



WELCOME

**CPS Energy
Quarterly Pole Attachment
Workshop**

December 1, 2022

Confidential Information Property of CPS Energy

<https://www.youtube.com/watch?v=Q35hIG5tuWg>

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

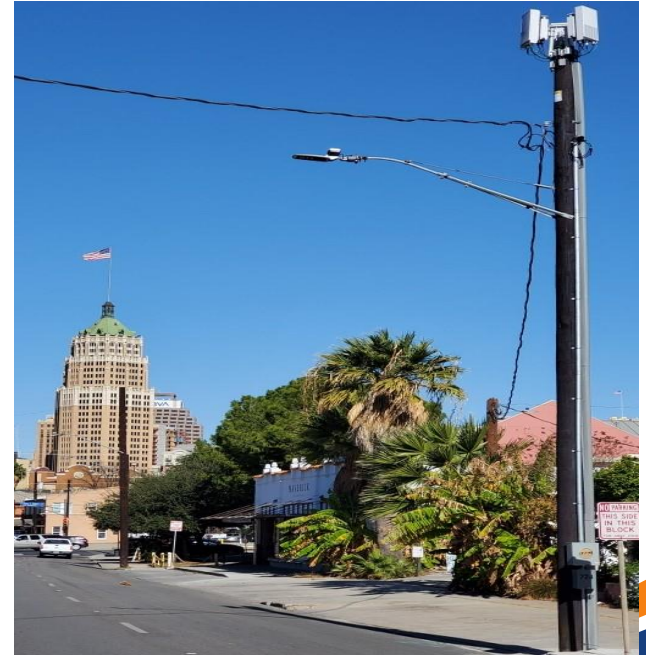
- Mock up
- Wireless Antenna Violations

5. Downtown/Residential Streetlight Project Updates

6. CPS Energy Pole Inventory

7. Customer Engineering Updates

8. Questions



Pole Attachment Services Program Project Manager, Jeremy Ortega

- Jeremy is the pole attachment services program project manager
- Jeremy previously held the project manager position for the City of San Antonio
- jvortega@cpsenergy.com




GENERAL TOPICS

POLE ATTACHMENT STANDARDS – APPENDIX A




- Attaching Entities are required to submit Appendix A “Attaching Entity Registration & Annual Reporting Form” to notify CPS Energy of confirm the contact information on file is valid by June 1 of every year.



CPS Energy
Pole Attachment Standards

Appendix A: CPS Energy Attaching Entity Registration & Annual Reporting Form



Attaching Entity Registration & Annual Reporting Form

To be completed annually by June 1 or as required due to contact information changes

Submit form via email to mlopez@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 | |

| | |
|---|-------|
| Has This Entity Been Granted a Franchise, Licensee Agreement, Permit, or Ordinance by a Suburban City in the CPS Energy Service Area? | Y / N |
| If Yes, Indicate City, Certificate Number and Date Received | |

| | |
|--|-------|
| Is This Entity an Infrastructure Provider as Defined by the Standards? | Y / N |
| If Yes, Please Identify All Infrastructure Provider Sublicensees Under Contract | |

ANNUAL POLE ATTACHMENT INVOICE



- CPS Energy will be sending out letters to the attaching entities that have not paid the 2022 invoices
- CPS Energy will be sending the 2023 Pole Attachment Invoices to each Attaching Entities having permitted Wireline, Wireless (includes downtown and residential streetlights) and Banner Attachments in late January or early February 2023
- CPS Energy is required to use the FCC telecom pole attachment rate formula to set the annual rates
- Please send any updates to the billing address if anything has changed or need to be updated before December 15, 2022
- Under the Pole Attachment Standards Section II, the annual pole attachment rental fees are due within 45 days. If payment is not received within 45 days, then interest of 1.17% per month will be charged until the payment is made. If payment is not received within 60 days, then CPS Energy will suspend processing applications until payment is paid in full.

POLE ATTACHMENT SERVICES WEBSITE



- Register to receive quarterly meeting invites
- Updates on the pole attachment standards revisions
- Future quarterly workshops will be posted

My Home My Business Construction & Renovation Work With Us Customer Support About Us [Ways to Pay](#) [Contact Us](#)

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 for comment the revised Pole Attachment Standards, Version 6.0 (the "Standards") and the **Joint Trench Agreement** on Friday, June 10, 2022. CPS Energy continues to work with stakeholders to ensure the Pole Attachment Standards improve a more streamlined process and operations for all attaching entities.

Please submit all formal written comments using **Form B18, Pole Attachment Standards Revision Request (PASRR)** Comment Form, [via email](#) to polettatch@cpsenergy.com. Comments will be accepted through Friday, July 8, 2022.



Subscribe to receive email updates:

If you would like to receive emails regarding CPS Energy's Pole Attachment Program, please click on the button below to register your contact information.

[Register Contact Info Here](#)

Previous Meetings/Workshops

- 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 19 2019
- Quarterly Pole Attachment Workshop: May 9 2019
- Quarterly Pole Attachment Workshop: Feb 7 2019
- Quarterly Pole Attachment Workshop: Nov 8 2018
- Quarterly Pole Attachment Workshop: Jul 26 2018
- Quarterly Pole Attachment Workshop: May 10 2018
- Quarterly Pole Attachment Workshop: Jan 25 2018

Pole Attachment Standards

- [Pole Attachment Standards - V6 - DRAFT June 10 2022](#)
- [Joint Trench Agreement - Draft June 10 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 \(Revised 1-7-2020\)](#)

Pro Forma Agreements

- [Standard Pole Attachment Agreement \(Pro-Forma\) Revised July 2016](#)
- [Wireless Addendum Final Revised Dec 2016](#)
- [Wireless Installation Agreement Final Revised Dec 2016](#)

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 PLU Client file links.

Forms

- [A1 Registration and Annual Reporting Form](#)
- [B1 Standard Pole Attachment Application](#)
- [B2 Standard Wireless Installation Application](#)
- [B3 Banner Attachment Application](#)
- [B4 Request for Pre-Certification of Wireless System](#)
- [B5 Request for Waiver of Applicable Engineering Standards](#)
- [B7 Request for Temporary Attachment](#)
- [B8 Completion of Attaching Entity Construction](#)
- [B15 Pole Attachment Standards Revision Request \(PASRR\)](#)

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 Lists 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 CONTRACTORS



- Engineering companies are currently at our maximum approval limit
- Engineering companies seeking approval will be placed on a waiting list
- CPS Energy will conduct reviews of companies to remove any companies not submitting pole attachment applications every six months
 - CPS Energy will be reaching out to any affected firms next month
- Companies removed will have to re-submit a letter from their Attaching Entity stating they will be doing work for them

APPROVED POLE ATTACHMENT ENGINEERING CONTRACTORS



- CPS Energy will send new applicant engineering companies a “User Access Agreement”
 - Must be signed and have it executed before approval is made and added as an approved engineering company
- Engineering companies **“MUST”** notify CPS Energy within 24 hours on employee termination/leave

POLE ATTACHMENT SERVICES - ELECTRICAL MAKE READY TRAINING CLASSES



- Future Proposed Trainings – Please submit the name and company to get on the list for next available training
 - Date? (Possible class in February)
 - Duration: 5 days – Mon - Fri
 - Location – Virtual
- For more information please email poleattach@cpsenergy.com



ELECTRICAL MAKE READY TRAINING CLASSES CONT...



- GIS training does not make the trainee experts about pole attachment standards, it only help the trainee understand how to use the GIS program
- The training is to do the basic GIS designs that Pole Attachment Services needs in order to submit Electrical Make Ready Designs which includes pole changeouts, moving neutrals and raising of drip loops
- It may take the beginning designer at least 6 months to really understand the electrical make ready design part of the process
- GIS training doesn't include how to fill out the pole attachment application and understanding the pole attachment standards
- We need to work with the new trainees to understand the process for pole attachment applications, pole attachment standards and the electrical make ready designs to streamline the rejections.
- Engineering firms continue to have trained employees leave and new ones needing training

GIS DESIGN PAGE EXAMPLES



| | | | | | | | | | | | | | | |
|---|---|--|--|---|---|---|---|---|---|---|---|---|---|---|
| <p>CONSTRUCTION COMPLETED</p> <p>MP# _____</p> <p>SCALE _____</p> <p>COUNT _____</p> <p>CIR _____</p> <p>FERG MAP PAGE 583 - B1</p> | OVERHEAD ELECTRIC DESIGN | | PROJECT# E-0070 | | | | | | | | | | | |
| | WR# | CLIENT, Application #, App Name, WO Type | | | | | | | | | | | | |
| | DESIGNER | Phone # | 10/14/2019 | | | | | | | | | | | |
| | SUPV | Phone # | Job Description: MAKE READY (1) | | | | | | | | | | | |
| | 1 OF 1 | | ADDRESS: 332 W. SUNSET RD. SAN ANTONIO, TX | | | | | | | | | | | |
| | E.S.D. | | | | | | | | | | | | | |
| | X 2136448.000000 | Y 13732284.000000 | A023 1" = 100' | | | | | | | | | | | |
| | <table border="1"> <tr> <td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>0</td> </tr> </table> | | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | | | |
| | ESTIMATED MAN HOURS: | | SKETCH SIZE 11 X 17 1" = 100' | | | | | | | | | | | |

The Designer must check for any other work order polygons in GIS to ensure no other jobs are replacing the pole or poles your customer is proposing to attach too

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)

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

Header Block Examples at Top of GIS Designs

COMMON APPLICATION REJECTIONS



- **Application missing required information**
 - CPS Energy pole number (PL#) missing on application
 - 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 REV#

COMMON POLE LOADING ANALYSIS REJECTIONS



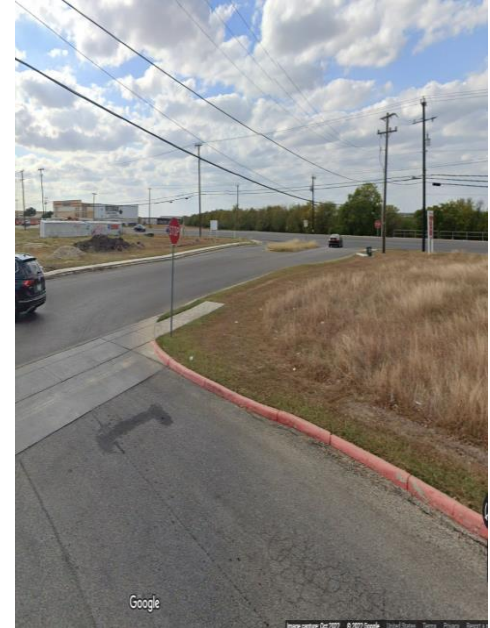
- Should include Pole Loading Analysis Report(s) Coversheet stamped by a Professional Engineer or Each Individual Pole Loading Analysis Report is to be also stamped
- Pole Information on Pole Loading Analysis Reports should reflect that of Application height information. Pole Capacity Utilization Percentage should also match on Application and most UTD Pole Loading Analysis Reports
- **Correct Wire Sizes/Types, Equipment Sizes/Types, Tensions, and Ownership needs to be utilized**
- Anchor(s)/Downguy(s) at appropriate Lead Lengths/Attachment Heights, as shown on Application. (If Applicable)
- Pole Number, Class/Height, Species, and Construction Grade, shown as it exists or is Proposed on Application
- Note: CPSE Pole Attachment Standards state that "PLA Analysis shall be valid for a time period of no longer than six (6) months from the time of Application Submission. After this six (6) month period, a new PLA analysis will be required." (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



- Notice of new attachment construction completion must be submitted to CPS Energy inbox poleapplications@cpsenergy.com within 90 days in order for CPS Energy to do the post inspection and issue the pole attachment permit
- If an extension is needed after NTP is received, due to not being able to build; the request needs to be sent in a timely manner to CPS Pole Applications inbox poleapplications@cpsenergy.com
 - **Courtesy emails will be sent out as a reminder that the 90 day post inspection is past due**
 - **Auto-post-fiber-inspection will be implemented if no post construction communication has been sent to EN Engineering and/or TRC**
- **Wireless post inspections is required to notify TRC/EN Engineering to do the post inspections before the meter is installed to avoid an outage and higher cost to remedy the gig**

WORK MANAGER







WORK MANAGER PROCESS

- Designer is responsible to add the initials of the responsible person to ALL task and responsible to push the design from start until it is closed out.
- All task must be completed or bypassed when not needed.

| 1000 | Com | M | REQ | 1 | Create Work Request |
|------|---------|---|-------|---|---|
| 1040 | Working | M | REQ | | Review WR Details / Assign Designer - Pro |
| 2280 | Pending | M | DSGN | | Perform Field Survey / Obtain Data |
| 2360 | Pending | M | DSGN | | Design Job |
| 2400 | Pending | M | DSGN | | Request ROW / Easement From Customer |
| 2445 | Pending | M | DSGN | | Obtain Permit(s) |
| 2460 | Pending | M | DSGN | | Perform Supervisor Review of Design |
| 2550 | Pending | M | DSGN | | Submit Design to Distribution Planning |
| 2570 | Pending | M | DSGN | | Obtain Distribution Planning Approval |
| 2605 | Pending | M | DSGN | | Send Contribution Charges to Customer |
| 2670 | Pending | M | DSGN | | Obtain ROW |
| 2680 | Pending | M | DSGN | | Indicate Official Revision |
| 5000 | Pending | M | APPR | | Perform Supervisor Approval |
| 5100 | Pending | M | APPR | | Approve Work Request |
| 6000 | Pending | M | DESFN | | Finalize and Lock Down Design |
| 9200 | Pending | M | CIAC | | Receive Customer Pre-Work Payment |

- Major tasks:
- T2280-Designer: Field work (locates, staked locations)
- T2360 -Designer: GIS design
- T2460- Supervisor: Designer must notify supervisor by email that EMR design is ready for review. Supervisor review design, create CIAC invoice and send to client at T2605
- T9200-Designer: designer get notified by auto email when CIAC payment received
- T2680-Designer: if EMR project is completed (all permits attached, PE seal, etc) designer IND of Revision in GIS and must send an email to supervisor that design is ready for Final approval
- T5000/5100-Supervisor: Final approval
- T6000-Designer: designer finalizing design, coordinate tree trimming if needed, apply for any pending ROW permits, re-stake proposed pole locations, prepare for construction

WORK MANAGER PROCESS CONT...

| | | | | | | |
|--|-------|---------|---|-------|--|---|
|  | 11100 | Pending | M | REL | | Accept Work Request for Construction |
|  | 12500 | Pending | M | SCH | | Schedule Work |
|  | 12800 | Pending | M | CONST | | Send Scheduled Date to Customer |
|  | 16100 | Pending | M | CONST | | Perform Field Work |
|  | 16500 | Pending | M | ABRPT | | Perform Initial Material Reconciliation |
|  | 16900 | Pending | M | ABRPT | | Receive Customer Post-Work Payment |
|  | 17000 | Pending | M | ABRPT | | Enter As-Builts |
|  | 18200 | Pending | M | CLOSE | | Close Work Request |

- Major tasks (cont'd):
- T11100-Designer: releasing design for construction, send email to scheduler.
- T12500/12800/16100-scheduler and construction
- T16500-Designer: email supervisor requesting NTP
- T17000_Designer: designer enters As Builts and submit it to supervisor for verification by email
- T18200: Work Order is closed

WORK MANAGER TASK STRUCTURE



- Task 2460 for EN Engineering is now Zsofia Cassidy – CZ is her initials and TRC is Elizabeth Teran- Delgado - TDEL
- Permit attachments expected at Task 2360
 - **Design for Review (Preliminary)**
 - **Design for Construction (Final)**
 - 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 (**should be attached @ Task 2360**)
 - TXDOT Approval (if necessary)
 - City/County Approvals (if necessary)

Attachments for Work Request/Task 40292154-2360

| Refresh Date | Attachment File Name | Job Instruction? | Flexible Report? | Web Viewable? | Plotter? | Description | Template Name | Pat |
|--------------|---|--------------------------|--------------------------|-------------------------------------|--------------------------|--------------------------------------|---------------|-----|
| | 40292154_2_201905071113_5-07-2019\11_13_ | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | DO NOT USE | | Wcp |
| | 40292154_2_201906051704_6-05-2019\17_04_ | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | DO NOT USE | | Wcp |
| | 40292154_2_201907021335_7-02-2019\13_35_ | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | READY FOR CONSTRUCTION | | Wcp |
| | 40292154_2_201908071125_8-07-2019\11_25_ | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | DO NOT USE | | Wcp |
| | 519 N Medina - Admin COA, Power Pole Replac | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Certificate of Appropriateness - COA | | Wcp |
| | 691327603_LONE STAR 811.pdf | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 811 TICKET | | Wcp |
| | E:\NC SELECT\TRAIL FOR CONSTRUCTION\1\1\ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | Wcp |
| | GAS MAP.pdf | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | CPS GAS MAP | | Wcp |
| | InternetMail_SADT_MORALES_HAVEN_SC Env | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ENVIRONMENTAL CHECKLIST EMAIL | | Wcp |
| | REC_156580.pdf | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | SAWS RECYCLE MAP | | Wcp |
| | SWR_156580.pdf | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | SAWS SEWER MAP | | Wcp |
| | WTR_156580.pdf | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | SAWS WATER MAP | | Wcp |

OK New From... Attach File... Copy Attachment... Delete Refresh Open Help

TEMPORARY ATTACHMENT FORM (B7) & WAIVER REQUEST



- Approved engineering company must coordinate site meeting with EN Engineering 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 must be submitted with the pole attachment application
 - The signed temporary attachment 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



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



February 06, 2019

Extenet Systems Inc.
Don Couch
Ronnie Teaff

RE: Occupancy Permit

Customer Application: SA015
Occupancy Permit: 2018-CS-TX-010175
Location: SAN ANTONIO, TX 78205
Project Number: A01G7Y2
Permit Date: 2/5/2019

AT&T has confirmed that the structure(s) is available for your use.

This is your approved occupancy permit. You have 12 months to complete your construction work.

Once your work is completed please fill out and return the attached Applicant Notice of Completion form and send it to BRIAN BEDNARZ, who can be reached on 210-729-8410. BRIAN BEDNARZ will make the necessary arrangements to have the post inspection work completed.

Rental will be billed on Extenet Systems Inc. account for Texas. Per your occupancy request, our records will reflect an occupancy of the following.

| Structure Type | Permit Quantity |
|----------------|-----------------|
| Pole | 1 |

If either the permit quantity or billing account is not correct, please notify us immediately, via email at: BB1308@att.com. Any unreported or unauthorized occupancy will be immediately subject to the appropriate penalty fines and removal actions as described in the associated tariff or agreement for the state involved.

Identification tags are required on your facilities at each point of contact (at each pole or manhole). The failure to install these identification tags may result in the inability to notify you in the event of a major failure or structure relocation.

Thank you,

BRIAN BEDNARZ
Manager - Structure Access
Attachments

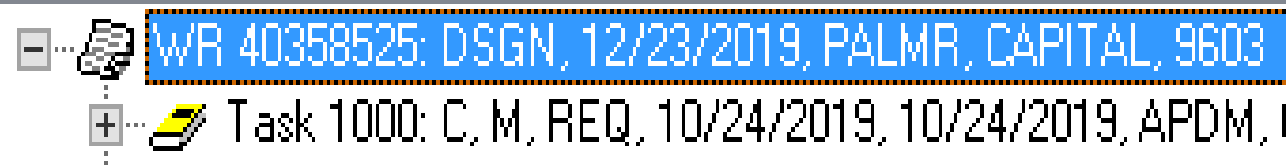


DESIGNER RESPONSIBILITY

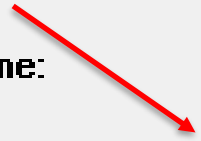


The Designer (design company) is the owner of the Work Order and GIS Design from creation through AsBUILTs

- Make sure designer's initials are indicated under Work Request Owner to ensure delivery of emails as tasks are completed



| | | | |
|----------|------------|-------------|-------|
| WR No: | 40358525 | WR Type: | PALMR |
| WR Name: | [REDACTED] | | |
| Owner: | NK2 | Jesse Lopez | |



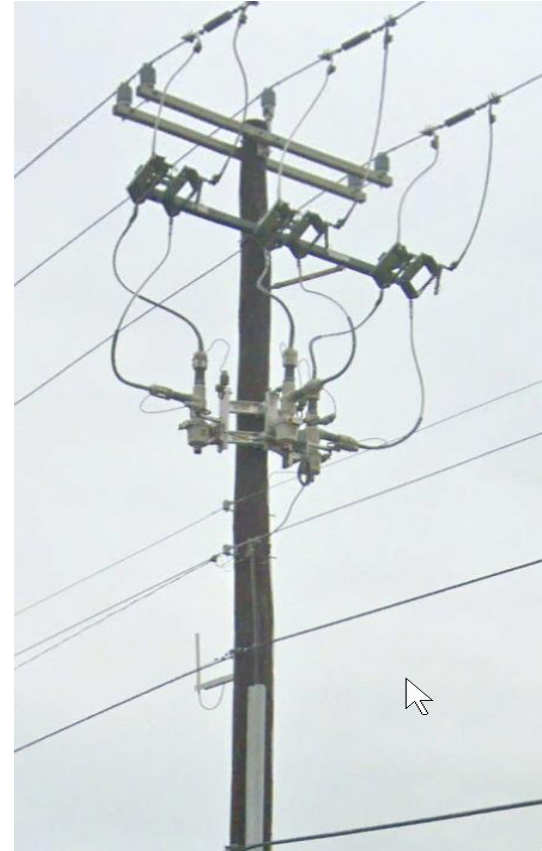
DESIGNER RESPONSIBILITIES CONT...

- **Designer (design company) is 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**

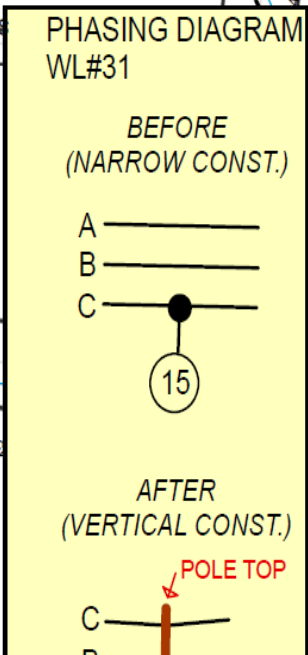
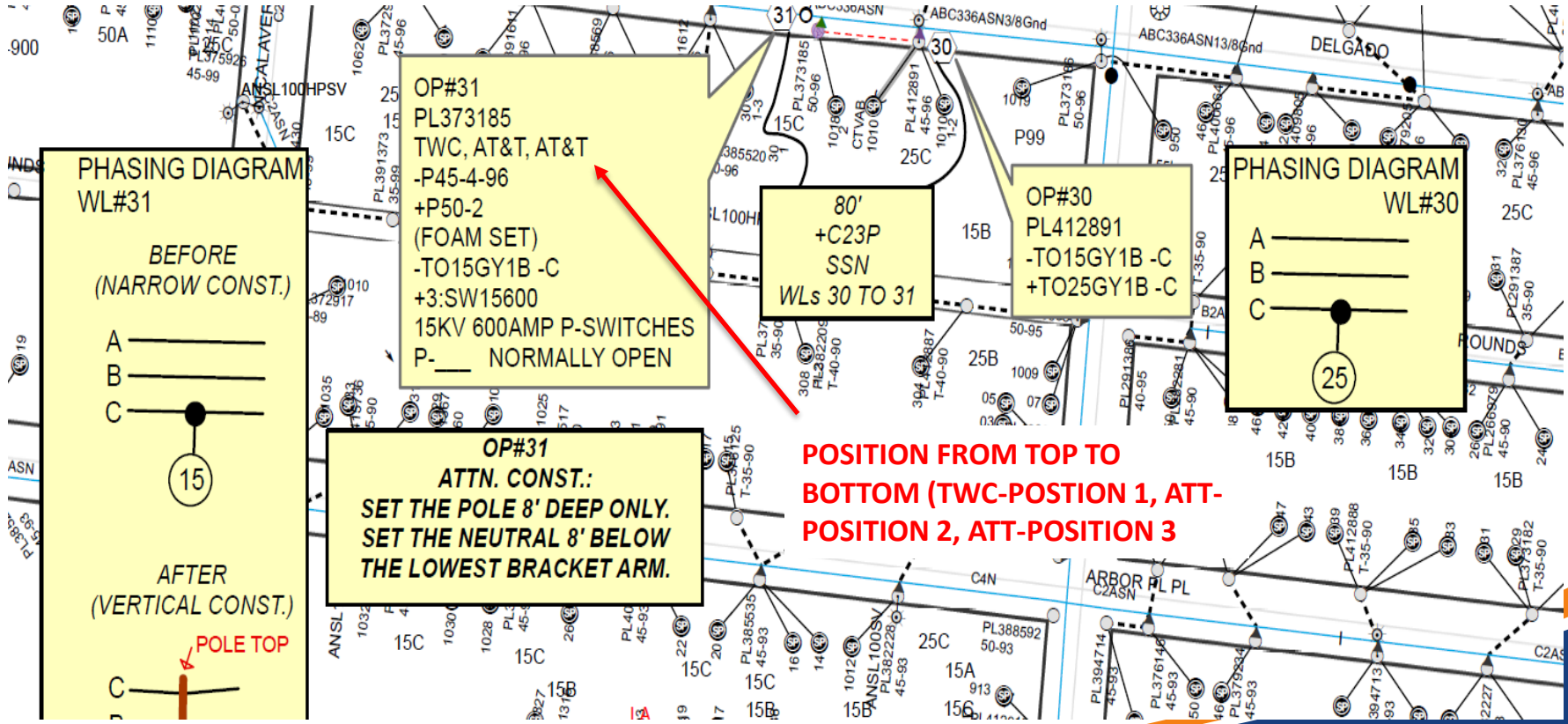


DESIGNER RESPONSIBILITIES CONT...

- **Designer (design company) 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**



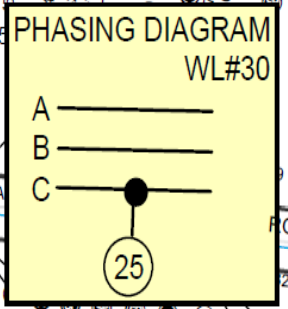
JOB SKETCHES



OP#31
 PL373185
 TWC, AT&T, AT&T
 -P45-4-96
 +P50-2
 (FOAM SET)
 -TO15GY1B -C
 +3:SW15600
 15KV 600AMP P-SWITCHES
 P-___ NORMALLY OPEN

80'
 +C23P
 SSN
 WLS 30 TO 31

OP#30
 PL412891
 -TO15GY1B -C
 +TO25GY1B -C



OP#31
 ATTN. CONST.:
 SET THE POLE 8' DEEP ONLY.
 SET THE NEUTRAL 8' BELOW
 THE LOWEST BRACKET ARM.

**POSITION FROM TOP TO
 BOTTOM (TWC-POSITION 1, ATT-
 POSITION 2, ATT-POSITION 3**

WIRELINER ATTACHMENTS

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
- CPS Energy contractors will contact and coordinate the attaching entities to transfer their facilities as soon as possible
- If attachments are simple transfers, CPS Energy may use our approved construction contractors to transfer and pull the old poles



COMMUNICATION TRANSFERS FOR CIVIC IMPROVEMENT & TXDOT PROJECTS



- Attaching entities must follow all pole attachment standards and processes for any civic improvement or TXDOT project
- 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

Process Standards

- Attachers must inform CPS/Contractors when fiber construction is complete
- Wireline routes should follow existing CPS Energy pole lines



WIRELESS ATTACHMENTS

Wireless Installation: CPS Energy Pole

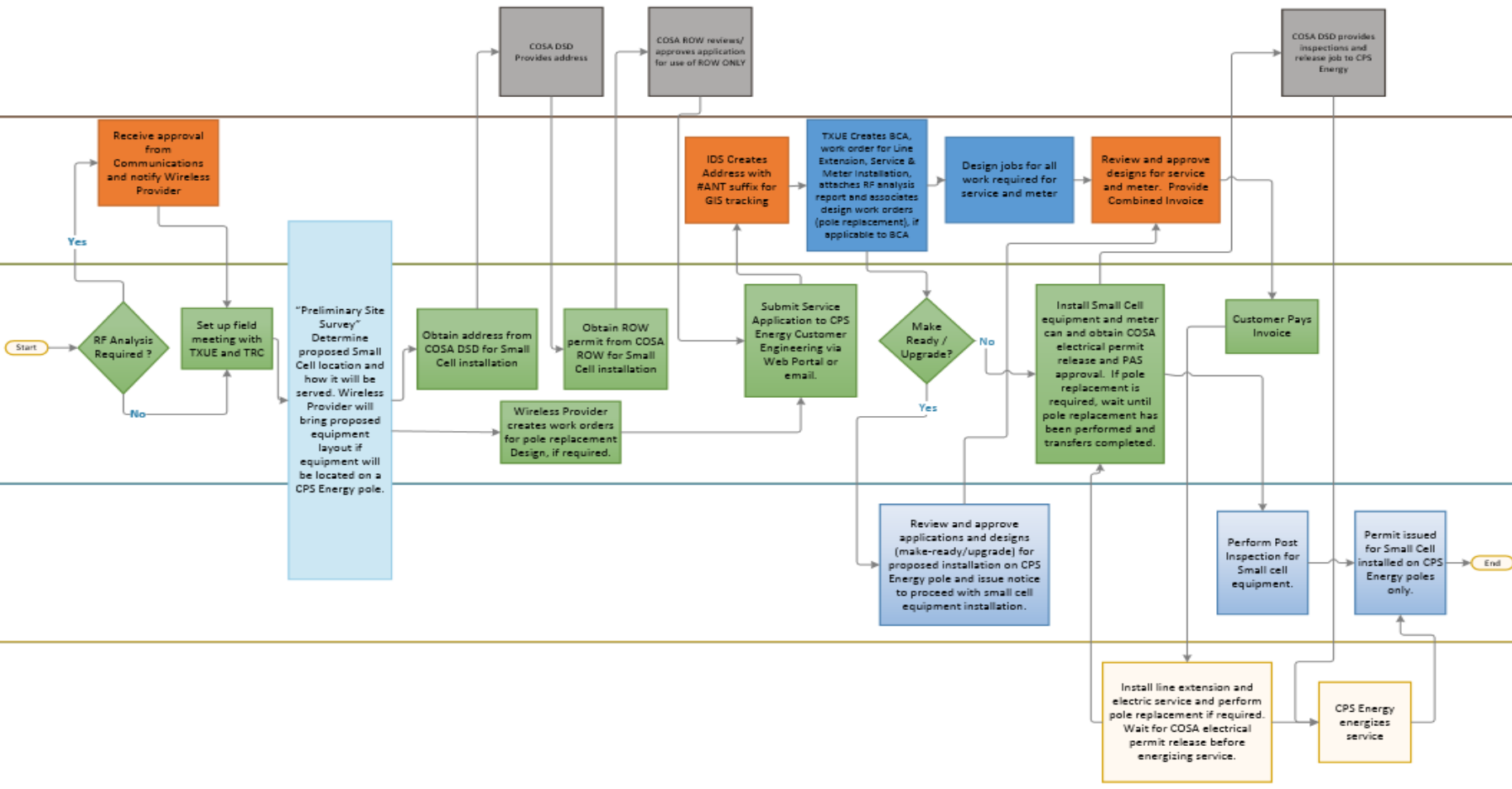
COSA ROW Dept
Development Services Dept.

CPS Energy
Customer engineering

Wireless Provider

CPS Energy
Pole Attachment Services

Construction



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 3 SMALL CELL MOCK-UP INSTALLATION FOR 4G/5G RADIOS



CPS Wood Pole



CPS Wood Pole "BEFORE"



CPS Wood Pole "AFTER"

WIRELESS ANTENNA INSTALLATION VIOLATIONS

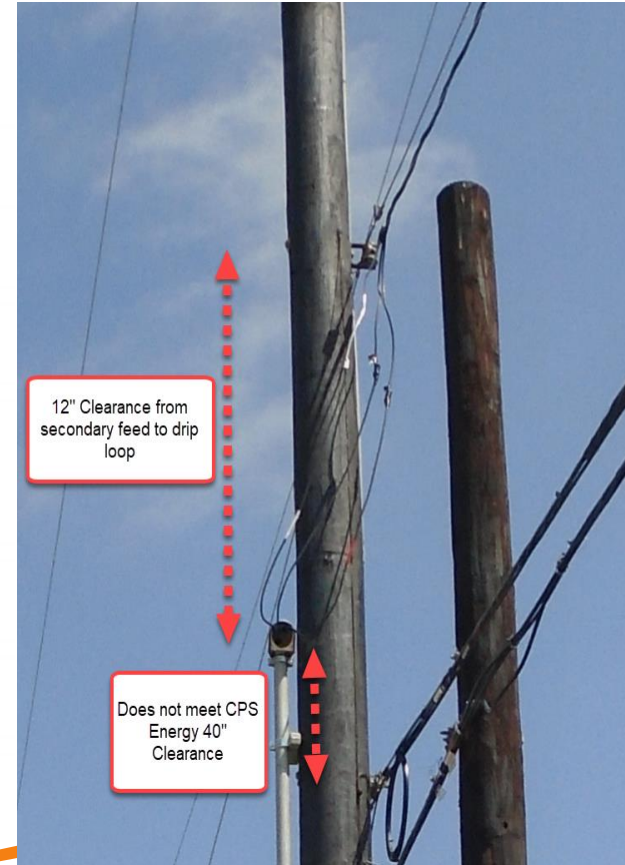
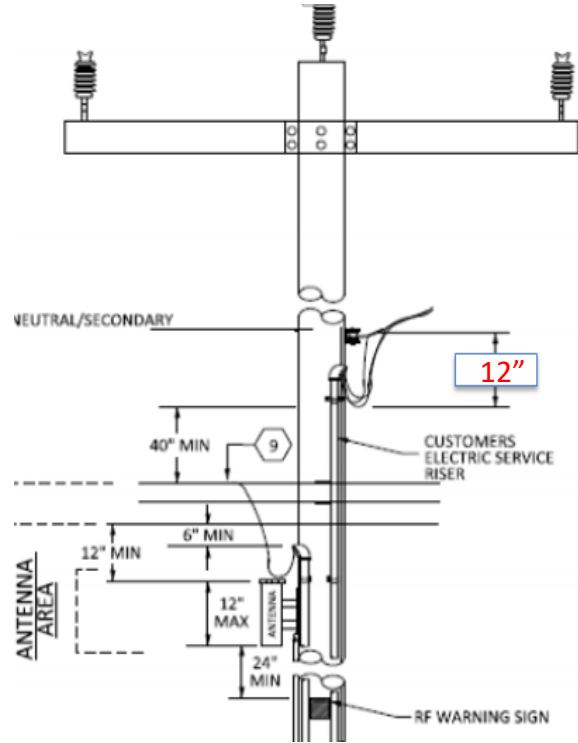
- ENTRUST Engineering and/or TRC are working with the wireless providers and customer engineering to start making the necessary adjustments on the weather head violations
- Clearance violations due to weather head installed too low
 - 40" clearance not met to the communication companies
- Communication 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 too 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**



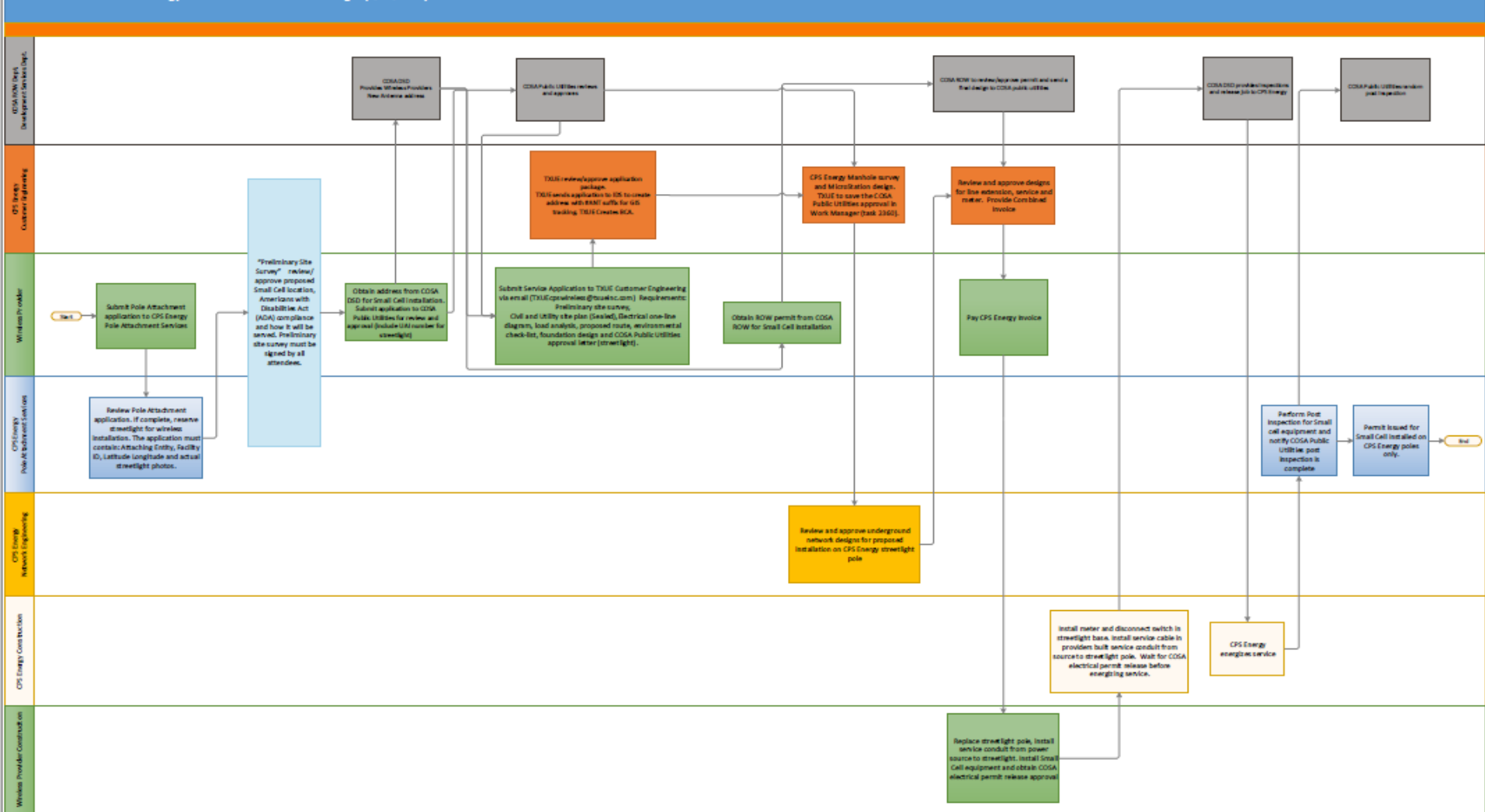
COMMUNICATION MAKE-READY IMPORTANCE

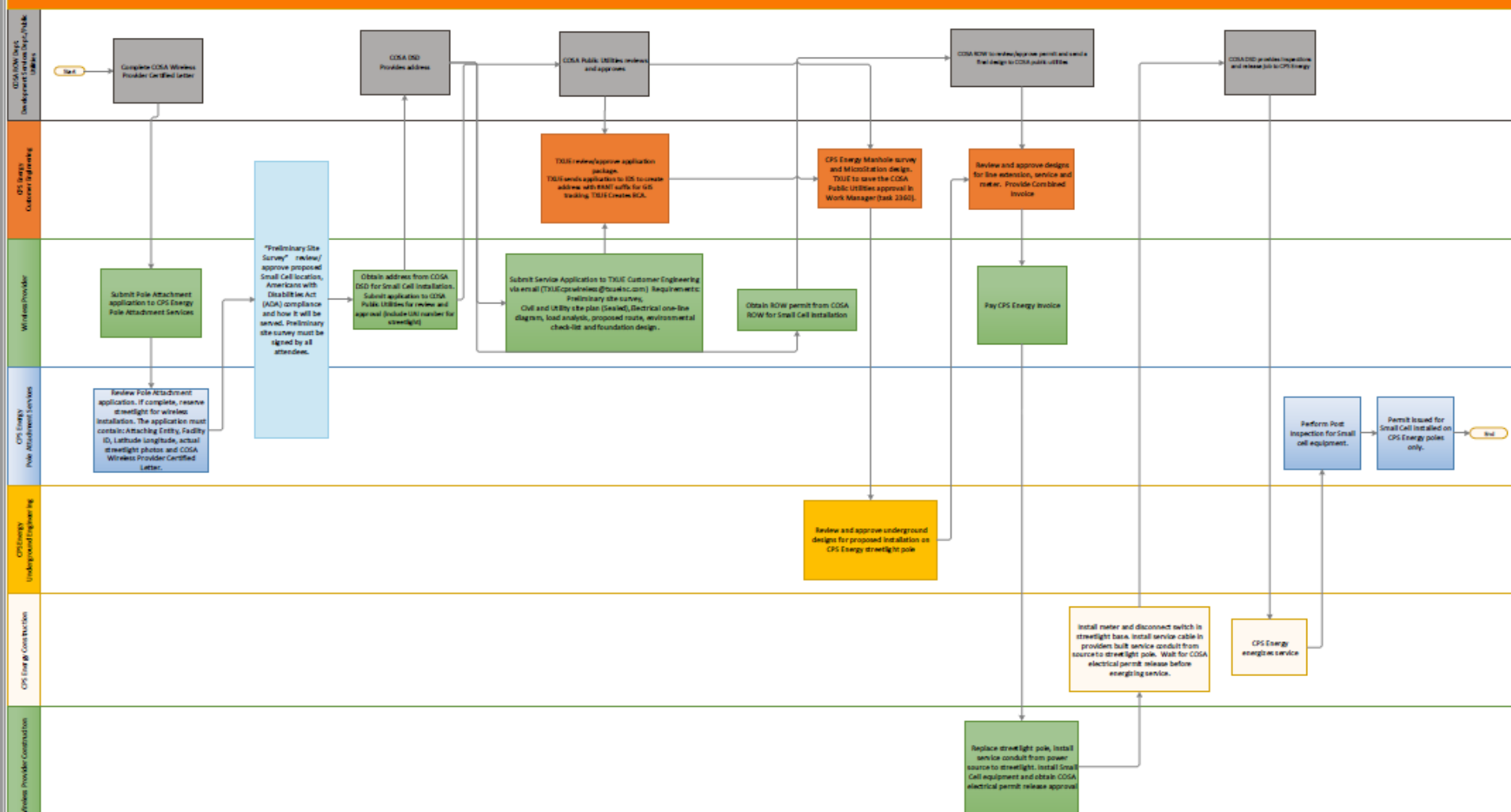
- **Communication companies fiber make ready needs to be done prior to the wireless antenna installation using the one-touch process for simple transfers**



DOWNTOWN DECORATIVE AND RESIDENTIAL STREETLIGHT UPDATE

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





DOWNTOWN UNDERGROUND FED 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 (Jennifer)

Team 1 update

- Applications Submitted – 178

Team 2 update

- Applications Submitted – 124

Team 3 update

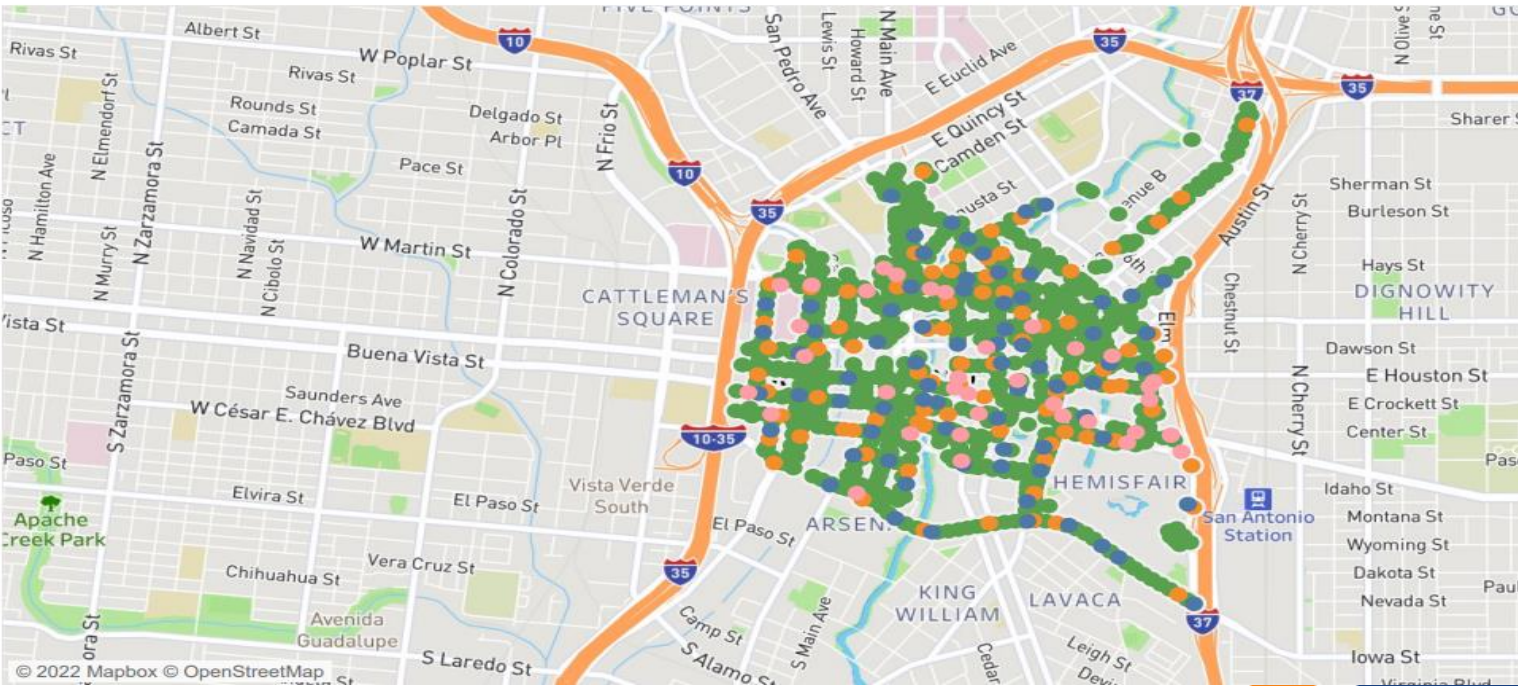
- Applications Submitted – 47



DOWNTOWN STREETLIGHT WIRELESS ANTENNA SOLUTION



Downtown Underground FED Street Lights Refreshed on September 19, 2022



RESIDENTIAL STREETLIGHT 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

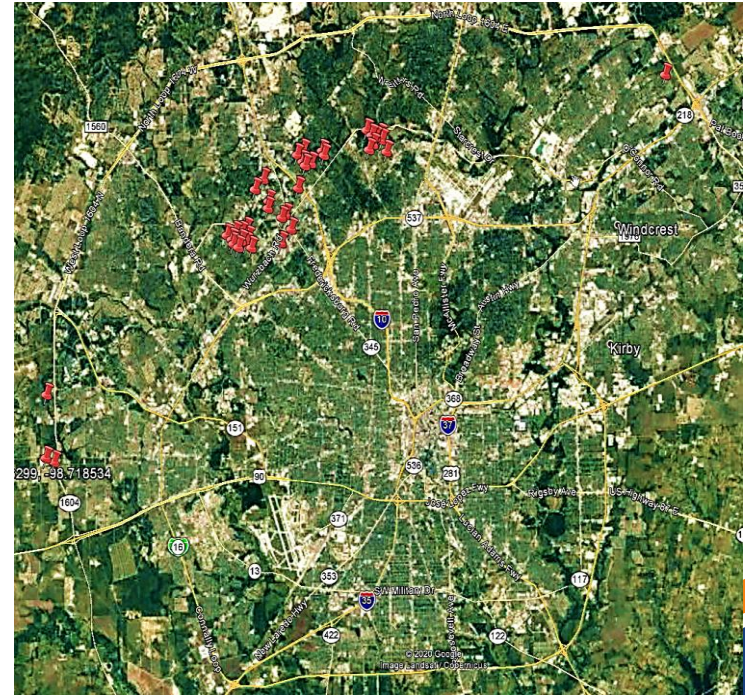
- Applications Submitted – 36

Team 2 update

- Applications Submitted - 10

Team 3 update

- Applications Submitted – 0



BANNER ATTACHMENTS

BANNER UPDATE

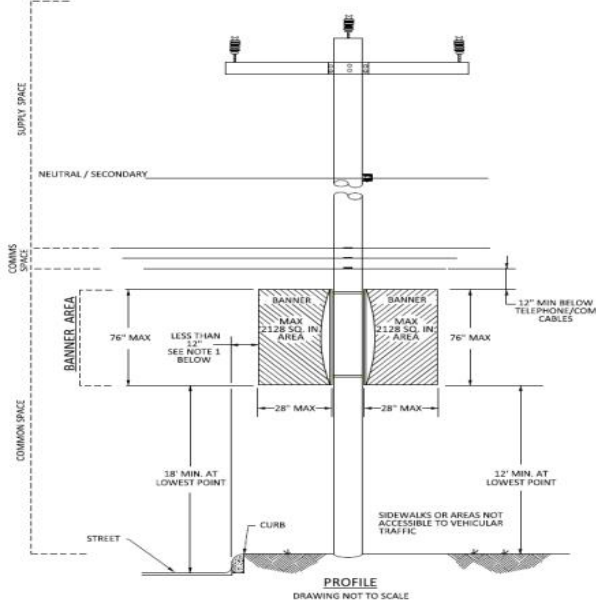


- We continue to work with Dixie Flags, internal and external customers on banner applications throughout the City of San Antonio and Suburban Cities
- Request include both the single and double banner installations



CPS Energy
Pole Attachment Standards

J1: CPS Energy Typical Banner Attachment – Single Pole



NOTES:
1. IF ATTACHMENT ON STREET SIDE OF POLE IS WITHIN 12 INCHES OF THE CURB HORIZONTALLY, THE ATTACHMENT'S LOWEST POINT MUST BE A MINIMUM OF 38 FEET ABOVE THE ROADWAY.
2. BANNER BRACKETS SHALL BE SPRING LOADED.

Revision: 6.0
Revision Date: June 10, 2022
Effective Date: August 12, 2022

Page: Appendix - 94

CUSTOMER ENGINEERING UPDATES

CPS Energy Customer Engineering Portal Website



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

The screenshot displays the CPS Energy Customer Engineering Portal website. The top navigation bar includes the CPS ENERGY logo, a search icon, and contact information: "Español | Billing or Service Questions? Call 210-353-2222". Below the navigation bar, there are several menu items: "My Home", "My Business", "Developers & Builders", "About Us", "Work With Us", and "Customer Support". To the right of these menus are two orange buttons: "Ways to Pay" and "Contact Us".

The "Developers & Builders" menu is expanded, showing a dropdown menu with the following options:

- Business Customer Engineering
- New Infrastructure
- Distributed Generation
- Safety on the Job

The "Business Customer Engineering" option is selected, displaying a detailed page with the following content:

Business Customer Engineering

We can help with new service installations, service remodel requests, security lights or street lights.

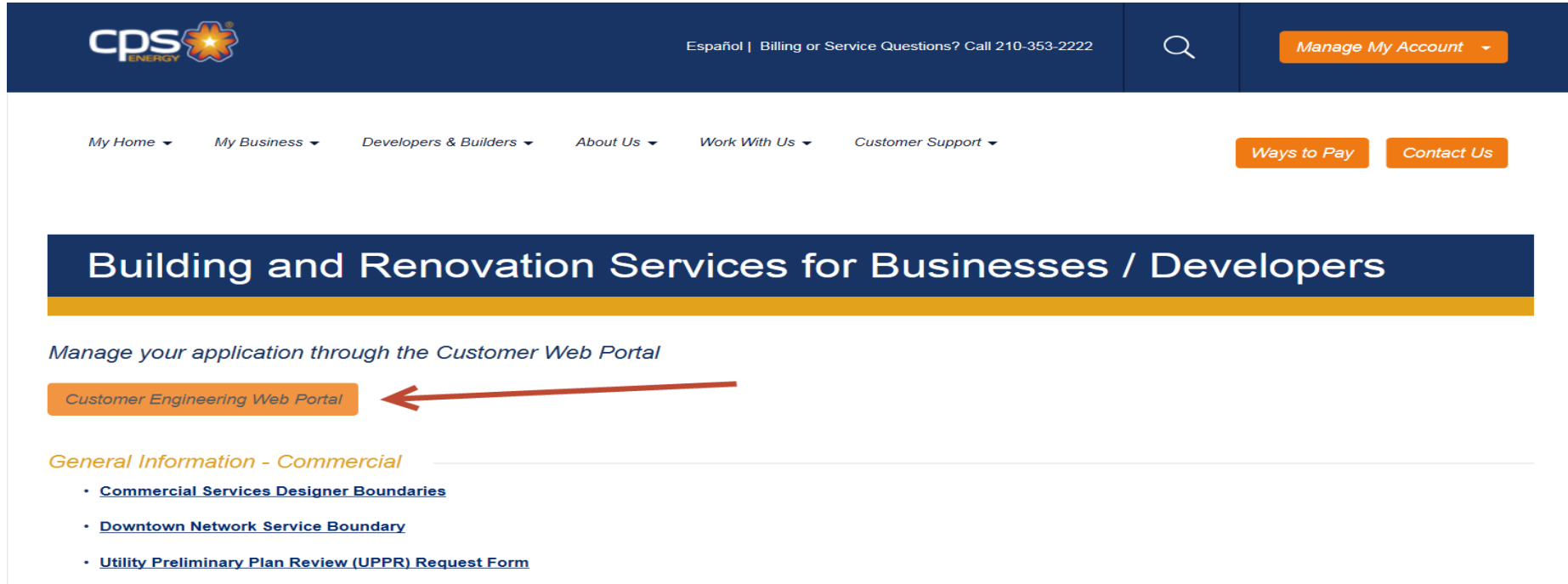
- [Building & Renovation Svcs for Businesses/Developers](#)
- [Building & Renovation Svcs for Homeowners/Builders](#)
- [CSI](#)
- [Pole Attachment Services](#)

A red arrow points to the "Building & Renovation Svcs for Businesses/Developers" link.

In the background, there is a banner for "THERMOSTAT REWARDS" with the text "for your Business or Home" and a "Learn More" link. To the right, there is a "Manage My Account" section with input fields for "Username" and "Password", a "Log In" button, and links for "Enroll My Account" and "Forgot Password?".

Web Portal Overview

- Click on Customer Engineering Web Portal



The screenshot shows the top navigation bar of the CPS Energy website. On the left is the CPS ENERGY logo. In the center, there is a language selector for 'Español' and a contact number: 'Billing or Service Questions? Call 210-353-2222'. On the right is a search icon and a 'Manage My Account' button with a dropdown arrow. Below the navigation bar is a secondary menu with links: 'My Home', 'My Business', 'Developers & Builders', 'About Us', 'Work With Us', and 'Customer Support'. To the right of these links are two orange buttons: 'Ways to Pay' and 'Contact Us'. The main content area features a dark blue banner with the text 'Building and Renovation Services for Businesses / Developers'. Below this banner, there is a heading 'Manage your application through the Customer Web Portal' and a list of links. The link 'Customer Engineering Web Portal' is highlighted with an orange background and a red arrow pointing to it from the right. Below this list is a section titled 'General Information - Commercial' with three bullet points: 'Commercial Services Designer Boundaries', 'Downtown Network Service Boundary', and 'Utility Preliminary Plan Review (UPPR) Request Form'.

Customer Engineering Web Portal


Manage your application through the Customer Web Portal

General Information - Commercial

- [Commercial Services Designer Boundaries](#)
- [Downtown Network Service Boundary](#)
- [Utility Preliminary Plan Review \(UPPR\) Request Form](#)

Web Portal Overview

- Check Work Request Status (No login required)


Customer Engineering: Call (210) 353-4050 (7:30am-4pm M-F)

SIGN IN →

Forgot Username/Password?
Contact Customer Engineering

Customer Engineering Web Portal

The fast, easy way for you to manage your work requests with CPS Energy!

Relevant Links

[Click Here to Enroll](#)

[Service Request Required Documents](#)

[Click Here to Pay Construction Invoices](#)

[Click Here to Check Project Work Status \(No login required\)](#)

Guides & Forms

[Customer Web Portal User Guide](#)


[Web Portal Authorization Form](#)

**** New Enhancements to Customer Web Portal ****

We are happy to announce the following easy-to-use features are now available to you through the CPS Energy website and the Customer Engineering Web Portal:

- * Gas Rough-In Process Improvement
- * CoSA Website Link
- * Public Project Status Webpage
- * Online Payments

If you experience technical issues or have questions, please call 210-353-2450 or email csifedback@cpsenergy.com.



For more information on our new enhancements, [click here](#).

If you're not completely satisfied with the service you are receiving from CPS Energy, we want to hear from you at 210-353-4001.

Web Portal Overview



For assistance, please call: (210) 353-4050 (7:30am-4pm M-F)

CPS Energy: Customer Engineering Work Status

Please select how you would like to lookup your work details. You may use the project number, a specific work request number or the street address on the project.

Search Type

Project Number

Work Request Number

Address

Provide the number associated to the specific work request you would like to view.

Work Request Number *:

40092696



Search

CPS Energy: Customer Engineering

Web Portal Overview



For assistance, please call: (210) 353-4050 (7:30am-4pm M-F)

CPS Energy: Customer Engineering Work Status

[← Back](#)

— Work Request (40092696) BOERNE STAGE RD SAN ANTONIO - In Design

Address: BOERNE STAGE RD SAN ANTONIO

Status: In Design

Work Request Details:

Name: CONTERRA APP U03022-4XX-1 - MAKE-READY

Type: UPGDG - Upgrades Gas

CPS Energy Contact:

Name: CARDEN, JOSH

Phone:

Email: DVJUSTET@CPSENERGY.COM

Customer Tasks

Description

Receive Customer Pre-Work Payment

Status

Not Started

Date/Date Range

06/28/2017 - 06/28/2017

CPS Energy Tasks

Description

Approve Work Request

Schedule Work

Status

Not Started

Not Started

Date/Date Range

06/28/2017 - 06/28/2017

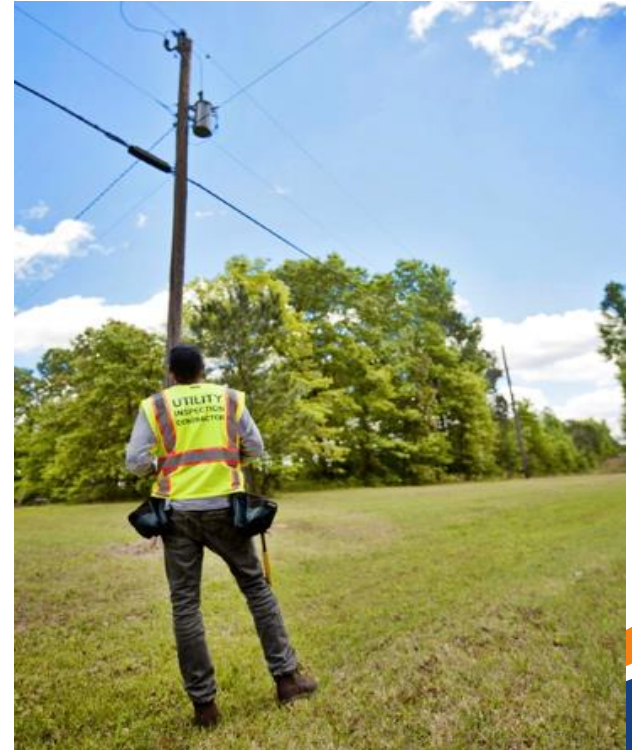
06/28/2017 - 06/28/2017

CPS Energy: Customer Engineering

POLE ATTACHMENT INVENTORY 2023

POLE ATTACHMENT INVENTORY

- **CPS Energy will be conducting the pole attachment inventory project in mid 2023**
- **Pilot – Proposed date June 1, 2023 – July 1, 2023**
- **Pole inventory – July 1, 2023 – June 30, 2024**
- **Data Review and GIS Data transition into production – proposal is possibly monthly from July 1, 2023 – June 30, 2024**
- **Proposed Project complete October 1, 2023**



LiDAR DATA AND LOW COMMUNICATION LINE ISSUES

OUTAGES AS A RESULT OF LOW COMMUNICATION LINES

- **CPS Energy continues to use the LiDAR data to identify potential low communication lines**
- **CPS Contractors will be coordinating with the attaching entities any adjustments needed and plan any necessary make ready work needed**

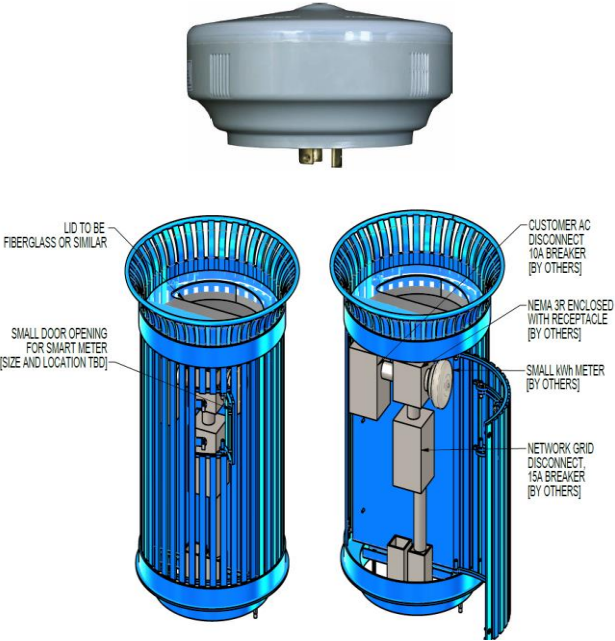


Lidar 3D view

Announcements

- **Next quarterly meetings are scheduled for February 9, 2023 and May 12, 2023**
- **Pole attachment services will have two engineers join the team in January 2023**

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?



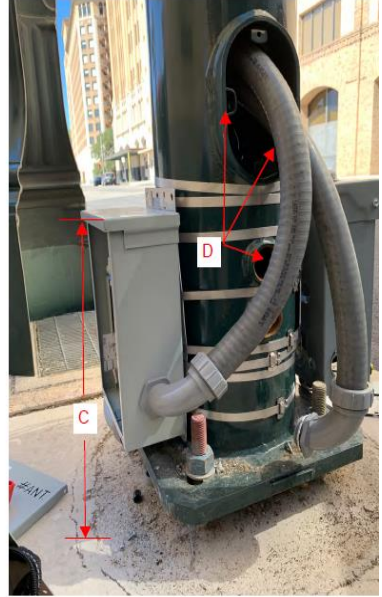
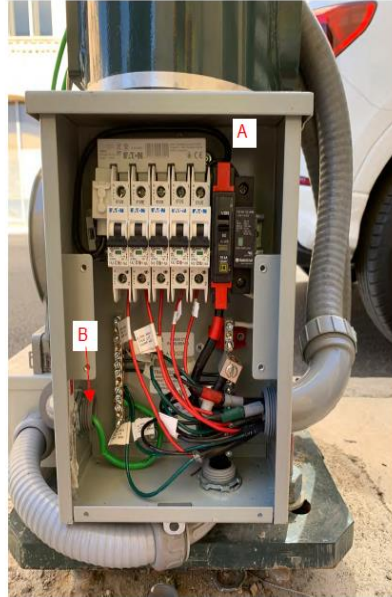
Valmont Street Pole examples

SMALL CELL SERVICE AND METERING INSTALLATION WITH AS-FOUND FIELD COMMENTS



- A. STREETLIGHT POLE'S 1-1/4-INCH THREADED COUPLINGS NOT UTILIZED, RATHER FLEX CONDUIT IS INSERTED INTO HAND HOLE THUS PREVENTING THE PROPER USE OF THE GROUNDING POINT.
- B. CONTRACTOR INSTALLED NON-APPROVED 100 AMP DISCONNECT IN PLACE OF THE PRE-APPROVED 60 AMP GRID-TIED DISCONNECT. 100 AMP DISCONNECT IS LARGER AND DEEPER PREVENTING THE SAFE CLOSING OF THE SHROUD.
- C. NEUTRAL IS EXTENDED FROM GRID-TIED DISCONNECT TO METER RATHER THEN UTILIZING NEUTRAL AT METER ENCLOSURE.
- D. INDIVIDUAL GROUNDING CONDUCTOR INSTALLED TO EACH DEVICE RATHER THAN SINGLE RUN TO DISCONNECT

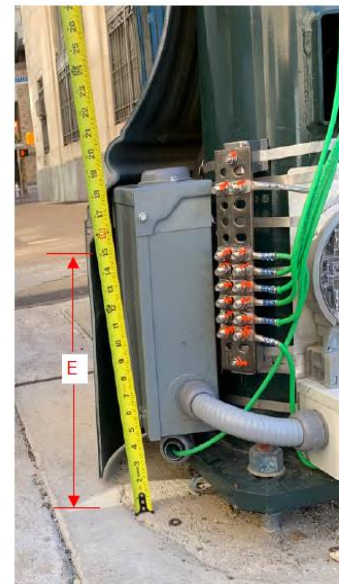
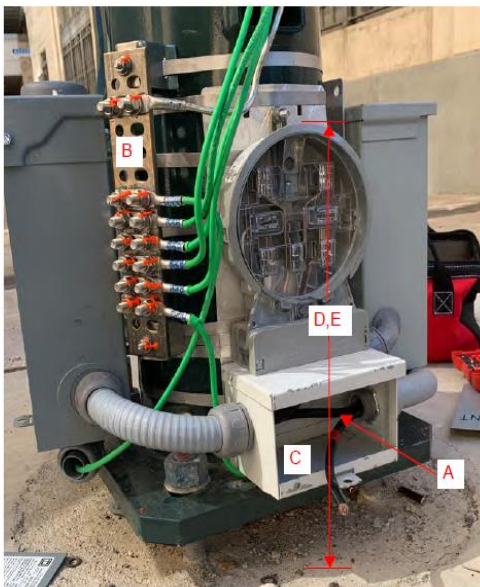
SMALL CELL SERVICE AND METERING INSTALLATION WITH AS-FOUND FIELD COMMENTS



- A. CONTRACTOR INSTALLED 60 AMP MAIN PANEL, BUT NOT PRE-APPROVED PANEL DESIGNED TO FIT WITHIN SHROUD.
- B. INDIVIDUAL GROUNDING CONDUCTOR INSTALLED, BUT NOT ROUTED THROUGH GRID-TIED DISCONNECT, A-BASE METER ENCLOSURE, CUSTOMER'S MAIN SERVICE PANEL, AND GROUND BONDED AT A SINGLE POINT SHARING THE SAME RACEWAY.
- C. MAXIMUM HEIGHT OF MAIN SERVICE PANEL NOT TO EXCEED 14-INCHES FROM FINISHED GRADE.
- D. STREETLIGHT POLE 1-1/4-INCH THREAD POLE COUPLINGS NOT USED, RATHER FLEX CONDUIT IS INSERTED INTO HAND HOLE THIS PREVENTING THE PROPER USE OF THE GROUNDING POINT

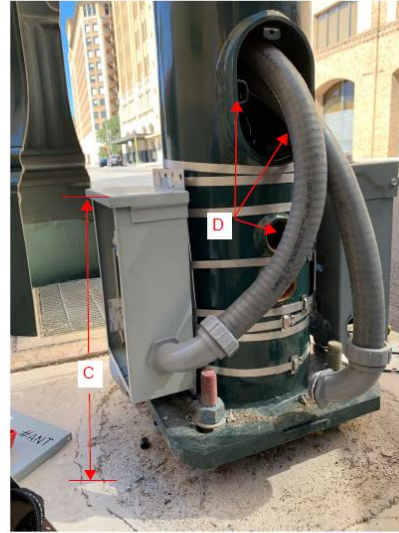
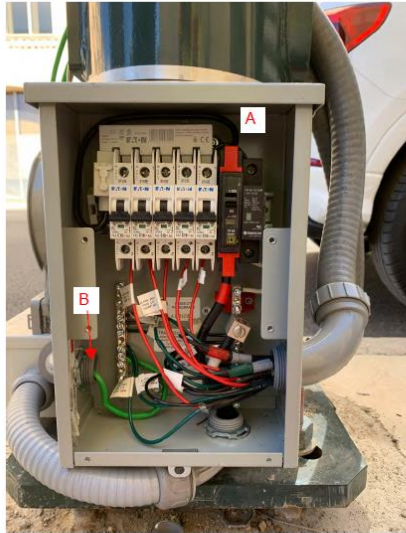


- A. STREETLIGHT POLE'S 1-1/4-INCH THREADED COUPLINGS NOT UTILIZED, RATHER FLEX CONDUIT IS INSERTED INTO HAND HOLE THUS PREVENTING THE PROPER USE OF THE GROUNDING POINT.
- B. CONTRACTOR INSTALLED NON-APPROVED 100 AMP DISCONNECT IN PLACE OF THE PRE-APPROVED 60 AMP GRID-TIED DISCONNECT. 100 AMP DISCONNECT IS LARGER AND DEEPER PREVENTING THE SAFE CLOSING OF THE SHROUD.
- C. NEUTRAL IS EXTENDED FROM GRID-TIED DISCONNECT TO METER RATHER THEN UTILIZING NEUTRAL AT METER ENCLOSURE.
- D. INDIVIDUAL GROUNDING CONDUCTOR INSTALLED TO EACH DEVICE RATHER THAT SINGLE RUN TO DISCONNECT.



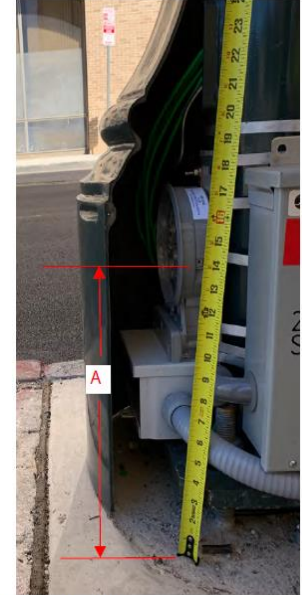
- A. CONTRACTOR INSTALL #2 AWG AND NOT THE PRE-APPROVED #6 AWG. #2 AWG WILL WORK, BUT HARDER TO MAKE UP AND REQUIRES GREATER BENDING RADIUS.
- B. GROUND BUS BAR SHOULD BE MOUNTED 180 DEGREE FROM PRESENT INSTALLATION TO AVOID METER CONTACT.
- C. NO GROUND BONDING NOTED AT A-BASE METER ENCLOSURE. GROUND BONDING CONDUCTOR SHALL BE ROUTED THROUGH AND BONDED AT EACH DEVICE.
- D. GOOD MOUNTING OF A-BASE METER SOCKET AND ENCLOSURE, BUT EXCEED 14-INCH HEIGHT LIMIT OF EQUIPMENT
- E. MAXIMUM HEIGHT OF GRID-TIED DISCONNECT AND METER NOT TO EXCEED 14-INCHES FROM FINISHED GRADE.

SMALL CELL SERVICE AND METERING INSTALLATION WITH AS-FOUND FIELD COMMENTS



- A. CONTRACTOR INSTALLED 60 AMP MAIN PANEL, BUT NOT PRE-APPROVED PANEL DESIGNED TO FIT WITHIN SHROUD.
- B. INDIVIDUAL GROUNDING CONDUCTOR INSTALLED, BUT NOT ROUTED THROUGH GRID-TIED DISCONNECT, A-BASE METER ENCLOSURE, CUSTOMER'S MAIN SERVICE PANEL, AND GROUND BONDED AT A SINGLE POINT SHARING THE SAME RACEWAY.
- C. MAXIMUM HEIGHT OF MAIN SERVICE PANEL NOT TO EXCEED 14-INCHES FROM FINISHED GRADE.
- D. STREETLIGHT POLE 1-1/4-INCH THREAD POLE COUPLINGS NOT USED, RATHER FLEX CONDUIT IS INSERTED INTO HAND HOLE THUS PREVENTING THE PROPER USE OF THE GROUNDING POINT.

SMALL CELL SERVICE AND METERING INSTALLATION WITH AS-FOUND FIELD COMMENTS



- A. MAXIMUM HEIGHT OF MAIN SERVICE PANEL NOT TO EXCEED 14-INCHES FROM FINISHED GRADE.
- B. SHOULD BE - GRID-TIED DISCONNECT - - 60 AMP SQUARE D MODEL QO260NATR
- C. SHOULD BE - CUSTOMER SERVICE PANEL - - RAYCAP MODEL RSCAC-1333-P-240

SMALL CELL SERVICE AND METERING INSTALLATION WITH AS-FOUND FIELD COMMENTS



CPS ENERGY IN PARTNERSHIP WITH THE CITY OF SAN ANTONIO AND SMALL CELL PROVIDERS MOCK INSTALLED A GRID-TIED DISCONNECT, METER A-BASE EQUIPMENT, AND CUSTOMER'S MAIN SERVICE PANEL WITHIN THE LIMITED WORKING SPACE UNDER THE SHROUD OF THE VALMONT STREETLIGHT POLE AT THE CPS ENERGY POLE TRAINING YARD. RECENT INSTALLATIONS HAVE DEVIATED FROM THE PREAPPROVED INSTALLATION THAT ARE AFFECTING THE SAFE SECURING OF THE SHROUD.

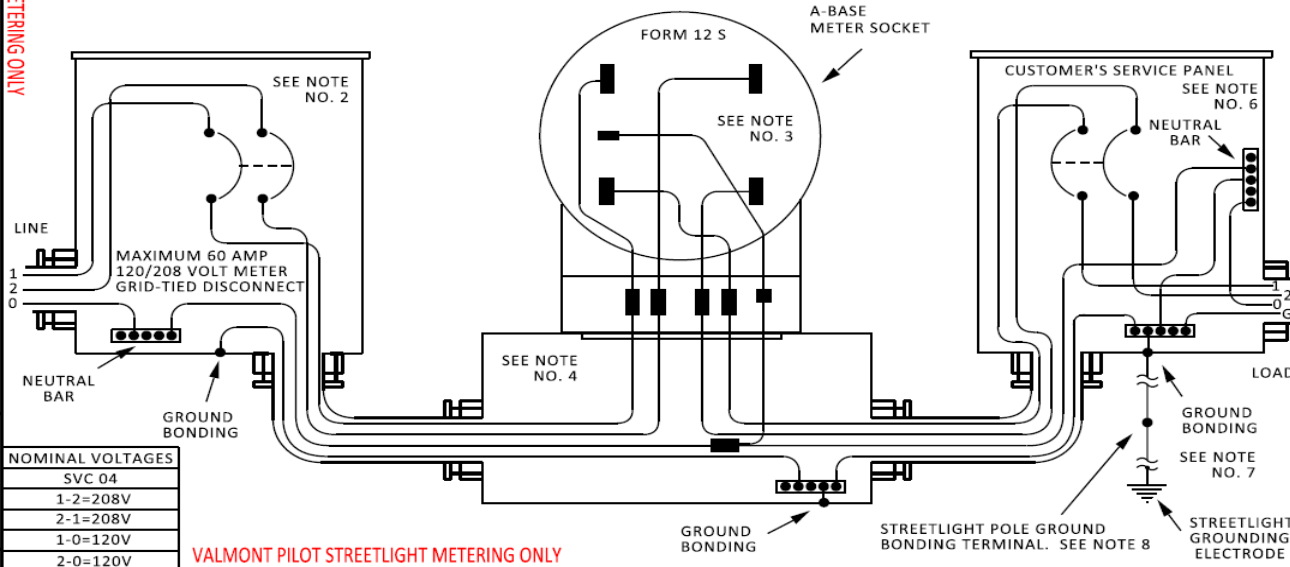
VALMONT PILOT STREETLIGHT METERING ONLY

INSTALLATION NOTES:

- SERVICE FROM 120/208V SINGLE-PHASE NETWORK SOURCE. CPS ENERGY SERVICE PERONNEL TO CONTACT METER SHOP FOREMAN FOR NETWORK METER.
- GRID-TIED DISCONNECTING DEVICE, 60 AMPS MAXIMUM, SQUARE D MODEL QO260NATR, SHALL BE CONNECTED ON LINE-SIDE OF METERING EQUIPMENT AS PER ARTICLE 1102.2 OF 2018 CPS ENERGY ELECTRIC SERVICE STANDARDS.
- A-BASE METER ADAPTOR, MARWELL MODEL 2500-3W-5J5T-125A, FIFTH TERMINAL REQUIRED FOR NETWORK 120/208-VOLT INSTALLATION. NO. 6 AWG CU MINIMUM SIZE CONDUCTOR.
- ENCLOSURE, NEMA 3R 6"L X 4"W X 4"H WITH LOCKING HASP, AND OPEN MOUNTING TOP
- INSTALL A SEAL ON GRID-TIED DISCONNECT, METER RING, CABLE TERMINATION COVER, AND ENCLOSURE.
- SERVICE PANEL, 60 AMP AC DISCONNECT WITH INTEGRATED SURGE PROTECTION FOR SMALL CELL RADIO, RAYCAP MODEL RSCAC-1333-P-240.
- NO.4 AWG CU GROUNDING CONDUCTOR SHALL BE CONTINUOUS FROM GROUNDING ELECTRODE THROUGH THE STREETLIGHT POLE GROUND BONDING TERMINAL TO THE CUSTOMER'S SERVICE PANEL.
- CUSTOMER TO FURNISH AND INSTALL ALL EQUIPMENT TO MEET APPLICABLE ELECTRIC SERVICE STANDARDS AND LOCAL AND NATIONAL CODE.

VALMONT PILOT STREETLIGHT METERING ONLY

ELECTRIC METER WIRING STANDARDS



NOMINAL VOLTAGES

| |
|----------|
| SVC 04 |
| 1-2=208V |
| 2-1=208V |
| 1-0=120V |
| 2-0=120V |

VALMONT PILOT STREETLIGHT METERING ONLY

3-WIRE, 1-PHASE, 120 / 208-VOLT NETWORK SERVICE, SELF-CONTAINED S-BASE METER WITH A-BASE ADAPTOR

| | | | | | | | | | |
|-----------------------|--------|-------|-----------|---------|-------|-------|------------|------|-------------------------|
| 8A STD. NO. | METER | PHASE | WIRES | STATORS | VOLTS | CLASS | KW SCALE | FORM | CPS ENERGY MATERIAL NO. |
| | kWh | 1 | 3 NETWORK | 2 | 120 | 200 | NON-DEMAND | 12S | 1042320 |
| | kWh/kW | | | | | | 0-42.0 | | 1042323 |



Thank You