Pole Attachment Standards require “Attacher” to pay rent for all attachments connected to CPS Energy’s poles within forty-five (45) days of its receipt of an invoice. Id. § 3.1 and Standards § II.I.1.e. “Attachers” failure to pay the 2024 Rental Invoice within 45 days and in full constitutes a default under section 11.1.4 of the Agreement.”

REGISTRATION & ANNUAL REPORTING FORM A1



- Is **Required** to be completed annually by **September 1st** of every year
- CPS Energy sent reminder to attaching entities on July 1st for compliance
 - Approximately 25% have responded
- Letters of compliance for annual reporting will be sent out by CPS Energy



Attaching Entity Registration & Annual Reporting Form

To be completed annually by September 1st or as required due to contact information changes
Submit form via email to poleattach@cpsenergy.com , Email Subject Line: Annual Registration & Reporting Form

Date Form Submitted to CPS Energy: _____

Attaching Entity General Information	
Attaching Entity Name	
Corporate Address	
Local Address	
Form Submitted by	
Telephone Number	
Email	
Does This Entity Hold a Certificate from the Public Utility Commission of Texas?	Y / N
If Yes, Indicate Certificate Number and Date Received	
Has This Entity Been Granted a Franchise, Licensee Agreement, Permit, or Ordinance by the City of San Antonio?	Y / N
If Yes, Indicate Certificate Number and Date Received	

A1 Registration & Annual Reporting Form

APPROVED ENGINEERING FIRMS



- The PAS team periodically identifies firms that have not submitted applications & then will remove them from the Approved Engineering Firms list
 - The last review was conducted on 9/1
- It takes 90 days for individual credentials to expire
 - The firms removed had been inactive for much longer
- Firms will need to re-apply to become approved, going through the entire approval process as if it were the first time

Engineering Firms that are collectively working on the applications & EMR design are to submit applications together

APPROVED ENGINEERING FIRMS



Engineering	Electrical Distribution Construction	One-Touch Transfer Construction	Vegetation Management
<p> Aeparmia ★ AWE, LLC ★ Binkley & Barfield ★★★ Black & McDonald ★★★ Byers Engineering ★ Cobb Fendley ★★★ DeBauche Comm. & Cons. Serv.LLC ★ ENTRUST ★★★ LJA Telecom ★★★ Merrick & Company ★★★ Mountain, LTD. ★★★ Quanta Utility Eng. Services ★★★ Surveying & Mapping, LLC ★★★ TDC2, LLC ★ TechServ ★★★ Telecom Staffing, LLC ★★★ TexasPro Engineering ★★★ TOP Engineers + ★★★ Tower Engineering Prof., Inc. ★★★ TRC, Inc. ★★★ Utility.Engineering ★★★ </p>	<p> Chain Electric Pike Electric Greenstone Source Power </p>	<p> BComm Constructors, LLC Ervin Cable Construction, LLC Quest Utility Construction, Inc. S&S Cable Communications Tero Technologies Inc. TEXSTAR Enterprises, Inc. TX Superior Communications, LLC JC Communications ADB Companies A2 Total Telecom Services LLC B Robinson Inc. CJ Hood Communications US Aerial HMI Utilities Global Optics </p>	<p> Asplundh Tree Expert Davey Tree Surgery McCoy Tree Surgery </p>

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

★★ Option 2: Make ready engineering

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

PAS GIS TRAINING CLASSES

GENERAL TOPICS



- Future Proposed Trainings – Please submit the name & company to get on the list for the next available training Sep 30- Oct 4th
 - Date: Near future (working on scheduling)
 - Next class is @ capacity, continue to submit for future training sessions
 - Duration: 5 days Mon – Fri
 - Location: Virtual
- For more information, please email poleattach@cpsenergy.com
- The maximum class size is 6 & the minimum is 3
- **You will receive a set-up walkthrough from the GIS team that needs to be completed prior to the course starting**

PAS GIS TRAINING CLASSES

GENERAL TOPICS



- GIS training **DOES NOT** cover:
 - Pole Attachment Standards
 - Distribution Standards and Specifications
 - Pole Attachment Process
 - **Replace Design Training**
- GIS Training **DOES** cover basic GIS design training to submit EMR designs which include:
 - Transformers, Streetlights Etc.
 - Pole change outs (PCO)
 - Setting mid-span poles

CPS Energy led GIS training isn't a replacement for design training

PAS GIS TRAINING CLASSES

POLE APPLICATION PROCESS



Engineering Firms should:

- Make sure that all new &/or replacement employees as well as contractors are trained on
 - Pole Attachment Standards & pole attachment process
 - Electrical make ready designs to streamline the rejections
- Continue to train their employees on the importance of communication regarding worker safety zones & applicable clearances

It's the engineering contractor's responsibility to learn how to fill out the application & understand CPS Energy standards



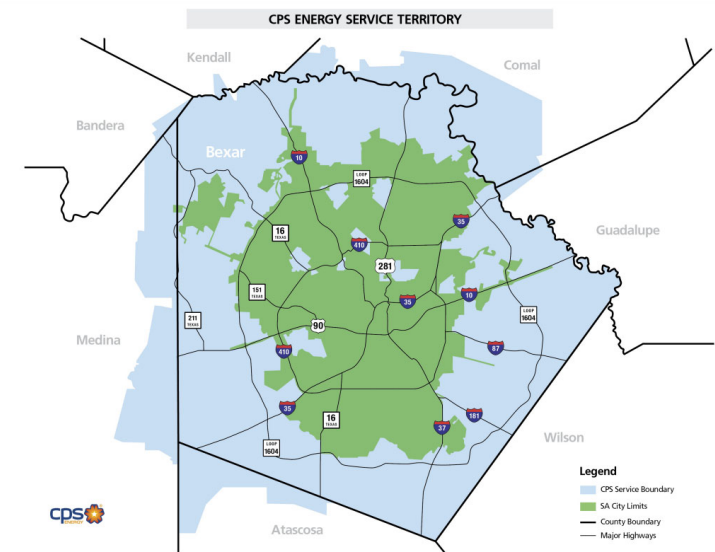
APPLICATIONS

PROACTIVE COMMUNICATION

INCREASE IN APPLICATIONS / POLE COUNT



- Funding Programs – Texas Broadband Development Office
 - Boot
 - Boot II
 - Pole Replacement
 - IIJA BEAD
 - IIJA Digital Opportunity Program
- Other local level programs
- Please proactively communicate with the Pole Attachment Services Department regarding large scale deployments



Counties in CPS Energy Territory

- Atascosa
- Bandera
- Bexar
- Comal
- Guadalupe
- Kendall
- Medina

COMMON APPLICATION REJECTIONS



GENERAL

- Incomplete Submittals
 - Missing one or more of: Pole Photos, WR Sketch, PLA Report, Block Map
- Address not matching between Application, PLA Report, Block Map
- Temporary Attachment Request with incorrect names on the forms
- Incorrect PL#'s on documents or PL#'s not matching across all submitted documents

COMMON APPLICATION REJECTIONS

APPLICATION



- Missing EMR WR #'s on application header
 - Needs to include all WR #'s – MR, UG, UPG
- Header counts incorrect or missing
- PLA count on Application not matching the number of poles in PLA Report
- PLA Pole Capacity Utilizations not matching Application
- Missing midspan measurements in all directions
- Missing communications (existing but not listed)
- Legacy stub pole removal comments not listed

COMMON APPLICATION REJECTIONS

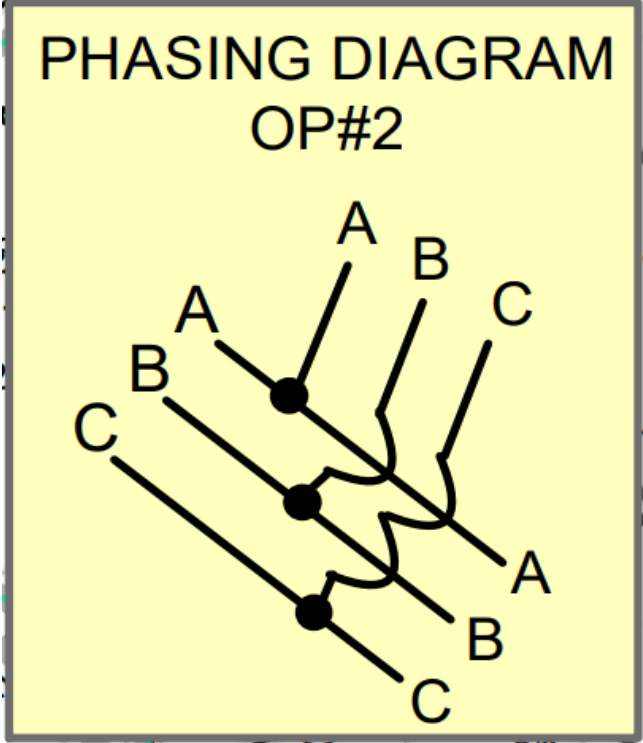
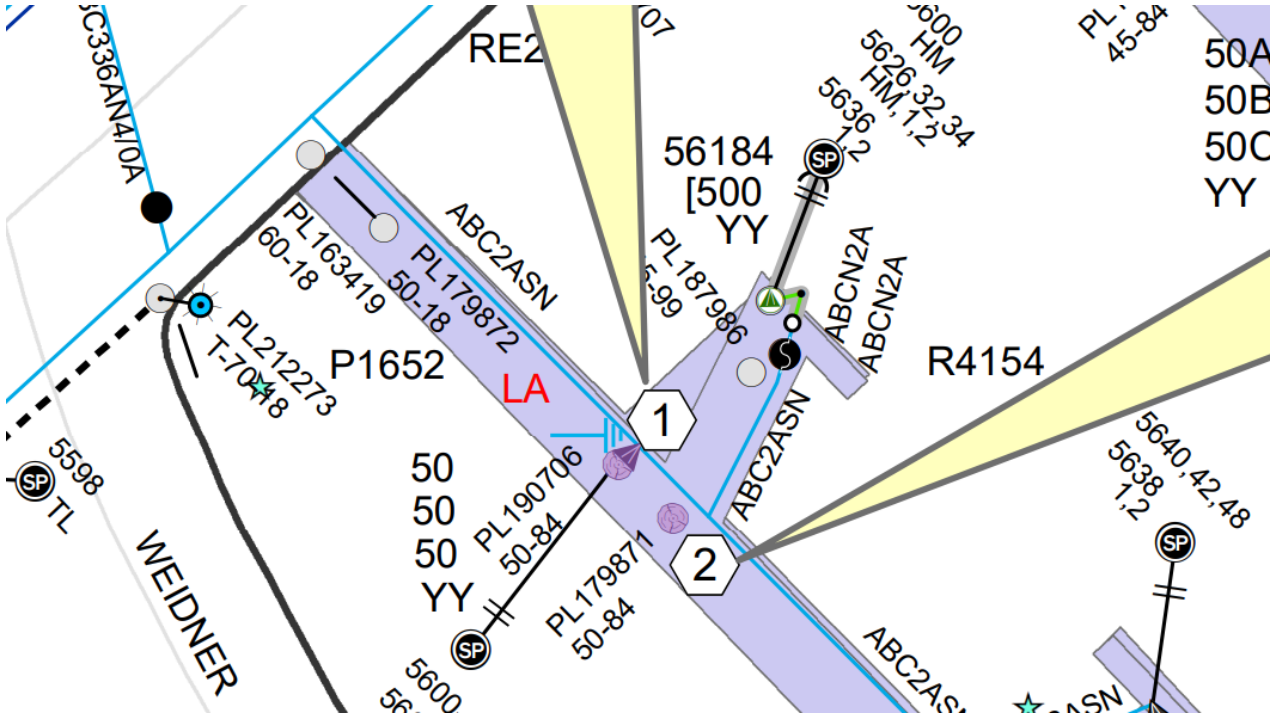
APPLICATION



- Incorrect pole class and heights
- Missing complete list of STL attachment points
 - Top, bottom, lowest portion of drip loop
- Missing proposed midspan heights
- Mislabeling of existing attachments that are N/A (not attached) compared to Attached
- Missing proposed down guys on application which are shown on pole loading analysis
- Missing existing/proposed riser measurements

APPLICATION CONSIDERATIONS

PHASING DIAGRAMS



APPLICATION CONSIDERATIONS

PARKING LOTS

- NESC Rule 217.A.1.a- Protection of structures from vehicular damage
 - Appropriate physical protection shall be provided for supporting structures in established parking areas, in alleys, or next to driveways subject to vehicular traffic abrasion that would materially affect their strength. Physical protection is not required for supporting structures located outside of established parking areas, alleys, or driveways.



APPLICATION CONSIDERATIONS

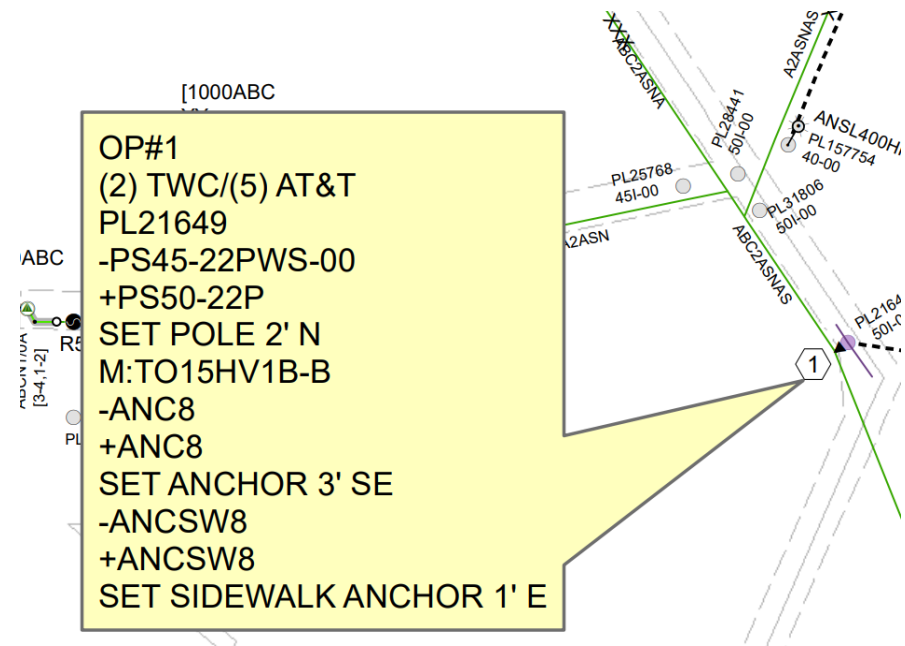
PARKING LOTS



APPLICATION CONSIDERATIONS

TRANSFERS

- CUs/Labor should match the call out boxes and the required make ready to facilitate attachment
- Transformers, streetlights, etc. should be included as transfers as necessary

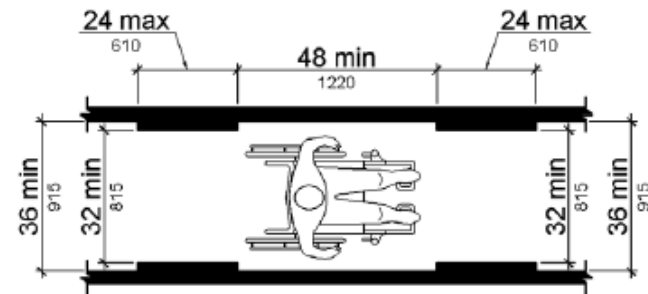


APPLICATION CONSIDERATIONS

ADA COMPLIANT POLE SETS

- A minimum width of 36" is required for sidewalks per the ADA
- Local Cities and Municipalities may have ordinances that exceed 36"
- New poles cannot be set to impede on these walkways

Figure 403.5.1 Clear Width of an Accessible Route



APPLICATION TIMELINE REFRESHER



- **The 21 days ‘Pause’ when applications are sent back for corrections (commonly called quick fixes)**
- **The timeline ‘Resumes’ when the review firm receives the quick fix back**
 - **Subsequent pauses for additional quick fixes**
- **Applicants shall receive a consolidated review for the total application (application form, PLA, EMR, etc.)**
- **Expect to see additional notification for 7-day extensions**

Applications in which the design needs to be fundamentally changed (e.g. additional pole replacements) are handled as rejections.

ASSOCIATED WORK REQUESTS

- All associated work requests should be submitted with the original application submission
- This extends to final approvals at task 5000/5100
- All associated work requests must be paid prior to sending to task 5000/5100
 - The 5000/5100 notification email should include the associated work requests



Failure to submit all associated work requests with the project can result in delays for the applicant company.

DESIGNER RESPONSIBILITY



- **After task 5100 is completed, designer is responsible to progress job**
- **Task 6000 – Designer: Designer is responsible for:**
 - Finalizing the design
 - Coordinates the tree trimming if needed
 - Applies for any pending ROW permits
 - Re-stakes proposed pole locations
 - Prepares for construction
- **Ensure CIAC payment has been received prior to progressing the job to scheduling/construction**

UPGRADE WORK REQUESTS

POLE ATTACHMENT STANDARDS

- Upgrade work requests are strictly for poles identified as defective.
 - **Sole Judgement of CPS Energy**
- Commonly referred to as 'double red tagged poles
- Require CPS Energy PAS manager approval



Depending on severity, these poles may be handled as emergency pole replacements.

UPGRADE WORK REQUESTS

SUMMER 2024 REVIEW

- Specific scenario presented
 - 360° review- the applicant company not attaching in that direction
 - No telecommunications throughout the span in question
 - CPS Energy measured below the pole attachment standards
 - The applicant can otherwise attach without creating a clearance violation
 - Other violations not present



UPGRADE WORK REQUESTS

SUMMER 2024 REVIEW



- Drafted a tentative plan to address these scenarios in the short term
- Plan to incorporate this guidance into the next iteration of the pole attachment standards
- Open to any feedback or any clarity needed around the proposed guidance

UPGRADE WORK REQUESTS



CPS Energy Upgrade Matrix		
	Is an upgrade necessary?	Does upgrade need to be completed before attaching?
THE LOWEST CPS ENERGY FACILITIES BETWEEN 18-22'	No	No
THE LOWEST CPS ENERGY FACILITIES BETWEEN 16.5-18'	Yes	No
LOWEST CPS ENERGY FACILITIES ARE BELOW 16.5'	Yes	Yes

Matrix for scenarios described on slide 26. Upgrade work requests require CPS Energy approval.

OVERHEAD SERVICE CROSSINGS

OH SERVICE CROSSINGS AND CROSSING TO CUSTOMER OWNED METER POLE

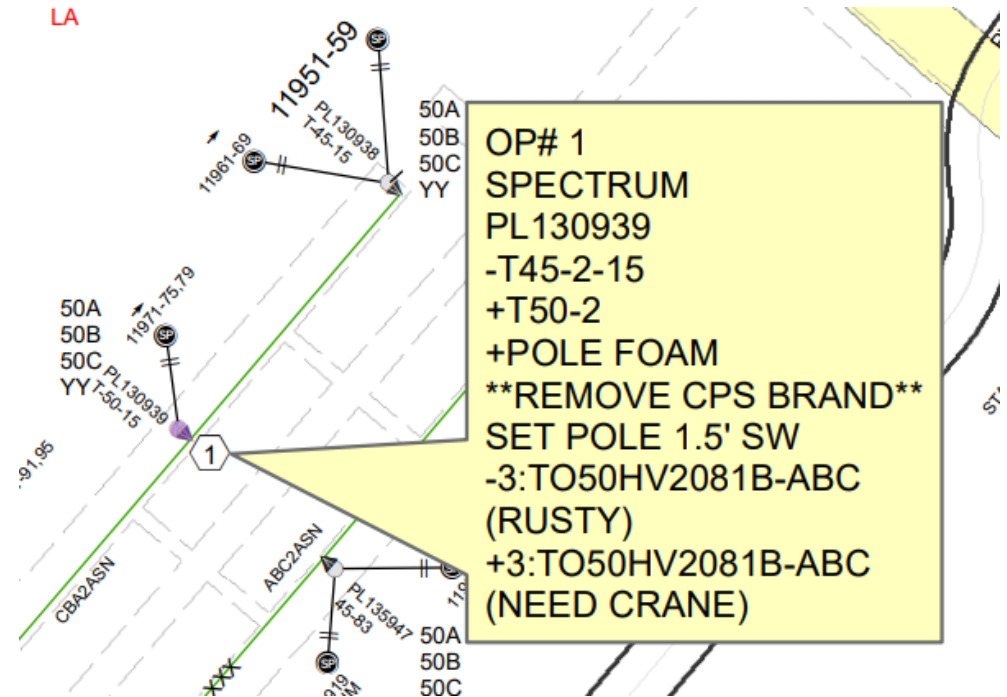
- Consolidate these locations on application submission
- These crossings do not need to be addressed as part of the application submission



Applicable to Electric Service only. If there are between clearances between CPS Energy and telecommunications, these need to be addressed.

AT&T OWNED POLES REPLACEMENT

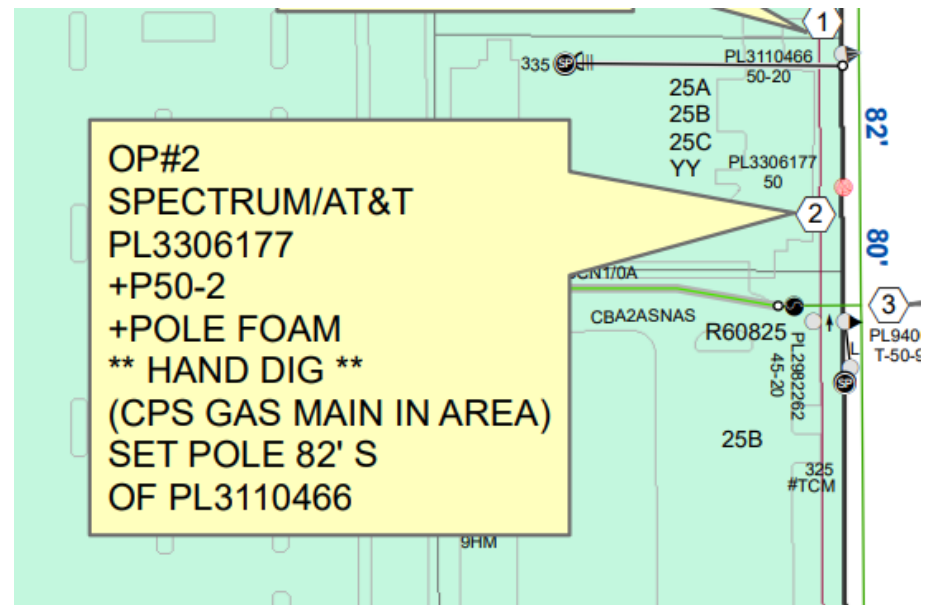
- The AT&T Occupancy Permit is insufficient to move forward with an AT&T pole changeout
- Required to have approval from AT&T for CPS Energy to change out an AT&T owned pole
- If approved, sketch should note that it is a T-pole as well as call out to remove CPS Energy brand



MIDSPAN POLES – UPDATE

PARAMETERS FOR MIDSPAN POLE

- Midspan poles are an option for span lengths greater than 250'
- Best effort should be made to split the span
 - Proper placements (not in the middle of driveways, right in front of customer windows, etc.)
 - No cascading for midspan poles
- Exceptions will be taken into consideration
 - Riser poles, AT&T poles, RR crossings, etc.



POLE PHOTOS

- **All applications, including overlashes, must have up to date photo(s) from within last 6 months**
 - May need a new photo if field conditions change, e.g.:
 - New attachment
 - Streetlight
- **Combine photos into a single PDF**
- **No Google Photos**



Taken in the field



Google StreetView

PROCESS STANDARDS

- Attachers must inform CPS Energy/Contractors when attachment construction is completed
 - Notice is required to initiate post construction inspection
 - Final permit will not be received until passing post construction inspection
- Wireline routes should follow existing CPS Energy pole lines



Pole line with communications attached

COMMUNICATION FIBER PLACEMENT

- Attachers shall place their fiber on the same side of the pole as CPS Energy Fiber
 - Safety issues – 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 allows for a simpler and smoother transition when replacing poles
 - Reliability issue – longer outage times to restore power during emergencies



Communications don't follow existing power

- Wireline routes should follow existing CPS Energy pole lines

AS-BUILT CLEAN UP



- CPS Energy is running weekly reports for work requests in As-Built Status
 1. Responsible designer shall review documents attached at task 16500 for As-Builts
 2. After entering and completing the as-builts, send revision for as-built verification through GIS
 3. In ARM, at Task 17000, add supervisor initials CZ or CSTE
 - "Completed on 03/07/2024 submitted to Entrust/TRC by SWAY"
- If the applicable designer has left the approved engineering firm's company, it is that engineering firm's responsibility to submit
- Supervisor that completes as-built verification shall notify designer that work request is closed



REQUIREMENTS

TAGGING – UPDATE PHOTO

- Attachers have tagging requirements for
 - Attachments
 - Banner Attachments
 - Overlashings
 - Wireless installations
 - Excludes Service Drops
- Minimum of 95% of attachments need to be tagged
 - upon non-compliance, attaching entities will be placed on a tagging plan



Proper Tag

TAGGING

TAGGING PLAN



- Should CPS Energy discover there are > 5% of total attachments not tagged (excluding service drops)
- Within 2 months, must provide CPS Energy a written tagging schedule to tag the attachments
- Must be completed within 18 months for Attachments, Overlashings
- Must be completed within 2 months for Wireless Installations and Banner Attachments

NJUNS NOTIFICATIONS



- CPS Energy utilizes different types of NJUNS notifications:
 - Pole Transfers (PT) tickets
 - Violation (VIO) tickets
 - New (New) tickets
- NJUNS training materials can be found on the training page & includes:
 - NJUNS User's guide
 - Training Videos
 - Best Practices

The next web-based training can be found at the [NJUNS Training page](#), where you can subscribe to receive notifications

NJUNS PROCESS & NEXT TO GO



- Attachers need to query NJUNS regularly to keep up with their Next to Go steps, PT tickets too
- Violation NTG steps will have a 5-day period to address
 - Safety driven initiative
- As was stated earlier, NJUNS registration is a requirement for **ALL** attaching entities

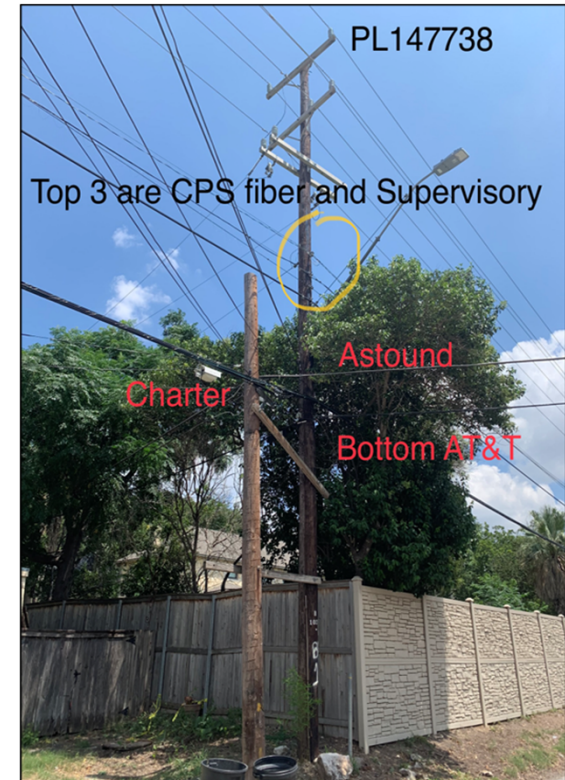


Regularly checking NTG reporting is important to staying clear of violations & holding up jobs for other entities

COMMUNICATION TRANSFERS & SAFETY CONCERNS



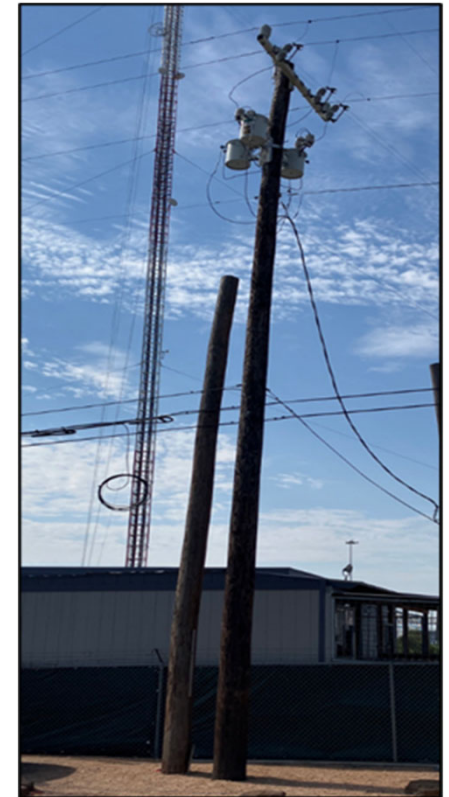
- CPS Energy continues to stress the importance of communications transfers
- CPS Energy receives numerous complaints per year regarding double wood & braced poles
- If NJUNS Tickets are not created, then there are multiple stub poles which pose a safety threat & unpleasant sight for the community



Stub Pole

NJUNS- PULL POLE STEPS

- PAS team is supporting Resource Management by separating the Next-to-Go tickets for 'Pull Pole' steps
- The NJUNS report is broken down into individual grid squares to consolidate pole removals to a single graphical area to assist contractors
- After the pole is removed, Resource Management to complete pull pole step so NJUNS ticket auto-closes



Pull Pole



LIDAR

LIDAR DATA & LOW COMMUNICATION LINES ISSUES

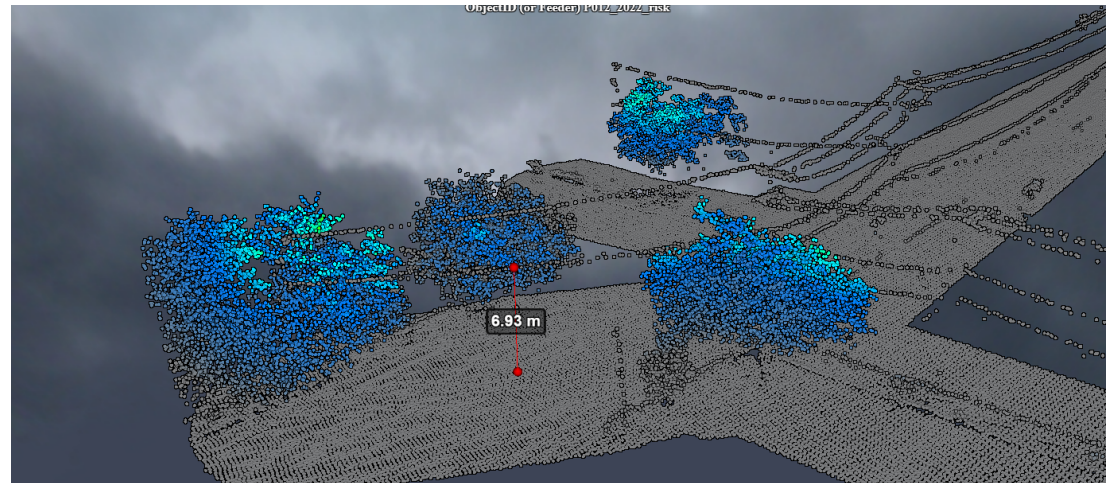


- LiDAR (Light **D**etection **A**nd **R**anging) traditionally used to map out vegetation to identify areas needing trimming
- Identifying low hanging wires to prevent vehicular strikes
 - Safety
 - Reliability
- Currently targeting street crossings that go below NESC clearances (15.5 ft)
- Only where Truck traffic is possible
- Doesn't capture everything

OUTAGES AS A RESULT OF LOW COMMUNICATIONS LINES



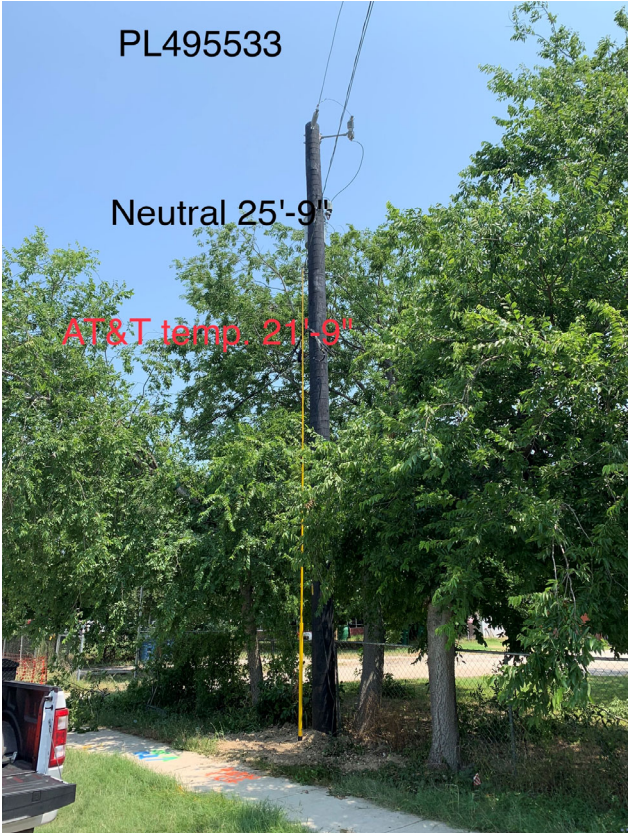
5827 Padre Crossing



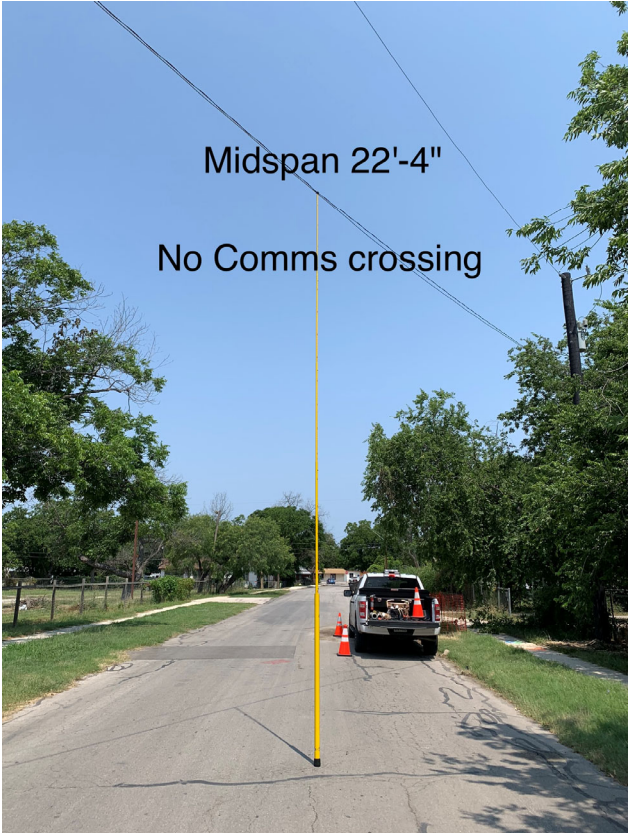
LiDAR 3D View of the Same Crossing

LiDAR did not identify this crossing as a violation. The communication lines were not captured in the data.

OUTAGES AS A RESULT OF LOW COMMUNICATIONS LINES



5827 Padre Dr



5827 Padre Dr Crossing

LIDAR- NJUNS VIOLATIONS

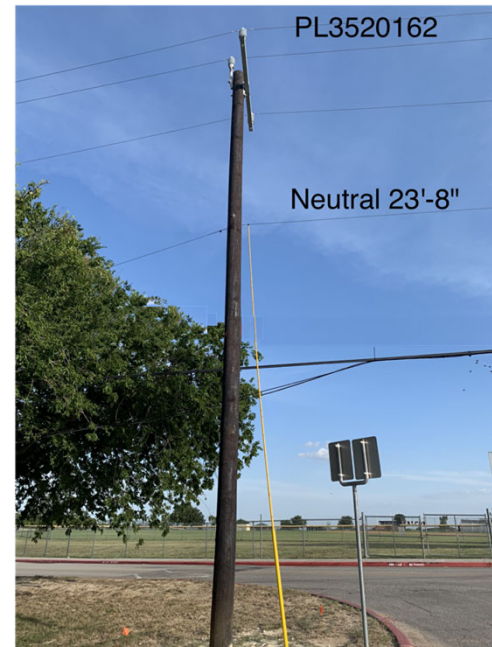


- Will be identified as violations (VIO) in NJUNS, requiring accelerated response times – emails outside of NJUNS are also sent as a friendly 'heads up'
- Currently, these are the only tickets being issued as VIO
- **Service drops that violate height requirements will be sent as violation tickets but will have a priority level of 3**
 - These pose a smaller risk of bringing down poles, but are still in danger of being snagged and can get wrapped in the primary

LIDAR

BY THE NUMBERS

- The LiDAR Project has resulted in
 - 49 total NJUNS Tickets created
 - 41 total WRs in flight to make corrections
- An emphasis has been placed on locations < 14 ft
 - 33 NJUNS Tickets created
 - 30 WRs created to address problems





ANNOUNCEMENTS

POLE ATTACHMENT INVENTORY



- Finalizing contract negotiations
- Expectation is for the inventory to be completed over 18 months
- Inventory is to account for pole attachments only, other facilities will not be inventoried
- Kickoff meeting with attaching entities

FUTURE DATES & GIS TRAINING



- Next Quarterly Dates:
 - 05 December 2024
- Contact poleattach@cpsenergy.com to get on the list for GIS training



THANK YOU